THE EFFECT OF ANIMATED VIDEOS ON THE IMPACT OF BULLYING ON THE LEVEL OF KNOWLEDGE AMONG PRIMARY SCHOOL CHILDREN

Ega Budiargo[1], Hani Risnawati[2*], Kresna Agung Yudhianto[3]
Bachelor of Nursing, Duta Bangsa University[123]
*Correspondence Email : Hani_risnawati@udb.ac.id

ABSTRACT

Background: Bullying behaviour amongst primary school-aged children remains a serious public health issue, whilst children's level of knowledge regarding the effects of bullying remains relatively low. Objective: This study aims to determine the effect of an animated video on the effects of bullying on the level of knowledge amongst primary school-aged children at Godog 01 State Primary School. Methods: This is a quantitative study with a quasi-experimental design using a pre-post test with a control group. The study sample comprised 50 respondents selected using simple random sampling and divided into an intervention group and a control group. The instrument used was a knowledge questionnaire that had been tested for validity and reliability. Data analysis utilised the non-parametric Wilcoxon and Mann-Whitney tests. Results: The intervention group experienced a significant increase in knowledge levels after being shown the animated video. The Wilcoxon test for the intervention group showed p = 0.002 (p < 0.05), whilst for the control group, p = 0.564 (p > 0.05). The Mann-Whitney test revealed a significant difference between the two groups with p = 0.004, with a mean rank of 30.72 for the intervention group and 20.28 for the control group. Conclusion: Animated videos have a significant effect on improving primary school children's knowledge of the impact of bullying and can be used as one of the educational media in school health programmes.

KEYWORDS *Primary School Children, Bullying, Level of Knowledge, Animated Video.*

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INTRODUCTION

Children of primary school age, between 7 and 12 years old, undergo rapid linguistic, emotional and social development, as well as physical growth. At this stage, children begin to adapt to the school environment and build relationships with their peers. School should be a safe, comfortable environment that supports pupils' mental, physical, emotional and social development (Akimal et al., 2022). Bullying is the repeated abuse of power through aggressive or harmful actions directed at weaker individuals or groups. Bullying can have psychological, social and academic consequences. Victims may experience anxiety, stress, low self-esteem, social withdrawal, as well as a decline in motivation and academic performance (Elsya, 2022; Mahardika, 2024).

Bullying remains a problem amongst school-age children. OECD data used in the study indicates that the incidence of bullying in Indonesia stands at 41.1 per cent. In Sukoharjo Regency, the number of bullying victims recorded in the research sources rose from 21 children in 2022 to 32 pupils in 2023 (Pramesti et al., 2025). This situation highlights the need for educational and preventative measures starting from primary school age. Knowledge is a person's understanding of an object (Ridwan et al., 2021). Children's knowledge can be enhanced through learning materials that are appropriate to their developmental characteristics. Animated videos combine visual and audio elements, enabling them to present information in a way that is engaging, concrete and easily understood by children (Apriansyah, 2020; Cholik & Umaroh, 2023; Nurfaiziah et al., 2024).

A recent incident involving bullying of elementary school students occurred on February 7, 2023, when a 9-year-old child was allegedly bullied by two third-grade students, resulting in a broken bone. In addition, a second-grade elementary school girl suffered permanent blindness in her right eye after allegedly being stabbed by an older classmate, and there was a case of a student who set fire to a school in Temanggung because he was frequently bullied. This indicates that bullying in Indonesia has reached alarming levels and is occurring as early as elementary school. Approximately 72 children in the city of Serang have experienced bullying at various educational levels, ranging from elementary school to junior high school. The impact is also evident in the dropout rate, which currently stands at around 133 children, with the potential to continue rising (Suwardiman et al., 2024).

Providing education through animated videos optimizes students' engagement in receiving information. Furthermore, animated videos that incorporate interactive audiovisual elements are considered more effective; however, their use in bullying prevention education has not yet been extensively studied, particularly in junior high school settings. Previous research has generally focused on bullying behavior or the incidence of bullying, whereas studies on enhancing knowledge of bullying prevention as a promotive and preventive measure remain relatively scarce. On the other hand, few studies have been conducted on students at Mts Waru Sukoharjo, so local data on the effectiveness of animated video education in enhancing knowledge of bullying prevention remains limited. The use of animated video media as a health education method to improve

knowledge of bullying prevention has not yet been optimized. This study aims to determine the effect of animated video education on knowledge of bullying prevention among students at Mts Waru Sukoharjo (Khoriyani, 2025).

