

Constructing and applying an intellectual gluttony scale among students of the colleges of education for humanities and pure sciences

Mohammed Hashim Taha Sulaiman AL-Ogaidi *

Department of Educational and Psychological Sciences, College of Education for Humanities, University of Mosul.

International Journal of Science and Research Archive, 2026, 19(03), 898-906

Publication history: Received on 12 May 2026; revised on 21 June 2026; accepted on 23 June 2026

Article DOI: <https://doi.org/10.30574/ijrsra.2026.19.3.1375>

Abstract

The present research aims to construct and apply a scale of Intellectual Gluttony among students of the Colleges of Education for Humanities and Pure Sciences at the University of Mosul. The research sample consisted of (400) male and female students, selected by the stratified random method with equal distribution across all academic levels. The scale was constructed by the researcher relying on theoretical bridging (the synthetic approach), and consisted of (24) items distributed across four dimensions: Cognitive Curiosity, Intellectual Passion, Cognitive Hoarding, and Intellectual Obsession. The apparent (face) validity value reached (96%), and construct validity was confirmed at a statistically significant level (0.05), while the test-retest reliability coefficient reached (0.83). The results indicated that the arithmetic mean of students' scores was (74.72) with a standard deviation of (18.00); when compared with the hypothetical mean of (60) using a one-sample t-test, the calculated t-value was (16.35), which is greater than the tabulated value (1.96) at the (0.05) significance level. The research concludes that students of both colleges possess a high level of Intellectual Gluttony, and that its four dimensions interact with psychosocial factors, transforming the legitimate desire for knowledge into unbalanced academic behaviors.

Keywords: Intellectual Gluttony; Cognitive Curiosity; Intellectual Passion; Cognitive Hoarding; Intellectual Obsession; University Students

1. Research Problem

Arab societies suffer from a noticeable decline in cognitive curiosity and intellectual passion, resulting from interrelated factors, most notably educational systems based on memorization and rote learning, and economic pressures that push individuals to focus on the demands of material life at the expense of intellectual inquiry. Educational institutions tend to emphasize grade-based success without encouraging students to adopt philosophical questions or pursue intellectual interests outside the formal curriculum; indeed, social culture may even describe intense intellectual engagement as "overthinking" or "detachment from reality," particularly when it does not translate into direct material benefit.

Proceeding from this, the research problem can be summarized in the following question: Can Intellectual Gluttony be measured among students of the Colleges of Education for Humanities and Education for Pure Sciences at the University of Mosul?

1.1 Significance of the Research

1.1.1. Theoretical Significance

The research offers a theoretical contribution by developing the conceptual framework of Intellectual Gluttony through identifying its four dimensions: Cognitive Curiosity, Intellectual Passion, Cognitive Hoarding, and Intellectual Obsession,

* Corresponding author: Mohammed Hashim Taha Sulaiman AL-Ogaidi.

clarifying how these variables operate as psychological mechanisms that shape Intellectual Gluttony. Furthermore, constructing the scale and verifying its psychometric soundness provides an empirically grounded instrument for measuring this concept.

1.1.2. *Applied Significance*

The applied significance is manifested in contributing to the design of training programs that teach students to transform random curiosity into purposeful exploration, and in providing activities that require them to use accumulated resources to solve real-world problems. The research also enables teachers, counselors, and parents to detect early signs of cognitive burnout and to guide students toward balanced success.

1.2. Research Objective

The research aims to identify the level of Intellectual Gluttony among students of the College of Education for Humanities and the College of Education for Pure Sciences at the University of Mosul.

1.3. Research Limits

The research is delimited to students of the University of Mosul regularly enrolled in morning studies at the Colleges of Education for Humanities and Pure Sciences for the academic year (2025–2026).

1.4. Definition of Terms

- **Theoretical Definition:** "An urgent and excessive desire for knowledge or intellectual stimulation that leads to the neglect of other areas of life and a continuous feeling of cognitive inadequacy."
- **Operational Definition:** The total score obtained by a student according to his/her responses on the Intellectual Gluttony Scale prepared for this purpose.

1.5. Theoretical Framework

This research draws upon a number of theories and models that explain the phenomenon of Intellectual Gluttony from multiple cognitive and psychological perspectives, which can be summarized as follows:

1.6. Berlyne's Theory of Epistemic Curiosity (1960)

Unstructured cognitive curiosity feeds Intellectual Gluttony, as individuals pursue new information without integrating it into coherent cognitive frameworks, moving between topics without depth. Excessive, unresolved stimulation leads to cognitive dissonance and fragmented learning.

