



## Primary School Teacher Education Students' Perceptions of the Use of ChatGPT in Language and Literature Teaching

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### Abstract

The rapid emergence of ChatGPT has generated significant attention in the education sector, particularly regarding its potential to support language and literature learning. This study investigates Primary School Teacher Education (PGSD) students' perceptions of ChatGPT use in Indonesian Language and Literature courses. Employing a quantitative research design, data were collected from 333 undergraduate students across six Indonesian universities using a questionnaire adapted from Chellappa and Luximon. The instrument measured three perceptual dimensions: optimism, usefulness, enthusiasm and appreciation. Data were analyzed using descriptive statistics, one-sample t-tests, and MANOVA. The findings indicate that students generally hold positive perceptions of ChatGPT across all measured dimensions. One-sample t-test results show that mean scores for all items were significantly above the neutral benchmark, suggesting favorable student attitudes toward the technology. MANOVA results reveal no significant differences in perceptions based on gender or semester level. However, significant differences were found across universities, highlighting the influence of institutional context on technology acceptance. The results align with the Technology Acceptance Model and Self-Determination Theory, indicating that both cognitive evaluations and motivational factors contribute to students' positive responses. Overall, ChatGPT demonstrates strong potential as a supportive cognitive and motivational tool in Indonesian Language and Literature learning. The study underscores the importance of institutional support and strategic integration to maximize the educational benefits of generative AI in teacher education contexts.

**Keywords:** chatgpt, students' perceptions, primary school, language, literature

## Persepsi Mahasiswa Pendidikan Guru Sekolah Dasar terhadap Penggunaan ChatGPT dalam Pembelajaran Bahasa dan Sastra

### Abstrak

Kemunculan ChatGPT yang pesat telah menarik perhatian besar di sektor pendidikan, khususnya terkait potensinya dalam mendukung pembelajaran bahasa dan sastra. Penelitian ini menyelidiki persepsi mahasiswa Pendidikan Guru Sekolah Dasar (PGSD) terhadap penggunaan ChatGPT dalam mata kuliah Bahasa dan Sastra Indonesia. Dengan menggunakan desain penelitian kuantitatif, data dikumpulkan dari 333 mahasiswa sarjana di enam universitas di Indonesia melalui kuesioner yang diadaptasi dari Chellappa dan Luximon (2024). Instrumen tersebut mengukur tiga dimensi persepsi: optimisme, kegunaan, serta antusiasme dan apresiasi. Data dianalisis menggunakan statistik deskriptif, uji t satu sampel, dan MANOVA. Temuan menunjukkan bahwa mahasiswa secara umum memiliki persepsi positif terhadap ChatGPT pada seluruh dimensi yang diukur. Hasil uji t satu sampel menunjukkan bahwa nilai rata-rata semua item secara signifikan berada di atas batas netral, yang mengindikasikan sikap mahasiswa yang menguntungkan terhadap teknologi tersebut. Hasil MANOVA mengungkapkan tidak terdapat perbedaan persepsi yang signifikan berdasarkan gender maupun tingkat semester. Namun, ditemukan perbedaan yang signifikan antaruniversitas, yang menyoroti pengaruh konteks institusional terhadap penerimaan teknologi. Hasil ini sejalan dengan Technology Acceptance Model dan Self-Determination Theory, yang menunjukkan bahwa evaluasi kognitif dan faktor motivasional sama-sama berkontribusi terhadap respons positif mahasiswa. Secara keseluruhan, ChatGPT menunjukkan potensi yang kuat sebagai alat pendukung kognitif dan motivasional dalam pembelajaran Bahasa dan Sastra Indonesia. Studi ini menegaskan pentingnya dukungan institusional serta integrasi strategis untuk memaksimalkan manfaat pendidikan dari AI generatif dalam konteks pendidikan calon guru.

**Kata kunci:** chatgpt, persepsi mahasiswa, sekolah dasar, bahasa, sastra

## INTRODUCTION

The launch of ChatGPT in November 2022 triggered substantial disruption across multiple sectors, with the education field attracting particularly strong attention (Baek et al., 2024). Although artificial intelligence (AI) itself is not a novel phenomenon, recent advances have fundamentally changed its educational relevance. What distinguishes current AI systems is the widespread accessibility of conversational interfaces and the significant improvement in generating coherent, human-like text (Dwivedi et al., 2023). This development has shifted AI from a specialized expert tool into an everyday academic assistant. As user adoption has grown rapidly, educators have increasingly questioned when, where, and how such tools should be appropriately integrated into students' learning practices (Firat, 2023).

