

The Effect of Digital Media on *Pangadereng* Values to Improve Students' Digital Ethnopedagogy

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ABSTRACT

This study stems from the importance of preserving local cultural values in the digital age, particularly in social studies learning, through technology-based innovations that support the internalization of Pangadereng values. This study aims to examine the influence of digital media on the transformation and internalization of Pangadereng values (Ade', Bicara, Rapang, Wari', and Sara') to improve the digital ethnopedagogy of junior high school students. This study employed a mixed-methods approach with an exploratory sequential design, incorporating in-depth interviews, participatory observation, and questionnaires. Qualitative data were analyzed thematically, while quantitative data were processed using descriptive statistics and simple linear regression. The findings show that digital media significantly improves students' understanding of Pangadereng values and correlates positively with an increase in digital ethnopedagogy, contributing 38%. Ade' and Sara' show the highest level of internalization, while Bicara, Rapang', and Wari' require more innovative and context-based pedagogical strategies.

Keywords:

Digital Media; *Pangadereng* Values; Ethnopedagogy.

ABSTRAK

Penelitian ini berangkat dari pentingnya pelestarian nilai-nilai budaya lokal di era digital, khususnya dalam pembelajaran IPS, melalui inovasi berbasis teknologi yang mendukung internalisasi nilai-nilai Pangadereng. Penelitian

ini bertujuan untuk mengkaji pengaruh media digital terhadap transformasi dan internalisasi nilai-nilai Pangadereng (Ade', Bicara, Rapang, Wari', dan Sara') guna meningkatkan etnopedagogi digital siswa sekolah menengah pertama. Penelitian ini menggunakan metode campuran (mixed-methods) dengan desain eksploratif berurutan (exploratory sequential design) digunakan, meliputi wawancara mendalam, observasi partisipatif, dan kuesioner. Data kualitatif dianalisis secara tematik, sedangkan data kuantitatif diproses menggunakan statistik deskriptif dan regresi linier sederhana. Temuan menunjukkan bahwa media digital secara signifikan meningkatkan pemahaman siswa terhadap nilai-nilai Pangadereng dan berkorelasi positif dengan peningkatan etnopedagogi digital, berkontribusi sebesar 38%. Ade' dan Sara' menunjukkan tingkat internalisasi tertinggi, sedangkan Bicara, Rapang, dan Wari' memerlukan strategi pedagogis inovatif dan berbasis konteks yang lebih banyak.

Kata kunci:

Media Digital; Nilai Pangadereng; Etnopedagogi.

1. Introduction

The digital era has brought paradigmatic changes in various aspects of life, including education (Harasim, 2000; Ningsih et al., 2025; Zaborova & Markova, 2021). On the one hand, technology offers unlimited opportunities for information access and learning innovation; on the other hand, it also presents challenges in maintaining cultural identity and local values in the midst of globalization (Castells, 2011; Larsari, 2024; Mariyono, Alifatul Kamila, & Alif Hidayatullah, 2025; Mohyeddin, 2024). The context of Makassar City, with its rich Bugis-Makassar culture in Indonesia, embodies noble values that are summarized in Pangadereng. Pangadereng, as a system of traditional norms and ethics, is the five main pillars that make up the fabric of Bugis-Makassar society: *Ade'* (Custom), *Bicara* (Rules), *Rapang* (Customary legal guidelines), *Wari'* (Social stratification), and *Sara'* (Religious teachings) (Mattulada, 1998; Rahman, Akhmar, Hasyim, Dalyan, & Rahman, 2022).

This study was motivated by the increasing influence of digital culture on student behavior, which has the potential to weaken local cultural values. Current social studies education has not been able to optimally incorporate Pangadereng values in the digital context, despite the continued growth of digital media in education. The importance of these values is not only relevant in everyday life, but should also be integrated into school learning, especially Social Studies subjects. Social studies subjects have a strategic role as a vehicle for instilling national values and local wisdom, forming students into cultured and responsible citizens (Hasni, Falihin, Ibrahim, Nur, & Salman, 2024; Hyde, 2024; Sakti, Endraswara, & Rohman, 2024; Uge, Neolaka, & Yasin, 2019). These values are the foundation of the character of the Bugis-Makassar people of Indonesia, but their transmission to the younger generation, especially junior high school students, faces significant challenges amid the dominance of global digital content that often ignores local wisdom. The integration of these values in social studies learning is crucial.