1.7. Self-Determination Theory (Deci & Ryan, 1985)

When curiosity becomes linked to external validation (such as grades or rewards) rather than intrinsic motivation, it turns into gluttony that drives students toward compulsive learning. This external focus undermines autonomy and reinforces an obsessive study pattern.

2. Cognitive Load Theory (Sweller, 1988)

Intellectual Gluttony arises when individuals misjudge their capacity to process information, leading them to hoard resources in the belief that accumulation equals preparedness, which overburdens working memory and weakens critical analysis.

2.1 Flow Theory (Csikszentmihalyi, 1990)

This theory explains how Intellectual Gluttony can develop into addiction, as the brain releases dopamine during deep immersion in learning, reinforcing the prolongation of study sessions at the expense of life balance.

2.2 Models of Cognitive Hoarding and Intellectual Obsession

Information Foraging Theory (Pirolli & Card, 1999) and Salkovskis's Model of Obsessional Thinking (1985) are explanatory models of resource-hoarding behavior and compulsive studying, whereby the pursuit of knowledge shifts from a noble goal into a persistent source of anxiety.

2.3 Vallerand's Dualistic Model of Passion (2010)

Obsessive passion aligns with Intellectual Gluttony, as individuals tie their self-worth to academic output. For example, a graduate student may work sixteen hours a day, equating productivity with personal value, which reinforces burnout and triggers anxiety when self-imposed standards are not met.

2.4 Dual Process Theory (Kahneman, 2011)

This theory distinguishes between two cognitive systems: System 1 (automatic, intuitive thinking) and System 2 (slow, analytical thinking). Intellectual Gluttony may stem from excessive reliance on System 1, whereby students consume information impulsively without strategic planning, leading to fragmented learning and increased cognitive load.

3. Previous Studies

3.1 Al-Ogaidi and Al-Salih Study (2026) – University of Mosul, Iraq

Titled "Building and Applying the Repetitive Thinking Scale among Students of the Faculties of Education for Humanities and Pure Sciences," this study is among the most methodologically proximate to the current research, as it matched it in research population (students of the Colleges of Education for Humanities and Pure Sciences at the University of Mosul), sample size (400 male and female students), instrument-construction method (theoretical bridging via the synthetic approach), and number of scale items (24 items). The study adopted four dimensions of Repetitive Thinking: Intrusive Thoughts, Repetitive Thought Patterns, Negative Emotional Impact, and Cognitive Interference. Face validity reached (95%), and the test-retest reliability coefficient was (0.86). Results showed that the arithmetic mean of students' scores was (55.20) with a standard deviation of (13.35), below the hypothetical mean (60); the calculated t-value (7.19) exceeded the tabulated value (1.96) at the (0.05) significance level, indicating that the sample in that study did not possess Repetitive Thinking, and that the absence of this pattern reflects mental flexibility and an ability to adapt to the changing university environment. (Al-Ogaidi & Al-Salih, 2026: 6537)

Note: No Arabic study has examined the variable of Intellectual Gluttony under that same designation and concept up to the preparation of this research; however, the Al-Ogaidi and Al-Salih study (2026) cited above represents the closest methodological precedent in terms of research population, sample, and instrument-construction method.

3.2 Suleman et al. Study (2019) – Pakistan

This study examined the relationship between emotional intelligence and academic success among (186) university students, using an emotional intelligence scale and cumulative GPA. Results showed a strong positive correlation between the two variables ($r = 0.88$); high emotional intelligence was associated with balanced intellectual engagement and reduced burnout.

3.3 Cumming et al. Study (2016) – A Synthesis Study

An analysis of 134 studies addressing students' writing from sources for academic purposes revealed a phenomenon of "source hoarding" driven by anxiety over losing information, leading to fragmented academic writing. The analysis also found that cultural backgrounds influence hoarding behaviors.

3.4 Research Method

The descriptive method was adopted for its suitability to the nature of the research, which aims to describe and measure the phenomenon of Intellectual Gluttony; this method serves as an entry point for understanding reality and lays the groundwork for future experimental studies.

3.5 Research Population and Sample

The research population consists of students of the Colleges of Education for Humanities and Pure Sciences at the University of Mosul, morning studies, for the academic year (2025–2026), totaling (10,045) male and female students; of whom (7,208) are enrolled in the College of Education for Humanities, and (2,837) in the College of Education for Pure Sciences.

A stratified random sample with equal distribution comprising (400) male and female students was drawn from the population, with (40) students selected from each academic department, distributed equally across the four academic years and between the two sexes.

