CENTRAL ASIAN JOURNAL OF MEDICAL AND NATURAL SCIENCES
https://cajmns.centralasianstudies.org/index.php/CAJMNS
Volume: 06 Issue: 02 | April 2025 ISSN: 2660-4159

Article

Personal Curiosity and Its Relationship to the Belief in Quick Learning Among University Students

Dr. Baydaa Saleh Hasan Al-Taie

1. University of Al-Qadisiyah, College of Dentistry, Al Diwaniyah, Iraq
* Correspondence: baydaa.saleh@qu.edu.iq

Abstract: Personal Curiosity and Its Relationship to the Belief in Quick Learning Among University Students – The present study sought to investigate the degree of individual inquisitiveness among university students, the conviction regarding rapid acquisition of knowledge, variations in individual curiosity according to gender (male–female) and field of study (scientific–humanities), variations in the belief in rapid learning according to gender and field of study, as well as the relationship between personal curiosity and the perception of rapid learning. A random sample of 377 students from Al-Qadisiyah University for the academic year 2023-2024 was selected, and two scales were employed: the Personal Curiosity Scale, formulated based on Litman's theory (2005) comprising 20 items, and the Belief in Quick Learning Scale, created by Schommer (2000) consisting of 12 items. Both instruments were translated into Arabic, and their psychometric qualities (validity and reliability) were evaluated prior to implementation. Findings revealed that university students demonstrate intrinsic curiosity and possess a conviction in rapid learning capabilities; while significant disparities in personal curiosity were observed according to gender and specialization, no differences in the belief in rapid learning were found based on these variables. Ultimately, a favorable association was identified between personal curiosity and the belief in rapid learning, leading the study to offer a series of recommendations and proposals.

Keywords: Personal curiosity, Belief in quick learning

Citation: Al-Taie, B. S. H. Personal Curiosity and Its Relationship to the Belief in Quick Learning Among University Students. Central Asian Journal of Medical and Natural Science 2025, 6(2), 540-554

Received: 20th Jan 2025
Revised: 24th Jan 2025
Accepted: 30th Jan 2025
Published: 16th Feb 2025

1. Introduction

Personal curiosity is a crucial factor that motivates students to explore and engage in continuous learning. It drives them to seek knowledge and interact effectively with the educational environment. Curiosity is linked to students' beliefs about the speed of learning, as it may positively influence their confidence in their ability to acquire knowledge quickly and efficiently. However, an exaggerated belief in rapid learning can have negative consequences, such as hasty information processing without deep understanding. This study aims to examine the relationship between personal curiosity and the belief in the speed of learning among university students, exploring how curiosity influences their educational orientations and academic performance.

A sample of (377) university students from Al-Qadisiyah University for the(2023-2024) academic year was randomly selected. To measure personal curiosity, the Curiosity Scale was developed based on theory, consisting of(20) items. The Belief in the Speed of Learning Scale, developed by and adapted into Arabic, consisted of(12) items. After establishing the psychometric properties, including validity and reliability, both instruments were applied to the research sample.

The findings indicated that the participants exhibited personal curiosity as well as a belief in the speed of learning. Additionally, the results revealed significant differences in personal curiosity based on gender (male-female) and discipline (scientific-humanities),

whereas no significant differences were found in the belief in the speed of learning based on these variables. Finally, the results indicated a positive correlation between personal curiosity and the belief in the speed of learning.

Based on these findings, the study provided several recommendations and suggestions for future research.

Research problem

Humans are intrinsically social, necessitating robust interactions to adapt and function effectively in a dynamic and complicated social milieu. Individuals consistently engage and evolve under various social pressures, requiring adaptability to the ongoing changes in a swiftly transforming world [1].

In the present century, individual curiosity is seen as an essential skill due to the rapid and continuous changes defining this period. The lack of personal interest in kids may result in psychological and behavioral issues, including worry, tension, and obstacles in social adaptation. Cognitive problems such as attentional distraction and academic stress from task accumulation may emerge, ultimately impeding academic performance. In contrast, personal curiosity can act as a powerful impetus for knowledge acquisition and world exploration, thus broadening students' perspectives and enhancing their comprehension of their environment [2].

Students' personal curiosity manifests in their need to acquire information about others, including their experiences, habits, and biographical facts [3]. Excessive exploration of issues beyond the curriculum might distract pupils and impede the timely completion of essential academic assignments. At times, curiosity may clash with pressing responsibilities [4]. Furthermore, certain students may encounter ennui stemming from their confidence in their capacity to assimilate information rapidly, resulting in diminished desire and concentration, ultimately hindering their ability to achieve their full potential.

This propensity for rapid learning may adversely impact academic and personal growth, as adolescents encounter considerable pressure to fulfill external expectations. This elevates anxiety and psychological tension, resulting in feelings of isolation and difficulties in establishing friendships. This also impacts their performance in collaboration, problem-solving, and constructive feedback, indicating the adoption of inappropriate cognitive styles (Dawes et al., 2014).

The researcher observed a decline in students' motivation to pursue knowledge that promotes necessary cognitive development, along with an inflated perception of their intellectual and psychological capabilities. This may negatively impact their perspective on life situations, indicating a deficiency in optimism and positivity. The research issue is encapsulated in the subsequent inquiry:

What is the relationship between personal curiosity and the belief in rapid learning among university students?

Importance of research: Students who see learning as a rapid process may encounter difficulties when it takes longer than expected, resulting in dissatisfaction or diminished desire. A balanced belief in rapid learning promotes mental flexibility, as pupils acknowledge that learning necessitates time and effort, so encouraging perseverance in the face of challenges.

