



The Effectiveness of Educational Wall Comics to Foster Social Awareness and Tolerance in Madrasah Ibtidaiyah Students

Rofiatun Nisa

Universitas Billfath, Indonesia

Corresponding Email: rofiatunnisa@billfath.ac.id

Received: 13-08-2026

Reviewed: 02-09-2026

Accepted: 25-09-2026

Abstract

The low level of social care and tolerance in elementary school students is a challenge in implementing character education during the digital era. This study aims to analyze the effect of using educational wall comic media on improving the character of social care and tolerance of elementary school students. The research method used was a quasi-experiment with a pretest-posttest control group design, involving 86 students from two Madrasah Ibtidaiyah, divided into experimental and control groups. The data collection instrument was a social care and tolerance character questionnaire, analyzed using the N-Gain and ANCOVA tests. The results showed that the experimental group experienced an increase in social care (N-Gain = 0.4192) and tolerance (N-Gain = 0.4778) in the moderate category, while the control group only showed an increase in the low category. The ANCOVA test showed significant results ($p < 0.05$), which indicated that the improvement in character was due to the treatment in the form of educational wall comics. Wall comic media is effective in shaping students' characters through a contextual and interesting visual-narrative approach.

Keywords: Educational Wall Comics, Social Awareness Characters, Tolerance, Character Education.

Introduction

Instilling character values from an early age is an important foundation in shaping children's personalities as the next generation (Ningsih, 2021). In the context of basic education, character traits such as social care and tolerance between friends have a strategic role in creating a harmonious and inclusive learning environment (Ode, 2022). In the midst of globalization challenges, complex challenges such as individualism and social inequality are increasingly eroding the practice of these values, so school-based educational interventions are becoming a national and global urgency (Harvey, 2023). Elementary school, as the initial stage of character formation, requires innovative media that is able to transform abstract values into concrete forms through visual and narrative approaches that are able to package moral messages in the form of narratives that are easy to understand and attract the attention of elementary school students (Anggito et al., 2023).

However, the results of the 2022 KPAI supervision report found that students' social interactions in elementary schools showed a tendency to increase indifferent behavior and a lack of tolerance towards peers, especially after online learning (Lusi et al., 2021). Many students have reported difficulty interacting socially due to weak character values such as tolerance, empathy, and mutual help (Sianturi, 2021). A survey of 500 elementary school teachers in various regions showed that only 38% of students consistently showed a helpful attitude toward friends and care for their social environment (Sutarti et al., 2025). Conditions in the field show that the social care character and tolerance of elementary school students have decreased because many elementary school-age students are more concerned about smartphones than the surrounding environment (Yusuf et al., 2025). Many teachers revealed that students tend to be individualistic, less sensitive to friends who are having difficulties, and

are not used to showing tolerance in daily social interactions (Hikmat et al., 2024).

This is exacerbated by the character learning approach, which tends to be normative and does not touch the concrete experiences of students (Siswanto et al., 2024). Learning activities that only emphasize the memorization of moral values have not been able to touch the affective dimension of children in depth (Mahartini et al., 2024). Therefore, an educational program is needed that is contextual, communicative, and can touch students' daily lives directly (Nudiyanti et al., 2023). One potential alternative is the school wall comic program, which is the provision of educational visual media in the classroom or school environment that consistently displays narratives and illustrations of character values such as social care and tolerance. This program is expected to provide sustainable visual and moral stimulus, strengthen students' exposure to positive values, and encourage gradual behaviour change through habituation.

Comics as an educational medium have the potential to shape students' characters through visual narrative-based learning (Ginting et al., 2025). The involvement of children's emotions and imagination in reading illustrated stories can increase the process of internalizing moral values (Murti et al., 2020). In the context of the value of social care and tolerance, visual media that is consistent and displayed in the learning environment, such as wall comics, provides repeated stimuli that strengthen memory and influence student behavior (Rina et al., 2020). Thus, wall comics can be an effective educational means in indirect value learning. The use of wall comics not only provides an explicit moral message, but also builds a visual environment that supports reflection on an environment that has naturally positive values.

A number of previous studies have shown that comic media can increase the value of good characters (Murti et al., 2020; Faradiba & Budiningsih, 2021). However, most of these studies still focus on comic media as reading material or storybooks, rather than as a permanent visual medium in the classroom (Solihah et al., 2022; Junaid et al., 2023). For this reason, the novelty of this research is to position educational comics as part of the physical learning environment that can provide long-term and repeated exposure to the character values of social care and tolerance. This approach is expected to be more effective in forming students' good mindset and behavior in a sustainable manner.

