

Building and Applying the Health Thinking Scale among the Students of the Faculties of Education for Humanities and Pure Sciences

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ABSTRACT

The purpose of the research was to design, construct and apply the Health Thinking Scale among the students of the Faculties of Education for Humanities and Pure Sciences.

The sample consisted of (400) male and female students, selected by stratified random method with equal distribution, from all academic stages of the Faculties of Education for Humanities and Pure Sciences, and in order to measure healthy thinking, a scale was built based on theoretical bridging (synthesis method), which consisted of (24) items.

The psychometric characteristics of the scale were extracted, including apparent truthfulness, which amounted to (98%), as well as the stability coefficient by the repeat method (0.80), while the statistical methods used were the Social Statistical Package (SPSS).

The results showed that the arithmetic average of the students' score was (69.93) with a standard deviation of (17.20) and when comparing the arithmetic average of the students' score with the hypothetical average of performance of (60) using the T-scale for one sample, it was found that the calculated T value is equal to (11.54) which is greater than the tabular T value (1.96) at the significance level of (0.05) and a degree of freedom (399). This indicates that there is a statistically significant difference, i.e., the students of the Faculties of Education for the Humanities and Pure Sciences possess healthy thinking.

We conclude from the research that the students of the Faculties of Education for Humanities and Pure Sciences have a positive outlook, intellectual flexibility, and self-awareness in managing the crises they face, and this is a clear proof of healthy thinking.

INTRODUCTION

Human behavior is shaped more by personal beliefs than by objective facts. These beliefs, formed through perception and experience, are often distorted by cognitive biases, leading to misinterpretations of reality. Under the influence of cultural tension and unrealistic digital content, especially among youth, negative thinking patterns emerge—such as overgeneralization and focus on failure. Over time, these patterns become automatic, shaping perception, emotions, and behavior and creating a cycle of anxiety, frustration, and low self-worth that begins with a simple thought but evolves into a distorted psychological reality (Al-Ogaidi, 2026, p. 6530).

In light of these cognitive distortions, it becomes necessary to examine the cultural environments that may reinforce or sustain such patterns of thinking. Unfortunately, the daily thinking pattern in Arab societies consists of superstitions and fanaticism that cancel free thinking and the ability to question and criticize. Submission to authority or intellectual references also results in the idea of cancelling the mind's ability to take off and be free, in addition to placing obstacles in the way of thinking based on argument and proof. All of this results in a lack

of knowledge, corruption in the method of thinking, inability to research, and negligence in dealing with the laws of the universe, its principles, and its laws (Al-Ogaidi, 2026, pp. 3979–3980).

Beyond these cultural influences, contemporary global changes have introduced additional dimensions that shape individuals' cognitive and behavioral experiences. Over the past two decades, rapid technological advancements and the accelerating pace of globalization have fundamentally transformed the educational landscape, reshaping how knowledge is delivered, accessed, and processed. As educational systems evolve in this increasingly interconnected world, students—particularly at the university level—face complex academic, psychological, and adaptive demands. The transition to higher education, especially during the first year, is a critical period often accompanied by heightened stress and anxiety and challenges in adapting to new learning environments. Research indicates that these difficulties are not solely related to external pressures but are also closely linked to maladaptive cognitive patterns and sometimes negative thinking styles that hinder effective adjustment (Al-Ogaidi, 2025, p. 1).

Within this evolving educational context, the practical consequences of these cognitive challenges become especially apparent. The inability to plan effectively should not be viewed as merely an individual student deficiency, but rather as evidence of deeper systemic and cognitive challenges affecting students' overall performance. Empirical evidence indicates that difficulties in planning, organization, and time management are closely linked to increased stress levels and decreased academic performance, often creating a vicious cycle of stress and poor achievement. Addressing these challenges requires moving beyond superficial solutions toward adopting well-established, scientifically grounded curricula that foster cognitive flexibility, emotional regulation, and adaptive thinking patterns. Therefore, it has become essential for us as educators to explore comprehensive cognitive frameworks that support both effective performance and the psychological well-being of our students (Al-Ogaidi, 2025, pp. 164–165).

In response to these accumulated challenges, a need emerges for a structured cognitive framework capable of addressing both performance and psychological well-being. Health Thinking is a cognitive and fundamental framework that enables individuals to approach life with flexibility and clarity. By incorporating mental habits that prioritize compatibility and emotional balance, this approach becomes vital especially for students who face multiple pressures in both academic and personal fields. Health thinking is characterized by several interrelated cognitive strategies that enhance the decision-making process and problem-solving when combined to achieve mental health (Smith, 2021: 15).