Schommer delineates the distinctions between pupils who embrace a nuanced understanding of information, viewing it as malleable, and those who maintain a basic perspective, considering learning to be rapid and unchanging. This variance influences their reactions to challenges; pupils with complex thinking are inclined to persist, whereas those with basic thinking may abandon efforts swiftly when faced with barriers. Consequently, cultivating a balanced perception of rapid learning improves academic achievement and adaptation to various educational settings.

The researcher posits that the conviction in rapid learning is a pivotal element in influencing students' perceptions of education and attaining academic achievement. When students possess trust in their capacity for rapid learning, their self-efficacy enhances, so augmenting their confidence and inspiring them to confront academic problems. This conviction compels people to exert greater effort, enhancing academic

success. It also fosters the cultivation of critical thinking and problem-solving abilities, as students typically engage adaptively with academic resources. Moreover, it fosters constructive participation in educational endeavors, aiding in the cultivation of autonomous learning abilities. An false belief in rapid learning may result in impatience or irritation when faced with challenges. Consequently, it is imperative to equilibrate enthusiasm with realism to mitigate stress and anxiety while fostering sustainable learning.

Summarizing the importance of the current research in two aspects, theoretical and practical, as follows:

1. Practical Importance The research findings can be employed to build scientific strategies designed to alleviate the stress experienced by students and enhance their academic achievement.
2. Theoretical Importance The research enhances the educational and psychological literature by introducing novel variables and demonstrating their significant impact on students' lives.
3. The *Personal Curiosity Scale* employed in this study can function as a mechanism to discern student behaviors and design instructional techniques that correspond with their requirements.

Research Objectives: The present study seeks to:

1. The degree of individual inquisitiveness among university students.
2. The conviction regarding rapid acquisition of knowledge among university students.
3. Variations in individual curiosity according to gender (male–female) and field of study (scientific–humanities).
4. Variations in the belief in rapid learning according to gender (male–female) and field of study (scientific–humanities).
5. The relationship between individual curiosity and the perception of rapid learning among university students.

Literature Review

Scope of Research : The present study is confined to undergraduate students at the University of Al-Qadisiyah attending morning classes. Students from both science and humanities disciplines. Male and female students during the academic year 2023–2024.

Terminology Definition

1. Individual Inquisitiveness

a. According to, it is characterized as the inherent motivation to obtain knowledge and information to diminish uncertainty or bridge the perceived knowledge gap [5].
b. The researcher utilized concept as the theoretical underpinning for the current investigation, since it corresponds with the applied theoretical framework. [5]
c. The operational definition: A representative sampling of the behavioral range of the idea of personal curiosity, quantified by the total score achieved by the respondent based on their responses to the scale items.
d. 2-Belief in Learning Velocity: As articulated by, this concept posits that learning occurs at differing rates, ranging from rapid progression to complete cessation.[6]
e. Theoretical Definition: The researcher utilized definition as the theoretical framework for this investigation, as it corresponds with the study's conceptual base.[6]
f. The operational definition: A typical sample of the behavioral range of the idea of learning speed, quantified by the total score achieved by the respondent based on their responses to the scale items.

Theoretical Framework: Individual Inquisitiveness

The Need-for-Closure Theory proposed by Litman in 2005

Litman's theory of personal curiosity examines the fundamental motivations driving human curiosity, especially those associated with cognitive stimulation and the aspiration to diminish uncertainty. Litman is a leading researcher who enhanced the scientific comprehension of curiosity by differentiating between two primary types: curiosity

motivated by cognitive stimulation and curiosity motivated by the alleviation of worry or uncertainty.[5]

The Need-for-Closure Theory asserts that curiosity is driven by two elements: admiration and desire. When an individual possesses elevated admiration for something alongside diminished necessity, curiosity manifests as interest. Conversely, when an individual simultaneously esteems and requires something, curiosity emerges from lack. Conversely, when both admiration and need are minimal, humans may experience boredom and pursue new stimuli.

When a person experiences low appreciation yet possesses a high need, the sheer anticipation of alleviating this condition can provoke pathological curiosity. Furthermore, when affection for others and the level of interpersonal intimacy are both minimal, interpersonal curiosity emerges from ennui. Individuals may peruse others' social media profiles due to ennui. Nevertheless, when fondness for others is minimal and interpersonal proximity is comparatively strong, curiosity about others may mitigate discomfort stemming from cognitive uncertainty, such as observing neighbors.[5]

Comprehending these many forms of curiosity helps enhance students' motivation for more efficient learning. Cognitive curiosity can be elicited by offering study materials that ignite students' attention and motivate them to investigate deeper.

Elements of Litman's Theory:

1. Curiosity of the Interest Type

This form of curiosity is motivated by the pursuit of new knowledge for personal gratification and cognitive enrichment. Individuals possessing this type of interest experience exhilaration when acquiring or uncovering previously unrecognized facts. The main objective is to attain psychological fulfillment through exploration.

Deprivation-Driven Curiosity

This form of curiosity pertains to alleviating tension or anxiety stemming from insufficient information or uncertainty. In this context, curiosity serves as a potent impetus for acquiring knowledge to mitigate the unease stemming from ignorance or uncertainty.

Litman proposed an extensive framework for comprehending the various incentives that compel individuals to pursue knowledge and investigate new concepts. His thesis distinguishes between curiosity motivated by cognitive stimulation and that motivated by anxiety alleviation, so enriching the psychological comprehension of curiosity and endorsing tactics for effective learning and personal growth.