Despite its promising affordances, generative AI such as ChatGPT also presents notable limitations. Prior research identifies risks related to embedded bias, factual inaccuracies, and over-reliance on automated outputs (Tiwari et al., 2024). From a pedagogical standpoint, excessive dependence on AI-generated text may weaken students' independent writing ability, reduce creative engagement, and potentially increase academic misconduct, including plagiarism. These concerns highlight that evaluating AI in education cannot focus solely on technical capability; it must also consider how learners perceive, interpret, and utilize the technology. Technology adoption studies consistently demonstrate that usage behavior is shaped by users' perceptions, prior experiences, and individual characteristics. Therefore, identifying students' concerns and the factors influencing their use of tools such as ChatGPT is essential for understanding barriers to effective implementation in learning environments (Hsu & Lin, 2022).

In the Indonesian context, Indonesian Language and Literature learning holds a foundational position in both primary and higher education. For students in Primary School Teacher Education (PGSD), mastery of language and literature is particularly crucial because it forms the basis of their future instructional competence. Courses in Indonesian Language and Literature are designed not only to develop theoretical understanding but also to strengthen students' practical ability to apply linguistic and literary knowledge in classroom settings. Within this instructional process, educational technology can function as a cognitive scaffold that supports students in interpreting complex literary texts, conducting textual analysis, and applying language concepts in more applied contexts (Hossain, 2024). When integrated appropriately, AI tools have the potential to enhance both comprehension and pedagogical preparation.

As an AI-driven educational assistant, ChatGPT offers several pedagogical affordances. It can generate immediate explanations, provide contextualized language examples, and assist learners in analyzing literary works. However, the educational value of these affordances depends heavily on students' acceptance of the technology. Student perception is widely recognized as a key determinant of technology adoption because it influences both initial use and sustained engagement with digital learning tools (Almulla, 2024).

This relationship is well explained by the Technology Acceptance Model (TAM), which posits that users' intention to adopt a technology is primarily influenced by two core constructs: perceived usefulness and perceived ease of use (Belmonte et al., 2024). Perceived usefulness refers to the degree to which an individual believes that using a particular system will enhance their task performance, whereas perceived ease of use reflects the extent to which the system is viewed as effortless to operate. In educational settings, these perceptions shape students' willingness to incorporate digital tools into their learning routines. Applied to Indonesian Language and Literature learning, students who view ChatGPT as beneficial for understanding course material and easy to use are more likely to integrate it into their academic practices.

Beyond cognitive evaluation, motivational dynamics also play a critical role in technology adoption. Self-Determination Theory (SDT) provides a usefulness framework for understanding this process. According to SDT, students' engagement increases when learning environments satisfy three basic psychological needs: autonomy, competence, and relatedness (Gao et al., 2024). Autonomy refers to the sense of control over one's learning, competence involves feeling capable of mastering tasks, and relatedness reflects meaningful connection with learning resources or communities. When students perceive that ChatGPT supports independent exploration, strengthens their understanding of course material, and connects them with relevant knowledge, their intrinsic motivation to use the technology is likely to increase. In Indonesian Language and Literature courses, where deep interpretation and sustained cognitive engagement are required, this motivational dimension becomes particularly significant (Dahri et al., 2024).

Despite the rapid growth of research on ChatGPT in higher education, existing studies predominantly examine general university populations and broad disciplinary contexts (Dwivedi et al., 2023; Kasneci et

al., 2023). Current literature largely discusses opportunities, risks, and academic integrity concerns associated with generative AI, but limited attention has been directed toward students enrolled in teacher education programs. This omission is critical because pre-service teachers play a strategic role in mediating future technology integration in primary classrooms. Research on artificial intelligence in higher education has identified a general expansion of AI applications, yet studies focusing specifically on teacher preparation programs remain comparatively underrepresented (Zawacki-Richter et al., 2019).

Furthermore, prior studies on ChatGPT frequently emphasize academic writing, assessment, and general learning support (Cotton et al., 2023; Firat, 2023), while discipline-specific investigations particularly in language and literature education remain scarce. Language and literature learning involves interpretative reasoning, textual analysis, and pedagogical reflection, which may shape students' technology perceptions differently compared to STEM-oriented contexts. The absence of focused empirical inquiry within Indonesian Language and Literature education represents a contextual gap that warrants investigation.

From a theoretical perspective, research on AI adoption in education commonly relies on the Technology Acceptance Model (TAM), which emphasizes perceived usefulness and perceived ease of use as primary predictors of technology acceptance (Davis, 1989; Venkatesh & Davis, 2000). However, fewer studies integrate motivational frameworks such as Self-Determination Theory (SDT), which highlights autonomy, competence, and relatedness as drivers of intrinsic engagement (Ryan & Deci, 2000). The limited integration of cognitive acceptance models and motivational theory suggests a theoretical gap in understanding how both evaluative and affective dimensions simultaneously shape students' perceptions of generative AI.

While previous studies have extensively examined students' perceptions of ChatGPT in general higher education settings, few investigations have focused specifically on pre-service primary school teachers within language and literature education contexts. Moreover, most prior research analyzes perceptions using single theoretical frameworks, particularly technology acceptance models, without integrating motivational dimensions that capture intrinsic engagement.