Many previous studies on the importance of cultural integration in education found that local wisdom-based learning can increase student learning motivation and foster a sense of patriotism

(Asror, Zainiyati, & Suryani, 2024; Li, Mohamad Nasri, & Jamaludin, 2025; Rahmad, 2021; Setyowati, Hendratno, & Sukartiningsih, 2024; Sofiyah, Suwandayani, & Kumalasani, 2025). Similarly, the study by Siliutina et al (Siliutina, Tytar, Barbash, Petrenko, & Yepyk, 2024) highlights the role of technology in disseminating cultural values, although it is still limited to platforms that are not fully interactive. However, these studies have not specifically elaborated on how Pangadereng value transformation can be effectively implemented through digital media to enhance digital ethnopedagogy. The concept of digital ethnopedagogy itself is a novelty that combines culture-based education (ethnopedagogy) with the use of digital technology, emphasizing how students can understand and apply cultural values in their interactions and behavior in the digital realm (Setyoko et al., 2023).

The novelty of this research lies in its focus on bridging the gap between traditional *Pangadereng* values and the evolving digital landscape by placing them in the specific context of social studies learning. This research not only identifies the potential of digital media as a tool for value transmission but also develops a model of how these values can be internalized by junior high school students, enabling them not only to know but also to internalize and actualize *Pangadereng* in their daily lives, both in the real and virtual worlds. Unlike previous studies that have focused solely on increasing motivation or digital literacy through digital media or the integration of local wisdom without a technology-based pedagogical approach this study aims to address these limitations.

Indicators of digital media utilization in this study include frequency of access, duration of use, type of platform accessed, and purpose of use (entertainment, general information, or local cultural information), adapted from the digital literacy and media use framework (Katadata Insight Center & Keminfo., 2021). Meanwhile, the digital ethnopedagogy indicators focus on students' online behavior that reflects their understanding and practice of *Pangadereng* values, such as the use of polite language, caution in sharing information, maintaining privacy, constructive discussion, and efforts to be a positive role model online, based on the concept of digital ethnopedagogy (Jensen, Bearman, Boud, & Konradsen, 2022).

Based on these issues, this study aims to analyze the use of digital media by students in social studies learning in junior high schools in Makassar City, measure students' understanding of *Pangadereng* values, and examine the level of application of ethnopedagogy in the social studies learning process. This study was conducted to develop a learning approach that aligns with the digital characteristics of students while preserving local cultural values through a digital ethnopedagogy model. The research locations included 14 public junior high schools based on subdistrict areas in Makassar City, Indonesia, namely Public Junior High Schools 1, 2, 4, 5, 7, 10, 12, 13, 15, 17, 23, 29, 35, and 47 Makassar. The study's results are expected to provide both theoretical and practical contributions to the development of a local wisdom-based character education curriculum in the digital era.

2. Methods

2.1. Research Design

This research employs a mixed-methods approach with an exploratory sequential design. This approach was chosen to gain a comprehensive understanding of the phenomenon of *Pangadereng*

value transformation through digital media and its impact on students' digital ethnopedagogy. The qualitative stage will be conducted first to explore the perceptions, experiences, and in-depth views of participants, with the results then used to develop a more targeted quantitative instrument.

According to Creswell (John W Creswell, 2014) exploratory sequential designs are particularly useful when researchers want to explore a phenomenon in depth in the early stages and then use the findings to build or test theories in the quantitative stage. This design allows researchers to gain a richer and more complete understanding of the research phenomenon than can be obtained using a single approach.

2.2 Research Subjects

The research locations consisted of 14 public junior high schools in Makassar City, Indonesia, which were selected from different sub-district areas. The selection of these diverse locations aims to obtain a more representative picture of the condition of students in different areas of Makassar City, Indonesia, while also considering potential variations in access to and interaction with digital media in each area.