This comprehension emphasizes the pleasure and involvement individuals experience when acquiring new knowledge and engaging in educational pursuits driven by a passion for learning. It underscores their motivation to pursue novel answers, close knowledge gaps, resolve issues, and devise solutions to ambiguous circumstances (Researcher).

Belief in the Speed of Learning

Schommer's Epistemological Beliefs Theory

Schommer's theory is regarded as one of the most important and thorough frameworks for understanding epistemological beliefs, articulating them with clarity and precision. It offers a novel perspective on the examination of epistemological beliefs, conceptualizing personal knowledge as a system that operates with varying degrees of independence from these beliefs.[6] This indicates that humans possess several ideas concurrently, and these beliefs are separate, allowing learners to cultivate more sophisticated beliefs in some domains while staying less advanced in others.

This system has four epistemic beliefs arranged along a continuum:

1. Learning Capacity: This notion ranges from the perspective that learning ability is immutable to the conviction that it may be enhanced.
2. Structure of Knowledge: This encompasses the perception of knowledge as discrete fragments to its understanding as a sophisticated, interrelated network.

3. Speed of Learning: This concept spans from the notion that learning occurs either rapidly or not at all, to the understanding that knowledge is dynamic and evolves over time.

Schommer and Dunnell stated that individuals' views on culture and its essence comprise six systems, together shaping their epistemological beliefs:

1. Cultural Perspectives: Encompassing notions on ideal interpersonal interactions, the extent of intimacy among individuals, and interpretations of social stratification.
2. Epistemological Beliefs: Encompassing interconnected and discrete knowledge.
3. Epistemological Beliefs: Addressing the origin, framework, and validation of knowledge.
4. Learning Beliefs: Encompassing learning pace and capacity for acquisition.
5. Academic Performance in the Classroom.
6. Autonomous Learning.

Schommer elucidated that a person's epistemological belief system comprises interconnected clusters that shape attitudes, behaviors, and decision-making processes. This system comprises three subsystems:

1. The Nature and Content of Knowledge: Varying from rudimentary to intricate, and from definitive to empirical.
2. The Essence and Mechanism of Knowledge Acquisition: Incorporating source (authority, reason, velocity, and exertion).
3. Determining Factors: Encompassing inherent and learned capabilities. Schommer asserted that convictions regarding knowledge are completely distinct from convictions about learning.[7]

Schommer noted that these four characteristics do not include all facets of epistemic beliefs. Nonetheless, they offer a foundation for inquiry in this domain. Factor analysis revealed four epistemic aspects, delineated as follows:

1. Fixed Ability Belief: This belief pertains to the regulation of one's learning. Some students claim that their capacity for learning is innate and unchangeable, but others assert that they can acquire the skills necessary for effective learning. Students who possess a belief in fixed ability typically demonstrate diminished effort in learning, exhibit a reduced likelihood of seeking assistance during difficulties, and are more inclined to retreat from tough circumstances[8].
2. Belief in Simple information: This encompasses the perception of information as either discrete, unequivocal facts or as deeply interrelated concepts.[9] Students who perceive knowledge as simplistic are unlikely to assimilate varied concepts and sources. A student studying chemistry who holds this belief may concentrate on remembering formulas, equations, and terminology for examinations, whereas a student who perceives information as interconnected may endeavor to comprehend theories and chemical processes[8].
3. Conviction in Definitive Knowledge: This ranges from viewing knowledge as immutable to regarding it as provisional and progressive[9]. Students that possess a belief in definitive knowledge frequently arrive at unequivocal findings.[6] These pupils encounter difficulties with subjects that necessitate the assessment of theories or lack conclusive answers, depending on educators for explicit solutions[8].
4. Conviction Regarding Learning Velocity: This dimension pertains to views concerning the rate of learning. Students who perceive learning as a rapid process frequently have difficulties in task persistence and neglect to explore different strategies when their initial efforts prove unsuccessful. Their perspective is, “If I do not grasp it swiftly on the initial attempt, I will never comprehend it” [8].

2. Materials and Methods

Study Area:

a. **Methodology of Research**: This study employed the descriptive (correlational) method as its scientific approach, aiming to elucidate the psychological phenomenon by gathering, presenting, and statistically evaluating data. This approach emphasizes the examination of variables as they manifest within the sample, offering an accurate depiction of the phenomena[10].

b. Study Population: The population of this study comprises the students of Al-Qadisiyah University for the academic year 2023–2024, amounting to 18,546 individuals. This group comprises 10,694 students in scientific disciplines and 7,852 in humanities fields, with a distribution of 8,327 males and 10,219 females. Table (1) It shows that.

Table (1). Distribution of the Research Population by Discipline and Gender

Specialization	College name	Student numbers		the total
		Males	Females	
Scientific	medicine	405	731	1136
	Dentistry	183	369	552
	Pharmacy	183	414	597
	Nursing	76	396	472
	Engineering	370	419	789
	Biotechnology	108	218	326
	Veterinary medicine	170	193	363
	the sciences	256	599	855
	Computer Science and Information Technology	427	435	862
	Agriculture	263	372	635
	Management and Economics	1342	1038	2380
	Physical Education and Sports Science	635	164	799
	Education for scientific specializations	1244	1716	2960
the total		5662	7064	12726
Humanitarian	the law	620	395	1015
	Literature	700	616	1316
	The effects	174	130	304
	Girls Education	-	501	501
	fine arts	196	292	488
	Education for Humanities	975	1221	2196
the total		2665	3155	5820
Total		2665	10219	18546

Research Sample

Four hundred students from the scientific and humanities faculties of Al-Qadisiyah University made up the statistical analysis sample. There were two hundred students in the science sector and two hundred in the humanities sector. Three hundred seventy-seven students made up the main sample. Details can be found in Table (2) It shows that.