This study offers three key contributions. First, it situates the investigation within Primary School Teacher Education (PGSD), a strategically important yet underexplored population in AI-in-education research. Second, it focuses specifically on Indonesian Language and Literature courses, a discipline characterized by interpretative and reflective learning processes that may shape AI perceptions differently from STEM fields. Third, it integrates the Technology Acceptance Model (TAM) and Self-Determination Theory (SDT) to provide a more comprehensive understanding of both cognitive evaluation and motivational engagement in students' perceptions of ChatGPT.

By combining contextual specificity with theoretical integration in a multi-university setting, this study advances current knowledge beyond descriptive perception studies and contributes a more nuanced model of AI acceptance in teacher education.

Given these considerations, a systematic examination of PGSD students' perceptions of ChatGPT in Indonesian Language and Literature learning is warranted. Although prior studies have explored AI adoption broadly, focused evidence within this disciplinary and teacher-education context remains limited. Understanding whether students view ChatGPT as a supportive learning partner or as a potentially problematic shortcut is essential for positioning the technology appropriately within pedagogy. Therefore, this study aims to investigate PGSD students' perceptions of ChatGPT use by focusing on indicators of optimism, perceived usefulness, enthusiasm, and appreciation. The findings are expected to provide a clearer picture of both the opportunities and challenges associated with integrating generative AI into language and literature education in higher education, while also informing more adaptive curriculum design and instructional strategies in the era of rapidly evolving educational technology.

This study aims to examine Primary School Teacher Education (PGSD) students' perceptions of the use of ChatGPT in Indonesian Language and Literature learning. Specifically, the study seeks to:

1. Identify the overall level of PGSD students' perceptions of ChatGPT in terms of optimism, perceived usefulness, and enthusiasm/appreciation.
2. Determine whether students' perceptions differ significantly from a neutral benchmark.
3. Examine whether significant differences in perceptions exist based on gender, university, and semester level.

Based on these objectives, the following research questions are formulated:

RQ1: What is the overall level of PGSD students' perceptions of ChatGPT in Indonesian Language and Literature learning?

RQ2: Are students' perceptions significantly different from a neutral benchmark?

RQ3: Do perceptions differ significantly based on gender, university, and semester level?

## METHODS

### Research Design

This research uses a quantitative research approach used in comprehensively understanding PGSD students' perspectives on ChatGPT in learning Indonesian language and literature. This approach was chosen to provide a more measured and detailed understanding of the relationship between the variables studied.

### Participants

Data for this study were collected as part of the validation process of the research instruments. Participants were selected using convenience sampling, primarily based on accessibility and willingness to participate. The respondents were undergraduate PGSD students aged between 17 and 23 years old who were currently enrolled in or had previously completed Indonesian Language and Literature courses.

Although participants were drawn from different universities and regions, the sampling approach does not ensure full representativeness of the broader PGSD student population. The use of convenience sampling may limit the generalizability of the findings, as the sample may not fully reflect the diversity of teacher education students across Indonesia. Therefore, the results of this study should be interpreted with caution and understood as indicative rather than nationally representative. All respondents provided informed consent prior to participating in the study.

### Research Instrument

The measurement of student perceptions in the use of ChatGPT was carried out using a questionnaire covering several aspects of ChatGPT. These aspects include use, ease, usefulness, interesting, and impact in learning Indonesian language and literature. After processing the questionnaire data, values were obtained in the form of an overall percentage score as well as a percentage score for each aspect. Categorisation was determined based on the mean and standard deviation of the scores obtained from the students. Scores on each subscale ranged from 1 to 5, with higher scores indicating higher levels of ChatGPT usage. Data on ChatGPT perceptions were collected using an online questionnaire adapted from (Chellappa & Luximon, 2024). The researchers enlisted the help of lecturers to distribute the questionnaire by sharing the link with their students through various communication channels, including WhatsApp groups, emails, or instant messages. This collaborative approach proved effective in reaching a larger sample size and facilitating data collection. Lecturers are often valuable partners in research as they have direct access to students and can help ensure higher response rates (Purnomo et al., 2024). A consent form, instructions, and brief information about the study accompanied the link. This online questionnaire was divided into two parts. The first part deals with demographic questions such as students' name, age, university origin, gender, class, and semester. The second part which consisted of 17 items was the core part of the measured scale which was the students' perception of using ChatGPT in learning Indonesian language and literature developed from 3 indicators (Table 1). At the beginning of the survey, there was a screening question to ensure that students had used ChatGPT for courses, assignments, or projects related to Indonesian language and literature learning courses.

Table 1. Questionnaire Items

Indicators	Code	Item
A. Optimism	O1	1. The responses generated by ChatGPT are well-structured.
	O2	2. ChatGPT functions as a valuable additional learning resource in language and literature learning.
	O3	3. The responses provided by ChatGPT are generally accurate.
	O4	4. I feel motivated to use ChatGPT more in language and literature learning.
	O5	5. The quality of ChatGPT will soon experience significant improvement.
	O6	6. I feel optimistic about ChatGPT in language and literature learning.

