

The Influence of the Dolanan Monopoli Game on Increasing Interest in Learning Javanese Script Based on the User Experience Questionnaire

Cahyo Febri Wijaksono*

Universität für Weiterbildung Krems, Austria

email: cahyo.wijaksono@edu.donau-uni.ac.at

Umar Chamdan

University of Vienna, Austria

email: umarc95@univie.ac.at

ABSTRACT

The decline in interest in learning the Javanese language among the younger generation poses a serious challenge to the preservation of Javanese language and culture. Innovations in digital educational media are necessary to attract their interest, one of which is through the educational game Dolanan Monopoli. This study aims to analyze the influence of the game on interest in learning the Javanese language using the User Experience Questionnaire (UEQ). This study used descriptive quantitative research method, involving 50 respondents who played Dolanan Monopoli and completed the UEQ, covering six dimensions: attractiveness, clarity, efficiency, accuracy, stimulation, and novelty. The results of this study showed a significant increase in the average interest score for learning the Javanese language, rising from 2.7 before playing to 4.3 after playing. Paired t-test statistics indicated a significant difference ($p < 0.05$), suggesting a positive contribution of Dolanan Monopoli in increasing interest in learning the Javanese language. These findings demonstrate that Dolanan Monopoli has the potential to become an effective interactive learning medium for the preservation of the Javanese language among the younger generation. Development recommendations include adding more in-depth learning features and collaborating with educational institutions for broader implementation. This study contributes to the field of language learning by demonstrating that user experience plays a critical role in enhancing learning interest, particularly through interactive game-based media designed for cultural preservation.

Keywords: Learning Interest, Javanese Language, User Experience Questionnaire.

Article history

Received:
Juni 4, 2025

Revised:
August 25, 2025

Accepted:
September 21, 2025

Published:
December 21, 2005

INTRODUCTION

The study of the Javanese language is an essential part of cultural education in Indonesia, especially for younger generations. Javanese is not merely a communication tool but also reflects the identity and cultural values of Javanese society (Fajar Kurnianda et al., 2024; Purnanto & Ardhian, 2021). Furthermore, the cultural richness of Javanese includes values of politeness and etiquette, as reflected in the

concept of unggah-ungguh (Sukoyo & Utami, 2024).

However, interest among the younger generation in learning Javanese has been declining due to the dominance of Indonesian and foreign languages in daily life, as well as the limited availability of engaging and interactive learning media (Nova Erika et al., 2023; Ratih Prameswari et al., 2024). Observations show that many students struggle to understand and remember Javanese grammar, especially related

to Javanese script and the unggah-ungguh or politeness levels in the language (Kartikasari & Rahmawati, 2022; Listiani et al., 2023). This situation highlights the need for a new approach to Javanese language learning that can overcome these challenges and enhance students' interest.

The lack of suitable supporting media for young learners has resulted in the younger generation being less familiar with and struggling to learn the Javanese script. Therefore, effective media is needed to introduce Javanese script, one of which is through engaging educational games that can provide information about Javanese script (Saputro et al., 2020; Purwanti & Hermawan, 2023). As part of the efforts to preserve the Javanese language and culture, it is crucial to adopt innovative methods in learning. One method that can be employed is through educational games, which not only deliver content but also foster student engagement and motivation (Fadliyani et al., 2024). Previous research has shown that interactive learning media, such as games, can improve learning outcomes in Javanese. Educational games, especially those designed to support language learning, offer a more appealing and relevant approach for the younger generation familiar with digital technology, effectively delivering learning material through engaging visuals and interactions (Puspita, 2022).

Dolanan Monopoli is a web-based game designed to provide an interactive learning experience for Javanese language study. This game combines elements of learning and play, allowing users to learn Javanese while playing. This method is expected to address challenges faced in Javanese language learning, including low interest due to the lack of engaging approaches (Maruti et al., 2022; Putra, 2022; Rahmi Inaya, 2024). Through enjoyable learning experiences, this game is expected to encourage students to gain a deeper understanding of Javanese language material.

