

Awakening Anti-Bullying Awareness through the "Find Friends" Game in the Boarding School Environment

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ABSTRACT

Background: Indonesia ranks 4th in violence cases and 2nd in bullying cases worldwide, following Japan. Bullying, increasingly common in school environments, has become a public health issue. Alarmingly, bullying incidents have infiltrated even morally-focused educational settings like Islamic boarding schools. This necessitates effective interventions to raise awareness and curb bullying. The interactive edutainment game "Find Friends," designed for group play, holds promise as a tool to build awareness and encourage positive behavior change in a fun, engaging manner. **Objectives:** This study aims to analyze the effectiveness of the "Find Friends" game in increasing anti-bullying awareness among students at an Islamic boarding school and promoting positive behavioral changes. **Methods:** A pre-experimental one-group pretest-posttest design was used in this intervention study, conducted in August 2024 at Pondok Pesantren X, Sukoharjo District. All 31 junior high school students participated as respondents. Data were collected through a checklist assessment and analyzed using the Wilcoxon test. **Results:** The findings showed no statistically significant difference in students' knowledge and attitudes toward bullying behavior, although there was a 4.8% increase in the average knowledge scores from pre-test to post-test on anti-bullying awareness. **Conclusion:** Although "Find Friends" demonstrated potential in boosting anti-bullying awareness, students' knowledge levels on bullying behavior did not significantly change in this study. Factors such as pre-existing knowledge from school may have influenced the results. Future studies with larger samples and extended intervention periods are recommended to explore the deeper impact of the game and to refine its methods for enhanced effectiveness.

Keywords: Bullying, Edutainment, Pondok Pesantren, Boarding School

INTRODUCTION

Bullying, in Bahasa Indonesia, refers to 'perundungan', refers to violent behavior that puts the victim in a helpless and defenseless position due to an imbalance of power (Damri et al., 2020). Bullying is a process, method, or abusive action carried out by someone with a certain power to harm or intimidate a vulnerable individual, causing them to comply with the bully's demands. Acts of violence can be physical (hitting, kicking), verbal (insulting, mocking), and/or psychological (Borualogo & Casas, 2022). This has become a health issue among children and adolescents as well as

relevant parties because it can harm the mental health of future generations (Subroto, 2021), social life and education (Abdillah et al., 2020), even death (Damri et al., 2020). The increasing number of incidents has placed Indonesia as the fourth highest in terms of violence cases. Meanwhile, for bullying cases, Indonesia ranks second after Japan (Susanti et al., 2018).

The education system in Indonesia is facing a "problem" due to the high rate of school bullying (Subroto, 2021), therefore, it requires a lot of attention from various relevant parties, such as schools, the Ministry of Education, parents, the Ministry of Health, and

psychologists, because schools are a formal means of teaching and learning process, and they influence the quality of life of future generations (Yusuf et al., 2022). Bullying in schools can be direct, such as physical or verbal attacks, indirect (also known as relational bullying), such as social exclusion and spreading rumors, or it can occur online (Salmivalli et al., 2021). For the victims of bullying, school is no longer a comfortable and safe place to pursue knowledge (Abdillah et al., 2020). Cases of bullying in schools are reported to be more prevalent among elementary school students than among middle school or high school students (Borualogo & Gumilang, 2019). This creates a "psychological shadow" on the victim, thereby reducing motivation to attend school and affecting their academic performance (Wakhid et al., 2019).

The prevalence of bullying in Indonesia is reported to be 40% according to the Global School-based Student Health Survey (GSHS) among adolescents (aged 13-15 years) (Munira et al., 2023). The Indonesian Child Protection Commission (KPAI) reported a total of 1,051 cases of violence in 2013, and 70% of those cases, or 736 cases, were school bullying (Susanti et al., 2018). Research in three major cities in Indonesia (Yogyakarta, Surabaya, and Jakarta) indicates that school violence has a prevalence of 76.9% in high schools and 66.1% in junior high schools, in the forms of psychological violence (isolation, exclusion), verbal violence (mocking), and physical violence (hitting). The highest to lowest incidence of violence occurs in Yogyakarta (77.5%), Jakarta (61.1%), and Surabaya (59.8%) (Putri, 2022). The research in Yogyakarta involving middle school and high school students shows that the types of bullying include physical (hitting, kicking, pulling ears), verbal (mocking, calling others by different names), relational (isolating, intimidating), and cyber (negative comments on social media, posting photos, and stories) (Waliyanti et al., 2018). A very concerning thing also happened in the boarding school environment (Waliyanti & Swesty, 2021), including Islamic boarding schools, which are important institutions in shaping students' characteristics and religious education (Hafidzi et al., 2024). Research at the Islamic boarding school shows that