As part of this framework, intellectual flexibility plays a central role in enabling students to adapt effectively to changing academic demands. The ability to adapt thought patterns and adopt diverse and different perspectives becomes important in academic environments, where new problems are constantly demanding innovative solutions. This intellectual flexibility of students enables them to review assumptions and integrate the information they have stored with new ones. For example, adopting intellectual flexibility enhances performance in areas that require problem-solving. Collaborative learning environments further enhance this flexibility, as exposure to different perspectives and opinions generates students' creativity and enables them to solve their problems (Thompson et al., 2019: 74).

Complementing intellectual flexibility, self-awareness represents another fundamental component within this cognitive framework. These cognitive strategies are based on a growing awareness of an individual's feelings, biases, and thought processes, and through the perception of internal states, individuals gain the ability to align their actions with their personal values and goals. College students with strong self-awareness show improvement in their academic results as well as their personal relationships, and they consistently take the initiative to identify the causes of stress and adjust their strategies according to situational demands. This introspective dimension links cognitive adaptability to thoughtful decision-making, which improves healthy thinking (Brown, 2018: 52).

Extending the application of these skills, their importance becomes even more evident when individuals are faced with unexpected challenges and crises. When unexpected crises arise, incorporating these skills becomes crucial. Dealing effectively with different scenarios—such as academic setbacks or financial instability—

requires composure, risk assessment, and creative strategic problem solving. Most research confirms that students trained in crisis management techniques, such as stress immunization or planning for the future, recover more quickly from disruption and demonstrate long-term resilience. Institutional support, including counseling services or simulated crisis training, equips students to deal with emergencies with confidence and effective thinking, thereby reducing the psychological impact of these crises (Lee & Park, 2022: 89).

Taken together, these elements form an integrated cognitive system that underpins both academic success and personal development. All of these interconnected cognitive strategies form a powerful framework for success in both academic and personal spheres. By fostering optimism, adaptability, self-reflection, and preparedness, healthy thinking transforms potential obstacles into opportunities for growth and development (Garcia, 2023: 103).

Defining Terms

- **Theoretical definition of healthy thinking:** "A cognitive process characterized by flexibility, optimism, self-awareness, and the ability to manage crises and emotions in a positive and constructive way."

THEORETICAL FRAMEWORK

Maintaining a positive outlook significantly enhances the daily life and educational outcomes of individuals. Research proves that individuals with optimistic tendencies experience improved academic performance and better psychological well-being. This positive mindset is particularly evident in educational environments, where students who regularly use their strengths report an increase in participation in academic activities. (Ferguson & Julie, 2024: 1-2)

Intellectual flexibility represents a cognitive ability that significantly influences success in both daily life and educational contexts. Individuals with high intellectual flexibility exhibit sophisticated problem-solving abilities and improve learning outcomes across various academic disciplines (Waugh & Anthony, 2023: 2-4).

On the other hand, self-awareness acts as an essential element in both personal and academic development, enabling individuals to accurately and effectively manage their behaviors and emotional responses, this strategy allows them to recognize patterns of their behavioral responses and develop more adaptive and compatible coping strategies, and increased self-awareness enables students to better assess their learning needs and implement appropriate study strategies, leading to improved academic performance and personal growth and professional (Filice and W. James, 2024: 583-584).

Effective crisis management requires a combination of cognitive, emotional, and personal competencies. This is evident through the ability of administrators to coordinate resources and maintain stability during difficult situations, while at the same time supporting students' mental health (Eid et al., 2023: 2).

It has been experimentally proven that incorporating positive thinking into daily life leads to significant psychological benefits. Research published in the *Journal of Clinical Psychology* (Volume 72, Issue 1) has shown that individuals who consistently practice positive thoughts show significant reductions in anxiety and anxiety, with effect sizes ranging from (1.52 to 2.50%). 2023: 5).

Individuals with healthy thought patterns exhibit increased flexibility in controlling attention, allowing them to adapt their focus between situations that require frequent updating and those that require constant focus. This cognitive adaptability proves to be particularly valuable in maintaining health psychological, where individuals are able to manage stress effectively and maintain emotional stability in various situations (Ferguson and Julie A., 2024: 1-2).

Developing healthy thinking patterns is critical in everyday life in general and in educational environments in particular, so students who demonstrate high levels of cognitive adaptability also exhibit well-developed problem-solving abilities and improved learning outcomes across various academic disciplines. This relationship

between cognitive flexibility and academic achievement suggests that educational interventions that focus on developing patterns Healthy thinking that has significant benefits for student success (Eid et al., 2023: 3).