Primary school-aged children are at the concrete operational stage and therefore tend to find it easier to understand information presented visually and closely linked to their everyday experiences. Animated videos on bullying can illustrate examples of behaviour, its consequences, and prevention methods in a more concrete and engaging manner (Kamal et al., 2025). Previous research has also demonstrated the benefits of animated videos in bullying education; however, studies specifically examining the impact of animated videos on the consequences of bullying regarding primary school children's knowledge levels remain limited.

The results of a preliminary study at SDN Godog 01 revealed instances of verbal bullying, such as mocking parents' names, giving nicknames, preventing friends from joining a group, and manipulating friendships. Based on these findings, this study was conducted to investigate the effect of animated videos on the impact of bullying on the knowledge levels of primary school children at SDN Godog 01.

RESEARCH METHOD

This study is a quantitative study with a quasi-experimental design using a pre-post test with a control group. The intervention group was shown an animated video on the effects of bullying, whilst the control group was not shown the animated video. Both groups underwent knowledge assessments before and after the study. The study population comprised all pupils at SDN Godog 01, totalling 138 children. The sample size was calculated using Lemeshow's formula and sample adjustment, resulting in 50 respondents. The sampling technique employed was probability sampling using a simple random sampling approach. Respondents were divided into 25 children in the intervention group and 25 children in the control group. Inclusion criteria included being an active pupil at SDN Godog 01, being able to read fluently, being aged 7–12 years, and being willing to participate as a respondent. The research instrument consisted of a questionnaire on knowledge of bullying comprising 13 true/false questions following a validity test. Of the 15 items tested, 13 were deemed valid and 2 were deemed invalid. The reliability test yielded a Cronbach's Alpha of 0.880. Knowledge levels were categorised as good (>76–100 per cent), adequate (56–75 per cent) and poor (<55 per cent). The intervention utilised an animated video covering the definition, forms, causal factors, impacts and prevention strategies for bullying.

RESULT AND DISCUSSION

Result

Level of Knowledge Before and After the Intervention

In the intervention group, before the animated video was shown, the majority of respondents fell into the 'fair' category (18 people, 72.0 per cent) and the 'poor' category (7 people, 28.0 per cent). After the animated video was shown, the number in the 'good'

category increased to 4 people (16.0 per cent), the ‘adequate’ category to 19 people (76.0 per cent), and the ‘poor’ category decreased to 2 people (8.0 per cent).

Table 1. Level of Knowledge Intervention Group

Category	Pretest (n=25)	Posttest (n=25)
Good	0 (0,0%)	4 (16,0%)
Adequate	18 (72,0%)	19 (76,0%)
insufficient	7 (28,0%)	2 (8,0%)
Total	25 (100%)	25 (100%)

In the control group, prior to the assessment, there were 5 respondents (20.0%) with ‘adequate’ knowledge and 20 respondents (80.0%) with ‘insufficient’ knowledge. In the post-test, the number of respondents in the ‘adequate’ category fell to 3 (12.0%) and the number in the ‘insufficient’ category rose to 22 (88.0%), whilst the number in the ‘good’ category remained at 0.

Table 2. Level of Knowledge Control Group

Category	Pretest (n=25)	Posttest (n=25)
Good	0 (0,0%)	0 (0,0%)
Adequate	5 (20,0%)	3 (12,0%)
insufficient	20 (80,0%)	22 (88,0%)
Total	25 (100%)	25 (100%)

The Effect of Animated Videos on Knowledge Levels

The results of the Wilcoxon Signed-Rank Test for the intervention group showed $p = 0.002$ ($p < 0.05$), indicating a statistically significant difference between knowledge levels before and after the animated video was shown. In contrast, the control group yielded $p = 0.564$ ($p > 0.05$), indicating no statistically significant change between the pre-test and post-test.

Table 3. Level of Knowledge Control Group

Analysis	Group	p-value	Notes
Wilcoxon	Intervention	0,002	Significant
Wilcoxon	Control	0,564	Non Significant
Mann-Whitney U	Interventions and Control	0,004	Significant

The Mann-Whitney test revealed a significant difference in knowledge levels between the intervention group and the control group, with $p = 0.004$ ($p < 0.05$). The mean rank of the intervention group, at 30.72, was higher than that of the control group, at 20.28. Calculation of the effect size using a Z-value of -2.881 and $N = 50$ yielded $r = 0.41$, which is categorised in this thesis as a moderate effect.