Indicators	Code	Item
B. Usefulness	U1	7. Having some background knowledge about your questions enables you to use ChatGPT effectively in language and literature learning.
	U2	8. ChatGPT can enhance creativity in language and literature learning.
	U3	9. ChatGPT has proven to be a valuable and effective tool for tasks related to language and literature learning.
	U4	10. ChatGPT enables me to learn more effectively.
	U5	11. Follow-up questions can help ChatGPT generate more accurate answers.
	U6	12. ChatGPT creates a user-friendly impression to enhance the human experience in language and literature learning.
	U7	13. ChatGPT can benefit from further improvements.
	U8	14. I am impressed by ChatGPT's capabilities.
C. Enthusiasm and Appreciation	E1	15. ChatGPT offers unique advantages compared to search engines such as Google.
	E2	16. ChatGPT can provide informative responses in explaining well.
	E3	17. ChatGPT is interesting.

Source: (Chellappa & Luximon, 2024)

**Validity and Reliability**

In this study, the validity and reliability of measurement instruments will be evaluated using the Confirmatory Factor Analysis (CFA) method with second-order factor analysis (Guntur & Purnomo, 2024). CFA will be used to examine the factorial structure of the measured construct, namely the perceived use of ChatGPT in learning Indonesian language and literature. Construct validity will be assessed by examining the extent to which the factorial model fits the observed data. CFA parameters, such as Construct Reliability consisting of Cronbach's Alpha (CA), rho\_A, Composite Reliability (CR), and Average Variance Extracted (AVE). This CFA analysis will ensure that the measurement instruments used can be considered valid and reliable in measuring the construct under study, thus ensuring the accuracy of the interpretation of the results and conclusions drawn in this study. There are 2 validities that run, namely content validity and construct validity. Content validity was conducted to experts in the field of language and 2 lecturers of elementary school teacher education. Construct validity was tested on PGSD students at Yogyakarta State University. It was found that the results per item <0.7 which can be concluded that each item is valid.

Table 2. Validity and Reliability

Indicators	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Optimism	0.891	0.893	0.917	0.649
Usefulness	0.895	0.899	0.920	0.657
Enthusiasm and Appreciation	0.846	0.847	0.897	0.685

In validity assessment, the focus lies on the cross-loading value, where a threshold of >0.70 is usually sought. Reliability evaluation includes various indicators, including Composite Reliability (CR) is generally used to measure the consistency of items within a construct. CR values exceeding 0.7 are conventionally considered acceptable. In addition, Average Variance Extracted (AVE) serves to measure the proportion of variance captured by a construct relative to measurement error. An AVE value that exceeds 0.5 indicates



good reliability. After conducting the reliability test, it was found to be  $> 0.7$ . Thus, the question items are reliable. The final conclusion is that the question items are valid and reliable (Table 2).

### Data Analysis Technique

This study used a quantitative approach to investigate the relationship between ChatGPT on learning Indonesian language and literature in this context. The research data was analysed using SPSS application. In this study, the data that has been found will be tested descriptive statistical analysis, normality, homogeneity, one sample t test, and manova.

A one-sample t-test was employed to determine whether the mean perception scores significantly differed from the neutral midpoint value (3) of the Likert scale. The neutral benchmark (3) represents a theoretically balanced position between agreement and disagreement, indicating neither positive nor negative perception. Comparing the sample mean against this midpoint allows for the identification of statistically significant deviations toward favorable or unfavorable attitudes. This approach is commonly used in perception studies to assess whether respondents' evaluations are meaningfully different from neutrality.

The use of this method is appropriate because the study aims to determine whether students' perceptions are significantly positive rather than merely descriptively above average. Therefore, the one-sample t-test provides inferential evidence regarding the direction and strength of student attitudes toward ChatGPT.

### RESULTS AND DISCUSSION

After distributing questionnaires in the field, it is time for the data to be analysed by researchers. The following (Table 3) contains the characteristics of elementary school teacher education students who have agreed to be respondents in this study:

Table 3. Characteristics of the study

Characteristic		Frequency	Percentage
Gender	Men	50	15%
	Women	283	85%
University	Yogyakarta State University	56	16,8%
	State University of Malang	34	10,2%
	Gorontalo State University	54	16,2%
	Surabaya State University	86	25,8%
	State University of Medan	81	24,3%
Academic Level	Semarang State University	22	6,6%
	Second Year	34	10,2%
	Third Year	242	72,7%
	Fourth Year	57	17,1%