This study uses the User Experience Questionnaire (UEQ) to evaluate user experiences while playing Dolanan Monopoli. UEQ is a widely used tool for evaluating user experience in various applications, including educational and gaming applications. This tool allows assessment across several key dimensions, such as attractiveness, clarity, efficiency, stimulation, and novelty (Abdillah,

2019). According to previous studies, a positive user experience can significantly contribute to enhancing interest in Javanese language learning among primary and secondary school students (S. Handayani, 2023; Puspita, 2022). Although previous studies have explored the use of educational games in language learning, limited research has specifically examined how user experience dimensions influence learning interest in the context of regional language preservation. This indicates a gap in understanding the relationship between interactive design and cultural learning engagement.

The primary goal of this research is to analyze the influence of user experience in playing Dolanan Monopoli on interest in learning Javanese. Through this approach, the study aims to provide insights into the effectiveness of educational games as a medium for Javanese language learning and offer recommendations for the development of similar learning media. The findings of this study are expected to support improvements in Javanese language teaching methods and rekindle young people's interest in their regional language, contributing to Javanese cultural preservation alongside formal education in schools (Hidayah et al., 2023; Yulianto et al., 2023).

METHOD

This study employed a descriptive quantitative approach using a survey method to evaluate user experiences while playing *Dolanan Monopoli* and its influence on learners' interest in the Javanese language. The research design enabled direct data collection from respondents through questionnaires, which were subsequently analyzed to capture user perceptions of learning Javanese via a web-based educational game. The study population consisted of students aged 15 to 25 who expressed an interest in learning the Javanese language and script. A total of 50 respondents were selected as the sample based on their access to digital devices and their willingness to complete all stages of the questionnaire, both before and after gameplay.

The measurement instrument used in this study was the User Experience Questionnaire (UEQ), which evaluates six primary dimensions of user experience: attractiveness, clarity, efficiency,

accuracy, stimulation, and novelty. Each dimension was assessed using a Likert scale ranging from -3 to +3, where -3 represents a highly negative experience and +3 represents a highly positive experience (Abdillah, 2019). The UEQ provided a comprehensive evaluation of user experience, including aspects such as ease of understanding the game, efficiency in achieving objectives, and the level of stimulation in enhancing interest in learning Javanese.

The data collection process was carried out in three stages. In the first stage, respondents completed a pre-use questionnaire (pre-test) measuring their initial interest in learning Javanese, serving as baseline data for comparison. In the second stage, respondents played *Dolanan Monopoli* for a minimum of 10 minutes, during which they engaged with several levels containing Javanese language materials. In the third stage (post-test), respondents completed the UEQ to evaluate their user experience, along with an additional questionnaire assessing any changes in their interest in learning Javanese after interacting with the game. All data were collected online באמצעות digital forms to facilitate accessibility and participation.

The UEQ data were analyzed quantitatively by calculating the mean scores for each user experience dimension (attractiveness, clarity, efficiency, accuracy, stimulation, and novelty), providing an overall representation of user perceptions toward the gameplay experience. To examine changes in learning interest, pre-test and post-test data were compared using inferential statistical analysis. A paired-sample t-test was conducted to determine whether there was a statistically significant difference in learning interest before and after the intervention. This analysis aimed to assess whether playing *Dolanan Monopoli* significantly increased learners' interest in studying Javanese. In addition, qualitative responses from participants were analyzed thematically to identify specific elements of the game that contributed to increased motivation. Through this combined approach, the study seeks to provide comprehensive insights into the effectiveness of educational games as a medium for learning the Javanese language.

RESULTS AND DISCUSSION

Result

This study aims to evaluate user experiences in playing *Dolanan Monopoli* and examine its influence on interest in learning the Javanese language. The study results are derived from data processed through the User Experience Questionnaire (UEQ), which includes six main dimensions: attractiveness, clarity, efficiency, dependability, stimulation, and novelty. Below are the results for each dimension and a discussion of the game's impact on interest in learning Javanese.

Attractiveness

The attractiveness of *Dolanan Monopoli* was rated quite high by respondents, with an average score of 4.5 on the Likert scale. This score indicates that, overall, respondents found the game engaging and enjoyable. Attractiveness is important as it fosters deeper engagement, positively influencing interest in learning Javanese (Kartikasari, & Rahmawati, 2022). Previous studies suggest that strong attractiveness in interactive learning media can boost students' motivation by creating a fun and non-monotonous experience (S. Handayani, 2023).