Intellectual Thinking Model

This model was created by Javidi et al. through research at Tehran University of Medical Sciences.

The model suggests that healthy thinking involves carefully considering all parts of a situation—including positive, negative, and neutral aspects—before making decisions. It is based on several main ideas:

1. **Gradual development:** The model shows how thinking moves from being based on direct sensory information to more complex thinking that includes abstract ideas and awareness of one's own thinking.
2. **Error reduction:** As thinking becomes more advanced, mistakes like cognitive biases and perceptual errors decrease, leading to better and more balanced thinking.
3. **Holistic processing:** Healthy thinking involves looking at situations from multiple angles, analyzing them thoroughly, and understanding both the advantages and disadvantages.

People who think in this healthy way tend to have a positive attitude, make thoughtful decisions based on self-awareness, handle stress well, and manage emotions effectively.

These traits are linked to better mental health and a higher quality of life (Javidi et al., 2022: 13355-13356).

Perma Model of Health Thinking

This model is based on the PERMA model of well-being developed by Martin Seligman. It offers a complete approach to understanding and improving healthy thinking. This model suggests that the best state of well-being, called flourishing, comes from five important parts, all connected to how we think. Healthy thinking is not just about avoiding negative thoughts, but about actively developing the following five areas:

1. **Positive Emotions:** This involves feeling and enjoying emotions like happiness, gratitude, satisfaction, hope, and love. It's not about being happy all the time, but about generally leaning toward positive feelings.
2. **Cognitive Engagement:** Healthy thinking helps positive emotions by focusing on positive experiences and helping people see difficult situations in a more positive light. This includes regularly noticing and sharing things you're grateful for (Seligman, 2011:167).
3. **Engagement:** This is about being fully involved in activities that are meaningful and challenging, using one's strengths to reach personal goals.
4. **Meaning:** This refers to having a sense of purpose through work, helping others, spiritual beliefs, or other meaningful actions in daily life (Wong, 2011:6).
5. **Achievement:** This is about reaching goals and feeling a sense of success, mastery, and skill. It involves setting realistic goals, working hard, and celebrating when those goals are achieved.

By practicing these five elements through careful thought and action, individuals can build strong thinking habits and live more satisfying and meaningful lives. This is a continuous process of learning, practicing, and improving over time (Dweck, 2006: 6).

Goal-Oriented Well-Being Model

The model of positive thinking is rooted in Ryff's theory of psychological well-being, which includes "life purpose" as a key aspect that encourages optimism by matching actions with personal values. This model suggests that people who have a clear sense of purpose act consistently toward their goals and are more emotionally stable, helping them to reframe difficulties as chances for growth (Ryff, 1989: 1070). Supporting this, the Healthy Minds framework highlights "purpose" as something that can be trained and measured. Studies using brain scans show that people with clear goals have less activity in the amygdala (related to stress) and more in the prefrontal cortex (related to decision-making) (Dahl et al., 2020:12). Experimental evidence also shows that thinking with purpose is linked to lower stress levels and better persistence in learning, confirming its role in building resilience (Joshani, 2019:5).

Adaptive Cognitive Processing Model (Productive Thinking)

Intellectual flexibility is explained by Harrison's Productive Thinking Model, which integrates divergent and convergent thinking to solve complex problems, highlighting repetitive cycles of thought generation and critical evaluation, enabling individuals to periodically review assumptions in response to new data, attitudes, and evidence. (Hurson, 2008:48), neurostudies expand this concept by linking adaptive flexibility to neuroplasticity, as practices such as mindfulness and meditation enhance the connectivity and expansion of the prefrontal cortex through the creation of new connections, improving students' ability to adapt to academic situations, crises, and changing circumstances. (Center for Healthy Minds, 2020:15), dual process theory also distinguishes between spontaneous (intuitive) thinking and intentional (analytical) thinking, where intellectual flexibility arises from the balance of these two systems of thinking (Kahneman, 2011:20).

Epistemological organization

Self-awareness is anchored in the pillar of "consciousness" in the framework of healthy minds, which combines meta-awareness (real-time observation of thoughts) with sensory clarity. FMRI studies show that individuals with high meta-awareness show less activity in the virtual mode network, which is associated with lower rumination and improved emotional regulation (Brown, 2018:55). This proposition is in line with Flavell's metacognitive theory, which posits that self-reflection practices, such as mindfulness and meditation, promote executive control of cognitive and emotional processes, which is critical to academic success (Flavell, 1979:907).