After knowing the characteristics of each respondent, the data began to be analysed descriptively using descriptive statistics to be able to describe the data findings. There are 17 question items that have been filled in by 333 respondents. The minimum value on the item is 1 and the maximum is 5 because it uses a Likert scale. So it can be seen that the optimism indicator found that the mean shows positive results (3.2 - 3.7) because it is above the neutral value (3). The standard deviation has an average of 0.8 indicating that most respondents have a uniform view and tend to be close to the average score (4.0). This means that only a few respondents strongly disagree or are neutral. On the usefulness indicator, it is found that the mean shows positive results (3.5 - 3.7) because it is above the neutral value (3). The standard deviation has an average of 0.7 - 0.8 indicating that most respondents have a uniform view and tend to be close to the average

score (4.0). This means that only a few respondents strongly disagree or are neutral. On the enthusiasm and appreciation indicator, it is found that the mean shows positive results (3.7 - 3.9) because it is above the neutral value (3). The standard deviation has an average of 0.7 - 0.8 indicating that most respondents have uniform views and tend to be close to the average score (4.0). This means that only a few respondents strongly disagree or are neutral. Thus, it can be concluded that students have a positive perception of optimism, usefulness, enthusiasm, and appreciation in using ChatGPT in learning Indonesian language and literature. It can be seen that the indicators of optimism, usefulness, enthusiasm and appreciation based on gender have a value > 0.05. Then the result is that the data above is normal. It can be seen that the indicators of optimism, usefulness, enthusiasm and appreciation based on the university have a value > 0.05. Then the result is that the data above is normal. It can be seen that the indicators of optimism, usefulness, enthusiasm and appreciation based on semester have a value > 0.05. Then the result is that the data above is normal.

The homogeneity test results indicate that the Optimism indicator has a significance value of 0.243 (>0.05), suggesting that the variance between groups is homogeneous. The Perceived Usefulness indicator shows a significance value of 0.172 (>0.05), also indicating homogeneous variance. Similarly, the Enthusiasm and Appreciation indicator yields a significance value of 0.811 (> 0.05), confirming homogeneity of variance across groups.

Subsequently, a one-sample t-test was conducted for each indicator to determine whether the mean scores significantly differed from the neutral benchmark value. Then do a one sample t test on each item as in the table below:

Table 4. One Sample T-Test

Indicators	Item	t	df	Sig. (2-tailed)	Mean Difference
<b>Optimism</b>	Item 1	11.093	332	0.000	0.49850
	Item 2	17.231	332	0.000	0.78078
	Item 3	5.176	332	0.000	0.23724
	Item 4	6.451	332	0.000	0.30330
	Item 5	13.507	332	0.000	0.63363
	Item 6	7.904	332	0.000	0.35435
<b>Usefulness</b>	Item 7	19.399	332	0.000	0.78679
	Item 8	11.265	332	0.000	0.51952
	Item 9	13.507	332	0.000	0.63363
	Item 10	10.901	332	0.000	0.51952
	Item 11	12.862	332	0.000	0.59459
	Item 12	14.381	332	0.000	0.61862
	Item 13	15.362	332	0.000	0.66366
<b>Enthusiasm and Appreciation</b>	Item 14	19.528	332	0.000	0.91892
	Item 15	17.909	332	0.000	0.84685
	Item 16	17.839	332	0.000	0.76577
	Item 17	17.773	332	0.000	0.87087

In the table table 4, it is found that the optimism indicator on item 1 to item 6 has a P-value = 0.000 <0.05, it can be concluded that the optimism indicator has a significant difference between the sample mean and the hypothesised value (3). This means that students' perceptions of the use of ChatGPT in learning Indonesian language and literature with the optimism indicator are significantly different from the neutral value (3). The mean difference of each item is higher than the hypothesised value (3), which means that students tend to have a positive perception of the use of ChatGPT in learning Indonesian language and literature in terms of optimism.

In the table above, it is found that the usefulness indicator in item 7 to item 13 has a P-value = 0.000 <0.05, it can be concluded that the usefulness indicator has a significant difference between the sample mean and the hypothesised value (3). This means that students' perceptions of the use of ChatGPT in learning Indonesian language and literature with usefulness indicators are significantly different from the neutral value (3). The mean difference of each item is higher than the hypothesised value (3), which means that

students tend to have a positive perception of the use of ChatGPT in learning Indonesian language and literature in terms of usefulness.

In the table above, it is found that the Enthusiasm and Appreciation indicators in item 14 to item 17 have a P-value = 0.000 < 0.05, so it can be concluded that the Enthusiasm and Appreciation indicators have a significant difference between the sample mean and the hypothesised value (3). This means that students' perceptions of the use of ChatGPT in learning Indonesian language and literature with the indicators of Enthusiasm and Appreciation are significantly different from the neutral value (3). The mean difference of each item is higher than the hypothesised value (3), which means that students tend to have a positive perception of the use of ChatGPT in learning Indonesian language and literature in terms of Enthusiasm and Appreciation (Table 3).