Perspiciuity

Clarity in understanding the gameplay instructions and the function of each element in the game was rated well, with an average score of 4.2. This dimension shows that *Dolanan Monopoli* effectively delivers instructions that are easy for users to understand. Clarity is crucial in educational media because a game that is easy to understand allows users to focus more on the learning content without being burdened by technical complexities. Several respondents also mentioned that the simple navigation helped them focus more on learning Javanese rather than figuring out how to play the game.

Efficiency

The efficiency score averaged 4.0, indicating that users felt they could achieve their learning goals relatively quickly and without significant difficulty. Efficiency in this game allowed respondents to complete levels while still

understanding Javanese language materials, such as basic vocabulary and the use of Javanese script. According to previous research, efficiency in digital learning media is one factor influencing learning effectiveness, as users can learn faster without easily losing interest (Puspita, 2022)

Dependability

The dependability dimension received an average score of 4.3, indicating that users felt confident and comfortable controlling the game and understanding its functionality. This dependability gives users a sense of control and assurance during gameplay, which plays an important role in enhancing learning motivation. Users who feel confident in controlling the game are more likely to engage actively and explore further the learning features provided

Stimulation

The stimulation dimension received the highest average score of 4.6. This score indicates that Dolanan Monopoli provides a highly engaging experience and is able to stimulate users' interest in the learning material. Respondents stated that the challenges presented in the game motivated them to complete certain levels. High stimulation can enhance users' interest in the Javanese language, as an engaging learning experience encourages sustained interest in learning (Dyah Aris Susanti, 2023; L. Handayani & Mulyana, 2024).

Novelty

The novelty of Dolanan Monopoli in presenting Javanese language learning interactively was rated favorably by respondents, with an average score of 4.4. This dimension highlights the innovative aspect of the game in delivering regional language learning through an approach distinct from traditional methods. Novelty is essential for capturing the interest of the younger generation, who are more accustomed to digital media. Related studies suggest that the use of educational games offering a fresh approach can help preserve regional languages, as they align better with modern learning styles (Putra, 2022).

Overall, the average user experience scores for each UEQ dimension are illustrated in Figure 1.

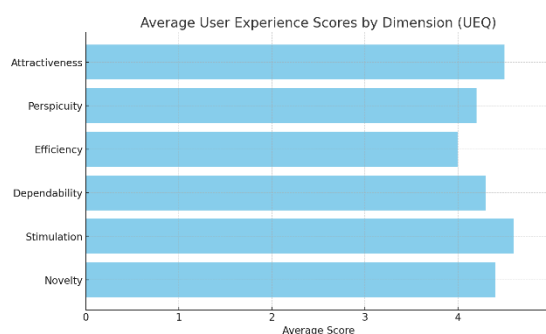


Figure 1. Average User Experience Score

Impact on Interest in Learning Javanese

Overall, the study results indicate that the experience of playing Dolanan Monopoli positively impacts interest in learning the Javanese language. A significant increase in the average interest score from 2.7 in the pre-use phase to 4.3 in the post-use phase can be seen in Figure 2. This indicates that Dolanan Monopoli is able to provide an engaging, easy-to-understand, and efficient learning experience for its users. The paired t-test statistical results show that this score change is significant ($p < 0.05$), reinforcing the conclusion that a positive experience in playing Dolanan Monopoli makes a substantial contribution to increasing interest in learning Javanese.