2.3 Research Population and Sample

The study population consisted of all junior high school students and teachers in Makassar City, Indonesia. The samples in this study are:

1. Students: The student sample consisted of 350 students from 14 public junior high schools in Makassar City, Indonesia, with each school taking 25 students from class VII. The selection of class VII is based on the cognitive and social development phase of students who are actively searching for identity, as well as their openness to digital technology. The sample selection was done by the purposive sampling method to ensure the representation of students who actively use digital media in each school (Sugiyono, 2022).
2. Social studies teachers: 14 social studies teachers from 14 junior high schools were involved as key participants. They are the closest to the learning process of social and cultural values and have an understanding of the local context.

2.4 Data Collection Technique

The data collection techniques in this study were based on Creswell (J.W Creswell, 2021), which were conducted by researchers:

1. In-depth Interview (Qualitative)

Semi-structured interviews will be conducted with 14 social studies teachers (one teacher per school) and 28 students (two students per school, randomly selected from the sample). These interviews aim to explore perceptions, experiences, and in-depth views on the influence of digital media on the transformation and internalization of *Pangadereng* values, to improve digital ethnopedagogy.

2. Participatory Observation (Qualitative)

Conducted in 5 selected schools (representation of schools with different access and levels of digital utilization) to observe students' interaction with digital media in the school environment.

3. Questionnaire (Quantitative)

Developed based on the results of interviews and preliminary observations from the qualitative stage. The questionnaire will be distributed to all 350 seventh-grade students to measure their level of utilization of educational digital media, their understanding of *Pangadereng* values, and their level of application of digital ethnopedagogy. This measurement uses a 5-point Likert scale, with interpretations of 1 (Very Low), 2 (Low), 3 (Fair), 4 (High), 5 (Very High) (Sugiyono., 2022).

2.5 *Data Analysis Technique*

Digital content analysis (Qualitative and Quantitative) by analyzing digital media content (videos, applications, educational games, or other digital materials) relevant to *Pangadereng* values used by schools or accessed by students.

Qualitative data will employ the thematic analysis approach. Stages include transcription of interview and observation data, coding (labeling of data segments), categorization (grouping of similar codes), and identification of emerging key themes related to the transformation of *Pangadereng* values *Ade'*, (*Adat Bicara* (Rules), *Rapang* (Customary law guidelines), *Wari'* (Social stratification), and *Sara'* (Religious teachings) and students' digital ethnopedagogy.

Quantitative data from the questionnaire will be analyzed using descriptive statistics (mean, median, mode, standard deviation, frequency, and percentage) to describe the students' profiles and the distribution of variables. To test the hypothesis regarding the relationship between digital media utilization (independent variable) and the improvement of students' digital ethnopedagogy (dependent variable), simple linear regression analysis will be employed using the simple linear regression formula: $Y = a + bX + e$ (Sugiyono, 2022).

Description:

Y= Dependent variable (Digital Ethnopedagogy of students)

X= Independent variable (Utilization of Digital Media based on Pangadereng Values in Social Studies learning)

a = Constant (Y value when X=0)

b = Regression coefficient (the rate of change in Y for each unit change in X)

e = Error term (error that cannot be explained by the model)

Limitations of focus and indicators to be studied in this study can be seen specifically in the following table 1:

Table 1. Limitations of Focus and Research Indicators

| Number | Research Focus | Indicator |
|--------|---------------------------|---|
| 1 | Digital Media Utilization | 1. Frequency of social media access 2. Duration of use 3. Type of platform accessed 4. Purpose of use (entertainment, general information, or local cultural |

| | | |
|---|--|---|
| | | information) (Katadata Insight Center & Keminfo, 2021) |
| 2 | Students' Understanding of <i>Pangadereng</i> Values | <ol style="list-style-type: none"> 1. <i>Ade'</i> (Custom) 2. <i>Bicara'</i> (Rules) 3. <i>Rapang'</i> (Customary law guidelines) 4. <i>Wari'</i> (Social stratification) 5. Sara' (Religious teachings) (Mattulada, 1998) |
| 3 | Implementation of Digital Ethnopedagogy | <ol style="list-style-type: none"> 1. Using polite language on social media 2. Avoiding the spread of false information, hoaxes, or slander 3. Maintaining the privacy of oneself and others in online interactions 4. Interacting wisely and constructively in online discussions 5. Trying to be a role model of positive behavior in cyberspace (online) (Jensen et al., 2022). |

3. Results and Discussion

3.1 *Students' Digital Media Utilization in Junior High School Social Studies Learning in Makassar City, Indonesia*

Based on the results of observations and in-depth interviews with teachers and students, this provides a more comprehensive picture of the patterns and motivations behind students' use of digital media. Teachers observed that students are very adaptive to technology. Puji Astuti, a social studies teacher at SMP 35 Makassar, Indonesia, said that:

"These children were born in the digital era. They quickly learn to use new applications. However, mostly for entertainment, such as playing games or watching funny videos. Only when they get assignments from school do they seriously use the internet" (June 19, 2025).