Habit Re-Establishment Model

Crisis management looks at habit consolidation through the Dohigg model, which identifies three stages – signaling, routine, and reward – to explain how stress responses turn into automatic responses, by deliberately replacing non-adaptive routine habits (e.g., avoidance) with adaptive ones (e.g., consciously reformulating cognition), in which individuals reprogram their neural pathways, enhancing their intellectual resilience (Duhigg, 2012:75).

RESEARCH METHODOLOGY

The research aims to describe the measurement of health thinking among students of both education for the humanities and pure sciences, so the descriptive study was relied upon, as this description is the beginning of new horizons for experimental studies that deal with research variables, based on the results of this descriptive study.

Second: Research Community

The current research population consists of (10045) male and female students from the College of Education for Humanities and Pure Sciences for the morning study and for the academic year (2024-2025), * (7208) male and female students from the College of Education for Humanities, and (2837) male and female students from the College of Education for Pure Sciences. A stratified random sample of (400) was drawn from it.

Research Tool

The tool is the means by which the scientific material (information) necessary to answer the research questions that have been developed, including: scales, interviews... etc. (Al-Rubaie et al., 2018: 160). The current search tool includes:

Health Thinking Scale

Based on the definition, dimensions of health thinking were formulated that were presented to experts as basic

* The researcher obtained this statistic from the Studies, Planning and Follow-up Division at the Presidency of the University of Mosul under the task facilitation book No. 3/2/12522 dated 7/11/2024.

components of this concept, and the percentage of experts agreed on the dimensions (98%), as well as determining the relative importance of each dimension. These dimensions also included a number of (24) paragraphs to form the Health Thinking Scale in its initial form of four dimensions, which are as follows: (Positive Outlook, Resilience, Self-Awareness, and Crisis Management).

Psychometric properties of the scale

In the psychological literature, this concept indicates the correlation of the basic qualities identified in the model of the theory adopted for the construction of the tool with the standard statistical characteristics of that tool, including: multiple correlations, the stability of the tool and the methods of measuring it, and the extent to which the scores of the tool are consistent with respect to the measured trait, in order to integrate the information that will in essence constitute the validity of that tool (Markus & Denny, 2013: 63-64). These characteristics include the following:

Face Validity

This type of honesty refers to the evaluation of whether on the surface of the tool (i.e. in terms of the content of the paragraphs) it seems to measure the psychological concept involved in the research and in general, the researcher inevitably applies this form of honesty criteria while building the scale, because the scale will include paragraphs that the researcher considers applicable, and apparent honesty is considered a very small scale of the validity of the tool which is a personal matter in that different researchers will come to different conclusions about the apparent validity of the scale (Howitt & Duncan, 2014: 313). The apparent honesty of the scale was extracted by presenting it to a group of experts and specialists in educational and psychological sciences to express their opinion on the validity of the scale, the relative importance of each of its dimensions, and the ability of its paragraphs to measure health thinking in the research sample. and their suitability to measure the phenomenon under discussion, and after taking their observations and opinions, the paragraphs were accepted and obtained a percentage of agreement (98%).

Statistical analysis of the test items.

Tests and measures are based on the principles of modern measurement theory by linking the standard characteristics of the instrument (coefficients of difficulty and distinction) with the levels of the measured attribute, as it seeks to analyze the statistical analysis of each paragraph to find out its distinctive characteristics (Habib & Sadiq, 2018: 359-360). Therefore, the aim of this analysis is to verify the validity of the paragraphs of the scale through the following methods:

After determining the upper and lower groups, the discriminating power of each of the items of the Health Thinking Scale was calculated using the (t-test) of two independent samples to calculate the average scores of the upper group with the average scores of the lower group for each of the (24) items of the scale, the paragraphs that obtained the calculated (t-value) (1.960) or more were considered as distinct items because they are statistically significant (*) At the level of (0.05) and at the degree of freedom (*) (216). Table (1) shows this.

Table (1) Factors for Discriminating the Paragraphs of the Health Thinking Scale Using the Extreme Sample Method

Paragraph Number	Lower Group (108)		Top Group (108)		Value (t-test)
	Arithmetic mean	Standard deviation	Arithmetic mean	Standard deviation	
1.	2.56	1.23	3.78	0.46	13.61

* The term "statistically significant" refers to a statistical result that indicates that measured data from individuals shows an effect or relationship (MacBride, 2018:26)

* It is symbolized by the symbol (df), and is called the degree of freedom of variance of the sample, which is the number of degrees in the sample that has freedom of change in all but one degree that does not have freedom of change, and its mathematical formula is: (df = n-1) (Privitera, 2019: 249).