In gender characteristics, the Wilks' Lambda value of 0.988 with Sig. of 0.289 indicates that there is no significant difference in student perceptions based on university gender towards the use of ChatGPT. In university characteristics, the Wilks' Lambda value of 0.914 with Sig. of 0.020 indicates that there is a significant difference in student perceptions based on university towards the use of ChatGPT. In semester characteristics, the Wilks' Lambda value of 0.993 with Sig. of 0.911 indicates that there is no significant difference in student perceptions based on semester towards using ChatGPT. In gender and university characteristics, the Wilks' Lambda value of 0.977 with Sig. of 0.945 indicates that the interaction between gender and university does not have a significant effect on student perceptions of using ChatGPT. In the characteristics of gender and semester, the Wilks' Lambda value of 0.996 with Sig. of 0.973 indicates that the interaction between gender and semester does not have a significant effect on student perceptions of using ChatGPT. In the characteristics of university and semester, the Wilks' Lambda value of 0.986 with Sig. of 0. In the characteristics of gender, university, and semester, the Wilks' Lambda value of 0.995 with Sig. of 0.700 indicates that the interaction between gender, university, and semester does not have a significant effect on student perceptions of using ChatGPT.

Table 5. Manova Test By Gender, University, And Semester on Indicator

Characteristics	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.
Gender	Optimism	6.109	1	6.109	0.313	0.576
	usefulness	4.974	1	4.974	0.197	0.658
	enthusiastic	2.323	1	2.323	0.253	0.615
University	Optimism	279.069	5	55.814	2.856	0.015
	usefulness	398.127	5	79.625	3.150	0.009
	enthusiastic	116.235	5	23.247	2.537	0.029
Semester	Optimism	22.050	2	11.025	0.564	0.569
	usefulness	46.595	2	23.298	0.922	0.399
	enthusiastic	14.553	2	7.276	0.794	0.453
Gender *	Optimism	17.555	5	3.511	0.180	0.970
University	usefulness	82.395	5	16.479	0.652	0.660
	enthusiastic	26.243	5	5.249	0.573	0.721
Gender *	Optimism	9.141	2	4.570	0.234	0.792
Semester	usefulness	3.406	2	1.703	0.067	0.935
	enthusiastic	2.690	2	1.345	0.147	0.864
	Optimism	31.641	1	31.641	1.619	0.204
University *	usefulness	55.166	1	55.166	2.183	0.141
	enthusiastic	0.833	1	0.833	0.091	0.763
	Optimism	4.801	1	4.801	0.246	0.620
Gender *	usefulness	6.468	1	6.468	0.256	0.613
University *	enthusiastic	10.148	1	10.148	1.107	0.293

In the table 5, on gender characteristics, the indicator of optimism shows a sig value. 0.576 so there is

no significant effect of gender on the optimism indicator. The usefulness indicator shows a sig. 0.658 so there is no significant effect of gender on the usefulness indicator. The Enthusiasm and Appreciation indicator shows a sig value. 0.615 so there is no significant effect of gender on the Enthusiasm and Appreciation indicator.

In university characteristics, the optimism indicator shows a sig value. 0.015 so there is a significant effect of university on the optimism indicator. The usefulness indicator shows a sig value. 0.009 so there is a significant influence of the university on the usefulness indicator. The Enthusiasm and Appreciation indicator shows a sig value. 0.029 so there is a significant influence of gender on the Enthusiasm and Appreciation indicator.

In semester characteristics, the optimism indicator shows a sig. 0.569 so there is no significant effect of semester on the optimism indicator. The usefulness indicator shows a sig. 0.399 so there is no significant effect of semester on the usefulness indicator. The Enthusiasm and Appreciation indicator shows a sig value. 0.453 so there is no significant effect of semester on the Enthusiasm and Appreciation indicator.

In gender and university characteristics, the optimism indicator shows a sig. 0.970 so there is no significant effect of gender and university on the optimism indicator. The usefulness indicator shows a sig. 0.660 so there is no significant effect of gender and university on the usefulness indicator. The Enthusiasm and Appreciation indicator shows a sig value. 0.721 so there is no significant effect of gender and university on the Enthusiasm and Appreciation indicator.

In the characteristics of gender and semester, the optimism indicator shows a sig. 0.792 so there is no significant effect of gender and semester on the optimism indicator. The usefulness indicator shows a sig. 0.935 so there is no significant effect of gender and semester on the usefulness indicator. The Enthusiasm and Appreciation indicator shows a sig value. 0.864 so there is no significant effect of gender and semester on the Enthusiasm and Appreciation indicator.

In university and semester characteristics, the optimism indicator shows a sig value. 0.204 so there is no significant effect of university and semester on the optimism indicator. The usefulness indicator shows a sig. 0.141 so there is no significant effect of university and semester on the usefulness indicator. The Enthusiasm and Appreciation indicator shows a sig value. 0.763 so there is no significant effect of university and semester on the Enthusiasm and Appreciation indicator.

On the characteristics of gender, university, and semester, the optimism indicator shows a sig value. 0.620 so there is no significant effect of gender, university, and semester on the optimism indicator. The usefulness indicator shows a sig. 0.613 so there is no significant effect of gender, university, and semester on the usefulness indicator. The Enthusiasm and Appreciation indicator shows a sig value. 0.293 so there is no significant effect of gender, university, and semester on the Enthusiasm and Appreciation.