Suyuti, a teacher at SMP 17 Makassar, Indonesia, added that:

"If they are told to search for general subject matter on the internet, they are quick. However, if they take the initiative to learn about regional culture, it remains very rare. It seems that they need encouragement and materials that are presented differently" (June 24, 2025).

The results of the interviews with the teachers are relevant to the findings from the interviews with Husnul, a student at SMPN 47 Makassar, which confirm the dominance of social media use for entertainment and social interaction.

"Every time I come home from school, I immediately open TikTok or YouTube. See dance videos or viral challenges. Sometimes I also chat with friends on WhatsApp. When I study, I only Google it if I have homework or difficult material" (June 23, 2025).

Regarding cultural content, Ratna, a student (SMP 13 Makassar), said:

"I've seen videos of traditional dances from Makassar and Indonesia on YouTube, but if they are long, I get bored quickly. I want something short, with upbeat music, and a young person narrating, so I watch it until the end" (June 25, 2025).

Observations in the five selected schools also corroborate these findings, showing that although students have digital devices, the majority of their time is spent on general non-educational or educational activities, with minimal independent exploration of local cultural content unless there is a specific direction or project from the teacher.

The findings from these observations and interviews are consistent with the questionnaire results from 350 seventh-grade students in Makassar City, Indonesia, where the overall average digital media utilization score was 3.82 on a scale of 1-5, with a standard deviation of 0.75. This indicates a "high" level of utilization. Frequency analysis showed that 92% of students accessed digital media daily, with an average time of 5-7 hours per day. The most popular platforms are TikTok (85%), YouTube (80%), and Instagram (75%). However, the utilization of search engines to find information related to local culture or regional history accounted for only 28% of the total usage. At the same time, the use of applications/content specific to *Pangadereng* values remains very minimal, at around 12%. The results of this finding can be seen in Table 2 regarding descriptive statistical data on student digital media utilization, below:

Table 2. Descriptive Statistics of Student Digital Media Utilization in Social Studies Learning (N=350)

| Indicator of Digital Media Utilization | Mean (Scale 1-5) | Std. Deviation | Frequency (N=350) | Percentage (%) | Category |
|---|------------------|----------------|-------------------|----------------|-----------------|
| Frequency of accessing social media (e.g., TikTok, Instagram) every day | 4.60 | 0.55 | 315 | 90.0 | Very high |
| Duration of usage time | 4.20 | 0.62 | 280 | 80.0 | High |
| Utilization of digital media to find general educational information | 3.90 | 0.80 | 168 | 48.0 | Moderately High |
| Utilization of digital media to find information about local culture | 2.45 | 1.05 | 42 | 12.0 | Low |
| Overall Average of Digital Media Utilization | 3.82 | 0.75 | - | - | High |

Source: Researcher's results 2025

Based on the research results above, it is in line with McQuail's argument (McQuail, 2010) about Uses and Gratifications Theory. This theory states that audiences actively select media and content based on their needs and satisfaction (Gejandran & Abdullah, 2025). Therefore, the low percentage of Pangadereng local culture content usage (12%) suggests that the currently available content may not have met the "gratification" that students are looking for. If content on *Ade'* (Adat), *Bicara* (Rules), *Rapang* (Customary law guidelines), *Wari'* (Social stratification), and *Sara'* (Religious teachings) is presented in interactive and relevant digital formats (e.g., inspirational short

videos, *Pangadereng* scenario-based educational games, or podcasts featuring interviews with traditional leaders), students will be more motivated to consume and internalize those values. This also aligns with Jenkins et al concept of Mediamorphosis (Jenkins, Ford, & Green, 2020), where new media do not simply replace the old, but adapt and reshape the media ecosystem. Digital media allows *Pangadereng* values, which were originally conveyed through oral tradition or traditional ceremonies, to "metamorphose" into a format that is more accessible and digestible to the digital generation.

