

## **GenAI Acceptance Modeling in Islamic Higher Education: An Integration of TAM and EVT Using PLS-SEM**

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### **Abstract**

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Generative artificial intelligence (GenAI) technology is currently receiving special attention and has numerous benefits. In the education field, this technology can help obtain information quickly to complete a thesis. This research aims to conduct GenAI Modeling based on the Technology Accepted Model (TAM) and Expected Value Theory (EVT) framework using the Partial Least Square Structural Equation Model (PLS-SEM). The research used primary data obtained from surveys. The population was all Tarbiyah faculty students who took a thesis in the Even Semester of the 2023/2024 academic year with a total of 1266. The sample in this research was 191 students who were completing their thesis and had used Gen AI technology to help complete their thesis. The sampling technique used cluster random sampling with a procedure of dividing students into 8 clusters based on the study program. The research instrument used a questionnaire consisting of 5 latent variables: Perceived Usefulness, Perceived Ease of Use, Intrinsic Motivation, Perceived Value, and Behavioral Intention to Use. The results of the analysis using the PLS-SEM method showed that Intrinsic Motivation has a significant relationship with Perceived Ease of Use, and Intrinsic Perceived Usefulness and Perceived Value have a significant relationship with Behavioral Intention to Use. These results show that students choose GenAI Technology to help complete their thesis based on its benefits, such as making it easier to prepare backgrounds, research instruments, and data analysis steps, as well as providing insight into knowledge related to the topic being researched. The research results imply the need for policies regarding the use of GenAI technology for theses so that students are wiser in using GenAI technology.

**Keywords:** EVT, generative artificial intelligence technology, PLS-SEM, TAM

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## **A. Introduction**

Generative Artificial Intelligence (GenAI) technology is currently receiving special attention, starting with the emergence of the ChatGPT application (Zhang & Aslan, 2021). In further developments, ChatGPT has competitors such as Gemini, Microsoft Bing, Quilbot, and others (Wong, 2023). GenAI is well received because it provides a level of convenience when searching for information. This technology is a variant of AI that uses machine learning algorithms to create new and original content such as images, video, text, and audio as a form of interaction or response to instructions, questions, or more complex instructions, thereby helping users select the information they need (Lim et al., 2023).

The implementation of GenAI in the field of data education is used to create scientific writing. According to research conducted by Setiawan & Luthfiyani (2023), this technology produces quite scientific writing with prompts that are formulated at the beginning using good and effective techniques. This technology is very useful for finding information related to completing a thesis or material. The use of GenAI by users is influenced by the level of acceptance of the technology by humans as users. The level of acceptance of technology can be measured through the behavior of system users with several factors such as the user's ease in operating GenAI, the benefits provided, which can have an impact on work effectiveness, and the intensity of use of technology, especially GenAI, in completing their work (Novianti et al., 2022). The technology acceptance model framework used in this research is the Technology Acceptance Model (TAM). Research on the TAM model in the education sector was carried out by (Fernanda et al., 2022), who investigated the acceptance of using the Inter-School Joint Information Network System (JIBAS) and resulted in the conclusion that the level of ease influenced the level of acceptance of JIBAS in operating the application.

The results of a preliminary study on students at the Tarbiyah Faculty of IAIN Kediri showed that students often encountered obstacles in completing their final assignments, such as searching for journal references, theories, and others. Students use generative AI to assist in resolving several of these obstacles (Fernanda, 2024). Based on the description above, researchers are interested in exploring the acceptance of Tarbiyah faculty students using GenAI to complete theses (final assignments). This research uses a TAM model that is different from the TAM model in general. The TAM model used involves a new variable, namely intrinsic motivation, as in research conducted by (Lai et al., 2023). The novelty of this research is also demonstrated by the use of a model from the Expectancy Value Theory (EVT), which is integrated with the TAM model. The EVT model used involves the Perceived Value variable, which consists of Attainment value and Utility value (Chan & Zhou, 2023). The variables used in this research consist of variables in the TAM model, namely the level of usefulness (Perceived Usefulness), the level of convenience (Perceived Ease of Use), interest (Intention to Use), intrinsic motivation (intrinsic motivation), and Perceived Value from the EVT model.