The findings of this study demonstrate that ChatGPT contributes positively to Indonesian Language and Literature learning among Primary School Teacher Education (PGSD) students. Its influence is evident across four key perceptual dimensions: optimism, perceived usefulness, enthusiasm and appreciation indicating that generative AI can function as both a cognitive and motivational support tool in language learning contexts. Rather than merely reflecting surface-level satisfaction, these perceptions align with established theories of technology acceptance and learner motivation, suggesting that students' favorable responses are theoretically grounded.

### **Optimism toward ChatGPT**

PGSD students demonstrated strong optimism toward the use of ChatGPT in Indonesian Language and Literature learning. This optimism appears to stem primarily from reduced cognitive effort and expanded access to literary resources. In line with the Technology Acceptance Model, technologies perceived as useful and easy to use tend to generate favorable expectations, particularly when they enhance efficiency and task readiness. Similarly, research has shown that conversational and adaptive systems can strengthen learners' sense of preparedness and academic confidence by lowering informational barriers (Morse & Emery, 2023; Khennouche et al., 2024). From the perspective of Self-Determination Theory, the immediate feedback and structured explanations provided by ChatGPT may support students' perceived competence, a key driver of intrinsic motivation. Prior studies (Xu et al., 2024; Giday & Perumal, 2024) similarly report that responsive educational technologies can reinforce learner confidence and future-oriented academic attitudes. In the PGSD context, this suggests that AI-supported tools may reshape how prospective elementary teachers conceptualize access to literary knowledge, moving from static resource dependence toward interactive knowledge construction.

Nevertheless, several limitations warrant careful consideration. First, the findings rely on self-reported perceptions, which may be influenced by novelty effects or social desirability bias. Second, while optimism reflects positive acceptance, excessive reliance on AI tools could potentially reduce independent analytical engagement with literary texts. Given that language and literature education prioritizes interpretative depth, uncritical dependence on automated responses may constrain critical thinking development. Additionally, ethical and academic integrity concerns remain salient, particularly regarding authorship boundaries and responsible AI use in academic settings. Future research should therefore examine longitudinal learning outcomes and explore structured guidelines to balance technological support with pedagogical integrity.

### **Perceived Usefulness of ChatGPT**

Students in this study also rated ChatGPT as highly useful for deepening their understanding of Indonesian literature. Within the Technology Acceptance Model (TAM), perceived usefulness is a primary predictor of technology adoption because users tend to embrace tools that demonstrably improve task performance. The students' responses indicate that ChatGPT successfully met this criterion by accelerating access to relevant literary materials and simplifying complex explanations.

This pattern aligns with [ur Rehman et al. \(2024\)](#), who report that ChatGPT significantly improves information accessibility, particularly for learners who struggle to locate appropriate academic sources. From a cognitive load perspective, easier access reduces extraneous processing demands, allowing students to focus more on meaning-making. [Casheekar et al. \(2024\)](#) similarly note that AI chatbots enhance learning efficiency by delivering rapid and targeted responses. In the context of literature learning, where interpretive clarity is essential, this immediacy appears especially valuable.

[Zhu et al. \(2024\)](#) further demonstrate that students rely on ChatGPT to clarify difficult literary concepts, which mirrors the present findings. [Essel et al. \(2024\)](#) add that detailed AI-generated explanations can improve students' readiness to complete assignments. Collectively, these studies support the interpretation that ChatGPT functions as a performance-enhancing tool, thereby reinforcing its perceived usefulness among PGSD students.

### **Enthusiasm toward ChatGPT Use**

Beyond cognitive evaluation, the study reveals strong student enthusiasm when using ChatGPT. This affective response is important because enthusiasm often signals intrinsic engagement rather than mere compliance. From the perspective of Self-Determination Theory, enthusiasm increases when learning tools support autonomy and competence.

[Acosta-Enriquez et al. \(2024\)](#) report that interactive dialogue with ChatGPT can stimulate curiosity, particularly in complex subjects such as literature. The conversational format allows students to explore topics iteratively, which likely contributes to the heightened enthusiasm observed in this study. [Luo et al. \(2024\)](#) similarly find that technology-supported academic discussions can create productive cognitive challenge, a known driver of sustained engagement.

[Ghafouri \(2024\)](#) notes that students feel more involved when they can explore content aligned with their personal interests: an autonomy-supportive condition emphasized in motivational theory. [Borgonovi et al. \(2023\)](#) further argue that enjoyment and perceived relevance are key drivers of enthusiasm in digital learning environments. In the present context, ChatGPT appears to satisfy these motivational conditions by combining flexibility, responsiveness, and personalization. Consequently, the elevated enthusiasm reported by PGSD students is theoretically consistent with motivation-driven technology engagement.