2.	2.36	1.17	3.79	0.43	16.68
3.	2.19	1.11	3.74	0.52	18.68
4.	2.04	1.04	3.63	0.66	18.89
5.	1.96	0.99	3.81	0.41	25.33
6.	2.02	1.02	3.80	0.52	22.78
7.	1.86	0.98	3.60	0.65	21.75
8.	1.96	1.03	3.73	0.54	22.37
9.	1.79	0.94	3.48	0.76	20.47
10.	1.92	0.98	3.60	0.68	20.68
11.	1.88	0.97	3.76	0.51	25.20
12.	1.80	0.97	3.71	0.56	25.08
13.	1.94	1.04	3.64	0.57	20.90
14.	1.94	1.01	3.69	0.56	22.18
15.	1.87	0.93	3.63	0.62	23.04
16.	1.97	1.05	3.69	0.63	20.49
17.	1.96	1.06	3.56	0.70	18.48
18.	1.87	1.02	3.71	0.55	23.37
19.	1.94	1.11	3.60	0.71	18.60
20.	1.90	1.05	3.69	0.62	21.45
21.	1.82	1.03	3.71	0.58	23.36
22.	1.84	1.06	3.69	0.56	22.65
23.	1.80	1.06	3.55	0.73	19.97
24.	2.03	1.19	3.70	0.64	18.17

* The tabular value of (t) at the degree of freedom (214) and the significance level of (0.05) is equal to (1.96).

Internal consistency method of items.

Internal consistency refers to the extent to which a group of similar elements are related to each other for the paragraphs of the scale. Technically, internal consistency is determined by the degree of interrelationships between the subjects' responses to a set of relevant scale items or a set of subscales with the overall score of the scale, and to create a reliable test, the scale items must be significantly related to each other, then they are retained, while those with low correlations are projected through A numerical indicator of internal consistency reliability called Cronbach's alpha coefficient (Dunn, 2013: 222). For the purpose of calculating the internal consistency of the scale, the researcher applied the scale to a random stratified sample of (400) male and female students from the faculties of education for humanities and pure sciences, then according to the correlation coefficients between the items of the scale and the total score and between the paragraphs of each field with the total score of the field, and finally between the score of each field together and the total score of the scale. To find out the significance of the correlation coefficients, the (t) test was used. by comparing the calculated values of (t) with the tabular value of (t) of (1.960) at the significance level of (0.05) and the degree of freedom (2014) it was found that all the paragraphs are statistically significant, and the internal consistency of the paragraphs of the health thinking test was verified through the following methods:

Finding the relationship between the paragraph score and the overall score of the scale

The researcher used the internal test represented by the total score of the scale to extract the validity of the construction, as the validity of the paragraphs is extracted by most researchers in psychometric empirically by calculating the correlation coefficient between the scores of the paragraph and the total score of the scale, which is a strong indicator of the internal consistency of the scale, Cronbach's alpha coefficient is calculated based on the correlations between the score of each paragraph separately and the total result obtained from The scale "Total correlations between the paragraphs" (Brough, 2019: 51). In order to identify the significance of the values of the correlation coefficient, the value of (t) was calculated as a significance as the correlation factor, and it was found that the calculated value of (t) was greater than the value of (t) of (1.960) at the level of significance (0.05) and the degree of freedom (399), and Table (2) shows this.

Table (2) Correlation coefficients for each item of the Health Thinking Scale with the total score of the scale

Paragraph Number	The relationship between the paragraph and the total score of the correlation coefficient	(T-test) for correlation coefficients
1.	0.58	14.09
2.	0.64	16.75
3.	0.66	17.67
4.	0.66	17.72
5.	0.72	20.58
6.	0.72	20.70
7.	0.68	18.60
8.	0.73	21.25
9.	0.64	16.79
10.	0.66	17.57
11.	0.71	20.17
12.	0.72	20.52
13.	0.70	19.39
14.	0.72	20.52
15.	0.66	17.48
16.	0.67	18.10
17.	0.64	16.57
18.	0.68	18.40
19.	0.64	16.57
20.	0.68	18.65
21.	0.70	19.66
22.	0.70	19.50
23.	0.66	17.34
24.	0.61	15.20

* The tabular value is equal to (1.96).