The complexity of the variables used in this research and the testing of a new theory that combines the TAM and EVT models requires the use of appropriate statistical analysis methods. The statistical analysis used uses the Partial Least Square Structural Equation Modeling (PLS-SEM) method. The PLS-SEM method has advantages over the Structural Equation Modeling (SEM) method. The advantage of this method is that it does not require multivariate normal assumptions and can be used when the research sample is small (Hair et al., 2014). This method can also be

used to test a new theory in this research, namely the integration between the TAM and EVT models for measuring acceptance of Generative AI technology. Based on the previous description, this research aims to conduct Generative Artificial Intelligence Technology Acceptance Modeling based on the Technology Accepted Model and Expected Value Theory using the Partial Least Square Structural Equation Model (PLS-SEM).

## B. Literature Review

### 1. Generative Artificial (GenAI) Technology

GenAI is one of the artificial intelligence technologies that can produce a variety of new and unique media, including text, graphics, audio, video, 3D models, and synthetic data (Peres et al., 2023; Chiu, 2024). GenAI is used in various fields because it is capable of producing sophisticated and realistic content that even resembles human ingenuity (Castelli & Manzoni, 2022). However, the use of Generative AI also poses its challenges, namely concerns about academic integrity primarily carried out by students, the need to train educators to identify AI-generated content, and the potential to undermine teacher authority. GenAI in the learning process can improve the quality of the process as long as it is balanced with strong policies regarding the use of this technology (Yusuf et al., 2024). Previous studies explain that students can accept GenAI Technology well because it helps in the learning process. However, previous studies have not found how acceptable GenAI technology is in helping complete the thesis, especially for students studying in the field of teacher education. The second novelty in this research is the integration between TAM and EVT to model the acceptance of GenAI technology.

### 2. Technology Accepted Model (TAM)

The Technology Acceptance Model (TAM) was initiated by Davis in 1986. This method underwent development and was implemented in research to measure user acceptance of the technology used. Basically, TAM is the result of adopting the Theory of Reasoned Action (TRA), which explains that a person's attitude and behavior towards something from the outside is based on the person's reaction and perception of that thing. This basic concept is implemented as a basis for measuring the acceptance of information technology, which is the reaction, perception, and action of the emergence of a technology (Nurqamarani et al., 2021). TAM has experienced developments in its application as a framework for measuring acceptance of a technology. TAM is used to measure the use of ChatGPT for learning by adding intrinsic motivation (Lai et al., 2023)

### 3. Expectancy Value Theory (EVT)

Measuring the acceptance of information technology can use frameworks or theories such as TAM or the *Unified Theory of Acceptance and Use of Technology* (UTAUT). *Expectancy Value Theory* (EVT) is an alternative theory to previous theories. EVT is a comprehensive framework for understanding and predicting important outcomes, such as choices regarding achievement, persistence, and behavior in accepting a technology (Ranellucci & College, 2020).

EVT is also widely used and has been adopted in various domains. This model was chosen as the theoretical framework for this research compared to other models such as the *Unified Theory of Acceptance and Use of Technology* (UTAUT), *Teknologi Acceptance Model* (TAM), and *Theory of Planned Behavior* (TPB) because EVT specifically focuses on the factors that drive motivation in individuals to make

decisions related to their choices, goals, and performance. Other models, such as UTAUT, TAM, and the TPB, offer valuable insight into technology acceptance and adoption, but they do not fully capture motivational factors like EVT. EVT was deemed more suitable for this research because it takes into account the perceived value and costs associated with using Generative AI, which are important factors in determining students' intentions to use the technology (Chan & Zhou, 2023).