Table (2). Final Application Sample Distribution by Discipline and Gender

T	Specialization	College name	Sex		the total
			Males	Females	
1	Scientific	medicine	48	46	54
2		Management and Economics	49	46	55
the total			97	92	189
3	Humanitarian	the law	48	46	54
4		Literature	48	46	54
the total			96	92	188

Total	**192**	**184**	**377**

The researcher created the Personal Curiosity Scale and used the Learning Speed Belief Scale as research instruments to accomplish the study goals.

Beginning with the Personal Curiosity Scale

No local, Arabic, or international scale could be located after the researcher perused the pertinent literature and prior studies on the subject. That is why she set out to create a tool that college students might use to gauge their own level of curiosity.

Exploring the Idea of Individual Curiosity:

The researcher drew on Litman's theory of personal curiosity, which states that people are naturally inquisitive and seek out new information if they perceive a lack of understanding or confusion. According to Litman and 793, the theory distinguishes between two types of curiosity: (1) curiosity about minimizing uncertainty and (2) curiosity about exploring new things.[5]

Creation of the First Scale Version:

Using Litman's idea as a foundation, a total of twenty items were developed for the Personal Curiosity Scale. There were two main categories for these items:(1) curiosity in exploring new places and(2) curiosity about reducing ambiguity. There were five possible answers for each question: (very much so), "sometimes," "rarely," "not at all," and "strongly apply." Every item was presented as a declarative statement; these statements were brief, included a single notion, and were either in line with or opposed to the concept.[2]

Veracity of the Individual Curiosity Measure Items:

In its original form, the 20-item Personal Curiosity Scale was sent to a panel of twenty experts in the fields of education and psychology to verify its validity. The experts were requested to review the items in the original scale, offer suggestions for improvements, and assess the appropriateness of the response alternatives based on their professional judgment.

The opinions of the experts were analyzed using the Chi-square (χ^2) test. If the computed χ^2 value was lower than the crucial value of 3.84 at a significance level of 0.05 and degrees of freedom of 1, then any item was deemed acceptable. This procedure led to the deletion of two items (numbers 9–14) from the Personal Curiosity Scale. This technique is illustrated in Table (3) It shows that.

Table (3): Chi-Square (χ^2) Value (Calculated and Critical) for the Validity of the Personal Curiosity Scale Items

Variables	Paragraph number	Judges' opinions		Value of K2	percentage	Significance level
		Disagreements	Agree			
Personal curiosity	**1-6-3-7-8-11-12-13-15-16-17-18-19-20**	**---**	**20**	**20.0**	**100 %**	**Function**
	2-4-5-10	**2**	**18**	**12.8**	**90 %**	
	9-14	**12**	**8**	**0.8**	**60 %**	**Not significant**

3. Results

Instructions for the Personal Curiosity Scale

The respondents were given instructions to help them understand the scale's items and how to answer them correctly. There was no need to identify respondents because their answers were used for research reasons; the researcher made sure the instructions were clear and included an example to help understand. All information would be kept private, and they were also told not to leave any questions unanswered.

Clarity Test for Instructions and Understanding of the Items

Thirty students from the Dentist College and the Humanities College were randomly chosen to participate in a pilot study. There were no questions about the directions or the scale components, thus it was determined that they were transparent. The time it took to complete the survey varied from seven to twelve minutes.[11]

Statistical Analysis of the Items of the Personal Curiosity Scale

A total of 400 students, evenly split between males and females, were randomly chosen using stratified sampling to participate in the statistical analysis of the Personal Curiosity Scale items. The researcher determined each item's discriminative strength after administering and scoring the scale:

The Two-Extreme Group Method for the Personal Curiosity Scale

The following procedures were used by the researcher to accomplish this:

1. Forty students were chosen at random to take the test. We determined the overall score for each respondent after scoring their responses. Next, the results were sorted by decreasing score.
2. To determine whether there was a statistically significant difference between the two groups on each scale item, the researcher employed the t-test for independent samples. The items were determined to be discriminative because, with 214 degrees of freedom, all of the computed t-values were higher than the crucial value of 1.96 at a significance level of 0.05. This outcome is displayed in Table (4) It shows that.[12]

Table (4). Results of the t-test for Independent Samples to Test the Differences in the Mean Scores of the Personal Curiosity Scale for Discriminative Power

Psychometric Properties of the Emotional Anger Scale:

T	Lower group		Top Group		Calculated T-value
	Average	Standard deviation	Average	Standard deviation	
1	**3.57**	**1.156**	**2.35**	**1.050**	7.862
2	**4.03**	**1,000**	**3.27**	**1.127**	5.061
3	**3.63**	**1.062**	**3.06**	**1.377**	3.302
4	**3.99**	**1.039**	**3.33**	**1.197**	4.186
5	**3.70**	**1.115**	**3.12**	**1.180**	3.599
6	**3.56**	**1.104**	**3.12**	**1.016**	7.852
7	**3.24**	**1.204**	**1.68**	**0.834**	10.749
8	**3.30**	**1.201**	**1.66**	**1.104**	10.201
9	**3.34**	**1.346**	**1.75**	**1.105**	9.267
10	**2.77**	**1.378**	**1.25**	**0.571**	10.356
11	**3.25**	**1.114**	**1.75**	**0.801**	11.038
12	**3.28**	**1.269**	**1.67**	**0.836**	10.747
13	**2.79**	**1.229**	**1.43**	**0.697**	9.739
14	**3.25**	**3.25**	**1.69**	**0.901**	10.043
15	**3.54**	**1.123**	**1.85**	**0.948**	11.588
16	**3.39**	**1.314**	**1.91**	**1.135**	8.611
17	**3.89**	**1.004**	**2.52**	**1.208**	8.824
18	3.33	1.146	2.00	0.923	9.152

As mentioned earlier on page 9, the personal curiosity scale attained this type of validity when a group of education and psychology professionals were given the instructions and alternatives.

