

## Curiosity as a Predictor of Internet Use for Learning Among University Students

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| <p data-bbox="164 607 507 667">*Juwandi<br/><a href="mailto:juwandi@mercubuana-yogya.ac.id">juwandi@mercubuana-yogya.ac.id</a></p> <p data-bbox="164 730 338 763"><b>Article History</b></p> <p data-bbox="164 817 352 878">Submitted :<br/>January 9<sup>th</sup>, 2026</p> <p data-bbox="164 904 352 965">Final Revised :<br/>June 3<sup>rd</sup>, 2026</p> <p data-bbox="164 992 352 1052">Accepted :<br/>June 5<sup>th</sup>, 2026</p> <div data-bbox="164 1088 459 1149"></div> <p data-bbox="164 1178 515 1301"><i>This is an open access article under the<br/><a href="#">CC-BY</a> license<br/>Copyright ©2025 by Author,<br/>Published by Jurnal Psikologi Teori dan<br/>Terapan</i></p> | <p data-bbox="544 573 1509 1077"><b>Background:</b> The internet has become an increasingly important learning resource; however, widespread access does not necessarily ensure its effective use for educational purposes. Previous studies have highlighted the role of curiosity in stimulating information seeking and supporting the adoption of learning technologies. Nevertheless, empirical evidence positioning curiosity as a predictor of internet utilization for learning remains limited. This study aims to examine the effect of curiosity on students' use of the internet as a learning resource. A quantitative cross-sectional design was employed involving 96 students selected through random sampling. Data were collected using a curiosity scale and an internet utilization as a learning resource scale, and analyzed using linear regression. The results indicate that curiosity significantly predicts internet utilization as a learning resource (<math>R^2 = 0.171</math>). The regression model is statistically significant (<math>F = 19.382</math>, <math>p &lt; 0.05</math>). These findings suggest that curiosity functions as a contextual predictor and highlight the importance of fostering epistemic curiosity to encourage effective and responsible internet use in learning contexts.</p> <p data-bbox="544 1104 1398 1137"><b>Keywords:</b> Curiosity; Internet; Learning resources; University students.</p> |

### Abstrak

**Latar Belakang:** Internet telah menjadi sumber belajar yang semakin penting; namun, akses yang luas tidak selalu menjamin pemanfaatannya secara efektif untuk tujuan pendidikan. Penelitian sebelumnya menyoroti peran rasa ingin tahu dalam mendorong pencarian informasi serta mendukung adopsi teknologi pembelajaran. Meskipun demikian, bukti empiris yang menempatkan rasa ingin tahu sebagai prediktor pemanfaatan internet untuk pembelajaran masih terbatas. Penelitian ini bertujuan untuk menguji pengaruh rasa ingin tahu terhadap pemanfaatan internet sebagai sumber belajar pada mahasiswa. Penelitian ini menggunakan desain kuantitatif dengan pendekatan cross-sectional yang melibatkan 96 mahasiswa yang dipilih melalui teknik random sampling. Data dikumpulkan menggunakan skala rasa ingin tahu dan skala pemanfaatan internet sebagai sumber belajar, kemudian dianalisis menggunakan regresi linear. Hasil penelitian menunjukkan bahwa rasa ingin tahu secara signifikan memprediksi pemanfaatan internet sebagai sumber belajar ( $R^2 = 0,171$ ). Model regresi juga terbukti signifikan secara statistik ( $F = 19,382$ ;  $p < 0,05$ ). Temuan ini menunjukkan bahwa rasa ingin tahu berfungsi sebagai prediktor kontekstual serta menekankan pentingnya pengembangan rasa ingin tahu epistemik untuk mendorong pemanfaatan internet secara efektif dan bertanggung jawab dalam konteks pembelajaran.