The purpose of this study is to analyze the application of educational wall comics and their effectiveness on the character values of social care and tolerance in elementary school students, which are studied quantitatively. This research not only aims to determine the level of effectiveness of the media, but also provides an alternative educational solution that is simple, easy to implement, and contextual in supporting the strengthening of character education in Madrasah Ibtidaiyah.

Literature review

This study draws on two key concepts, namely character education for social care and tolerance, and educational comics as a learning medium. The following review synthesizes prior conceptual and empirical work on these two concepts to clarify the theoretical basis of this study and to position its contribution relative to existing research.

a. Social Care and Tolerance as Character Education Values in Elementary Schools

Character education is the deliberate effort to instil values that shape a person's personality and social conduct from an early age (Ningsih 2021). Among the many character values taught in elementary school, social care and tolerance occupy a strategic position because they underpin a harmonious and inclusive learning environment and prepare students to live amid social and cultural diversity (Ode, 2022; Harvey, 2023). Empirical evidence, however, suggests that these values are increasingly eroded among elementary school students. A nationwide survey further found that only 38% of students consistently displayed helpful and caring attitudes toward their social environment Sutarti et al., (2025), a pattern teachers

attribute to excessive smartphone use and declining face-to-face social interaction (Yusuf, 2025; Hikmat et al., 2024).

Several approaches have been developed to strengthen these values, ranging from transformative learning models Siswanto et al., (2024) and folktale-based instruction Prawiyogi et al., (2025) to culturally enriched storybooks Mahartini et al., (2024) and puzzle-based learning media (Nudiyanti & Sudarmilah, 2023). Afandi and Astuti (2023) further emphasize that children's social development is shaped by habituation, modelling, and a supportive learning environment, while Ristiana et al. (2025) and Badeni and Saparahayuningsih (2021) argue that character growth is best supported by an inclusive learning climate and by positioning students as active agents rather than passive recipients of moral instruction. Nonetheless, most of these approaches remain normative and curriculum-bound, relying on verbal instruction or one-off activities rather than a sustained, everyday presence in students' physical learning environment (Siswanto et al., 2024; Mahartini et al., 2024). This gap points to the need for a contextual, repeatable medium capable of habituating social care and tolerance through students' daily school experience.

b. Educational Wall Comics as a Medium for Character Formation

Comics combine narrative and illustration in a way that engages children's emotions and imagination, making them an effective medium for internalizing moral values Murti et al., (2020). Prior studies have shown that comic-based media can strengthen a range of character values: Ginting et al. (2025) developed a comic to foster caring and responsibility Rina et al. (2020) and Faradiba and Budiningsih (2021) designed comics to build social care and character education more broadly, Anggito et al. (2023) demonstrated the effectiveness of multicultural digital comics in improving social care, and Junaid et al. (2023) used a webtoon to prevent bullying through cultural values of mutual respect. Similarly, Solihah et al. (2022) found that digital comics and animation-based media can build character values and critical thinking through an engaging audiovisual format, while Cipta et al. (2023) confirm that audiovisual and digital media provide a communicative and emotionally engaging channel for character messages.

This effect can be explained through social learning principles: repeated, attractively presented visual models encourage observation, imitation, and gradual internalization of prosocial behavior (Kuo et al., 2011), while visual-narrative media allow children to simulate social situations that trigger moral reflection and self-identification with story characters (Nugraheni et al., 2021). In the context of tolerance specifically, Yulianto et al. (2023) show that inclusive visual narratives expand students' capacity to understand others' social positions, Harun (2024) argue that media featuring culturally diverse characters help normalize diversity as part of daily school life.

Most existing studies position comics as reading material or storybooks that students engage with individually or during a single session, rather than as a permanent, repeatedly encountered element of the physical classroom environment (Solihah et al., 2022; Junaid et al., 2023). This distinction is important because the strength of visual-narrative learning lies partly in repeated exposure, which is more naturally achieved when comics are displayed consistently in students' everyday surroundings (Rina et al., 2020). Building on this observation, the present study positions educational wall comics as a form of habitual, environment-embedded visual media, extending prior comic-based character education research into a context of sustained exposure rather than one-time reading.