Reliability of the scale

The rescaling method of consistency measures the temporal stability of the scale. In this method, the scale is administered for the same sample on two different occasions, this type of stability is used to assess the consistency of the scale over time (time stability), this approach assumes that there will be no significant change in the structure measured between the two occasions, by administering the same procedure on two different occasions. The researcher obtains two sets of scores. The correlation coefficient calculated for these two sets of scores is the stability coefficient (Verma, 2019: 47). Accordingly, the researcher extracted the stability of the scale by re-scaling on a sample of (100) male and female students, and after (15) days, the same scale was reapplied to the members of the stability sample themselves, and the value of the correlation coefficient between the scores of the first measurement and the scores of the second measurement reached (0.80), and in this type of estimation of the value of the stability coefficient, we can determine the extent of reliability in the possibility of generalizing the results from the degree obtained by the individual.

Correcting the Health Thinking Scale

Correction means placing a score for the examinee's response on each of the paragraphs of the scale and then adding the scores to find the total score, the scale was corrected according to the method prepared by the two researcher as more appropriate than others, as the one who sets the scale is the one who holds the key to correction (Rabih and Khatam, 2008: 206). As for the weights and alternatives of the response on the paragraphs of the scale, there were four alternatives, namely: (Applies to me a lot, applies to me to a moderate degree, applies to me a little, does not apply to me). The lowest score was (24) and the highest score was (96), and with a hypothetical average of (60), see Figure (1).

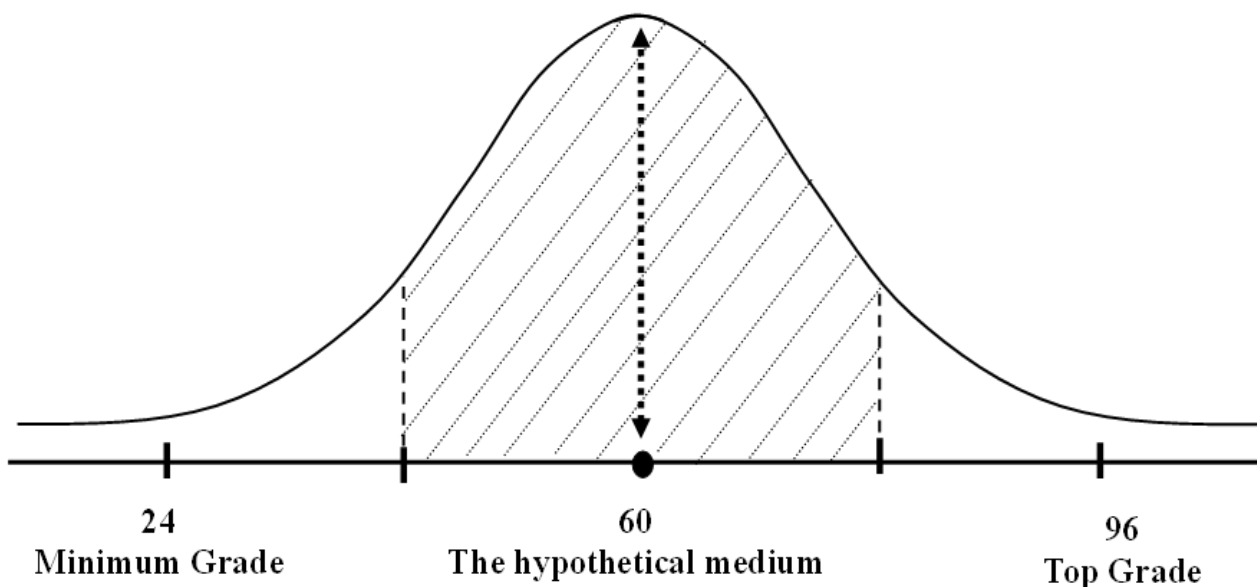


Figure (1) represents the minimum, maximum, and average hypothetical values for healthy thinking.

RESULTS

Measuring Health Thinking

To achieve the goal and after processing the data statistically, the results showed that the arithmetic average of the students' score reached (69.93) with a standard deviation of (17.20) and when comparing the arithmetic mean of the students' score with the hypothetical average of performance of (60) and using the T scale for one sample, it was found that the calculated T value is equal to (11.54) which is greater than the tabular T value (1,96) at the significance level of (0.05) and the degree of freedom (399). It was found that the T-value indicates the existence of a statistically significant difference, in the sense that the students of the Faculties of Education for Humanities and Pure Sciences possess healthy thinking, and Table (3) shows this.