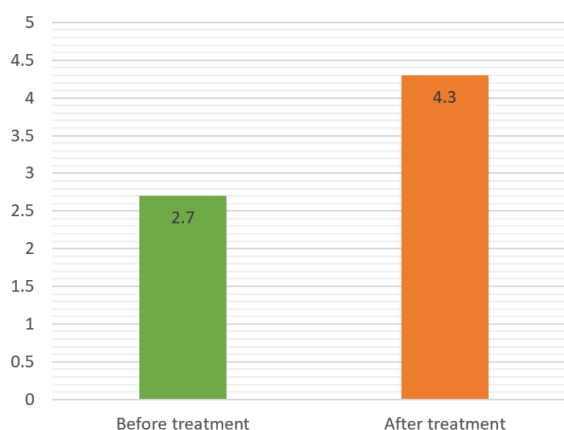


Figure 2. Average User Experience Score

These results align with other studies showing that interactive, experience-based learning media can enhance students' motivation and interest in various subjects (S. Handayani, 2023; Maruti et al., 2022). In the context of Javanese language learning, the Dolanan Monopoli game offers an enjoyable and relevant experience, effectively capturing the interest of students who were

previously less interested in their regional language. Thus, Dolanan Monopoli holds great potential as a learning medium that can contribute to preserving the Javanese language through a digital approach tailored to the needs of the younger generation.

CONCLUSION

This study shows that the educational game Dolanan Monopoli has a positive impact on young people's interest in learning the Javanese language. Analysis using the User Experience Questionnaire (UEQ) revealed that this game successfully creates an engaging, clear, efficient, and innovative user experience, with the highest score in the stimulation dimension. The increase in the average score of interest in learning Javanese from 2.7 in the pre-use phase to 4.3 in the post-use phase, along with the paired t-test result indicating significance ($p < 0.05$), demonstrates that a positive experience with Dolanan Monopoli significantly contributes to heightened interest in learning Javanese. In conclusion, Dolanan Monopoli serves not only as a learning medium but also as a tool for preserving the Javanese language through an approach that resonates with a tech-savvy younger generation.

Recommendations

Based on the results of this study, several recommendations can be made for further development. First, to enhance learning effectiveness, Dolanan Monopoli developers could add more in-depth learning features, such as varying difficulty levels or specific modules for different aspects of the Javanese language, including vocabulary, grammar, or unggah-ungguh (levels of politeness). Second, collaboration with educational institutions could enable Dolanan Monopoli to be implemented in schools as part of the curriculum or extracurricular programs, allowing more students to benefit from this interactive learning approach. Third, further research is recommended to explore the long-term effects of using this game on students' skills and interest in learning the Javanese language.

With continued development and broader implementation, Dolanan Monopoli is expected not only to boost interest in learning Javanese but also to become an effective tool for

preserving Javanese cultural heritage through digital technology that is relevant to the current generation.

References

- Abdillah, L. A. (2019). Analisis Aplikasi Mobile Transportasi Online Menggunakan User Experience Questionnaire pada Era Milenial dan Z. *JURNAL SISTEM INFORMASI BISNIS*, 9(2), 204.
- Dyah Aris Susanti. (2023). Efektifitas Permainan Tebak Kata Terhadap Penguasaan Pelajaran Unggah Ungguh Bahasa Jawa. *Al-Ibtida'*, 11(1), 44–77.
- Fadliyani, N. M., Roshayanti, F., & Suprihatini, G. (2024). Pengaruh Penggunaan Game Puzzle terhadap Hasil Belajar. In *Ainara Journal* (Vol. 5, Issue 2).
- Fajar Kurnianda, V., Rulyansah, A., Kasiyun, S., & Umar Susanto, R. (2024). Indonesian Research Journal on Education Analisis Kesulitan Belajar Bahasa Jawa Siswa Kelas IV Sekolah Dasar. In *Indonesian Research Journal on Education* (Vol. 4).
- Handayani, L., & Mulyana. (2024). Peningkatan Keterampilan Berbicara Bahasa Jawa Krama Melalui Model Pembelajaran Role Playing Pada Siswa Menengah Pertama. *Jurnal Studi Guru Dan Pembelajaran*, 7(1).
- Handayani, S. (2023). Integrasi Metode Pembelajaran Sosiodrama dan Media Komik Bergambar dalam Pembelajaran Menulis Teks Sesorah Sesuai Unggah-Ungguh Bahasa Jawa. *Jurnal Pendidikan Indonesia*, 4(1), 41–51.
- Hidayah, K., Dinar Permata, S., Mashuri, A., Sekolah,), Keguruan, T., Pendidikan, I., Ngawi, M., & Indonesia, ; (2023). Pengaruh Model Teams Games Tournament (TGT) Terhadap Minat Belajar Siswa Kelas III Mata Pelajaran Bahasa Jawa MI PSM Sulersewu. *Global Education Journal*, 1(1).
- Kartikasari, M., & Rahmawati, F. P. (2022). Desain Media Pembelajaran Interaktif “Tekat Baja” untuk Memperkaya Kosakata Bahasa Jawa Siswa Sekolah Dasar. *Jurnal Basicedu*, 6(3), 5052–5062.
- Listiani, I., Akbar, F. A., Sasmitaningrum, H., Eprilia, N., Anjarsari, N., Mistrika, E. S., Rahmawati, M. M., Rohman, N. F., Khotima, E. S., Budiarti, N., Uyun, K.,