bullying behavior is more common among male students with dominant verbal, physical, and indirect bullying behavior. (Fadhilah et al., 2021).

Preventing bullying requires a comprehensive approach with effective strategies. Many studies focus on implementing school-based interventions aimed at reducing bullying incidents among students (Borualogo et al., 2022; Hikmat et al., 2024; Le et al., 2021; Peng et al., 2022; Smith, 2016), and reported that intervention and prevention programs can be effective in reducing bullying in schools (Gaffney et al., 2019). Other research has used combination of education and entertainment can be one of the methods that can be implemented in efforts to prevent bullying, supported by research in Lamogan. By applying group counseling guidance using the game of snakes and ladders, it is possible to enhance flashcards as an educational and entertainment medium, which can also enhance students' knowledge about bullying (Suriah et al., 2024). Based on the analysis of the situation and conditions, the *Find Friends* card game was we designed to incorporate both cognitive and affective elements. The game features picture cards that provide information about bullying, including its different types, the traits of bullies and victims, and the effects of bullying on both. Additionally, to promote awareness, *Find Friends* includes guidance on how to respond when witnessing bullying and the appropriate actions to take when someone is either a witness or a victim of bullying.

Based on the above facts, further research was conducted to assess the effectiveness of edutainment as a method for preventing bullying in schools, and to ensure that this method can be implemented effectively, thereby positively impacting student awareness. *Find Friends Card* is an edutainment in the form of flash cards that we created as an effort to reduce bullying cases among adolescents, especially among students because it can be done as a form of edutainment learning in schools. Edutainment *Find Friends Card* hopes to be able to increase knowledge and attitudes about bullying. *Find Friends Card* features 90 cards designed to foster connection and conversation. Among them, 10 are flip cards, each with a

thought-provoking question meant to inspire meaningful discussions, encouraging players to share their thoughts, experiences, and perspectives. The other 80 cards are response cards, which contain answers or statements that align with the flip cards' questions. Players draw a response card and match it with the corresponding flip card, offering their interpretations or reactions.

In Find Friends Card, a game can be played by 8 participants and 1 facilitator. Gameplay is led by a host who holds the flip cards, while each player receives a set of response cards each 7 cards. The host flips over a flip card and reads the

question aloud, prompting players to select a response card from their hand that they believe best matches the question. Once everyone has submitted their responses, the host reads them aloud and engages the group in discussion. The game continues until one player successfully plays all of their response cards, with the first player to do so being declared the winner. This dynamic encourages both thoughtful reflection and lively conversation as players interact to match their answers to the flip cards.



Figure 1. Flip card



Figure 2. Response card

In this study aimed to determine the effectiveness of the game "Find Friends" in increasing awareness among students at the Islamic boarding school regarding bullying behavior.

METHODS

This intervention study used a pre-experimental method with a one-group pretest-posttest design to measure the effectiveness of the "Find Friends" game in enhancing anti-bullying awareness at the Islamic boarding school. The research population consisted of all junior high school students at Pondok Pesantren X, in Sukoharjo District, totaling 31 individuals. Total sampling technique was employed to include the entire population in this study.

The research was conducted in three stages. The first stage was the pretest to measure the initial knowledge and attitudes of students towards bullying. The second stage was the intervention, where students were given the "Find Friends" game to increase their

awareness. This game was presented in the form of educational cards that discuss bullying behavior, its impact, and prevention through interactive approaches. The final stage was the posttest; measurements were taken again to evaluate changes after the intervention.