Table (3) Results of the T Scale for the Significance of Health Thinking

Number	Hypothetical Average	Arithmetic Average	Standard deviation	T-value		Significance level at (0.05) function
				Calculated	Tabularity	
400	60	69.93	17.20	11.54	1.96	

The researcher attribute this finding to the city's historical cultural diversity, which has led to students' intellectual flexibility and prompted them to adapt to this diversity. Educational policies have also contributed to promoting self-awareness through curricula that focus on self-analysis of preconceived notions. In addition, the city's recent community initiatives (such as cultural festivals) that have turned challenges into opportunities for constructive dialogue have generated a more positive outlook for a brighter future. Finally, Mosul's experience with crises (such as war and reconstruction) has served as a natural laboratory for developing crisis management by deconstructing complexities with a rational methodology. These interactions show that healthy thinking is not just an individual skill, but the product of an interaction between the self and the complex environment.

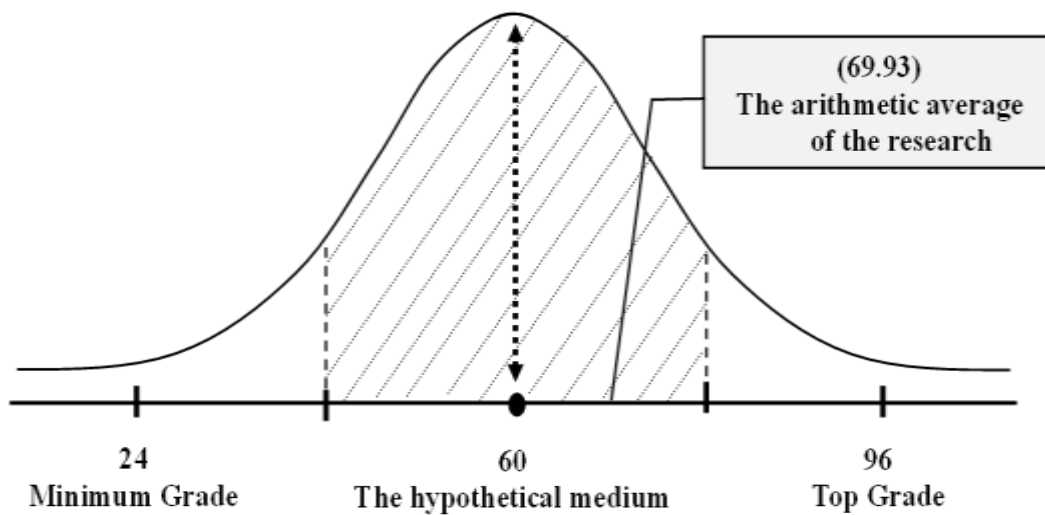


Figure (2) The level of health thinking among the research sample

CONCLUSION

The students of the Faculties of Education for Humanities and Pure Sciences have a positive outlook,

Intellectual flexibility, and self-awareness in managing the crises they face, and this is a clear proof of healthy thinking.

REFERENCES

1. AL-Ogaidi, Mohammed Hashim Taha Sulaiman (2025) Building and Applying the Reckless Thinking Scale among Students of the Faculties of Education for Humanities and Pure Sciences. International journal of research and innovation in social science (IJRISS), Volume/Issue:9\12, Page No: 164-173.
2. AL-Ogaidi, Mohammed Hashim Taha Sulaiman (2025) Twisted thinking and its relationship to radical thinking among university students. SA Journal of Industrial Psychology, Vol 51, a2245.
3. AL-Ogaidi, Mohammed Hashim Taha Sulaiman (2026) Building and Applying the Repetitive Thinking Scale among Students of the Faculties of Education for Humanities and Pure Sciences. International journal of research and innovation in social science (IJRISS), Volume/Issue: 10/3 | Page No: 6529-6538.
4. AL-Ogaidi, Mohammed Hashim Taha Sulaiman (2026) Measuring Twisted Thinking among Young University Students. International journal of research and innovation in social science (IJRISS), Volume/Issue: 10/2 | Page No: 3979-3987.