Maheshwari (2021) also highlights the impact of institutional support and perceived enjoyment on students' intentions to continue studying courses online. Specifically, the perceived value component that influences these intentions is Achievement value, which refers to the belief that engaging in behavior will lead to an important goal or outcome. For example, students who believe that using Generative AI will successfully improve their academic performance or digital competence may be more likely to use it. EVT in this study was measured using Perceived Value, which consists of two indicators, namely Attainment Value and Utility Value (Selano et al., 2020; Chan & Zhou, 2023).

#### **4. Partial Least Square Structural Equation Model (PLS-SEM)**

PLS is a powerful analysis because it can be used on any data scale, and the assumption requirements are more flexible. PLS can also be used when the theoretical basis of the model is tentative or the measurement of each latent variable is still new, so it is designed for prediction purposes. Many researchers use this method to analyze data on various scales and have complex relationships. Khlaif et al. (2024) to measure teacher perceptions regarding the use of GenAI technology for learning assessment. A previous study used this data analysis method to measure student satisfaction when using GenAI in education (Almufarreh, 2024). PLS methods consist of three stages, namely the outer model or measurement model, the inner model or structural model, and weight relations, where the value of the latent variable can be estimated. In the parameter estimation method in PLS (*least square methods*), the calculation process is carried out in an iterative manner, where the iteration will stop if a convergent condition has been reached. Parameter estimation in PLS includes three things: Weight estimate is used to create latent variable scores; path estimate, which connects latent variables and estimates loading between latent variables and indicators; and Means and location of parameters (regression constant values, intercept) for indicators and latent variables (Hair, 2021).

### **C. Method**

#### **1. Research Design**

This research used a correlational design, which aims to examine the relationship between the independent variable and the dependent variable. The independent variables in this research consist of intrinsic motivation, Perceived Usefulness, Perceived Ease of Use, and Perceived Value. The dependent variable used in this research is interest in using the Generative AI (Intention to Use) application.

#### **2. Participants of the Study**

The population in this study were Tarbiyah Faculty students from eight study programs, namely Mathematics Education, English Education, Madrasah Ibtidaiyah Teacher Education (PGMI), Islamic Education Management, Arabic Language Education (PBA), Religious Education Islam, Indonesian language education, natural science education, who were taking a thesis in 2023/2024 academic year.

The total population in this research was 1266 students. The sample in this study was calculated using a probability sampling equation. The minimum sample calculation with this equation is as follows.

$$n = \frac{z_{1-\alpha/2}^2 p (1-p) N}{e^2 (N-1) + z_{1-\alpha/2}^2 p (1-p)}$$

N = The population in this study amounted to 1266

$$z_{1-\alpha/2}^2 = 1,96^2$$

p = proportion of students using GenAI technology = 0.85

e = 5% (0,05)

$$n = \frac{1.96^2 0.85 0.15 1265}{0.05^2 (1265) + 1.96^2 0.8 0.15} = 190,3 = 191$$

Finally, the sample in this study amounted to 191 respondents.

### 3. Instruments

The questionnaire adopted the concept of technology acceptance using the TAM that involves a new variable, namely intrinsic motivation, as in research conducted by (Lai et al., 2023) combined with EVT in this study was measured using Perceived Value, which consists of two indicators, namely Attainment value and Utility Value. The question indicators used have been adjusted by researchers so that they can measure acceptance of the GenAI application. The measurement scale used uses a Likert scale of 1 to 5. A score of 1 indicates that the respondent does not agree, a score of 2 states that the respondent does not agree, a score of 3 states that they agree, and a score of 5 states that the respondent strongly agrees with the question asked.

The variables in this research consist of 5 latent variables or constructs. Each latent variable is composed of several question indicators, as presented in Table 1.