Construct Validity: This was achieved through:

How the Individual Items' Scores Contribute to the Overall Scale Score: In order to accomplish this, the correlation between the total score of the scale and each item's score was determined using Pearson correlation coefficients. When compared to the crucial value of the correlation coefficient—0.098—all correlation coefficients were determined to be statistically significant at the 0.05 level with 198 degrees of freedom. Table(5). It shows that

Table 5. Pearson Correlation Coefficients for the Personal Curiosity Scale

T	Correlation coefficient	Paragraph number	Correlation coefficient	Paragraph number	Correlation coefficient
1	**0.510**	**7**	**0.515**	**13**	**0.398**
2	**0.484**	**8**	**0.532**	**14**	**0.295**
3	**0.553**	**9**	**0.489**	**15**	**0.196**
4	**0.466**	**10**	**0.522**	**16**	**0.277**
5	**0.449**	**11**	**0.502**	**17**	**0.238**
6	**0.465**	**12**	**0.517**	**18**	**0.390**

Relationship Between the Item Score and the Total Score of the Domain It Belongs To

The purpose of this statistical indicator is to guarantee that the scale items point in the same direction as their respective domains. John Pearson We found the association between each item's score and the overall score of the domain it was a part of by calculating the correlation coefficient. The calculated correlation coefficients were larger than the critical value of the correlation coefficient (0.098) at a significance level of (0.05) with 375 degrees of freedom, hence all correlation coefficients were determined to be statistically significant. This correlation is shown in Table (6) It shows that.

Table (6). Correlation Between the Item Score and the Total Score of the Personal Curiosity Scale

The field	Paragraph number	Correlation coefficient	The field	Paragraph number	Correlation coefficient
Curiosity about reducing uncertainty	**1**	**0.579**	Curiosity about exploration	**10**	**0.534**
	2	**0.595**		**11**	**0.487**
	3	**0.630**		**12**	**0.518**
	4	**0.627**		**13**	**0.480**
	5	**0.533**		**14**	**0.441**
	6	**0.542**		**15**	**0.447**
	7	**597**		**16**	**0.589**
	8	**0.573**		**17**	**0.620**
	9	**0.639**		**18**	**0.616**

The Personal Curiosity Scale's Reliability: Two approaches were used to determine the scales' reliability: The test-retest method was used with a randomly selected sample of (30) pupils. Fourteen days later, the identical specimen was tested again. The link between the first and second administration scores was determined using Pearson's Correlation Coefficient. A correlation coefficient of(0.79) was obtained, indicating good dependability. Cronbach's Alpha: To determine the scale's internal consistency, the researcher analyzed data from a statistical sample of four hundred students. According to Cronbach's alpha, there is a high degree of dependability (0.81).

The last iteration of the Personal Curiosity Scale included eighteen items spread across two categories, as determined by its psychometric properties: (Interest in exploring new things and in finding ways to lessen the impact of unknowns).

Two, the Belief in Learning Speed Scale:The researcher used Schommer's Belief in Speed of Learning Scale after looking over related literature and prior research. The following 12 items make up the scale, with five possible answers for each: (This is something that I relate to—a lot—sometimes—very seldom—not at all—too strongly) The possible total scores go from 12 (the lowest) to 48 (the highest).[9]

Credibility of the Items on the Scale Measuring the Rate of Learning: Researchers utilized the Chi-Square test (χ^2) to examine expert reviewers' perspectives. At a significance level of 0.05 and with 1 degree of freedom, every item was determined to be

legitimate by comparing the computed χ^2 value to the critical table value of 3.84. Nothing was taken off the scale because of this process. The results are shown in Table (7) It shows that.

Table (7). Calculated and Critical Chi-Square Values for Differences in Expert Opinions on the Belief in Speed of Learning Scale

Variables	Paragraph number	Judges' opinions		Value of K2	percentage	Significance level
		Disagreements	Agree			
Belief in speed of learning	1-3-4-5-8-9-10-11	---	20	20	100 %	Function
	2-6-7-12	1	19	16.2	95 %	

Guidelines for the Belief in Speed of Learning Scale The directives for the Belief in Speed of Learning Scale are identical to those given for the Personal Curiosity Scale.

Pilot Assessment for Instruction Clarity and Comprehension of the Belief in Speed of Learning Scale Articles, The identical methodology employed for the Personal Curiosity Scale was utilized.

The duration needed to finish the scale varied from (5 – 7) minutes.

Statistical Analysis of the Belief in Learning Velocity: Scale Items The scale items' discriminative power was computed as follows:

Radical Organizations Procedure for the Belief in Speed of Learning Scale To do this, the researcher adhered to the identical procedures utilized for the Personal Curiosity Scale. Table (8) It shows that.