Table 1 Distribution of the Research Sample by College, Department, Sex, and Academic Year

College	Department	Sex	Year 1	Year 2	Year 3	Year 4	Total
Education for Humanities	Arabic Language	M / F	5 / 5	5 / 5	5 / 5	5 / 5	40
	English Language	M / F	5 / 5	5 / 5	5 / 5	5 / 5	40
	Geography	M / F	5 / 5	5 / 5	5 / 5	5 / 5	40
	History	M / F	5 / 5	5 / 5	5 / 5	5 / 5	40
	Quranic Sciences	M / F	5 / 5	5 / 5	5 / 5	5 / 5	40
Education for Pure Sciences	Physics	M / F	5 / 5	5 / 5	5 / 5	5 / 5	40
	Chemistry	M / F	5 / 5	5 / 5	5 / 5	5 / 5	40
	Mathematics	M / F	5 / 5	5 / 5	5 / 5	5 / 5	40
	Life Sciences	M / F	5 / 5	5 / 5	5 / 5	5 / 5	40
	Computer Science	M / F	5 / 5	5 / 5	5 / 5	5 / 5	40
Grand Total							400

3.6 Research Instrument

3.6.1 *The Intellectual Gluttony Scale*

In constructing the scale, the researcher followed a synthetic approach based on theoretical bridging among the multiple theories and models related to Intellectual Gluttony, and identified the following four dimensions:

- **First Dimension – Cognitive Curiosity:** A strong desire to learn new things, explore ideas, and an eagerness for knowledge.
- **Second Dimension – Intellectual Passion:** Deep enthusiasm and engagement with complex—and at times unproductive—intellectual issues.
- **Third Dimension – Cognitive Hoarding:** Reluctance to share ideas, regarding them as personal possessions, and accumulating information without organizing it.
- **Fourth Dimension – Intellectual Obsession:** Excessive preoccupation with intellectual activities to the point that they interfere with daily and emotional life.

The scale in its initial form consisted of (51) items, which were reduced after statistical analysis to (24) final items. Items are answered using four alternatives: (Applies to me a lot – Applies to me to a moderate degree – Applies to me a little – Does not apply to me), with scores ranging from a minimum of (24) to a maximum of (96), and a hypothetical mean of (60).

3.7 Psychometric Properties of the Scale

3.7.1 *Face Validity*

The scale was presented to (17) experts and specialists in educational and psychological sciences from the faculty of the University of Mosul; all items obtained an agreement rate of (96%), confirming the scale's face validity.

Table 2 Item Discrimination Coefficients of the Scale (n = 216)

Item No.	Upper Group Mean	SD	Lower Group Mean	SD	t-value
1	3.94	0.30	2.78	1.20	13.87
2	3.93	0.40	2.49	1.05	18.73
3	3.93	0.35	2.44	1.12	18.55
4	3.95	0.25	2.05	0.97	28.03

5	3.96	0.19	2.55	1.17	17.47
6	3.99	0.10	2.59	1.15	17.69
7	3.96	0.19	2.31	1.11	21.60
8	3.98	0.13	2.49	1.14	19.00
9	3.98	0.13	2.46	1.16	19.10
10	3.95	0.25	1.98	1.06	26.49
11	3.95	0.25	2.03	0.92	29.69
12	3.96	0.23	2.54	1.13	18.19
13	3.98	0.13	2.56	1.23	16.83
14	3.97	0.21	2.41	1.15	19.67
15	4.00	0.00	1.98	0.96	30.76
16	3.95	0.25	1.82	0.92	32.71
17	3.94	0.41	1.72	0.87	33.69
18	3.94	0.33	1.75	0.94	32.19
19	3.97	0.16	1.79	0.92	34.16
20	3.98	0.13	2.07	1.10	25.17
21	3.98	0.13	2.04	1.11	25.42
22	3.97	0.16	2.19	1.08	23.96
23	3.99	0.10	1.94	0.96	31.40
24	3.98	0.13	2.06	1.01	27.53

3.8 Construct (Discriminant) Validity

The scale was applied to a statistical analysis sample of (400) male and female students, and the upper and lower groups were determined at (27%) from each extreme, i.e., (108) students per group. An independent-samples t-test was used to compare the two groups on each item; all (24) items showed statistically significant discriminating power at the (0.05) level with a tabulated value of (1.96), with calculated t-values ranging between (13.87) and (34.16).

4. Internal Consistency

Correlation coefficients between each item's score and the scale's total score were calculated on a sample of (400) male and female students. Correlation values ranged between (0.57) and (0.75), all statistically significant, as the calculated t-values exceeded the tabulated value (1.96) at the (0.05) significance level with (398) degrees of freedom, confirming the high internal consistency of the scale.