The results of this study strongly support the hypothesis that digital media utilization has a significant influence on improving students' digital ethnopedagogy, especially in the context of social studies learning. This finding is consistent with the theory of media convergence by Jenkins (Jenkins, 2006) which states that new media enables various forms of content and participation, which can be utilized for cultural education purposes.

3.2 Students' Understanding of Pangadereng Values

Based on the results of the interviews it provides in-depth insight into students' understanding of each of the pillars of *Pangadereng*, as well as how teachers perceive them. Teachers said that these two values are most often taught, and students easily understand their relevance. The following are the results of interviews with social studies teachers and junior high school students in Makassar City, Indonesia:

Table 3. Interview Results of Understanding Pangadereng Values

| Number | Name | School | Understanding of Pangadereng Value | Interview Result |
|--------|----------------------|--------------------------------|---|---|
| 1 | Marwanting (Teacher) | SMP 27 Makassar | <i>Ade'</i> (custom) and <i>Sara'</i> (religious teaching) | " <i>Ade'</i> (Adat) is about manners, etiquette, and we always emphasize it both in class and in daily interactions. <i>Sara'</i> too, because it is closely related to the religious lessons they receive every day and has become part of their lives." " <i>Ade'</i> (Custom) is like respecting your elders; if you pass in front of someone, you have to bow a little, or not speak harshly. <i>Sara'</i> (religious teachings) is about praying, reciting the Quran, which is taught from childhood at home and at school." |
| 2 | Annisa (Student) | Junior High School 15 Makassar | <i>Ade'</i> (custom) and <i>Sara'</i> (religious teachings) | "They know that <i>Wari'</i> (social stratification) is to maintain the good name of the family, not to |
| 3 | Indrayani Djasman | SMP 4 Makassar | <i>Wari'</i> (Social stratification) | |

| | | | | |
|---|-------------------------------|--------------------------------|--|--|
| | Pakiding (Teacher) | | | cause embarrassment, especially if posting on social media. But how to implement it more deeply, for example, maintaining the honor of custom in general, that's what we are still encouraging". |
| 4 | Kevan Dwi Alvaro (Student) | SMP 2 Makassar | <i>Wari'</i> (Social stratification) | "If I want to post something on IG or TikTok, I think twice, I don't want it to reflect badly on my family or me. I'd be embarrassed if someone made a negative comment or something bad went viral". |
| | Muhammad Hijrat (Teacher) | Junior High School 15 Makassar | <i>Bicara'</i> (Rules) and <i>Rapang'</i> (customary law guidelines) | "We often give real cases, but connecting them to the digital context so that children can understand <i>Bicara'</i> (speaking politely and wisely) and <i>Rapang'</i> (being a positive example) in cyberspace is still a big challenge. Moreover, behavior on social media is sometimes far from this value". |
| 5 | Hasrah Fadillah (Student) | SMP 10 Makassar | <i>Bicara'</i> (Rules) and <i>Rapang'</i> (customary law guidelines) | "If there is a problem in a group, game, or group chat of friends, sometimes immediately get emotional. It's very difficult to talk nicely. I want to reply immediately or leave the group. If it's <i>Rapang'</i> (customary law guidelines), I'm confused about who to follow on the internet. Many influencers make less educational content or even make a scene". |

Source: Researcher results 2025

The theoretical implications of these findings suggest the need to develop a locally based learning model that is suitable for the digital context, so that *Pangadereng* values are not only understood as traditional social norms but also positioned as a digital ethical framework for students. In terms of policy, these results underscore the importance of integrating local wisdom-based character education into the social studies curriculum through digital media, as well as providing teachers with training to apply ethnopedagogy based on local culture that is adaptable to technological developments and student behavior in the digital age.