Research method

This study used a quantitative method with a quasi-experimental design to compare the effectiveness of 2 different groups in improving social care and tolerance characteristics. This study was carried out with 88 students in grades IV, V, and VI in two Ibtidaiyah Madrasah in

Lamongan Regency. In the experiment, the students were divided into two groups, namely an experimental class with educational wall comic intervention and a control class without educational wall comic media intervention. The research process is shown in Figure 1. The control group, with 44 students, and the experimental group were first given a pretest on social care and tolerance with the same number of questions and the same duration of time (25 minutes). Then, for 2 weeks, the students in the experimental group were given interventions in the form of 5 wall comic stories with different themes about stories that depicted the implementation of social care and tolerance characters such as Bread for Goodness, Play Together, Come On!, Classes Without Mockery, New Friends at School, and Tree of Kindness. Meanwhile, in the control class for 2 weeks, the teacher gave an overview of the story of the implementation of social care characters and tolerance without educational wall comics. After the experiment, the post-test was carried out for 25 minutes.

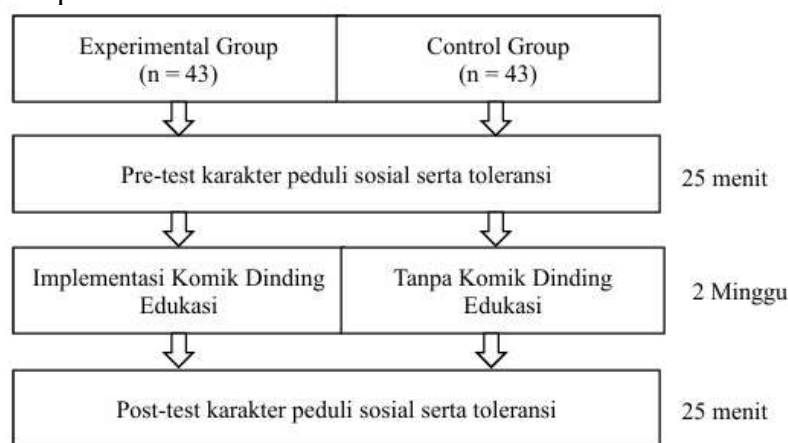


Figure 1. Research Flow

The data collection technique in this study uses observation of the implementation of educational wall comics, documentation, the social care character questionnaire and the tolerance questionnaire. Direct observation instruments will be explained in Table 1. While the social care character questionnaire and tolerance questionnaire instruments will be explained in Table 2.

Table 1. Observation Instruments

No	Observed Indicators
1	Students are interested and pay attention to the content of the comic
2	Students read comics independently without being told
3	Students discuss or tell stories about the content of comics with friends
4	Students demonstrate an understanding of the moral message of the comic (such as: tolerance, empathy)
5	Students show a positive attitude after reading the comic (such as: helpful, friendly, appreciative)
6	Students associate the content of comics with everyday situations at school
7	Students show respect for differences between friends
8	Students show changes in social behavior (more open, tolerant, cooperative)

Table 2. Social Concern and Tolerance Questionnaire Instrument

Variabel	Dimensions	Indicator
Social Care	Empathy	1. Sensitive to the feelings of a friend who is sad or struggling.
	Helpful actions	2. Being aware of the needs of others around him.
		3. Likes to help friends without being asked.
		4. Offer help to a teacher or friend.
	Concern for the social environment	5. Caring about the cleanliness and comfort of the classroom.
		6. Not letting friends have a hard time alone.
Tolerance	Acceptance of differences	1. Want to make friends with friends of different ethnicities or religions.
	Attitudes towards conflict	2. Respect the opinions of different friends.
		3. Not like to impose one's will when there is a difference of opinion.
		4. Likes to discuss in a peaceful way when there are differences.
	Cooperation in diversity	5. Willing to work together in a group with anyone.
		6. Not picking friends while playing or studying.

Data obtained from direct observation by 3 observers, questionnaire of social concern and student tolerance characteristics using the Likert scale of 5 (Sugiyono, 2016). Data were analyzed quantitatively using descriptive analysis and ANCOVA. Descriptive analysis was calculated by calculating the average score of 3 observers, and the results were converted to percentages. In measuring the results of descriptive analysis, the categories of Very High, High, Sufficient, Low, and Very Low, with the range of values, will be described in Table 3.

Table 3. Interval of Descriptive Analysis Values

Percentage Range (%)	Category	Description
86% – 100%	Very High	Implementation is at an optimal or ideal level
71% – 85%	High	Implementation is good and impactful, although it is not optimal
56% – 70%	Enough	Midle implementation, still needs to be strengthened
41% – 55%	Low	Implementation lacks, requires follow-up interventions
≤ 40%	Very Low	Implementation is very minimal or no visible impact

Prior to conducting the hypothesis test, prerequisite analyses, including normality and homogeneity tests, were performed to ensure that the data fulfilled the assumptions for parametric statistical analysis. Once these assumptions were confirmed, the effectiveness of the developed product was evaluated using Analysis of Covariance (ANCOVA), with pre-test scores included as covariates to account for initial differences between the experimental and control groups. The quantitative data were analyzed using IBM SPSS Statistics, with statistical significance determined at the 0.05 level. A significance value of $p < 0.05$ was considered evidence of a statistically significant effect of the treatment on the improvement of students'

social care and tolerance character. The statistical analysis was conducted using SPSS version 26.