**Table 1. Questionnaire Items**

| Variable                     | Questions  |
|------------------------------|--|
| <i>Perceived Usefulness</i>  | Generative AI is very helpful in creating a comprehensive research background (PU1)  |
|                              | Generative AI makes it easy to find theoretical foundations, such as books and research journals that are relevant to the research theme (PU2) |
|                              | Generative AI provides systematic steps in the data processing and analysis process (PU3)  |
|                              | Generative AI is very helpful in preparing instruments used in research (PU4)  |
|                              | Generative AI is very helpful in improving the quality of writing (language style, grammar, paragraph continuity, level of plagiarism) (PU5)   |
| <i>Perceived Easy of Use</i> | The Generative AI application that I use is easy to use (PEOU1)  |
|                              | The Generative AI application that I use has a very good level of flexibility (PEOU2)  |
|                              | The user interface (display) of the Generative AI application that I use is easy to operate to get information (PEOU3)                         |
|                              | Generative AI applications can always be accessed smoothly at all times (PEOU4)  |
|                              | Generative AI is a very fun technology to help complete these (IM1)  |

|  |   |
|--|---|
|  | The process of searching for information using Generative AI technology is very easy and fun (IM2).                   |
| <i>Intrinsic Motivation</i>                    | Generative AI can improve my academic achievements, especially in completing my thesis (IM3)                          |
|  | Generative AI makes the thesis completion process more effective and efficient (IM4)                                  |
| <i>Perceived Values</i>                        | I understand the use of Generative AI well to support the completion of their thesis (PV1)                            |
|  | I believe Generative AI can improve my competence in the digital world to support the completion of my thesis (PV2)   |
|  | I believe that Generative AI can improve my academic abilities in completing my thesis (PV3)                          |
|  | I believe generative AI can help me produce a quality thesis (PV4)  |
|  | I believe that generative AI will make time more efficient in completing these (PV5)                                  |
|  | I believe Generative AI technology helps me in giving insight and perspective in completing the thesis (PV6)          |
|  | I feel Generative AI can provide me with a solution to complete my thesis quickly (PV7)                               |
|  | I think Generative AI technology is an extraordinary tool and can be used at any time (PV8)                           |
| <i>Behavioral Intention (Intention to Use)</i> | I will use Generative AI technology to help complete the thesis (BI1)   |
|  | I will plan to use Generative AI to help answer questions related to completing my thesis (BI2)                       |
|  | I predict that in the future, I will use Generative AI to answer questions related to completing my thesis (BI3)      |
|  | I intend to continue using Generative AI to answer academic questions related to my thesis as often as possible (BI4) |

#### 4. Data Analysis Techniques

Data analysis techniques in this research consist of two parts: Descriptive Statistical Analysis and Partial Least Square Structural Equation Model (PLS-SEM). Descriptive statistical analysis was carried out to determine the characteristics of respondents, including gender, age, and study program. Descriptive analysis was also carried out to determine the pattern of respondents' answers based on intrinsic motivation, Perceived Usefulness, Perceived Ease of Use, Perceived Value, and Intention to Use using the GenAI application. PLS is a powerful analysis because it can be used on any data scale, and the assumption requirements are more flexible. PLS can also be used when the theoretical basis of the model is tentative or the measurement of each latent variable is still new, so it is designed for prediction purposes. The model in PLS includes three stages, namely the outer model or measurement model, the inner model or structural model, and weight relations, where the value of the latent variable can be estimated. In this study, PLS-SEM was used to test the hypothesis.

- a. Intrinsic Motivation has a significant relationship to Perceived Usefulness.
- b. Intrinsic Motivation has a significant relationship to Perceived Ease of Use
- c. Intrinsic Motivation has a significant relationship to Behavioral Intention (Intention to Use)

- d. Perceived Usefulness has a significant relationship to Behavioral Intention (Intention to Use)
- e. Perceived Ease of Use has a significant relationship to Behavioral Intention (Intention to Use)
- f. Perceived Value has a significant relationship to Behavioral Intention (Intention to Use)

**D. Findings**

The GenAI technology used by Tarbiyah Faculty students varies greatly, and some students use more than one GenAI technology. The technology most widely used is ChatGPT, with a frequency of 83 respondents (43.5%). Detailed information regarding GenAI technology is presented in Table 2.