Discussion

The respondents’ ages ranged from 7 to 12 years, consistent with the characteristics of primary school-aged children. At this stage, cognitive abilities, emotional development and social skills are maturing, enabling children to begin understanding information and distinguishing between good and bad behaviour. Visual and interactive media can help children understand the material in a more concrete way (Zakiyah et al., 2024). Changes in knowledge levels within the intervention group indicate that animated videos can serve as

a suitable educational medium for primary school-aged children. The combination of moving images, sound, text, colour and narrative makes information about bullying more engaging and helps children understand the material (Apriansyah, 2020; Nurfaiziah et al., 2024). These findings are consistent with research on the use of animated videos for anti-bullying education, which shows that audiovisual media can enhance pupils' understanding (Nurfaiziah et al., 2024; Nurlaela et al., 2023).

The absence of any significant change in the control group indicates that, during the study period, there was no significant increase in knowledge without the provision of the animated video intervention. Descriptively, the 'inadequate' category even increased from 80.0 per cent to 88.0 per cent. This situation highlights the importance of reinforcing information through educational media that is appropriate to children's characteristics. Statistically significant differences between groups, as determined by the Mann-Whitney test, confirm that changes in knowledge within the intervention group were associated with the use of animated videos. These findings are consistent with research showing that audiovisual materials can enhance the effectiveness of learning by engaging both the senses of sight and hearing simultaneously (Safitri et al., 2024). Consequently, animated videos can be utilised as one of the educational media in school health education to improve children's knowledge regarding the impacts of bullying (Safitri et al., 2024; Suwardiman et al., 2024).

In practical terms, animated videos can serve as an easy-to-use medium in school health education activities. The material presented covers the definition, forms, causes, impacts and prevention strategies for bullying, enabling children to acquire information they can use to recognise and respond to bullying behaviour.

CONCLUSION

This study shows that there was a significant change in the level of knowledge in the intervention group following the screening of an animated video on the effects of bullying, with a Wilcoxon test p-value of 0.002. The control group showed no significant change ($p = 0.564$). The Mann-Whitney test revealed a significant difference between the intervention and control groups ($p = 0.004$), with mean ranks of 30.72 and 20.28 respectively. The effect size ($r = 0.41$) was categorised as moderate based on the criteria used in this thesis. Thus, the animated video had an effect on the level of knowledge of primary school-aged children regarding the effects of bullying amongst the study respondents at SDN Godog 01.

REFERENCES

Akimal, J. K., Sari, D. V., Keperawatan, A., Iskandar, K., & Lhokseumawe, M. (2022). The Correlationship Of School Age Children Characteristics In Bullying Occurrence At SD Negeri 2 Cot Girek, Aceh Utara Regency.

Apriansyah, M. R. (2020). Pengembangan Media Pembelajaran Video Berbasis Animasi Mata Kuliah Ilmu Bahan Bangunan. Jurnal Pensil, 9(1), 9–18.

Cholik, M., & Umaroh, S. T. (2023). Pemanfaatan Video Animasi Sebagai Media Pembelajaran Di Era Digital. JIPI, 8(2), 704–709.

Chumairo, M., et al. (2025). Optimalisasi Program Edukatif Interaktif Anti-Bullying Untuk Menanamkan Nilai Toleransi Dan Empati Sejak Dini.

Elsya, P. (2022). Kasus Bullying Di Lingkungan Sekolah: Dampak Serta Penanganannya. Keguruan: Jurnal Penelitian, Pemikiran Dan Pengabdian, 10, 24–30.

Kamal, F. A., et al. (2025). Pengaruh Pendidikan Kesehatan Dengan Media Video Animasi Terhadap Pengetahuan Dan Sikap.

Karimah, N., Andayani, S. A., & Munir, Z. (2025). Pengaruh Edukasi Tentang Bahaya Bullying Dengan Metode Audiovisual Terhadap Pengetahuan Dan Sikap Remaja. Trilogi: Jurnal Ilmu Teknologi, Kesehatan, Dan Humaniora, 6(3), 90–100.

Mahardika. (2024). [Sumber mengenai dampak akademis bullying yang digunakan dalam skripsi].