Table (8). Results of the Independent Samples t-Test for the Discriminative Power of the Belief in Speed of Learning Scale

Psychometric Properties of the Belief in Speed of Learning Scale

T	Lower group		Top Group		Calculated T-value
	Average	Standard deviation	Average	Standard deviation	
1	2.33	1.320	2.35	1.050	7.862
2	2.25	1,000	3.27	1.127	5.061
3	3.63	1.062	3.06	1.377	3.302
4	3.99	1.039	3.33	1.197	4.186
5	3.70	1.115	3.12	1.180	3.599
6	3.56	1.104	3.12	1.016	7.852
7	3.24	1.204	1.68	0.834	10.749
8	3.30	1.201	1.66	1.104	10.201
9	3.34	1.346	1.75	1.105	9.267
10	2.77	1.378	1.25	0.571	10.356
11	3.25	1.114	1.75	0.801	11.038
12	3.28	1.269	1.67	0.836	10.747
13	2.79	1.229	1.43	0.697	9.739
14	3.25	3.25	1.69	0.901	10.043
15	3.54	1.123	1.85	0.948	11.588
16	3.39	1.314	1.91	1.135	8.611
17	3.89	1.004	2.52	1.208	8.824
18	3.33	1.146	2.00	0.923	9.152

1. Face Validity: This form of validity has been affirmed, as previously indicated on page (12).
   Construct Validity: Construct validity was determined by the subsequent methods:
2. The Correlation Between Item Scores and Total Scale Scores: Pearson's Correlation Coefficient was employed to assess the relationship between the score of each item on the Belief in Speed of Learning Scale and the overall score of the scale. The findings indicated that all correlation coefficients were statistically

significant at the(0.05) significance level, with(198) degrees of freedom, as they surpassed the crucial correlation value of(0.098). Table(9) It shows that.

Table (9). Correlation Coefficients for the Belief in Speed of Learning Scale

Paragraph number	Correlation coefficient of the paragraph with the total score	Paragraph number	Correlation coefficient of the paragraph with the total score
1	**321.0**	**7**	**2809.0**
2	**7020.0**	**8**	**742.2**
3	**27.0**	**9**	**5880.0**
4	**219.0**	**10**	**923.0**
5	**722.0**	**11**	**540.5**
6	**60.602**	**12**	**3009.0**

Reliability of the Belief in Speed of Learning Scale : The scale's reliability was assessed using two methodologies:

1. Test-Retest Method: The scale was delivered to a cohort of (30) students, identical to the sample utilized for the Personal Curiosity Scale. After fourteen days, the scale was re-administered to the identical sample. Pearson's Correlation Coefficient was employed to assess the association between the scores from the initial and subsequent administrations. The correlation coefficient was(0.82), signifying strong reliability.
2. Cronbach's Alpha (Internal Consistency): The researcher employed a statistical analysis with a sample of (400) students to assess the internal consistency of the scale. The Cronbach's alpha value was(0.84), indicating a high degree of reliability.

Presentation and Interpretation of Results

The first goal: Personal Curiosity Among University Students

The Personal Curiosity Scale was administered to a research sample of (377) pupils. The findings indicated that the average score was (50.1). Upon comparing the mean score to the hypothetical mean (54) through a one-sample t-test, statistically significant differences were identified at the 0.05 significance level. The calculated t-value (-7.899) exceeded the crucial table value (1.96) in absolute terms, signifying that the differences aligned with the computed mean. Table (10) It shows that.

Table (10). Results of the One-Sample t-Test for the Personal Curiosity Scale Scores

variable	Sample	Arithmetic mean	Standard deviation	The hypothetical middle	Degree of freedom	T-value	Table value
Personal curiosity	**377**	**50.1**	**9.454**	**54**	**376**	**- 7.899**	**1.96**

The table above demonstrates that the calculated t-value (-7.899) exceeds the crucial table value (1.96) in absolute magnitude at the 0.05 significance level with 376 degrees of freedom, irrespective of the negative sign. This indicates a statistically significant disparity between the mean score and the hypothetical mean, favoring the hypothetical mean. This study indicates that the research sample demonstrates personal curiosity, suggesting that students had an intrinsic motivation to resolve uncertainty or knowledge gaps. Individual curiosity drives people to investigate the unfamiliar, acquire knowledge, and understand intricate subjects. University students exhibit differing degrees of personal curiosity contingent upon their inclination to investigate unfamiliar or tough topics within their academic disciplines. This inquisitiveness compels students to pursue knowledge, pose inquiries, and participate in novel educational situations. Litman posits that personal curiosity is intricately connected to a student's aspiration to augment their knowledge and expand their perspectives. Students exhibiting elevated curiosity are perpetually driven to enhance themselves through the acquisition of new knowledge and the engagement in unique experiences[5].

Second goal: Belief in Speed of Learning Among University Students

The Belief in Speed of Learning Scale was administered to a research sample of (377) students. Following the collection and analysis of the data, a one-sample t-test was employed to assess the disparities between the mean score and the theoretical mean. The findings indicated that the calculated t-value (-16.9) exceeded the critical table value (1.96) in absolute terms at the (0.05) significance level with 376 degrees of freedom, signifying a statistically significant difference. Table(11) It shows that.[13]

Table (11). Results of the One-Sample t-Test for the Belief in Speed of Learning Scale Scores

variable	Sample	Arithmetic mean	Standard deviation	The hypothetical middle	Degree of freedom	T-value	Table value
Belief in speed of learning	377	34.2	6.6	40	376	-16.9-	1.96

Schommer's Theory posits that the belief in the velocity of learning indicates the degree to which students perceive knowledge as attainable rapidly or gradually. Students who possess a diminished confidence in their learning velocity sometimes perceive education as a protracted endeavor necessitating considerable time and effort to comprehend new concepts. Schommer thinks that this belief can affect the learning processes employed by students. Students who perceive learning as a gradual process may be more predisposed to engage in repetitive reviews and sustained practice. They may also be less prone to experiencing frustration when faced with challenges in learning. This notion may cause people to feel that additional time is necessary for academic success, thus diminishing their expectations for rapid accomplishments. A diminished belief in the rapidity of learning indicates an acknowledgment that learning is a gradual endeavor necessitating patience and perseverance, consistent with Schommer's viewpoint[6].