Results

The first purpose of this study is to find out the results of the implementation of educational wall comics to improve the character of social concern and tolerance by observing the implementation of activities for 2 weeks. The comics are designed with a strong moral message, raise themes of daily life that are close to the world of children, and contain values such as empathy, cooperation, and respect for differences. One of the images of an educational wall comic is shown in Figure 2.



Figure 2. Pictures of Educational Wall Comic Series Bread for the Mind

As part of the implementation, direct observation was carried out by three observers on students' behaviour in daily activities in the school environment for 2 weeks. This observation included eight main indicators that reflected students' cognitive, affective, and behavioural responses to the comic content presented. The results of this observation provide a real picture of how wall comics not only attract students' attention but are also able to encourage reflection, social discussion, and positive attitude changes in the context of school life. The implementation of educational wall comics at Madrasah Ibtidaiyah is shown in Figure 3.



Figure 3. Implementation of Educational Wall Comics in Learning

Based on the results of observation data processing on the application of educational wall comic media in improving the character of social care and tolerance of students in grades IV, V, and VI at Madrasah Ibtidaiyah, Lamongan Regency, observations were made by three observers on student behaviour based on 8 main indicators. Each indicator was observed directly and given a score on a scale of 1–5, with the results of the assessment shown in Table 4.

Table 4. Results of Descriptive Statistical Analysis of the Implementation of Educational Wall Comic

No	Observed Indicators	Average	Percentage (%)	Standard Deviation	Description
1	Students are interested and pay attention to the content of the comic	4.7	94%	0.47	Very high. Students show great interest
2	Students read comics independently without being told	4.3	86%	0.47	High. Students actively read independently
3	Students discuss or tell stories about the content of comics with friends	4.0	80%	0.82	High. Active discussions arise naturally
4	Students demonstrate an understanding of the moral message of comics	4.3	86%	0.47	High. Understanding of moral messages is excellent
5	Students show a positive attitude after reading a comic	4.0	80%	0.82	High. Positive behavior changes are visible
6	Students associate the content of comics with everyday situations at school	3.8	76%	0.47	Quite high. Reflection begins to occur
7	Students show respect	4.3	86%	0.47	High. A real

No	Observed Indicators	Average	Percentage (%)	Standard Deviation	Description
8	for differences between friends Students show changes in social behavior (more open, tolerant, cooperative)	4.0	80%	0.82	inclusive attitude emerges High. Indications of social change visible
Total		4,2	83,5%		

Based on the observation results of the implementation of educational wall comics among Grade IV, V, and VI students at Madrasah Ibtidaiyah in Lamongan Regency, the overall mean score was 4.2, with a percentage of 83.5%, indicating a high level of implementation. Of the eight observed indicators, students' interest in and attention to the comic content achieved the highest score, with a mean of 4.7 (94%), categorised as very high. Meanwhile, students' ability to read comics independently, understand the moral messages, and respect differences among peers each obtained a mean score of 4.3 (86%), categorised as high. The indicators of discussing the comic content, demonstrating positive attitudes after reading, and showing changes in social behaviour, such as being more open, tolerant, and cooperative, each obtained a mean score of 4.0 (80%), while students' ability to relate the comic content to everyday situations at school obtained a mean score of 3.8 (76%), categorized as quite high. Overall, these findings indicate that the use of educational wall comics was able to attract students' attention and increase their engagement while also showing positive indications of improvements in their social care and tolerance character, as reflected in greater respect for differences, cooperation, openness, and positive social behavior.

Before hypothesis testing using Analysis of Covariance (ANCOVA), a prerequisite test was first carried out, which included a normality test and a homogeneity test. The normality test was carried out using the Shapiro–Wilk test to find out whether the social care and tolerance character data in the experimental and control groups were normally distributed. The test results showed that the overall significance value was above 0.05, namely 0.200 for the social care character and 0.184 for the tolerance character in the experimental group, and 0.200 and 0.167 in the control group. Thus, all data were declared to be normally distributed, as shown in Table 5.