**Table 2. Frequency distribution based on the use of GenAI technology**

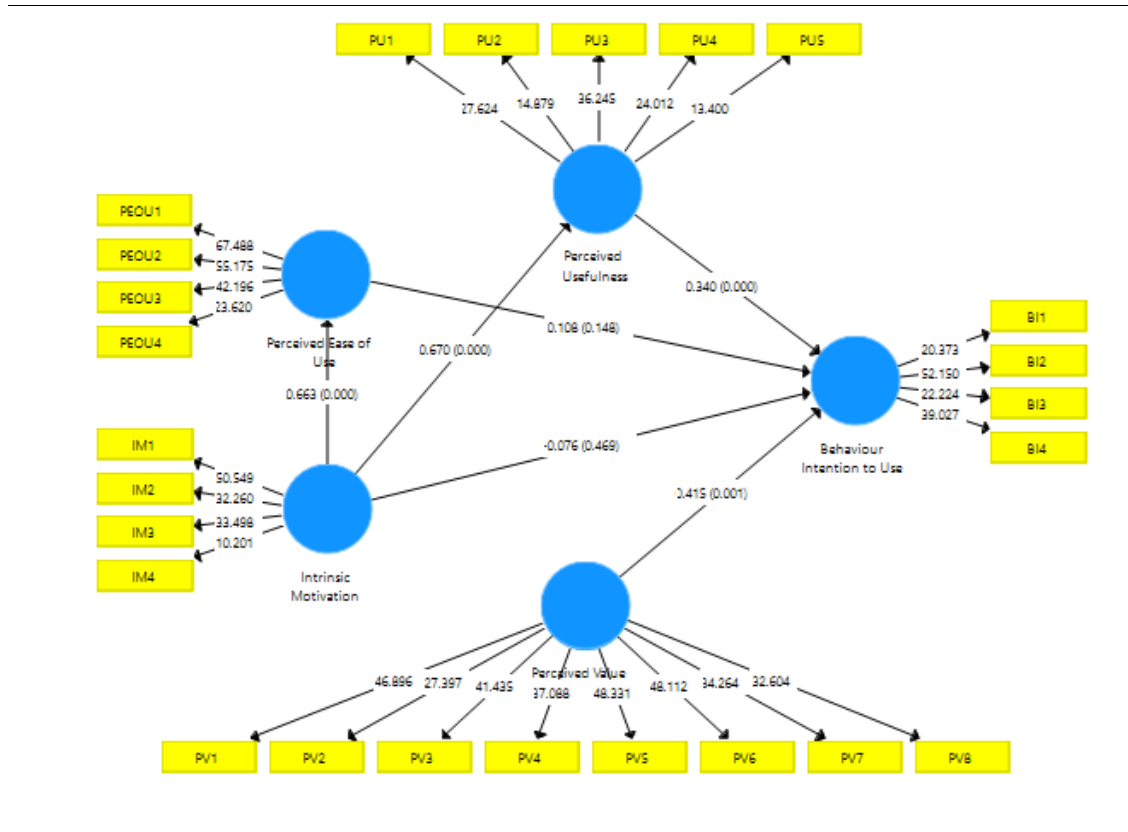
| Generative AI                    | Frequency | Persentase |
|----------------------------------|-----------|------------|
| ChatGPT                          | 87        | 45.5       |
| ChatGPT, Perplexity AI, Quillbot | 2         | 1          |
| Elicit                           | 2         | 1          |
| Gemini                           | 1         | 0.5        |
| Grammarly                        | 38        | 19.9       |
| Microsoft Bing                   | 8         | 4.2        |
| Neural Writer                    | 1         | 0.5        |
| Perplexity AI                    | 14        | 7.3        |
| QuillBot                         | 35        | 18.3       |
| QuillBot dan ChatGPT             | 2         | 1          |
| Research Rabbit                  | 1         | 0.5        |
| Total                            | 191       | 100        |

Table 2 gives information about the GenAI technology that students of the Tarbiyah faculty used to finish their theses. Some students use more than one GenAI technology, such as Chatgpt and QuillBot, and others. Respondents' perceptions of the use of GenAI technology based on the TAM framework and EVT are explained in Table 3.