### **Student Appreciation of ChatGPT**

Students also expressed strong appreciation for ChatGPT as a learning aid. Appreciation, in this context, reflects evaluative satisfaction after direct experience with the technology. [Yee Leng et al. \(2010\)](#) suggest that students tend to value educational technologies that provide practical and immediate problem-solving support. This mechanism is clearly visible in the present findings, where students acknowledged ChatGPT's role in simplifying their learning process.

[Sadam and Al Mamun \(2024\)](#) emphasize that appreciation increases when users experience tangible academic benefits. [Wong and Oh \(2023\)](#) similarly report that immersive AI-supported learning environments can enhance positive emotional responses toward the technology. [Tuohy et al. \(2023\)](#) further note that clear procedural guidance is a major contributor to students' evaluative satisfaction. Because ChatGPT delivers structured explanations and step-by-step support, it likely strengthens students' sense of

academic assistance, thereby increasing appreciation.

### Differences by Gender, University, and Semester

The analysis also revealed that students' perceptions were generally consistent across gender groups. This finding suggests that gender may not be a primary determinant of AI acceptance in contemporary higher education contexts. [Ofem et al. \(2024\)](#) report similar patterns, arguing that digitally mediated learning environments tend to reduce traditional demographic gaps. [Thi Uyen Nguyen et al. \(2024\)](#) further contend that accessibility and usability exert stronger influence on trust in learning technologies than gender-based factors. In this study, ChatGPT appears to meet universal usability expectations, resulting in broadly similar perceptions among male and female students. However, variation emerged across universities. This pattern is theoretically consistent with institutional support models, which posit that technology acceptance is shaped by the surrounding learning ecosystem. [Dang et al. \(2024\)](#) argue that institutions that actively promote digital innovation tend to cultivate more positive student attitudes toward educational technology. [Pan et al. \(2024\)](#) similarly emphasize the role of institutional climate in shaping technology readiness.

[Rodriguez-Calzada et al. \(2024\)](#) explain that repeated exposure to AI tools builds experiential trust, which may account for the more favorable perceptions among students from technology-supportive universities. Conversely, [Matinlompolo et al. \(2024\)](#) warn that limited institutional guidance can produce uncertainty and skepticism. [Jose et al. \(2024\)](#) add that proactive institutional strategies often correlate with higher student enthusiasm and confidence in emerging technologies. Thus, the observed inter-university variation in this study likely reflects differences in digital culture, policy support, and prior AI exposure.

Finally, semester level did not significantly differentiate overall perceptions. This finding suggests that ChatGPT possesses a relatively low entry barrier and high usability across academic stages. [Ollesch et al. \(2022\)](#) similarly report that intuitively designed educational technologies tend to be adopted consistently across student cohorts. [Alnasyan et al. \(2024\)](#) argue that flexible AI tools can serve diverse learner levels simultaneously, which aligns with the present results.

Nevertheless, subtle differences in usage orientation were observed. Consistent with [Pun \(2019\)](#), senior students appeared to value advanced analytical features more strongly, likely due to their research demands. In contrast, early-semester students primarily used ChatGPT for foundational comprehension support, echoing the findings of [Hadi Mogavi et al. \(2024\)](#). [Yeni et al. \(2024\)](#) note that such variation typically reflects task needs rather than attitudinal differences. Therefore, while overall perceptions remain stable across semesters, functional usage patterns may evolve as students' progress academically.

### CONCLUSION

This study confirms that PGSD students generally perceive the use of ChatGPT positively in Indonesian Language and Literature learning, particularly in terms of usefulness, enthusiasm, and academic support. The significant differences across universities indicate that institutional ecosystems such as digital infrastructure, lecturer guidance, and policy frameworks play a decisive role in shaping students' acceptance of AI supported learning tools. In contrast, the absence of differences based on gender or semester suggests that readiness to engage with AI is shaped more by institutional context than by demographic characteristics.

These findings carry important implications for teacher education programs. First, PGSD curricula should incorporate structured AI literacy components that train prospective teachers to critically evaluate, adapt, and ethically employ AI generated content in language and literature instruction. Rather than positioning ChatGPT as a shortcut for completing assignments, programs should frame it as a pedagogical support tool that requires reflective use. Second, assessment strategies need to emphasize higher order thinking skills such as literary interpretation, argumentative writing, and critical reflection. This shift would help ensure that students engage deeply with texts instead of relying passively on automated outputs.

At the institutional level, the variation across universities highlights the importance of clear governance and professional development. Faculties of education should provide systematic training for lecturers on how to integrate AI tools into classroom practice in ways that preserve academic integrity and promote independent analysis. Institutions also need explicit guidelines regarding responsible AI use in coursework and practicum settings to prevent misuse while still encouraging innovation.

Overall, the potential of ChatGPT in Indonesian Language and Literature education depends not only on students' positive perceptions but on how teacher education institutions design curricular structures,

ethical standards, and instructional practices that balance technological advancement with the cultivation of critical literacy competencies.

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