Table 5. Results of Normality Test

Variable	Group	Shapiro–Wilk Statistic	Sig. (p)	Interpretation
Social Care	Experimental	0.965	0.200	Normal
Social Care	Control	0.961	0.200	Normal
Tolerance	Experimental	0.958	0.184	Normal
Tolerance	Control	0.956	0.167	Normal

The results of the homogeneity test were carried out using Levene's Test to determine the similarity of variance between the experimental group and the control group. The test results showed a significance value of 0.721 for the social care character and 0.684 for the tolerance character. Both values were greater than 0.05, so it can be concluded that the variance of the data in both groups was homogeneous as shown in Table 6.

Table 6. Results of Homogeneity Test

Variable	Levene's Statistic	Sig. (p)	Interpretation
Social Care	0.128	0.721	Homogen
Tolerance	0.169	0.684	Homogen

The results of the homogeneity test show that the significance values for both social care and tolerance are greater than 0.05. Thus, the variances between the experimental and control groups can be considered homogeneous. Based on the results of the normality and homogeneity tests, the data fulfilled the prerequisite assumptions for conducting parametric analysis using ANCOVA based on Table 7.

Table 7. ANCOVA Test Results of Social Care and Tolerance Character

Character	F-value	Sig. (p)	Interpretasi
Social Care	133.93	0.000	Significant ($p < 0.05$) = There is a real influence
Tolerance	152.36	0.000	Significant ($p < 0.05$) = There is a real influence

The results of ANCOVA showed that the difference in posttest results between the experimental and control groups was statistically significant. With a value of $p < 0.05$ for both variables, it can be concluded that the difference in character improvement that occurred was not due to the initial difference (pretest), but by the influence of treatment in the form of educational wall comic media.

Discussion

The results of this study show that the use of educational wall comic media is significantly able to improve the social caring character of elementary school students, as shown by the average N-Gain value of 0.4192 in the experimental group in the medium category. These findings confirm that visual and narrative approaches embedded in the learning environment have a strong influence on the internalisation of moral values such as empathy and mutual help attitudes. This is in line with the opinion of Wulan et al. (2023), which emphasises that story-based visual media such as comics can evoke students' emotional involvement, thereby strengthening the process of internalising moral values. In addition, (Amalia et al., 2020) shows that comic media that is developed educatively is able to foster children's social concern significantly because it combines affective and cognitive elements in one communicative and interesting media package. The repetitive and consistent visual context such as that contained in wall comics, has a long-term effect in shaping students' social perceptions and actions, as stated by Cipta et al., (2023), which states that visual narrative-based digital media is able to form a character-filled learning environment indirectly but effectively.

Furthermore, this approach is a solution to the weaknesses of conventional methods in character education which are often normative and do not touch the affective realm of students (Prawiyogi et al., 2025). Wall comics present a concrete representation of the values of empathy and care in the form of characters and storylines that are close to students' daily lives. When students see the narrative repeatedly in the classroom, they not only understand the concept of social care cognitively, but also experience the habituation process through constant visual reinforcement. According to Nugraheni et al. (2021), Visual-based media has great potential in strengthening social character because it is able to present simulated situations that can trigger moral reflection and self-identification with the story characters.

The process of forming prosocial behaviour is strongly influenced by observation of the model, especially if the model is presented in an interesting and repetitive manner. In this case, the wall comic acts as a model of behaviour that visually depicts prosocial actions such as helping a friend in difficulty or keeping the environment clean together (Kuo et al., 2011).

Through this mechanism, students not only imitate but also begin to build a value system that matches the narrative they see every day. Therefore, the existence of educational wall comics is not only a complement to learning media, but also as a transformational instrument in shaping a caring, inclusive, and empathetic school culture.

The findings of this study show that educational wall comic media has a significant effect on improving the tolerance character of elementary school students, as evidenced by the N-Gain value of the experimental group of 0.4778 (medium category) and significant ANCOVA test results ($p < 0.05$). These results reinforce the assumption that visual-narrative approaches embedded in the context of students' daily lives can be an effective medium in forming attitudes of accepting differences, working together in diversity, and resolving conflicts peacefully. In line with Vygotsky's theory of social constructivism, socially charged and interaction-based learning is decisive in the development of high-level psychological functions, including tolerance (Afandi & Astuti, 2023). Educational wall comics allow students to contextually process the meaning of tolerance values as they are exposed to real-life representations of social interactions that prioritize the principle of mutual respect. This is also reinforced by the findings (Mega Nur 'Afni & Nadri Taja, 2022), which state that visual narrative-based learning expands students' space for reflection on different social experiences, thus opening up space for the development of empathy and tolerance in multicultural interactions.