**Table 3. Perception based on TAM and EVT framework**

| Variable                     | Average Score |
|------------------------------|---------------|
| Perceived Ease of Use (PEOU) | 3.83          |
| Perceived Usefulness (PU)    | 3.55          |
| Intrinsic Motivation (IM)    | 3.67          |
| Perceived Values (PV)        | 3.57          |
| Behavioral Intention (BI)    | 3.35          |

Perceived Ease of Use has an average score of 3.83. This score indicated that GenAI technology makes it easy to get information. The average score of Perceived Usefulness is 3,55, which provides that information GenAI technology is useful for finishing their theses. Intrinsic Motivation has an average score of 3.57, and Behavioral Intention has an average score of 3.35.



**Figure 1. PLS-SEM Analysis result**

The next stage of analysis is to test the hypothesis in this research, which consists of 6 hypotheses. Statistical analysis uses the Partial Least Square Structural Equation Model (PLS-SEM) method. The conceptual framework that is the basis for preparing hypotheses in this research is presented in Figure 1. In Figure 1, the relationship between variables is explained using the Partial Least Square Structural Equation Model (PLS-SEM) method with the help of SmartPLS software.

Each latent variable in this research is composed of several question indicators. Question indicators must be valid. The validity test in the PLS-SEM model was carried out by comparing the calculated t value of the outer loading value for each question with a value of 1.96 (t table). Based on the results in Table 4, it is known that all the question indicators that make up the construct are valid because they have a calculated t-value greater than 1.96 at an  $\alpha$  of 0.05. Based on Table 4.8, it can be concluded that all constructs used in this research are reliable.

**Table 4. Loading Factor of indicator**

| Latent Variable | Loading Factor | $\hat{\lambda}_{jk}$ | $t = \frac{\hat{\lambda}_{jk}}{se(\hat{\lambda}_{jk})}$ | Information |
|-----------------|----------------|----------------------|---|-------------|
|                 | 0.79           | 0.04                 | 20.37   | Valid       |
| BI2             | 0.89           | 0.02                 | 52.15   | Valid       |
| BI3             | 0.84           | 0.04                 | 22.22   | Valid       |
| BI4             | 0.86           | 0.02                 | 39.03   | Valid       |
| IM1             | 0.88           | 0.02                 | 50.55   | Valid       |
| IM2             | 0.86           | 0.03                 | 32.26   | Valid       |
| IM3             | 0.85           | 0.03                 | 33.50   | Valid       |



|       |      |      |       |       |
|-------|------|------|-------|-------|
| IM4   | 0.62 | 0.06 | 10.20 | Valid |
| PEOU1 | 0.91 | 0.01 | 67.49 | Valid |
| PEOU2 | 0.89 | 0.02 | 55.18 | Valid |
| PEOU3 | 0.87 | 0.02 | 42.20 | Valid |
| PEOU4 | 0.79 | 0.03 | 23.62 | Valid |
| PU1   | 0.82 | 0.03 | 27.62 | Valid |
| PU2   | 0.78 | 0.05 | 14.88 | Valid |
| PU3   | 0.85 | 0.02 | 36.24 | Valid |
| PU4   | 0.80 | 0.03 | 24.01 | Valid |
| PU5   | 0.71 | 0.05 | 13.40 | Valid |
| PV1   | 0.87 | 0.02 | 46.90 | Valid |
| PV2   | 0.83 | 0.03 | 27.40 | Valid |
| PV3   | 0.86 | 0.02 | 41.44 | Valid |
| PV4   | 0.85 | 0.02 | 37.09 | Valid |
| PV5   | 0.87 | 0.02 | 48.33 | Valid |
| PV6   | 0.86 | 0.02 | 48.11 | Valid |
| PV7   | 0.83 | 0.02 | 34.26 | Valid |
| PV8   | 0.81 | 0.02 | 32.60 | Valid |