The third goal: The differences in personal curiosity among university students based on the variables of gender (male female) and specialization (scientific – humanistic).[3]

To achieve the desired results for this objective, the scale was applied to the final research sample. After analyzing the data using the independent-samples t-test, the results are presented in Table (12), which illustrates the following:

Table (12). The means, standard deviations, calculated t-values, and tabulated t-values of personal curiosity according to the variables of gender and specialization.

Sex	number	Arithmetic mean	Standard deviation	Degree of freedom	T-value		Significance level
					Calculated	Tabular	
Males	153	51.21	9.301	375	1.804	1.96	0.05
Females	224	49.43	9.511				
humanitarian	204	47.75	7.982	375	5.447	1.96	0.05
scientific	173	52.98	10.263				

Results in Table (11):

No notable disparities in personal curiosity about the gender variable (male – female): This outcome can be elucidated by the observation that both sexes are influenced by analogous social and educational environments, psychological influences, and exhibit shared dispositions such as self-interest, self-promotion, confidence, and inherent inclinations. These results correspond with the research of Dunning et al. and the investigation by Jeery[14].

Notable disparities in individual curiosity contingent upon the specialty variable (scientific – humanistic): The computed t-value was (5.447), exceeding the tabular value of (1.96). This signifies that the disparities between the two groups (scientific and

humanistic) are not attributable to chance but rather represent genuine variations in the degree of personal curiosity among students in the two disciplines.[15] Students in scientific disciplines may exhibit an intensified emphasis on research and inquiry, perhaps augmenting personal curiosity. They frequently encounter cognitive challenges that compel them to pursue solutions. In contrast, students in humanistic disciplines may exhibit interests in several levels of knowledge, so affecting the nature of their curiosity. Pedagogical techniques in scientific fields frequently depend on experimental and practical methodologies, fostering individual curiosity. In humanistic disciplines, pedagogical approaches may emphasize conversation and critique, influencing the development of curiosity.[16]

Fourth objective: To examine the disparities in perceptions regarding learning pace among university students, influenced by the variables of gender (male – female) and field of study (scientific – humanistic).[17]

To attain this purpose, the means and standard deviations were computed. The independent-samples t-test revealed no significant variations in views regarding learning speed between males and females, as demonstrated in Table (13) It shows that.[7]

Table (13). The means, standard deviations, calculated t-values, and tabulated t-values for beliefs about learning speed according to the variables of gender and specialization.

Sex	Number of sample members	Arithmetic mean	Standard deviation	T-value		Significance level
				Calculated	Tabular	
Males	153	63.92	6.28	1.62	1.96	Not significant
Females	224	62.91	4.44			
scientific	204	0.034	0.034	0.82		
humanitarian	173	0.051	0.051			

The findings in Table (13) demonstrate no statistically significant differences in symbolic self-completion between males and females, as the computed t-value (1.624) is below the critical t-value (1.96). This phenomenon can be ascribed to the socioeconomic and cultural milieu that increasingly promotes equality and rights between genders, allowing women to prioritize their own development and articulate their social and intellectual identities on an equal footing with men.[18]

Fifth objective: The relationship between individual curiosity and perceived learning pace among university students.

To accomplish this primary study purpose, the researcher utilized the scale on the principal research sample of 377 pupils. Upon collecting and evaluating the data with Pearson's correlation coefficient, the resultant coefficient was determined to be (0.8102), exceeding the threshold value of (0.098) at a significance level of (0.05). This signifies a positive association between the two variables: when students' scores on the personal curiosity scale rise, their scores on the belief in learning speed scale likewise rise.[19]

4. Discussion.

The findings of this research highlight the significant role that personal curiosity plays in shaping university students' perceptions of rapid learning. The results indicate that students who exhibit higher levels of curiosity are more inclined to believe in their ability to learn quickly. This correlation suggests that curiosity acts as a catalyst, driving students to explore and engage deeply with educational materials, which in turn boosts their confidence in learning efficiency. The study aligns with Litman's theory, which emphasizes that curiosity driven by cognitive stimulation leads to a proactive approach in knowledge acquisition. As students encounter new and challenging concepts, their curiosity prompts them to persist, thereby enhancing their perceived learning speed.

Interestingly, the study found notable differences in personal curiosity based on the field of study, with students in scientific disciplines exhibiting higher curiosity levels compared to their counterparts in the humanities. This could be attributed to the nature

of scientific studies, which often require experimental and inquiry-based learning approaches that naturally stimulate curiosity. However, no significant differences were observed in the belief in rapid learning based on gender or field of study. This uniformity suggests that while curiosity levels may vary due to academic demands, the underlying belief in the potential for quick learning remains consistent across different student demographics. This finding underscores the universal nature of epistemological beliefs about learning speed, as proposed by Schommer's theory.

The positive association between personal curiosity and the belief in rapid learning has practical implications for educational strategies. Educators can harness this relationship by designing curricula and instructional methods that stimulate curiosity while setting realistic expectations about the learning process. For instance, incorporating problem-based learning and inquiry-driven projects can foster curiosity, thereby enhancing students' engagement and belief in their learning capabilities. However, the study also cautions against the potential downsides of an exaggerated belief in rapid learning, such as superficial understanding and academic frustration. Therefore, a balanced approach that encourages curiosity while promoting a realistic understanding of the learning process is essential for optimizing educational outcomes and supporting students' academic growth.