5. Brough, Paula (2019) *Advanced Research Methods for Applied Psychology Design, Analysis and Reporting*. First published by Routledge, 2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN 711 Third Avenue, New York, NY 10017, United States of America.
6. Brown, A. (2018). The role of meta-awareness in the Healthy Minds Framework: Insights from fMRI studies. *Journal of Cognitive Neuroscience*, 25(3), 50–60.
7. Brown, L. M. (2018). *Metacognition and emotional regulation in higher education*. Academic Press.
8. Center for Healthy Minds. (2020). *Enhancing neural plasticity through mindfulness: A report on academic adaptability* (Report No. 2020-15).
9. Dahl, C. J., Davidson, R. J., & Lutz, A. (2020). The framework of healthy minds: Training purpose and neural correlates. *Journal of Cognitive Neuroscience*, 32(4), 10–15.
10. Duhigg, C. (2012). *The power of habit: Why we do what we do in life and business*. Random House.
11. Dunn, Dana S. (2013) *Research Methods for Social psychology*. Second Edition, Textbook, ISBN 978-1-118-40605-2, Printed in the United States of America.
12. Dweck, C. S. (2006). *Mindset: The New Psychology of Success*. New York: Random House Publishing Group. *Journal Psychology*, Vol.7 No.9.
13. Eid, Jarle, Anita Lill Hansen, Natalia Andreassen, Roar Espevik, Guttorm Brattebø and Bjørn Helge Johnsen (2023) *Developing local crisis leadership – A research and training agenda*. *Sec. Health Psycholog*, Volume 14.
14. Ferguson, Connor L. & Julie A. Lockman (2024) *Increasing PhD student self-awareness and self-confidence through strengths-based professional development*. published by Julie A. Lockman, Volume 9.
15. Filice, Lucas & W. James Weese (2024) *Developing Emotional Intelligence*. *Journal of Encyclopedia*, Vol. 4.
16. Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist*, 34(10), 906–911.
17. Garcia, R. T. (2023). *Holistic approaches to student mental health*. Springer Nature.
18. Habib, Safaa Tarek and Sadiq Abdel Nour Aziz (2018) *Building Psychological Scales According to the Paragraph Response Theory Using the Generalized Scouting Model*. First Edition, Dar Al-Manhayah for Publishing and Distribution, Amman, Jordan.
19. Howitt, Dennis and Duncan Cramer (2014) *Introduction to Research Methods in Psychology*. Fourth Edition, printed by Ashford Colour Press Ltd., Gosport, Pearson Education Limited, Edinburgh Gate, Harlow CM20 2JE, United Kingdom.
20. Hurson, T. (2008). *Think better: An innovator’s guide to productive thinking*. McGraw-Hill.
21. Javidi, Nasir, Mostafa Ghanei, Khodabakhsh Ahmadi, Mohammad Javad, Ahmadizadeh & Abbas Ebadi (2022) *Indicators of Intellectual Thinking as Healthy Thinking and Its Relation with Health-Promoting Lifestyle: A New Perspective in Clinical Psychology and Public Health*. *Iran J Public Health*, Vol. 51, No.6.
22. Joshanloo, M. (2019). Purposeful thinking, cortisol levels, and academic perseverance: Empirical evidence. *Journal of Happiness Studies*, 20(3), 1–12.
23. Kahneman, D. (2011). *Thinking, fast and slow*. Farrar, Straus and Giroux.
24. Lee, H., & Park, J. (2022). *Crisis resilience in educational settings*. Routledge.
25. MacBride, Dawn M. (2018) *the Process of Statistical Analysis in Psychology*. SAGE Publications Ltd, 1 Oliver’s Yard 55, City Road London, EC1Y 1SP, United Kingdom.
26. Markus, Keith A and Denny Borsboom (2013) *Frontiers of Test Validity Theory Measurement, Causation, and Meaning*. Published by Routledge, 711 Third Avenue, NY 10017, New York, United States of America.
27. Privitera, Gregory J. (2019) *Essential Statistics for the Behavioral Sciences*. Second Edition, SAGE Publications Ltd, one Oliver’s Yard 55 City Road London, EC1Y 1SP United Kingdom.
28. Rabie, Mashaan Hadi and Khatam Ismail Ahmed (2008) *Measurement and Evaluation in Education*. Dar Zahran, Amman, Hashemite Kingdom of Jordan.
29. Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being. *Journal of Personality and Social Psychology*, 57(6), 1069–1081.
30. Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York: Free Press, Vol. 3 No. 1.



31. Smith, J. A. (2021). *Foundations of healthy thinking: Theory and practice*. Oxford University Press.
32. Suud, Fitriah M. & Tri Na'imah (2023) The effect of positive thinking training on academic stress of Muslim students in thesis writing: a quasi-experimental study. *international journal of adolescence and youth*, vol. 28, No. 1.
33. Thompson, R., Davis, K., & Miller, F. (2019). *Cognitive flexibility and learning in the digital age*. Harvard Education Press.
34. Verma J. P. (2019) *Statistics and Research Methods in Psychology with Excel*. Published by the registered company Springer Ltd, the registered company, 152 Beach Road, Gateway East, Singapore.
35. Waugh, E. Waugh & Anthony W. Sali (2023) Resilience as the Ability to Maintain Well-Being: An Allostatic Active Inference Mode. *Journal of Intelligence*, Vol. 11, No. 158.
36. Wong, P. T. P. (2011). *The human quest for meaning: A handbook of strategies*. New York: Routledge.