**Table 5. Composite Reliability and Average Variance Extracted**

| Latent Variabel              | Composite Reliability | Average Variance Extracted (AVE) |
|------------------------------|-----------------------|----------------------------------|
| Behavioral Intention to Use_ | 0.91                  | 0.71                             |
| Intrinsic Motivation         | 0.88                  | 0.65                             |
| Perceived Ease of Use        | 0.92                  | 0.75                             |
| Perceived Usefulness         | 0.89                  | 0.63                             |
| Perceived Value              | 0.95                  | 0.72                             |

Composite reliability values are presented in Table 5; it can be concluded that all variables in this study are reliable because they have a composite value above 0.7. In Table 5, the Average Variance Extracted (AVE) value is also presented and used to measure convergent validity. The acceptable AVE value is a minimum of 0.5. Based on the results in Table 5, the AVE values for all variables have met the established criteria.

**Table 6. Coefficient values and significance of the structural model**

| Relationship between variable                         | Coefficient | Sig   | Conclusion         |
|---|-------------|-------|--------------------|
| Intrinsic Motivation -> Behavioral Intention to Use_  | -0.076      | 0.469 | Not significant    |
| Intrinsic Motivation -> Perceived Ease of Use         | 0.663       | 0.000 | <b>significant</b> |
| Intrinsic Motivation -> Perceived Usefulness          | 0.670       | 0.000 | <b>significant</b> |
| Perceived Ease of Use -> Behavioral Intention to Use_ | 0.108       | 0.148 | Not significant    |
| Perceived Usefulness -> Behavioral Intention to Use_  | 0.340       | 0.000 | <b>significant</b> |

|   |       |       |                    |
|---|-------|-------|--------------------|
| Perceived Value -> Behavioral Intention to Use_ | 0.415 | 0.001 | <b>significant</b> |
|---|-------|-------|--------------------|

The results of hypothesis testing in the research are presented in Table 6. The hypothesis proven in this research is that Intrinsic Motivation has a significant relationship with the Intention to Use GenAI technology. Intrinsic Motivation has a significant relationship to Perceived Usefulness, Perceived Usefulness has a significant relationship to Intention to Use, and Perceived Value has a significant relationship to Intention to Use GenAI technology.

**Table 7. Structural model R-square value**

| Variable                         | R Square Adjusted |
|----------------------------------|-------------------|
| <i>Behavior Intention to Use</i> | 0.46              |
| <i>Perceived Ease of Use</i>     | 0.44              |
| <i>Perceived Usefulness</i>      | 0.45              |

The R-square value has a function to determine how accurately the model explains existing data variations. The R square value for each variable is presented in Table 7. The Behavioral Intention to Use variable is 0.46. This value means that the Behavioral Intention to Use model, which is composed of the variables Intrinsic Motivation, Perceived Usefulness, Perceived Ease of Use, Perceived Value, and interest (Intention to Use), is able to explain the diversity of data by 46%. The variable level of ease (Perceived Ease of Use) was able to explain 44% of the data diversity with intrinsic motivation as the predictor. The level of usefulness variable (Perceived Usefulness) has an R-square value of 45%, which means this variable is able to explain the diversity of data with the intrinsic motivation variable as the predictor.

**E. Discussion**

Based on the results of the analysis, ChatGPT is the most widely used GenAI. These results are in line with research conducted by Farhat et al. (2023). His research used bibliometric analysis, and the results showed that ChatGPT is currently the most used GenAI. ChatGPT is also widely used by medical students to assist in writing scientific articles (Liu et al., 2024). The advantage of ChatGPT is that it is able to respond to questions from users in text form like a human. In some cases, this technology is even able to correct code and algorithm errors in programming (Yilmaz & Karaoglan Yilmaz, 2023; Roumeliotis & Tselikas, 2023).