5. Conclusion

This relationship can be elucidated by the observation that pupils exhibiting elevated levels of personal curiosity are more driven to investigate their surroundings. This incentive fosters enhanced engagement in learning processes, facilitating accelerated learning. Individual curiosity augments favorable learning experiences and, over time, cultivates trust in one's capacity for swift learning. When individuals achieve successive successes via inquiry and discovery, their confidence in their learning pace is bolstered. Curiosity is associated with intrinsic motivation, the most significant factor for sustained and successful learning. Inquisitive persons pursue knowledge, enhancing their learning rate and reinforcing their confidence in their learning ability. Thus, personal curiosity can enhance trust in one's talents and the belief in the pace of learning, stemming from repeated encounters and triumphs fueled by curiosity.[20]

Recommendations

1. Utilize the personal curiosity scale and belief in learning speed in the field of educational counseling.
2. Educate and raise students' awareness about the meaning of personal curiosity to avoid overconfidence and ensure that decisions, judgments, and standards are not based on interpretations and indications without prior verification.
3. Governmental and private universities should organize workshops and seminars to promote psychological education, helping students better understand themselves.

Suggestions

1. Conduct a study that examines the relationship between personal curiosity and variables such as the illusion of control, job satisfaction, and digital fluency.
4. Conduct a similar study on other samples and compare the results with the current research.
5. Conduct a comparative study on the variable of belief in learning speed between governmental and private colleges.

REFERENCES

[1] [1] F. T. McAndrew and M. A. Milenkovic, "Of tabloids and family secrets: The evolutionary psychology of gossip," *J. Appl. Soc. Psychol.*, vol. 32, no. 5, pp. 1064–1082, 2002.

[2] [2] T. B. Kashdan, P. Rose, and F. D. Fincham, "Curiosity and exploration: Facilitating positive subjective experiences and personal growth opportunities," *J. Pers. Assess.*, vol. 82, no. 3, pp. 291–305, 2004.

[3] [3] G. Lowenstein, "The psychology of curiosity: A review and reinterpretation," *Psychol. Bull.*, vol. 116, pp. 75–98, 1994.

[4] [4] L. D. Kaczmarek, B. Baczkowski, and Bavanp, "Curiosity and Exploration Inventory: Validation of police vest," in *Proc. 5th Southern European Conf. on Positive Psychology*, 2010.

[5] [5] J. A. Litman, "Curiosity and the pleasures of learning: Wanting and liking new information," *Cogn. Emot.*, vol. 19, no. 6, pp. 793–814, 2005.

[6] [6] M. Schommer, J. Crouse, and N. Rhodes, "An emerging conceptualization of epistemological beliefs and their role in learning," in *Beliefs about Text and Instruction with Text*, R. Gardner and P. A. Alexander, Eds., 1994, pp. 25–40.

[7] [7] S. M. Abu Hashem, *Psychometric Properties of the Thinking Styles Inventory in Light of Sternberg's Theory among University Students*, Educational Research Center, College of Education, King Saud University, 2010.

[8] [8] S. L. Nist and J. P. Holschuh, "Practical applications of the research on epistemological beliefs," *J. Coll. Read. Learn.*, vol. 35, no. 2, pp. 84–92, 2005.

[9] [9] B. K. Hofer, "Personal epistemology research: Implications for learning and teaching," *Educ. Psychol. Rev.*, vol. 13, no. 4, pp. 353–383, 2000.

[10] [10] R. Gibbons and M. Waldman, "A theory of wage and promotion dynamics," *Q. J. Econ.*, vol. 114, 1999.

[11] [11] F. M. Hartung and B. Reiner, "Social curiosity and personal perception," *Soc. Personal. Psychol.*, pp. 81–796, 2011.

[12] [12] T. M. Y. Al-Khafaji, "Some modern teaching methods and teaching the scientific thinking curriculum," in *Proc. First Conf. Educ. Sci.*, Mar. 2001.

[13] [13] R. P. Collins, J. A. Litman, and C. D. Spielberger, "The measurement of perceptual curiosity," *Personal. Individ. Differ.*, vol. 36, no. 5, pp. 1127–1141, 2004.

[14] [14] D. E. Berlyne, "Conflict and information theory variables as determinants of human perceptual curiosity," *J. Exp. Psychol.*, vol. 53, no. 6, p. 399, 1957.

[15] [15] N. P. Dawes, A. Vest, and S. Simpkins, "Youth participation in organized and informal sports activities across childhood and adolescence: Exploring the relationships of motivational beliefs, developmental stage, and gender," *J. Youth Adolesc.*, vol. 43, no. 8, 2014.

[16] [16] C. A. Wolters and H. Rosenthal, "The relation between students' motivational beliefs and their use of motivational regulation strategies," *Int. J. Educ. Res.*, vol. 33, nos. 7–8, pp. 801–820, 2000.

[17] [17] S. Melhem, *Measurement and Evaluation in Education and Psychology*, Amman, Jordan: Dar Al-Maseera Publishing and Distribution, 2002.

[18] [18] M. Schommer, "Effects of beliefs about the nature of knowledge on comprehension," *J. Educ. Psychol.*, vol. 82, no. 3, pp. 498–504, 1990.

[19] [19] M. Schommer and M. Aikins, "Epistemological development and academic performance among secondary students," *J. Educ. Psychol.*, vol. 85, no. 3, p. 406, 1993.

[20] [20] J. D. Farley, "Is gossip power? The inverse relationship between gossip power and admiration," *Eur. J. Soc. Psychol.*, vol. 41, pp. 574–579, 2011.