**Kata Kunci:** Mahasiswa; Pemanfaatan internet; Rasa ingin tahu; Sumber belajar.

## Introduction

Compared to conventional media, the internet can serve as an effective learning resource, with easy and quick access to knowledge, information, and learning materials on various topics and levels of difficulty (Bond et al., 2006; Derksen et al., 2022; Ginting, 2019). However, there is still a gap between the potential of digital technology and its use in the context of learning. Although students actively use digital technology, they often do not use it as a medium for independent learning (Yot-Domínguez & Marcelo, 2017). Instead, students tend to use the internet primarily for social media rather than as a learning resource (Almasi et al., 2017; Nurhayati & Musa, 2020). In fact, even during classroom learning, they also tend to access non-academic content, such as social media, online games, and other websites unrelated to lecture material (Simanjuntak et al., 2019). It is clear that high internet access is not always accompanied by optimal utilization.

Several studies have examined the factors that influence the use of the internet as a learning resource. For example, digital literacy (Agina-Obu & Okwu, 2023a; Herawan et al., 2023; Udoh et al., 2020) and self-regulated learning (Priyambodo et al., 2025). Most studies place internet use as an independent variable that plays a significant role in learning. For example, the use of the internet as a learning resource is positively correlated with learning motivation (Arlia & Sumiati, 2015; Pratiwi et al., 2024; Tasya & Armayanti, 2025), influences learning outcomes (Aditia et al., 2017; Artuti et al., 2022; Halim et al., 2021; Haryanto et al., 2021), and supports the learning process (Martin et al., 2022). Although curiosity plays a fundamental role in learning (Gruber & Ranganath, 2019), empirical research examining curiosity in relation to media use and learning resource utilization is still limited.

Since the early development of psychology, curiosity has occupied an important position in the study of motivation, emotion, and cognition, and is considered a central aspect of human nature (Kashdan et al., 2018; Zhou et al., 2024). Curiosity is widely recognized as a fundamental psychological construct related to motivation, cognition, and information seeking. It reflects an intrinsic drive to reduce knowledge gaps by exploring novel, uncertain, or complex stimuli (Kashdan et al., 2018; Kidd & Hayden, 2015). When individuals recognize a gap in their knowledge, curiosity motivates them to seek new information and engage in exploratory behaviors aimed at resolving uncertainty (van Lieshout et al., 2020).

Previous studies have shown that curiosity positively predicts adaptive information-seeking behavior (Schumacher et al., 2026). Other studies have shown that both interest-type and deficiency-type epistemic curiosity can directly improve digital literacy (Hendriyani et al., 2023; Ma et al., 2025a), and also influences academic motivation (Bayuningrum, 2021a). It appears that curiosity plays a very important and decisive role. Without curiosity and the drive to satisfy that curiosity, individuals would not be interested in asking questions, reflecting, seeking information, or construct new knowledge.

Individuals are considered to have a high level of curiosity when they experience curiosity more easily and frequently, over a longer period of time, and in various situations (Kashdan & Roberts, 2004). The literature shows that individuals with higher levels of curiosity tend to be more active in seeking and exploring information, engage more deeply with information, ask questions more actively, and utilize digital resources more optimally (Bayuningrum, 2021a; Ma et al., 2025b). On the other hand, the internet provides abundant information, knowledge, and resources that can be accessed quickly and easily, anytime and anywhere. Thus, students with higher levels of curiosity will tend to use the internet actively and intensively to explore and deepen their knowledge, including searching for resources.

From the perspective of uses and gratifications theory, media users are active agents. They deliberately choose specific media to meet specific needs. This is a core process in understanding user motivation (Almakaty, 2025; Bhatiasevi, 2024; Liu & Luo, 2022). Research also indicates that attitudes and perceptions about the usefulness of the internet significantly influence internet use for academic purposes (Mallya & Lakshminarayanan, 2017). Relevant to this, through the internet, students can complete academic assignments, expand their reading scope, encourage independent learning, improve exam preparation, and learn anywhere (Apuke & Iyendo, 2018; Song & Bonk, 2016). Within the framework of the uses and gratifications theory, the internet can be understood as a medium that can meet the needs and satisfy the curiosity of students.