Several factors influence ChatGPT usage. In the TAM framework, Perceived Usefulness and perceived ease of use can be factors that affect the behavioral intention to use technology such as Chatgpt. The result of this research proved that information on perceived usefulness has a significant effect on the intention of Tarbiyah faculty students to use Chatgpt. This result aligned with Utari & Fauziah (2023), who found that perceived usefulness is one of the factors affecting the intention to use later. Perceived Usefulness is related to the benefit provided when using ChatGPT to finish the thesis. Students get benefits such as a comprehensive solution for writing theses and help to make comprehensive backgrounds and others.

This research consists of six hypotheses. Based on the results of the analysis, intrinsic motivation does not have a significant relationship with behavioral intention

to use. This research is in line with research conducted by Bastari et al. (2020) that indicates that intrinsic motivation has a direct effect on behavior and intention to use technology. These results show that the enjoyment of using GenAI technology in completing the thesis is not the main factor for students using this technology.

The second hypothesis is that intrinsic motivation has a significant relationship to the perceived ease of use of GenAI technology. In this research, perceived Ease of Use can be defined as how GenAI is easy to use to help complete a thesis. Based on the PLS-SEM analysis result, Intrinsic Motivation has a significant relationship to the Perceived Ease of Use of GenAI technology. Putu et al. (2024) also examined the relationship between intrinsic motivation and perceived ease of use. They obtained the same results, which showed that the intrinsic motivation of the user influences the ease of using technology.

Intrinsic Motivation has a significant relationship to Perceived Usefulness. This result has an interpretation that the higher student motivation in using GenAI technology, the higher GenAI technology's Perceived Usefulness. These conditions explain that the more students enjoy using GenAI, the greater the benefits they will get, especially in completing their thesis. Senaratne & Samarasinghe (2019) have the same result: Intrinsic motivation has a significant relationship to the perceived usefulness of technology.

Perceived Ease of Use has no relationship to Behavioral Intention to Use. These results illustrate that when using GenAI, students prioritize other factors, such as the benefits obtained, rather than the level of ease in operating the technology. Widiar et al. (2023) have researched and analyzed the effect of Perceived Ease of Use on Behavioral Intention to Use mobile banking. Her research concluded that Perceived Ease of Use has no significant relationship to behavioral intention to use mobile banking.

Perceived Usefulness has a significant relationship to Behavioral Intention to Use GenAI technology. This result reflects the benefits of GenAI technology, such as making it easier to prepare backgrounds, research instruments, and data analysis steps, as well as providing insight into knowledge related to the topic being researched, which is an important factor when using GenAI technology. Perceived Usefulness is when the user believes that using a specific technology, such as ChatGPT, Gemini, etc, can improve their performance, especially for this research, and can help to finish their complete thesis (Li et al., 2024)

Perceived Value consists of Attainment value, which is a person's belief that by involving themselves in a behavior, they will have the direction to achieve important results. For example, using GenAI technology will increase academic achievement. Utility value refers to the belief that performing a behavior will result in practical benefits, such as increased skills or knowledge. For example, students believe that using GenAI will help them save time or provide them with useful input (Chan & Zhou, 2023). This research proves that perceived value is a significant factor in behavioral intention to use GenAI technology. This research aligned with Ahn & Lee (2019) and Elizabeth (2024), which proved that the technology used is influenced by perceived value.

## **F. Conclusion**

This research concludes that Perceived Usefulness and Perceived Value have a significant relationship to the intention to use GenAI technology. Using GenAI technology is expected to assist them in completing their thesis based on its benefits,

such as making it easier to prepare backgrounds, research instruments, and data analysis steps, as well as providing insight into knowledge related to the topic being researched. Based on this result, institutions should make policies regarding the use of GenAI technology for theses so that students are wiser in using GenAI technology. This research also has limitations, such as the samples still being limited to students who are currently completing the thesis. For future research, Research on GenAI technology was developed to examine its use in learning processes such as completing assignments or for learning material.

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