Mapitara. (2024). Gambaran Jenis Perilaku Bullying Pada Anak Usia Sekolah Dasar. 12(2), 505–514.

Melati, E., et al. (2023). Pemanfaatan Animasi Sebagai Media Pembelajaran Berbasis Teknologi Untuk Meningkatkan Motivasi Belajar. Journal On Education, 6(1), 732–741.

Muryani, S., Wibowo, N. Y., Khodijah, K., & Rahmawati, I. A. (2023). Perilaku Bullying Dan Aktivitas Belajar Pada Anak Usia Sekolah Di SD Suradadi Kabupaten Tegal. JIK Jurnal Ilmu Kesehatan, 7(2), 483.

Nurfaiziah, H., et al. (2024). Pengembangan Video Animasi Tentang Pencegahan Perilaku Bullying Di Sekolah Dasar. Innovative: Journal Of Social Science Research, 4(3), 8537–8547.

Nurlaela, A., Nugraha, M. F., Nurfitriani, M., et al. (2023). Pengembangan Video Pembelajaran Stop Bullying Untuk Meningkatkan Pemahaman Siswa.

Nurida, S. W., Sari, P., & Azhari, A. (2024). Implementasi Sosialisasi Anti-Bullying Sebagai Upaya Pencegahan Tindakan Bullying Di Sekolah Dasar Negeri Bandar Lor Kota Kediri.

Pradana, C. D. E. (2024). Pengertian Tindakan Bullying, Penyebab, Efek, Pencegahan Dan Solusi. Jurnal Syntax Admiration, 5(3), 884–898.

Pramesti, Z. E., Handayani, S. L., & Ninawati, M. (2025). Edukasi Anti Bullying Dan Praktik Pembuatan Poster Melalui Platform Canva Di SDN Bakipandeyan 01. Jurnal Solma, 14(2), 2796–2803.

Ridwan, M., Syukri, A., & Pengetahuan, I. (2021). Studi Analisis Tentang Makna Pengetahuan Dan Ilmu Pengetahuan Serta Jenis Dan Sumbernya. 04(01), 31–54.

Safitri, M., Wirakhmi, I. N., & Ramdhani, F. N. (2024). Edukasi Bullying Sebagai Upaya Meningkatkan Pengetahuan Dan Menurunkan Kejadian Bullying Pada Anak Di SD Negeri Karangsoka Kembaran. 3(1), 4–11.

Sugiyono. (2023). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. ALFABETA.

Suwardiman, D., et al. (2024). The Effect Of Audiovisual Health Education On Friendship Behavior And The Dangers Of Bullying In Elementary School Students. Journal Of Nursing Studies, 2(1), 11–18.

Zakiyah, S., et al. (2024). Perkembangan Anak Pada Masa Sekolah Dasar. DIAJAR: Jurnal Pendidikan Dan Pembelajaran, 3(1), 71–79.

Author's short biography

Authors Name:

Name : Ega Budiargo

Affiliation : Universitas Duta Bangsa Surakarta

Phone Number : 085866499240

Email : budiargoega@gmail.com

Nursing graduate from Universitas Duta Bangsa Surakarta with a strong commitment to pediatric mental health. Passionate about research in bullying prevention and psychological support, dedicated to fostering safe and supportive environments for children through evidence-based practice.

Authors Name:

Name : Ns. Hani Risnawati, S.Kep., M.N.Sc

Affiliation : Universitas Duta Bangsa Surakarta

Phone Number : 087736433014

Email : hani_risnawati@udb.ac.id

professional nurse specializing in pediatric nursing, holding a Master of Nursing degree with a concentration in Child Health Nursing. She has a specific research and clinical interest in the care of children with chronic illnesses, focusing on both clinical and psychosocial aspects, alongside active involvement in community service related to pediatric nursing.

Authors Name:

Name : Kresna Agung Yudhianto, S.Psi., M.Psi.

Affiliation : Universitas Duta Bangsa Surakarta

Phone Number : 085728959697

Email : kresna_agung@udb.ac.id

This diverse range of courses spans nursing, midwifery, and psychology, offering a comprehensive understanding of human behavior, social structures, and professional communication. The curriculum prepares students across health and social sciences by covering essential topics such as medical ethics, therapeutic communication, psychological development across various contexts (from clinical to educational and industrial settings), and the impact of culture and society on health and well-being.