Visual media such as comics also provide a space for students to imagine the perspectives of others and understand diversity through the characters and dialogues presented. In studies by Yulianto et al., (2023), It is explained that students who get on an inclusive visual narrative show an increase in the ability to understand the social position of others and are more likely to express an open attitude towards differences. In addition, research by Garzia, (2020) emphasizing that media that uses ethnically and culturally diverse figures encourages the development of a tolerant disposition from an early age. In this context, wall comics become a non-formal educational space that normalizes diversity and makes the value of tolerance a part of daily life. This is very relevant to the context of elementary schools in Indonesia which are full of diversity of ethnicities, religions, and social backgrounds.

Strengthening the value of tolerance through a visual approach is also indirectly visible but sustainable. According to Harun & Lasriani (2024), the success of multicultural education is not only determined by the content of the formal curriculum, but also by a learning environment that supports diversity visually and symbolically. Consistent wall comics featuring harmonious dialogues between characters with different backgrounds serve as a visual curriculum that shapes students' mindsets and social responses to differences. Furthermore, research by Alfredo et al., (2025) It shows that the use of multimodal texts in the classroom is able to build a stronger bridge of intercultural communication compared to a purely verbal approach. Therefore, the integration of educational comic media into the physical environment of the school can be positioned as an effective and sustainable pedagogical strategy in fostering the value of student tolerance contextually, reflectively, and applicatively.

These findings have important implications for the world of basic education, especially in efforts to strengthen character education that is not only theoretical but also applicable and contextual. The use of educational wall comics has proven to be a simple, economical, but significant impact in shaping the character of social care and student tolerance. In practice, teachers do not need to radically change the structure of the curriculum, but rather simply enrich the learning environment through visual media that is integrated with character values. As stated by Ristiana et al. (2025), A learning environment that is responsive to the social-emotional needs of students is able to create an inclusive learning climate that is conducive to character development. This shows that learning innovation does not always have to be in the form of advanced technology, but can start from simple interventions that are targeted and

sustainable.

The existence of wall comics as an educational medium also opens up a space for collaboration between educational stakeholders such as teachers, students, parents, and policymakers. For example, in the comic production process, students can be involved in designing stories based on their real experiences at school, so that a stronger sense of belonging and involvement is formed with the values instilled. This is also relevant to the concept of student agency put forward by Badeni et al., (2021), namely the empowerment of students as active subjects in the character learning process. The comic produced together is not only a passive medium, but also a means of expressing values and social reflection that can strengthen the formation of a school culture based on empathy and diversity. In addition, the results of this research can be a basis for consideration for school principals or education offices in developing structured and visual character habituation programs in the school environment.

Conclusion

This study demonstrates that positioning educational wall comics as a permanent and repeatedly encountered feature of the school environment provides a simple, low-cost, and practical strategy for strengthening social care and tolerance among elementary students in Madrasah Ibtidaiyah, offering an alternative to normative, memorization-based character education without requiring major curricular changes. However, the study is limited by its small sample from only two Madrasah Ibtidaiyah in one regency, a short two-week intervention, reliance on questionnaires and observer ratings, and a quasi-experimental design without random assignment, which may limit generalizability and leave the sustainability of character changes uncertain. Future research should therefore involve larger and more diverse samples, longer interventions with follow-up assessments, qualitative methods to explore students' internalization processes, randomized designs, and additional character dimensions.

Declaration of conflicting interest

The authors declare that there is no conflict of interest in this work.

Funding acknowledgment

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

References

- Afandi, M., & Astuti, M. (2023). Perkembangan Sosial Siswa Sekolah Dasar/Madrasah Ibtidaiyah dan Implikasinya Terhadap Perilaku Sosial dalam Pembelajaran. *At-Thullab : Jurnal Pendidikan Guru Madrasah Ibtidaiyah*, 7(1). <https://doi.org/10.30736/atl.v7i1.1420>
- Alfredo, R., Mejia-Domenzain, P., Echeverria, V., Rahayu, D., Zhao, L., Alajlan, H., Swiecki, Z., Käser, T., Gašević, D., & Martinez-Maldonado, R. (2025). TeamTeachingViz: Benefits, Challenges, and Ethical Considerations of Using a Multimodal Analytics Dashboard to Support Team Teaching Reflection. *15th International Conference on Learning Analytics and Knowledge, LAK 2025*, 58–69. <https://doi.org/10.1145/3706468.3706475>
- Amalia, U., Fitria, E., & Handayani, I. (2020). Media Edukasi Melalui Animasi Untuk Meningkatkan Critical Thinking Skill Dalam Melawan Informasi Hoaks. *Arah Kurikulum Program Studi Bimbingan Dan Konseling Indonesia Di Era Merdeka Belajar*, 63.