Table 3 Item–Total Correlation Coefficients of the Scale

Item No.	Correlation Coeff.	t-value	Item No.	Correlation Coeff.	t-value
1	0.57	13.80	13	0.62	15.72
2	0.65	17.20	14	0.64	16.75
3	0.62	15.89	15	0.75	22.42
4	0.73	21.12	16	0.73	21.18
5	0.60	14.81	17	0.75	22.90
6	0.62	15.56	18	0.72	20.88

7	0.66	17.72	19	0.75	22.90
8	0.63	16.36	20	0.72	20.76
9	0.64	16.44	21	0.74	22.01
10	0.72	20.52	22	0.70	19.66
11	0.75	22.42	23	0.74	22.01
12	0.63	16.01	24	0.73	21.00

4.1 Reliability of the Scale

Reliability was extracted using the test-retest method on a sample of (100) male and female students; after a (15)-day interval, the same scale was re-administered to the same sample members. The correlation coefficient between the two sets of scores was (0.83), a high reliability indicator that exceeds the theoretically acceptable threshold of (0.80).

5. Results

5.1 Results of Measuring Intellectual Gluttony

After applying the scale to the main research sample (400) male and female students and statistically processing the data using the Statistical Package for Social Sciences (SPSS), the results showed that the arithmetic mean of students' scores was (74.72) with a standard deviation of (18.00). When this mean was compared with the hypothetical mean (60) using a one-sample t-test, the calculated t-value was (16.35), greater than the tabulated value (1.96) at the (0.05) significance level with (399) degrees of freedom, indicating a statistically significant difference, meaning that students of the Colleges of Education for Humanities and Pure Sciences possess a high level of Intellectual Gluttony.

Table 4 Results of the t-test for the Significance of Intellectual Gluttony among the Research Sample

N	Arithmetic Mean	Hypothetical Mean	SD	Calculated t	Tabulated t	Sig.
400	74.72	60	18.00	16.35	1.96	Significant

6. Discussion of Results

The elevated level of Intellectual Gluttony among students of both colleges can be interpreted in light of the local social and educational context, as students seek to compensate for educational gaps through random, undirected information consumption. They also tend to study multiple subjects simultaneously without integrating them into the formal curriculum, leading to cognitive fragmentation. Academic passion may turn into obsession as a result of the desire for self-affirmation, prompting students to adopt excessive study hours at the expense of psychological health. Furthermore, students develop "cognitive stockpiling" behavior as a coping mechanism against the fear of missing opportunities, which weakens critical analysis and deepens feelings of exhaustion.