Although previous studies have demonstrated that curiosity encourages information seeking and engagement with technology-based learning resources, empirical research that explicitly models curiosity as a predictor of internet utilization as a learning resource remains limited. Most existing studies primarily examine internet use as an independent variable that influences learning outcomes, rather than investigating the psychological factors that motivate students to utilize the internet for learning purposes. From the perspective of Uses and Gratifications Theory, individuals actively select media that can satisfy their cognitive needs, including the need to acquire information and knowledge. In this context, curiosity may function as an intrinsic motivational factor that encourages students to explore and utilize digital learning resources available on the

internet. Therefore, this study aims to examine the role of curiosity in predicting students' internet utilization as a learning resource. Based on the theoretical framework and previous empirical findings, the hypothesis of this study is formulated as follows: H1: Curiosity positively predicts internet utilization as a learning resource among university students.

## Method

### Sample or Population

This study used a quantitative cross-sectional design. The participants of this study were university students with the following criteria: (1) second-year students, as they were considered to have already adjusted, especially to their academic roles and tasks; and (2) who had access to the internet at all times. Of the 139 respondents who completed the scale, only 96 met the eligibility criteria for analysis. Referring to Green's (1991) recommendation, for regression analysis, the minimum number of subjects recommended is  $N \geq 8/f^2 + (m - 1)$  (Green, 1991).  $N$  represents the minimum recommended sample size,  $f^2$  indicates the effect size, and  $m$  indicates the number of predictors. This study involved one predictor ( $m = 1$ ) with a moderate effect size ( $f^2 = 0.15$ ). The calculation results showed that the minimum recommended number of subjects was 53 subjects ( $8/0.15 + [1 - 1] = 53$ ). This study decided to use 96 respondents who were available as participants in this study. With 96 participants, the statistical power and stability of the regression coefficient estimates will be greater than with only the minimum recommended number of subject (53).

This study was conducted in accordance with ethical research standards. Participants were informed about the purpose of the study, the voluntary nature of their participation, and the confidentiality of their responses before completing the questionnaire. Informed consent was obtained from all participants prior to data collection, and all data were collected anonymously.

### Data Measurement

Curiosity was measured using the Curiosity and Exploration Inventory-II (CEI-II) developed by Kashdan et al. (2009). The scale conceptualizes curiosity as a multidimensional construct consisting of two dimensions: Stretching and Embracing. Stretching refers to the tendency to actively seek opportunities for acquiring new knowledge and experiences, whereas Embracing reflects the willingness to accept uncertainty, novelty, and unpredictable situations in everyday life. The scale uses four response options: *almost never* (score 1), *sometimes* (score 2), *often* (score 3), and *almost always* (score 4) (Kashdan et al., 2009).

The original CEI-II consists of ten items measured on a five-point Likert scale. In the present study, the instrument was adapted to the research context through translation and contextual modification of items to ensure suitability for university students in the digital learning environment. After the adaptation process, a pool of 30 items was initially developed to represent the theoretical dimensions of curiosity. This approach was used to anticipate the elimination of items that did not meet the psychometric criteria during item analysis.

Item analysis results indicated that 20 items met the acceptable psychometric standards and were retained in the final scale. The item discrimination indices ranged from 0.374 to 0.609, indicating adequate item quality. Reliability analysis using Cronbach's alpha yielded a coefficient of 0.861, demonstrating good internal consistency. Previous validation studies have also confirmed the construct validity and reliability of the CEI-II across different populations (Kashdan et al., 2009). The dimensions, indicators, and item distribution of the curiosity scale used in this study are presented in Table 1:

**Table 1.** Dimensions and Indicators of the Curiosity Scale

| Dimensions        | Indicators                                                                                                                                                 | Item Numbers                       | N         |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|-----------|
| <b>Stretching</b> | (1) Desire to seek opportunities to acquire new knowledge; (2) Desire to seek challenging new experiences.                                                 | 2, 4, 6, 8, 10, 12, 14, 16, 18, 20 | <b>10</b> |
| <b>Embracing</b>  | (3) Desire to accept, experience, and embrace new things; (4) Desire to accept, experience, or embrace uncertainty and unexpected or unpredictable events. | 1, 3, 5, 7, 9, 11, 13, 15, 17, 19  | <b>10</b> |
| Total             |                                                                                                                                                            |                                    | <b>20</b> |

Table 2 displays the dimensions, indicators, item numbers, and the number of items for each dimension of the scale of curiosity. The scale comprises two dimensions, four indicators, and ten items per dimension, resulting in a total of 20 items.