- Anggito, A., Purwanta, E., Saptono, B., & Senen, A. (2023). The Effectiveness of Digital Comics based Multicultural to Improve Social Care Character of Elementary School Students. *New Educational Review*, 72, 122–132. <https://doi.org/10.15804/ner.2023.72.2.09>
- Badeni, B., & Saparahayuningsih, S. (2021). Towards a Model of Attitude and Character Learning Through Training Needed By Teachers. *International Journal of Education and Practice*, 9(3), 487–496. <https://doi.org/10.18488/journal.61.2021.93.487.496>
- Cipta, E. S., Husaeni, A. S., Cahyati, C., & Anwar, F. (2023). Analisis Pengaruh Media Digital terhadap Perkembangan Karakter Siswa Sekolah Dasar. *Ainara Journal (Jurnal Penelitian Dan PKM Bidang Ilmu Pendidikan)*, 4(3). <https://doi.org/10.54371/ainj.v4i3.271>
- Faradiba, D. G., & Budiningsih, C. A. (2021). Pengembangan media komik berbasis pendidikan karakter peduli sosial pada pembelajaran tematik-integratif. *Jurnal Inovasi Teknologi Pendidikan*, 7(2). <https://doi.org/10.21831/jitp.v7i2.24758>
- Garzia, M. (2020). Permainan Tradisional Dalam Literasi Budaya Dan Perkembangan Anak Usia Dini Pada Abad 21. *Jurnal Educhild: Pendidikan Dan Sosial*, 9(2). <https://doi.org/10.33578/jpsbe.v9i2.7696>
- Ginting, L. C. B., Murron, F. S., Fitriani, A. D., Mufliva, R., Rahmawati, E., & Somantri, M. (2025). Development of Comic Character as a Media to Foster Caring and Responsibility for Children. *International Research Journal of Multidisciplinary Scope*, 6(1), 1451–1462. <https://doi.org/10.47857/irjms.2025.v06i01.02470>
- Harun, M. A., & Lasriani, L. (2024). Manajemen Pendidikan Berbasis Multikultural dalam Mewujudkan Budaya Toleransi Peserta Didik. *Jurnal Manajemen Dan Budaya*, 4(1). <https://doi.org/10.51700/manajemen.v4i1.559>
- Harvey, P. F. (2023). “Everyone Thinks They’re Special”: How Schools Teach Children Their Social Station. *American Sociological Review*, 88(3), 493–521. <https://doi.org/10.1177/00031224231172785>
- Hikmat, R., Suryani, S., Yosep, I., & Jeharsae, R. (2024). Empathy’s Crucial Role: Unraveling Impact on Students Bullying Behavior - A Scoping Review. *Journal of Multidisciplinary Healthcare*, 17, 3483–3495. <https://doi.org/10.2147/JMDH.S469921>
- Junaid, N., Hidayanti, F., Rafli, M., & Arnidah, A. (2023). Development of 3S Cultural Webtoon Media (Sipakatau, Sipakalebbi, Sipakainge’) as an Effort to Prevent Bullying Among Makassar City High School Students. *Jurnal PENA : Penelitian Dan Penalaran*, 10(1). <https://doi.org/10.26618/jp.v10i1.10719>
- Kuo, H. H., Yang, S. W., & Kuo, Y. C. (2011). A character experiential learning system: An animated vignette creating tool. *Advanced Materials Research*, 267, 221–226. <https://doi.org/10.4028/www.scientific.net/AMR.267.221>
- Lusi Indriyani, Nana Sutarna, & Yani Fitriyani. (2021). Analisis Perubahan Interaksi Sosial Siswa Sekolah Dasar Di Masa Pandemi. *Jurnal Lensa Pendas*, 6(2).