The data collected through the checklist instrument regarding knowledge and attitudes towards bullying were analyzed using the Wilcoxon test to determine significant differences between pretest and posttest scores. Statistical analysis was conducted using SPSS, and the comparison of pretest-posttest values was used to determine the impact of the game on students' anti-bullying awareness.

This study received approval of Ethics Committee (96/EA/KEPK/2023), which was released on 16 April 2024 by Faculty of Public Health, Universitas Airlangga, Surabaya, Indonesia

RESULTS AND DISCUSSION

Table 1. Respondent Characteristics

	Category	Frequency	Percentage (%)
Age (y.o)	12	7	23
	13	8	26
	14	15	48
	15	1	3
Grade	VII	13	42
	VIII	7	23
	IX	11	35
Gender	Male	31	100
	Female	0	0
Total		31	100

The study involved a total of 31 respondents, all of whom were male (100%). Respondents were distributed across different age groups, with the majority being 14 years old (48%), followed by 13 years old (26%), 12 years old (23%), and 15 years old (3%).

In terms of academic grade, most respondents were from grade VII (42%), followed by grade IX (35%), and grade VIII (23%). The absence of female respondents highlights a gender homogeneity within the sample, which may reflect the demographic characteristics of the study setting or sampling approach.

Table 2. Results of preventive intervention using Find Friends edutainment

Variable	Pre-test Score	Post-test Score	p-value
Knowledge	70.6	75.2	0.184
Attitude	75.2	85.2	0.527
Total	78.2	79.6	0.253

Pre-test score was 70.6, and the post-test score increased slightly to 75.2. The p-value of 0.184 suggests that this

change was not statistically significant. The pre-test in attitude score was 75.2, and it improved to 85.2 after the

intervention. However, the p-value of 0.527 indicates that this change was not statistically significant. The overall score increased from 78.2 to 79.6. With a p-value of 0.253, this result is also not statistically significant.

Despite the non-significant findings, the increase in scores from pre-test to post-test suggests that the intervention could have a positive, albeit small, impact on the participants. This is particularly noticeable in the attitude variable, where the score increased by 10 points. While the p-value does not confirm this improvement statistically, it might indicate the potential of the "Find Friends" edutainment intervention to influence participant attitudes.

The effect of edutainment sessions on students' knowledge and attitudes could not be apparent if they are too brief or infrequently held. It normally takes time for knowledge to be internalized to learn effectively. Students' enthusiasm and involvement in edutainment programs vary widely. Less motivated students might not get the most out of the program, which would

lower its overall efficacy (Listiana, Suryoputro and Sriatmi, 2018).

The "Find Friends" edutainment intervention showed slight improvements in knowledge and attitudes among participants, but the changes were not statistically significant. Further research with a larger sample size, longer duration, and potential program modifications may yield clearer evidence of the intervention's effectiveness. The increases in scores, especially for attitude, are promising and could indicate that with refinement, this approach could become more impactful.

Table 3. Average Scores of Pre-test and Post-test.

Group	Mean
Pre	158,23
Post	159,68

Based on the descriptive results, the average pre-test score is 15.823, and the average post-test score has increased to 15.968. This increase in average scores indicates a positive change in participants' awareness after participating in the "Find Friends" intervention.

Table 4. Ranks difference between Pre-test and Post-test total score.

		N	Mean Rank	Sum of Ranks
Pre-test	Negative Ranks	6 ^a	15.33	92.00
Post-test	Positive Ranks	16 ^b	10.06	161.00
	Ties	9 ^c		
	Total	31		

In the ranking test, the results of the pre-test and post-test show that out of 31 participants, 6 experienced a decrease in scores, 16 experienced an increase in scores, and 9 did not

experience any change. This indicates that more participants experienced an increase in awareness than those who experienced a decrease.

Table 5. Ranks difference between Pre-test and Post-test of Knowledge and Attitudes.