Internet utilization as a learning resource was measured using a scale developed based on a review of previous literature on digital learning behavior and online learning resource utilization (Pratama et al., 2023; Sutherland & Jalali, 2017). The scale measures three main aspects of internet use for learning purposes: (1) reading academic sources, (2) downloading, listening to, and watching learning materials, and (3) discussing learning resources with others. This scale consists of four response options for favorable items: *very appropriate* (score 4), *appropriate* (score 3), *inappropriate* (score 2), and *very inappropriate* (score 1). Conversely, unfavorable items are scored in reverse: *very appropriate* (score 1), *appropriate* (score 2), *inappropriate* (score 3), and *very inappropriate* (score 4).

Initially, 40 items were developed to represent these aspects. Following item analysis, 30 items were retained as valid items with item discrimination indices ranging from 0.271 to 0.661. Reliability testing produced a Cronbach's alpha coefficient of 0.861, indicating satisfactory internal consistency of the instrument. The aspects, indicators, and distribution of items measuring internet utilization as a learning resource are presented in Table 2:

| <b>Table 2. Aspects and Indicators of the Internet Utilization as a Learning Resource Scale</b> |                                                                                                                                                                                                          |                             |           |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------|
| Aspects                                                                                         | Indicators                                                                                                                                                                                               | Aitem Number                | N         |
| <b>Reading sources relevant to learning</b>                                                     | (1) Reading materials closely related to the courses taken; (2) reading scientific journals; (3) reading online news, websites, blogs, and other forms of content containing general knowledge.          | 1,4,9,12,29,30,5,16,23,27   | <b>10</b> |
| <b>Downloading, listening to, and watching sources relevant to learning</b>                     | (4) Downloading e-books, scientific journals, and other text-based sources; (5) watching audiovisual materials on science, training, learning resources, and related content.                            | 8,15,17,24,2,11,16,13,19,21 | <b>10</b> |
| <b>Discussing sources relevant to learning with others</b>                                      | (6) Discussing science, theories, research findings, or scholars' ideas; (7) discussing news, events, or issues that are currently widely discussed in society; (8) discussing matters related to books. | 3,10,18,20,22,26,28,25,14,7 | <b>10</b> |
| Total                                                                                           |                                                                                                                                                                                                          |                             | <b>10</b> |

Table 2 presents the aspects, indicators, item numbers, and the number of items for each dimension of the scale of internet utilization as a learning resource. The scale comprises three aspects, eight indicators, and ten items per aspect, resulting in a total of 30 items.

## Data Analysis

This study uses simple regression analysis to test the effect of independent variables on dependent variables. Simple regression analysis is often used to model the relationship between two variables and to predict the dependent variable from one independent variable (Field, 2009; Iba & Wardhana, 2024). In this study, curiosity serves as the predictor variable, while internet utilization as a learning resource was the outcome variable. Data were analyzed using SPSS.

## Result

After the assumptions of normality and linearity were met, a simple regression analysis was conducted to test the relationship between curiosity and the use of the internet as a learning resource. The results showed a significant positive relationship between curiosity and the use of the internet as a learning resource, with a correlation coefficient of 0.413 ( $p < 0.05$ ), as shown in Table 3:

**Table 3.** Correlation between Curiosity and Internet Utilization as a Learning Resource

|                  |                     | Internet      | Curiosity     |
|------------------|---------------------|---------------|---------------|
| <b>Internet</b>  | Pearson Correlation | 1             | <b>.413**</b> |
|                  | Sig. (1-tailed)     |               | <b>.000</b>   |
|                  | N                   | 96            | <b>96</b>     |
| <b>Curiosity</b> | Pearson Correlation | <b>.413**</b> | <b>1</b>      |
|                  | Sig. (1-tailed)     | <b>.000</b>   |               |
|                  | N                   | <b>96</b>     | <b>96</b>     |

**\*\*Correlation is significant at the 0.01 level (1-tailed)**

The correlation coefficients presented in Table 3 indicate that the higher the students' curiosity, the higher their use of the internet as a learning resource. Furthermore, to determine the predictive role of curiosity, a regression analysis was conducted to find out the extent to which curiosity explains the variation in the use of the internet as a learning resource. The results of the analysis are presented in Table 4:

**Table 4.** Coefficient of Determination ( $R^2$ ) of Curiosity for Internet Utilization as a Learning Resource

| Model    | R             | R Square    | Adjusted R Square | Std. Error of the Estimate |
|----------|---------------|-------------|-------------------|----------------------------|
| <b>1</b> | <b>.413**</b> | <b>.171</b> | <b>.162</b>       | <b>10.483</b>              |

**a. Predictor: (Constant) Curiosity**

Table 4 shows the coefficient of determination ( $R^2$ ) for curiosity related to internet utilization as a learning resource, with a value of 0.171. This result indicates that curiosity explains 17.1% of the variation in the use of the internet as a learning resource, while the remaining 82.9% is influenced by other factors. These findings indicate that curiosity contributes to predicting internet use as a learning resource. Whether the regression model can be used for prediction can be seen in Table 5:

**Table 5.** Regression Model Significance for Predicting Internet Utilization as a Learning Resource

| ANOVA <sup>b</sup> |            |                |    |             |                |
|--------------------|------------|----------------|----|-------------|----------------|
| Model              |            | Sum of Squares | Df | Mean Square | Sig.           |
| <b>1</b>           | Regression | 2130.013       | 1  | 2130.013    | <b>.000(a)</b> |
|                    | Residual   | 109.895        | 94 | 109.895     |                |
|                    | Total      | 12460.156      | 95 |             |                |

**a. Predictor: (Constant) Curiosity**  
**b. Dependent Variabel: Internet Utilization as a Learning Resource**

Table 5 presents an F value of 19.382 with a significance value of 0.000 ( $p < 0.05$ ). This means that the regression model is statistically significant and suitable for predicting the dependent variable from the independent variable. In other words, curiosity is a significant predictor of the use of the internet as a learning resource. Curiosity's contribution and its significance to the use of the internet as a learning resource can be seen in Table 6 below:

**Table 6.** Significance of Curiosity in Predicting Internet Utilization as a Learning Resource Coefficients<sup>a</sup>

| Model    |            | Unstandardized Coefficients | Standardized Coefficients | t      | Sig.        |
|----------|------------|-----------------------------|---------------------------|--------|-------------|
|          |            | B                           | Beta                      |        |             |
| <b>1</b> | (Constant) | 62.147                      |                           | 11.296 | <b>.000</b> |
|          | Curiosity  | .434                        | .913                      | 4.403  | <b>.000</b> |

**a. Dependent Variabel: Internet Utilization as a Learning Resource**

Table 6 shows that curiosity predicts internet utilization as a learning resource, as indicated by the regression equation  $Y = 62.147 + 0.434X$ . This means that a 1% increase in curiosity correlates with a 0.434 increase in the use of the internet as a learning resource. A t-test was conducted to assess statistical significance. The results show that the regression coefficient for curiosity is 4.403, with a significance value of 0.000 ( $p < 0.05$ ), indicating that curiosity contributes significantly to predicting internet use. Therefore, the hypothesis that curiosity affects internet utilization as a learning resource is supported.

The results of the study show that the majority of participants' scores for both curiosity and internet utilization as a learning resource fell within the moderate and high categories. The score categorization was determined based on standard deviation, taking into account the minimum hypothetical score and maximum hypothetical score. The standard deviation was obtained from the maximum hypothetical score minus the minimum hypothetical score, then divided into six parts and became the estimated standard deviation used to categorize the scores. The results of the curiosity score categorization are presented in Table 7 below:

**Table 7.** Distribution of Curiosity Scores

| Categories       | Score            | N  | %            |
|------------------|------------------|----|--------------|
| <b>Very Low</b>  | $x < 40$         | 12 | <b>12,5%</b> |
| <b>Low</b>       | $40 \leq x < 50$ | 15 | <b>15,5%</b> |
| <b>Moderate</b>  | $50 \leq x < 60$ | 38 | <b>39,6%</b> |
| <b>High</b>      | $60 \leq x < 70$ | 27 | <b>28,1%</b> |
| <b>Very High</b> | $x \leq 70$      | 4  | <b>4,2%</b>  |
| Total            |                  | 96 | <b>100%</b>  |