7. Conclusion

The four dimensions of Intellectual Gluttony interact, within the context of the Colleges of Education for Humanities and Pure Sciences, with psychosocial factors, transforming the legitimate desire to gather information into unbalanced academic behaviors. The lack of educational infrastructure and societal pressures intensify these dimensions, creating a vicious cycle between the pursuit of self-affirmation and the deterioration of psychological health. The research results confirmed that students of both colleges possess a high and statistically significant level of Intellectual Gluttony.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Abbas, M. K., et al. (2014). Introduction to research methods in education and psychology (5th ed.) [in Arabic]. Dar Al-Masirah, Amman.
- [2] Al-Daamin, M. (2007). Fundamentals of scientific research (1st ed.) [in Arabic]. Dar Al-Masirah, Amman.
- [3] Al-Jabali, S. S. (2005). The basics of constructing psychological and educational tests and scales (1st ed.) [in Arabic]. Aladdin Printing and Distribution, Damascus.
- [4] AL-Ogaidi, Mohammed. H. T. S., & Al-Salih, H. I. M. (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*, 10(3), 6529–6538. <https://doi.org/10.47772/IJRISS.2026.100300471>
- [5] Berlyne, D. E. (1960). Conflict, arousal, and curiosity. McGraw-Hill.
- [6] Brown, T. (2020). The double-edged sword of intellectual passion. *Educational Research Quarterly*, 44(2), 25–40.
- [7] Clark, R. (2021). *The Paradox of Knowledge Consumption*. London: Academic Press.
- [8] Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approach* (4th ed.). Sage.
- [9] Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. Harper & Row.
- [10] Cumming, A., Lai, C., & Cho, H. (2016). Students' writing from sources for academic purposes: A synthesis of recent research. *Journal of Second Language Writing*, 34, 1–16.
- [11] Davis, K. (2020). Holistic learning: Integrating mind and practice in higher education. *Journal of Academic Wellbeing*, 8(2), 50–65.
- [12] Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum Press.
- [13] Elliot, A. J., & McGregor, H. A. (2001). A 2×2 achievement goal framework. *Journal of Personality and Social Psychology*, 80(3), 501–519.
- [14] Habib, S. T., & Sadiq, A. N. A. (2018). *Constructing psychological scales according to item response theory* (1st ed.) [in Arabic]. Al-Manhajiya House, Amman.
- [15] Hafiz, A. R. A. (2012). *Fundamentals of scientific research* (1st ed.) [in Arabic]. Scientific Publishing Center, Jeddah.
- [16] Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts. *Journal of Personality and Social Psychology*, 60(3), 456–470.
- [17] Kahneman, Daniel. (2011). *Thinking, Fast and Slow* (New York, NY: Farrar, Straus and Giroux) 499.
- [18] Lazarus, R. S. & Folkman, S. (1984). *Stress, Appraisal, and Coping*. Springer Publishing Company: New York, NY, USA.
- [19] Mahasneh, I. M. (2013). *Psychological measurement in light of classical and modern theory* (1st ed.) [in Arabic]. Dar Jarir, Amman.
- [20] Murad, S. A., & Amin, A. S. (2005). *Tests and scales in psychological and educational sciences* (2nd ed.) [in Arabic]. Dar Al-Kitab Al-Hadith, Cairo.
- [21] Pirolli, P., & Card, S. (1999). Information foraging. *Psychological Review*, 106(4), 643–675.
- [22] Rabie, M. H., & Khatam, I. A. (2008). *Measurement and evaluation in education and teaching* [in Arabic]. Dar Zahran, Amman.
- [23] Salkovskis, P. M. (1985). Obsessional-compulsive problems. *Behaviour Research and Therapy*, 23(5), 571–583.
- [24] Smith, L. (2019). Cognitive curiosity in higher education: Balancing inquiry and overload. *Journal of Educational Psychology*, 45(3), 112–125.
- [25] Suleiman, S. M. (2009). *Methods of scientific research in education and psychology* (1st ed.) [in Arabic]. Alam Al-Kutub, Cairo.

- [26] Suleman, Q., Hussain, I., Syed, M. A., Parveen, R., Lodhi, I. S., & Mahmood, Z. (2019). Association between emotional intelligence and academic success among undergraduates: A cross-sectional study in KUST, Pakistan. *PLOS ONE*, 14(7), e0219468.
- [27] Sweller, J. (1988). Cognitive load during problem solving. *Cognitive Science*, 12(2), 257–285.
- [28] Taylor, M. (2018). Information hoarding in academia: Causes and consequences. *Journal of Cognitive Studies*, 12(4), 14–29.
- [29] Vallerand, R. J. (2010). On passion for life activities: The dualistic model of passion. *Personality and Social Psychology Review*, 14(3), 313–331.
- [30] Wilson, A. (2022). Obsessive learning: The hidden crisis in university culture. *Higher Education Review*, 55(1), 30–45.

Appendix: The Intellectual Gluttony Scale in Its Final Form

The scale consists of (24) items distributed across four dimensions, answered using one of the following alternatives: (Applies to me a lot – To a moderate degree – A little – Does not apply to me).

No.	Item	Applies to me a lot	To a moderate degree	A little	Does not apply to me
1	I feel a strong desire to learn new things.				
2	I continuously explore new information and ideas.				
3	I am interested in learning about the culture of those around me.				
4	I connect different ideas and concepts.				
5	I listen to multiple viewpoints even when they conflict with my own opinion.				
6	I think in different ways to solve my problems.				
7	I seek out challenges in my field of study.				
8	I enjoy analyzing information and forming my own opinions.				
9	I have a passion for exploring different aspects of life.				
10	I spend long periods thinking about philosophical or scientific questions.				
11	I enjoy attending intellectual lectures and seminars.				
12	I continuously improve my knowledge and skills.				
13	I feel that my ideas are an essential part of my identity.				
14	I feel frustrated when I cannot remember all the details of a topic.				
15	I retain large amounts of information without organizing or classifying it.				
16	I fear that others will exploit my ideas for their own benefit.				
17	I feel that sharing ideas makes me vulnerable to criticism.				

18	I buy new books continuously.				
19	I neglect my academic duties because of my constant preoccupation with thinking.				
20	I find it difficult to focus on a conversation because of the flow of thoughts in my mind.				
21	I frequently feel tired and physically exhausted due to lack of sleep caused by excessive thinking.				
22	I think about all the possibilities that might happen to me in the future.				
23	I feel despair due to my inability to control my thoughts.				
24	Thoughts come to me involuntarily despite my attempts to ignore them.				