<https://doi.org/10.33222/jlp.v6i2.1655>

- Mahartini, K. T., Suastra, I. W., Sudiana, I. N., Gading, I. K., & Sanjaya, D. B. (2024). Crafting cultural narratives: developing storybooks enriched with Bali's local heritage to improve students' understanding of spiritual and social attitude. *Edelweiss Applied Science and Technology*, 8(6), 9322–9327. <https://doi.org/10.55214/25768484.v8i6.3995>
- Mega Nur 'Afni, & Nadri Taja. (2022). Nilai-Nilai Pendidikan Karakter Religius dalam Film Omar dan Hana. *Jurnal Riset Pendidikan Agama Islam*. <https://doi.org/10.29313/jrpai.v2i1.986>
- Murti, D. K., Gunarhadi, & Winarno. (2020). Development of Educational Comic with Local Wisdom to Foster Morality of Elementary School Students: A Need Analysis. *International Journal of Educational Methodology*, 6(2), 337–343. <https://doi.org/10.12973/ijem.6.2.337>
- Ningsih, T. (2021). Pendidikan Karakter (Teori dan Praktik). In *Cetakan 1*.
- Nudiyanti, S. H., & Sudarmilah, E. (2023). Educational learning media by cross puzzles to improve social character in elementary school children. *AIP Conference Proceedings*, 2727, 141765. <https://doi.org/10.1063/5.0141765>
- Nugraheni, L., Suyitno, S., Waluyo, H. J., & Wardani, N. E. (2021). Language Character Value of Wasis Joyokusumo Folklore as Learning Media at Elementary School. *ACM International Conference Proceeding Series*, 3516920. <https://doi.org/10.1145/3516875.3516920>
- Ode, M. N. I. (2022). Peran Guru Dalam Implementasi Pendidikan Karakter Peduli Sosial Di Sekolah Dasar. *Taksonomi: Jurnal Penelitian Pendidikan Dasar*, 2(2). <https://doi.org/10.35326/taksonomi.v2i2.2653>
- Prawiyogi, A. G., Suparman, T., & Fitri, A. (2025). Folktales as a media for positive character building education in elementary schools (Case Study in Karawang, West Java, Indonesia). *Edelweiss Applied Science and Technology*, 9(1), 1219–1227. <https://doi.org/10.55214/25768484.v9i1.4378>
- Rina, N., Suminar, J. R., Damayani, N. A., & Hafiar, H. (2020). Character education based on digital comic media. *International Journal of Interactive Mobile Technologies*, 14(3), 107–127. <https://doi.org/10.3991/ijim.v14i03.12111>
- Ristiana, H., Mahmud, A., Suminar, T., & Wasino. (2025). Building morality: the role of character education, learning environment, and motivation. *Perspektiv Nauki i Obrazovania*, 73(1), 566–582. <https://doi.org/10.32744/pse.2025.1.36>
- Setyosari, P. (2020). *Metode Penelitian Pendidikan dan Pengembangan*. Kencana.
- Sianturi, Y. R. U. (2021). Pengaruh Penggunaan Gadget Terhadap Kemampuan Interaksi Sosial Siswa Sekolah Dasar. *Jurnal Kewarganegaraan*, 5(1). <https://doi.org/10.31316/jk.v5i1.1430>

- Siswanto, M. B. E., Suryanti, Nursalim, M., & Wahida, S. N. (2024). Development of transformative reflexive empowering character building learning model: a case study of Pancasila student profile at elementary schools. *Perspektiv Nauti i Obrazovania*, 72(6), 458–469. <https://doi.org/10.32744/pse.2024.6.28>
- Solihah, S. A. S., Suherman, S., & Fadlullah, F. (2022). Pengembangan Media Komik Digital Bermuatan Pendidikan Karakter Materi Membangun Persatuan dan Kesatuan pada Mata Pelajaran PPKn di Sekolah Dasar. *Edukatif: Jurnal Ilmu Pendidikan*, 4(4). <https://doi.org/10.31004/edukatif.v4i4.3156>
- Sugiyono. (2016). Metode Penelitian Kuantitatif Kualitataif dan Kombinasi (Mixed Methods). *Journal of Chemical Information and Modeling*, 53(9).
- Sutarti, T., Asrowi, Triyanto, & Ramli, M. (2025). The potential of social pedagogy-based learning models to enhance student tolerance: An exploratory study. *Multidisciplinary Science Journal*, 7(4), 2025210. <https://doi.org/10.31893/multiscience.2025210>
- Wulan, A. N., Subyantoro, S., & Wagiran, W. (2023). Prototipe Media Pembelajaran Bahasa Indonesia Berbasis Komik Audio Visual Bermuatan Nilai Antikorupsi untuk Siswa SMA. *GHANCARAN: Jurnal Pendidikan Bahasa Dan Sastra Indonesia*. <https://doi.org/10.19105/ghancaran.vi.11725>
- Yulianto, F., Winarno, & Mintasih Indriayu. (2023). Audiovisual Learning Media Based on Local Wisdom Values of the Baduy Tribe Community to Grow Student Character. *International Journal of Elementary Education*, 7(1). <https://doi.org/10.23887/ijee.v7i1.54930>
- Yusuf, F. A., & Fajari, L. E. W. (2025). Character Quality Development in Future-Oriented Education: A Case Study of Indonesian Nature-Based Schools. *Educational Process: International Journal*, 14, 22521. <https://doi.org/10.22521/edupij.2025.14.29>