Table 7 shows that on the curiosity scale, most of the participants' scores were in the moderate (39.6%) and high (28.1%) categories. Similarly, on the internet utilization as a learning resource, most participants' scores also fell within the moderate and high categories. The categorization of scores for internet utilization as a learning resource is presented in Table 8 below:

**Table 8.** Distribution of Internet Utilization as a Learning Resource Scores

| Categories       | Score             | N  | %     |
|------------------|-------------------|----|-------|
| <b>Very Low</b>  | $x < 60$          | 4  | 4,2%  |
| <b>Low</b>       | $60 \leq x < 75$  | 7  | 7,3%  |
| <b>Moderate</b>  | $75 \leq x < 90$  | 57 | 59,4% |
| <b>High</b>      | $90 \leq x < 105$ | 26 | 27,1% |
| <b>Very High</b> | $x \leq 105$      | 2  | 2,1%  |
| Total            |                   | 96 | 100%  |

Table 8 indicates that, on the internet utilization as a learning resource scale, most participants' scores were in the moderate (59.4%). Of the 96 participants, 27.1% demonstrated high scores and 2.1% demonstrated very high scores.

## Discussion

The results revealed a significant positive relationship between curiosity and internet utilization as a learning resource, with curiosity explaining a meaningful proportion of the variance in internet utilization. The regression analysis further demonstrated that curiosity serves as a significant predictor of internet utilization as a learning resource, with higher levels of curiosity associated with increased use of the internet for learning purposes. These findings provide a basis for discussing the role of curiosity in shaping how individuals engage with the internet as a learning resource.

Needs and satisfaction are always important in understanding human behavior and motivation (Du, 2024), including understanding learning media choices. From the perspective of the theory of use and gratification, media users are goal-oriented and choose the media that best satisfies and meets their needs. For example, cognitive needs—seeking information, knowledge, and understanding (Agina-Obu & Okwu, 2023b; Arisukwu et al., 2022; Walia, 2025). Compared to other media, the internet offers abundant learning resources that can meet cognitive needs. Therefore, students with high curiosity will be encouraged to use the internet as a learning resource because it can satisfy their cognitive needs. The findings of this study support this theoretical framework by showing that curiosity plays a significant role as a predictor of internet use as a learning resource ( $\beta = 4.403$ ,  $p < 0.05$ ). The findings reflect the compatibility between the psychological characteristics of users and the gratification provided by the internet. In other words, there is a compatibility between the expected satisfaction and the satisfaction that may be obtained from using the internet.

These findings are consistent with previous studies showing that individuals with high curiosity are more active in information seeking, digital resource exploration, and digital literacy development (Bayuningrum, 2021b; Ma et al., 2025a). Curiosity is also associated with higher self-efficacy in the use of artificial intelligence (Schutte & Li, 2025) and enhances self-directed learning (Sucipto et al., 2019), which is relevant to digital learning. Curiosity also contributes to the ability to evaluate the credibility of accessed website information (Keshavarz, 2021). Thus, the statistical significance found in this study is not only empirical but also strongly supported by previous literature.

Descriptive findings show that most students fall into the moderate category, both in terms of curiosity (39.6%) and the use of the internet as a learning resource (59.4%). This condition indicates that although curiosity plays a significant role, its intensity is not strong enough to encourage deep and optimal digital exploration because intrinsic motivation is still at a moderate level. This condition helps explain why the  $R^2$  value (0.171) is not in the high category. This indicates the need for teachers to play a role in fostering or stimulating curiosity as intrinsic motivation. It is also relevant to this study's finding that an increase in curiosity will be followed by an increase in the use of the internet as a learning resource ( $Y = 62.147 + 0.434X$ ). Although its contribution is in the moderate category ( $R^2 = 0.171$ ), the findings are still theoretically meaningful, given that digital learning behavior is a complex phenomenon influenced by various factors. For example, digital literacy, self-regulated learning, learning design, and academic environment support.