- Kusumawardani, I., & Sulistyowati, S. (2023). Sosialisasi Penggunaan Media Pembelajaran Ular Tangga untuk Mengatasi Kesulitan Pembelajaran Bahasa Jawa. *Archive: Jurnal Pengabdian Kepada Masyarakat*, 3(1), 95–104.
- Maruti, E. S., Yulianto, B., Suhartono, S., Yohanes, B., & Cahyono, B. E. H. (2022). Scale development as a measuring tool of critical Javanese language' awareness for pre-service Javanese teachers. *Cogent Arts and Humanities*, 9(1).
- Nova Erika, V., Nurul Azizah, A., Guru Sekolah Dasar, P., Darussalam Cilacap, S., Raya Karangpucung -Majenang Km, J., & Karangpucung, K. (2023). Peran Pengajaran Bahasa Jawa Dalam Mempertahankan Warisan Kebudayaan Bahasa Jawa.
- Purnanto, D., & Ardhian, D. (2021). Capturing Social Issues Through Signs: Linguistic Landscape in Great Malang Schools, Indonesia. *International Journal of Sustainable Development & Planning*.
- Purwanti, P. and Hermawan, H.D., (2023), June. Development of 'AJAR'(Aksara Jawa Augmented Reality) learning media based on Android for elementary school students. In *AIP Conference Proceedings*, 2727(1).
- Puspita, M. (2022). Pembelajaran Pelestarian Bahasa Jawa Melalui Media Game Edukasi. In *Journal of Multimedia Trend and Technology-JMTT* (Vol. 1, Issue 2).
- Putra, N. P. (2022). Meningkatkan Kemampuan Berbahasa Jawa Pada Siswa Melalui Media Pembelajaran Moja: Monopoli Bahasa Jawa di SDN Sugihwaras 07. *Jurnal Dieksis Id*, 2(1), 38–46. <https://doi.org/10.54065/dieksis.2.1.2022.82>
- Rahmi Inaya, V. (2024). Analisis Implementasi Metode Role Playing dalam Pembelajaran Kosa Kata Bahasa Jawa Kelas 2 SD Negeri 2 Tahunan. *Edu Cendikia Jurnal Ilmiah Kependidikan*, 4(2), 665–674.
- Ratih Prameswari, C., Ratih Prameswari Akademi Komunitas Negeri Pacitan, C., Abadi Akademi Komunitas Negeri Pacitan, F., Arla Pribadiyanti Akademi Komunitas Negeri Pacitan, E., Walanda Maamis, J., & Timur, J. (2024). Perancangan Media Interaktif "Mengenal Aksara Jawa."
- Realisasi : Ilmu Pendidikan, Seni Rupa Dan Desain, 1(1).
- Saputro, N.D., Romadhani, T. and Dewanto, F.M., 2020, April. Designing Android Based Education Game Aksara Jawa Using Shuffle Random Algorithm. In *IOP Conference Series: Materials Science and Engineering*, 835(1).
- Sukoyo, J., Kurniati, E., & Utami, E. S. (2024). Joyful Learning Model for Javanese Speech Levels Course. *Theory and Practice in Language Studies*, 14(6), 1786-1795.
- Yulianto, B., Maruti, E. S., Suhartono, Yohanes, B., Shodiq, S., & Parji. (2023). Stimulating critical awareness of Javanese language in elementary schools: Exploring mother language teaching practices in Indonesia. *Cogent Education*, 10(1).