The interview results are consistent with the questionnaire results; the average score for students' understanding of *Pangadereng* values overall is 3.95 on a scale of 1-5, indicating a "good" level of understanding. Descriptive statistical testing of each *Pangadereng* pillar shows variation:

Table 4. Average Score of Students' Understanding of *Pangadereng* Pillars in Social Studies Learning Context (N=350)

| Pillar of <i>Pangadereng</i> | Brief Description | Mean (Scale 1-5) | Std. Deviation | Category |
|--|---|------------------|----------------|-------------|
| <i>Ade'</i> (Custom) | Understanding of customs and manners | 4.20 | 0.55 | Very Good |
| <i>Bicara'</i> (Rules) | Understanding of customary deliberation and justice | 3.68 | 0.82 | Fairly Good |
| <i>Rapang'</i> (Customary law guidelines) | Understanding of modeling good deeds | 3.55 | 0.88 | Good enough |
| <i>Wari'</i> (Social stratification) | Understanding of lineage, dignity, and respect | 3.75 | 0.78 | Good |
| <i>Sara'</i> (Religious teachings) | Understanding of Islamic law as a foundation | 4.81 | 0.60 | Very Good |
| Overall Average Understanding of <i>Pangadereng</i> | - | 3.95 | 0.73 | Good |

Source: Researcher results 2025

Based on the results of interviews, observations, and data analysis, it was found that integrating *Pangadereng* values into digital-based social studies learning content proved effective in facilitating students' understanding. For example, simulations of Bugis-Makassar, Indonesia, traditional deliberations accessed through YouTube or online learning platforms, help students understand the values of *Ade'* (Adat) and *Bicara'* (Rules) in a more visual and contextualized manner than simply reading social studies textbooks. This is also in line with Bandura's social cognitive learning principles (Bandura, 2018) where students learn through observation and interaction with the environment, including the digital environment, students' ability to emulate (*Rapang'*) local or national pictures reviewed in social studies digital content is also strengthened through interactive narratives.

Although understanding of *Ade'* (Customs) and *Sara'* (Religious teachings) is high, the data shows the need to strengthen *Bicara* (Rules), *Rapang'* (Customary legal guidelines), and *Wari'* (Religious teachings). This indicates that current social studies learning methods may still lack innovation in presenting these values in an engaging and relevant way to students' digital lives. Digital media offers a solution to this, for example, by developing local history podcasts for *Wari'* (religious teachings), creating educational games based on customary conflict resolution scenarios for *Bicara*, or digital citizenship campaigns that feature role models (*Rapang'*) from local wisdom.

3.3 Students' Digital Ethnopedagogy Level in Social Studies Learning

Based on the results of the questionnaire, the average score for students' digital ethnopedagogy implementation is 3.88 on a scale of 1-5, which is categorized as "good." Statistical testing of the indicators can be seen in Table 5 below:

Table 5. Average Score of Students' Digital Ethnopedagogy Implementation in Social Studies Learning (N=350)

| Digital Ethnopedagogy Indicator | Mean (Scale 1-5) | Std. Deviation | Category |
|---|------------------|----------------|-------------|
| Using polite and courteous language on social media | 4.15 | 0.60 | Very good |
| Avoiding the spread of false information, hoaxes, or slander | 4.10 | 0.63 | Very good |
| Maintaining the privacy of oneself and others in online interactions | 3.95 | 0.70 | Good |
| Interact wisely and constructively in online discussions | 3.78 | 0.75 | Good |
| Strive to be a role model of positive behavior in cyberspace (online) | 3.40 | 0.90 | Good enough |
| Overall Average of Digital Ethnopedagogy Implementation | 3.88 | 0.72 | Good |

Source: Researcher results 2025

From the results of the statistical data above, it can be seen that the relationship between the utilization of digital media and the improvement of digital ethnopedagogy analyzed from the results of simple linear regression analysis shows that the utilization of digital media based on *Pangadereng* values in social studies learning (independent variable) has a significant and positive influence on improving students' digital ethnopedagogy (dependent variable). The Pearson correlation coefficient (r) is 0.61, indicating a strong positive relationship between the two variables. The results of the simple linear regression analysis are shown in Table 6 below:

Table 6. Simple Linear Regression Analysis Results

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | F | Sig. (p-value) |
|----------|-------|----------|-------------------|----------------------------|---------|----------------|
| 1 | 0.610 | 0.372 | 0.370 | 0.45 | 198.750 | < 0.001 |

Source: Researcher results 2025

While the results of the correlation coefficient, shown in Table 7 below:

Table 7. Regression Coefficient

| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. (p-value) |
|-----------------------|-----------------------------|---------------------------|-------|----------------|
| | B | Std. Error | Beta | |
| (Constant) | 2.10 | 0.15 | 14.00 | < 0.001 |
| MD Utilization | 0.42 | 0.03 | 14.10 | < 0.001 |

Source: Researcher results 2025

The resulting regression model is digital ethnopedagogy $= 2.10 + 0.42$ (Digital Media Utilization). This means that every one unit increase in digital media utilization (in the context of learning *Pangadereng* values in social studies learning) will increase the digital ethnopedagogy score by 0.42 units. The coefficient of determination (R^2) of 0.38 indicates that 38% of the variance in the level of digital ethnopedagogy can be explained by digital media utilization. In comparison, the

remaining 62% is attributed to other factors (e.g., family role, social environment, or students' personal characteristics). The very small p-value ($p < 0.001$) indicates that this relationship is statistically significant, suggesting that the findings corroborate the positive relationship between purposeful digital media utilization and improved ethnopedagogy.

This positive relationship can be explained through the lens of Bandura's Social Cognitive Theory (Bandura, 2018). This theory emphasizes the role of observational learning and modeling in behavior formation. When students are exposed to digital content that showcases real-life examples of the application of the values of *Ade'* (Adat), *Bicara* (Rules), *Rapang'* (Customary legal guidelines), *Wari'* (Social stratification), and *Sara'* (Religious teachings) in a digital context (e.g., how a traditional picture interacts ethically on social media, or how an online conflict is wisely resolved according to *Bicara*), they are likely to mimic that behavior.

This is where the role of digital ethnopedagogy becomes crucial, as suggested by Jensen et al. (2022). It is not just about teaching internet etiquette, but also about how inherent cultural values, such as *Pangadereng*, can serve as a moral compass for students when interacting in the digital world. Students' low understanding of *Bicara* (Rules) and *Rapang'* (Customary law guidelines) in the digital context, as well as lower implementation scores on the indicator 'modeling positive behavior online,' suggest that role modeling and online problem-solving mechanisms need to be strengthened. This can be done through real case studies of local influencers who demonstrate ethical behavior or traditional leaders who are active in digital media, reinforcing aspects of *Rapang'* (Customary law guidelines) in a concrete way. Social studies teachers can play a crucial role in facilitating this, for example, by assigning social studies projects that require students to create digital content (short videos, infographics, blogs) that educate on the value of *Pangadereng*.

Jenkins' concept of Participatory Culture (Jenkins, 2006; Jenkins & Jie, 2024) can serve as a framework. By encouraging students to become prosumers (producers and consumers) of digital content that elevates the value of *Pangadereng*, internalization will deepen. This finding also aligns with the idea of the importance of digital access and skills to reduce the digital divide, where cultural context becomes an important factor (Putrayasa, Suwindia, & Winangun, 2024; Redhana, 2024; Van Deursen & Van Dijk, 2020; Van Dijk, 2020). This finding underscores the great potential of digital media in enriching social studies learning, not only as a source of information but also as a medium for the internalization and actualization of *Pangadereng* cultural values, which will ultimately improve students' digital ethnopedagogy. Teachers can act as facilitators and content curators, guiding students to understand and filter information relevant to the cultural values prevalent in Makassar City, Indonesia.

4. Conclusion

This study shows that integrating *Pangadereng* values through digital media in social studies learning effectively improves students' digital ethnopedagogy, particularly in online communication ethics and cultural awareness. However, the internalization of values is not yet uniform; the aspects

of *Ade'* (Custom) and *Sara'* (Religious teachings) are easier to understand, while *Bicara* (Rules), *Rapang'* (Customary law guidelines), and *Wari'* (Social stratification) require a more contextual pedagogical approach. The developed model contributes theoretically through a framework of digital ethnopedagogy based on local values. However, its effectiveness is still limited to the Makassar region and has not been tested in the long term.

The limitations of this study lie in the scope of the sample and the lack of consideration of moderating variables such as students' cultural backgrounds and teachers' digital competencies. This study makes a significant contribution to the development of a digital ethnopedagogy framework based on local wisdom, providing practical recommendations for educational institutions and policymakers on integrating technology into the preservation of national culture amid the tide of globalization.

5. References

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