However, it is important to note that the influence of curiosity is not universal and always adaptive. Curiosity does not always have the same potential benefits and disadvantages (Whitecross & Smithson, 2023). Several studies show that maladaptive curiosity can increase the risk of internet addiction and problematic exploratory behavior (Arneklev, 2023; Dahabiyeh et al., 2021; Mahama et al., 2024; Mayone & Arneklev, 2015). Therefore, a positive view of curiosity needs to be balanced with an awareness that exploratory drives also carry potential risks (Kashdan et al., 2024). This confirms that even though the regression coefficient shows a positive influence, the interpretation of the findings needs to be limited to the context of constructive and learning-oriented curiosity.

In this context, epistemic curiosity is the most relevant form to explain the positive relationship found in this study. Epistemic curiosity encourages engagement in intellectual activities, the pursuit of knowledge (Erdemli et al., 2025; K.g. et al., 2020), the exploration of new ideas (Lin et al., 2026), and the overcoming of ignorance (Guo et al., 2025). Conversely, other forms of curiosity, such as perceptual curiosity and physical sensations, do not always contribute directly to the utilization of media and learning resources. This difference confirms that the influence of curiosity is contextual and is influenced by the type of curiosity, individual characteristics, and the learning environment. It may also explain why the  $R^2$  value does not show a very large contribution.

Overall, the findings of this study reinforce the position of curiosity as an intrinsic motivation that drives the use of the internet in independent learning in higher education. The findings also expand the application of Uses and Gratifications Theory in the context of higher education, and confirm that the influence of curiosity on digital learning behavior is contextual, influenced by the underlying type of curiosity. The findings also emphasize the need for learning models that can stimulate epistemic curiosity.

The study has several limitations, including those related to the measurement of curiosity in general, which does not provide information on the specific types of curiosity that can be developed in relation to the use of the internet as a learning resource. Specifications on epistemic curiosity would be more relevant to the context of digital learning. In addition, the use of the internet as a learning resource is dynamic, influenced by the rapid development of technology and information. The scale of internet utilization as a learning resource will depend on how many types of digital resources are included in the scale. If it is difficult to determine theoretically, the scale needs to clearly state the domain of measurement. Another note is that this study only involved 96 subjects, which exceeds the minimum recommended number but may not be sufficient to make predictions and generalizations. Future research could reach a wider range of participants, focus on specific curiosities, and use a more contextual scale of internet utilization as a learning resource, in line with developments in digital technology.

## Conclusion

This study aimed to examine whether curiosity predicts students' utilization of the internet as a learning resource. The findings demonstrate that curiosity has a significant positive relationship with internet utilization for learning purposes, indicating that students with higher levels of curiosity are more likely to use the internet to explore knowledge and support their academic activities. These results confirm that curiosity functions as an important intrinsic motivational factor that encourages students to engage with digital learning resources.

From a theoretical perspective, this study contributes to the literature by positioning curiosity as a predictor of digital learning behavior, thereby extending the application of Uses and Gratifications Theory in the context of higher education and digital learning environments. The findings suggest that the alignment between students' intrinsic motivation and the informational affordances of the internet plays a role in shaping how digital resources are utilized for learning.

Practically, the results highlight the importance of developing learning environments that stimulate epistemic curiosity, enabling students to use digital technologies more effectively, reflectively, and responsibly as part of independent learning in higher education.

### Limitation

This study has several limitations that need to be acknowledged. *First*, the measurement of curiosity in this study was conducted using a general curiosity scale, which does not differentiate in detail between specific types of curiosity, such as epistemic curiosity, perceptual curiosity, or social curiosity. Considering that epistemic curiosity is more directly related to learning behavior and information seeking, future studies are encouraged to employ more specific and contextual measures of curiosity that better capture its relevance to digital learning contexts. *Second*, the sample size was relatively limited ( $N = 96$ ) and drawn from a specific population of university students, which may restrict the generalizability of the findings. Although the sample size exceeded the minimum statistical requirement for regression analysis, future research should involve larger and more diverse samples across different universities, disciplines, and educational levels to enhance external validity. *Third*, internet use as a learning resource is highly dynamic and influenced by rapid technological developments, platform changes, and emerging digital learning tools. The scale used in this study reflects the context at the time of data collection and may not fully capture future patterns of internet-based learning. Therefore, continuous refinement and contextualization of measurement instruments are necessary to keep pace with technological changes.

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