		N	Mean Rank	Sum of Ranks
Pre-test of knowledge	Negative Ranks	7 ^a	8.93	62.50
	Positive Ranks	12 ^b	10.63	127.50
Post-test of knowledge	Ties	12 ^c		
	Total	31		
Pre-test of attitude	Negative Ranks	9 ^d	13.50	121.50
Post-test of attitude	Positive Ranks	11 ^e	8.05	88.50
	Ties	11 ^f		
	Total	31		

In terms of knowledge, 7 participants experienced a decrease, while 12 participants showed an improvement. Additionally, 12 other participants did not experience any

change in their knowledge level. This increase reflects the positive impact of the game in enhancing knowledge about bullying and how to address it.

In terms of attitude, the results indicate that 9 participants experienced a decrease in their attitude towards bullying, while 11 participants showed an improvement. The remaining 11 participants did not experience any change in their attitude. Despite some experiencing a decrease, the number of participants who showed improvement remains higher, demonstrating the game's success in building a stronger anti-bullying attitude.

Edutainment is defined as a communication strategy based on theory that intentionally incorporates educational and social issues into the creation, production, processing, and dissemination of entertainment programs, with the aim of achieving desired changes in individuals, communities, institutions, and society among the targeted media users (Wang, 2009). Based on the analysis of the situation and conditions that have been outlined, the card game Find Friends was designed to include cognitive and affective components. The game was implemented in the form of picture cards, containing knowledge about bullying, types of bullying, characteristics of bullies and victims, and the impact of bullying on both perpetrators and victims. Meanwhile, in efforts to raise awareness, Find Friends also addresses appropriate actions to take when witnessing bullying in one's environment, as well as actions to take when one is a witness or victim of bullying.

The edutainment approach of Find Friends provides an opportunity for students to play and encourages them to participate in activities that allow reflection on their knowledge and feelings about bullying. The goal of this approach was to help students enhance their understanding and awareness of bullying. Interventions in games have the potential to prevent bullying incidents by increasing empathy in the children who receive the intervention (Kurniawan *et al.*, 2024). Through gaming media, empathy and social skills can be enhanced, which are important for preventing expressions of hatred, including verbal bullying (Ordóñez-Olmedo *et al.*, 2022).

The results of the analysis indicated that the card game Find Friends can enhance the knowledge of students. These findings align with research on the development of bullying prevention games

for teenagers using board games and flashcards containing questions about bullying. The research results mentioned changes in cognitive function improvement among the respondents (Effendi *et al.*, 2021). The card game "Waterfall Card" used as an educational tool for bullying prevention can increase students' knowledge about bullying with an improvement rate of 92.5% (Damarningrum, 2024). Increased knowledge about bullying is expected to contribute to reducing bullying incidents among students in the boarding school environment.

The results of the analysis test showed that the card game "Find Friends" may increase students' awareness of bullying. Interventions in the "Find Friends" game, including empathy training and social skills, can facilitate effective recognition and handling of bullying situations. Implementation of this strategy was expected to create a safer environment free from bullying actions and behaviors.

CONCLUSION

Overall, this research showed that the game "Find Friends" was able to increase awareness about anti-bullying, both in terms of knowledge and attitude. This game has proven to be an effective approach and can be used as one of the methods to create a safer and more inclusive environment in the boarding school. The significant improvement in most participants indicated that this interactive method successfully facilitates positive change in addressing bullying issues. For future research, it is recommended to develop health promotion media based on edutainment, such as flashcards or other formats. This development should consider the duration of playtime, the number of participants involved, and the strategies for delivering the content to the target audience. These considerations aim to ensure that the media used can achieve significant results in enhancing participants' understanding and awareness of the health issues addressed.

AUTHOR CONTRIBUTIONS

Tausyiah Rohmah Noviyanti: Conceived the research idea, developed, and

designed the "Find Friends" game. **Riska Oktaviana:** Contributed to the development of the research idea and assisted in designing the "Find Friends" game.

Aprillia Nurhayati: Assisted in data collection, intervention implementation, and drafting the research results. **Asma Nadia:** Supported data analysis and translated the article into English. **Eva Ardiana:** Contributed to writing the introduction section of the article. **Ira Nurmala:** Supervised and guided the article writing process.

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