

# Effectiveness of School-Based Online Game Prevention among Students of SMPN 1 Kuala Nagan Raya

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## Abstract

Behavior playing online games is threat the biggest for health society . Online games on junior high school students , such as Mobile Legends, Free Fire, and PUBG are very popular However risky trigger addiction , decline performance academic , disturbance mental health ( anxiety , aggressiveness ), and problem physical ( pattern Sleep disturbed ). Behavior playing online games no only impact bad for health , but rather Also on aspect social And academic . The Aceh government has do efforts to make this online game the more controlled , including with issued rule from Assembly Deliberation Aceh Ulema (MPU) regarding prohibition playing online games in fatwa number 3 of 2019 concerning law playing PUBG games and The like is forbidden according to Islamic jurisprudence which has established , however , the phenomenon play this online game the more increased . The purpose of this study is to know effectiveness prevention online game addiction school on Students of SMPN 1 Kuala Nagan Raya . Research This use quasi- experimental method with pre test – post test with control group non equivalent design. Intervention given every day for 2 weeks on students at SMPN 1 Kuala Nagan Raya. Amount sample in study This namely 78 students For each group . Data analysis conducted in the form of analysis descriptive And inferential . From the results study obtained results that Of the 156 respondents , identified that as much as 82.7 % active play online games with location at school , room And in place general . Cultural video approach A ceh based school proven effective in increase knowledge to prevention of online games but not effective in increase attitude to prevention of online games based on school on Students of Kuala Nagan Raya 1 Middle School .

**Keywords:** Acehnese cultural videos ; school-based ; prevention ; online games.

## Introduction

Online gaming has negative impacts such as fostering aggressive behavior influenced by violent genres, causing players to lose track of time, and fostering antisocial behavior. Every individual should be aware of technological advances in online gaming to positively impact online gaming (Hendra, S. 2015). The

proliferation of online games and their easy access actually have a negative impact, namely online addiction. Online gaming addiction can lead to psychological and mental health problems, as well as visual impairments. Furthermore, online game addicts tend to forget about interacting with their social life (Yohanis Bastian Lete et al. 2022).

Online gaming addiction has caused Gen Z children to be far more temperamental than previous generations. This can be seen in the phenomenon of Gen Z children playing online games, where they become easily angered when they lose (Asri, 2022). If this continues, temperamental traits can develop without anyone realizing it, and Gen Z children currently have poor anger management (S, 2024; S, 2024).

Excessive gaming activity can have a negative impact on the physical, mental, and social health of adolescents, causing eye fatigue, impaired posture, lack of sleep, stress, anxiety, depression, and aggressive behavior (Ministry of Elementary and Secondary Education, 2024). Video is an engaging medium often used to provide information for better health behavior change. According to Adam et al., the use of animated videos with effective cultural introduction can increase the acceptance of video-based health communication interventions across the globe (Yosua, 2023).

In Aceh, several studies have been conducted to reduce school-based online game addiction, such as that conducted by Nurul Maulidya Rusfa et al. on Online Game Addiction in Adolescents at SMAN 4 Banda Aceh, but have not been very effective and have not found the right method (Fithria, F, 2023). On the other hand, the Acehnese people also have local wisdom that emphasizes the importance of maintaining speech, comfort and security. One example is the philosophy of "*adat bak poteumeuruhom, hukom bak syiah kuala*", which emphasizes the importance of maintaining customs and religious laws in everyday life. Thus, preventing online gaming behavior in Aceh is not only about health aspects, but also an effort to preserve highly respected cultural and religious values.

Based on these problems, this research is important to be conducted to determine the effectiveness of school-based online game addiction prevention with Acehnese cultural videos on students of SMPN 1 Kuala Nagan Raya.

## Methods

This study used a quasi-experimental pre-test-post-test design with a non-equivalent control group design, a research method that uses two groups: a treatment group and a control group, with unequal sample characteristics between the two groups. The *pre-test* and *post-test results* for both groups were measured and compared to assess any differences resulting from the treatment.

The population in this study was all 330 students at SMPN 1 Kuala Nagan Raya. The sample size for each group was 78 students, totaling 156. The sampling technique in this study was a purposive sampling approach. This study was conducted at SMPN 1 Kuala Nagan Raya from August to October 2025.

Intervention This intervention was conducted by showing Acehnese culture-based online game

prevention videos to students for 2 weeks at SMPN 1 Kuala Nagan Raya . The intervention video contained information, dangers, and ways to prevent online games, packaged in an animated video with content packed with Acehese cultural elements.

Data analysis in this study used descriptive and inferential statistical analysis. Descriptive statistics were used to determine the frequency, percentage, and average for respondent characteristics, independent variables, and dependent variables. Meanwhile, inferential statistics were used to determine the effectiveness of school-based online gaming prevention on knowledge, attitudes, and online gaming behavior. If the data were normally distributed and homogeneous, then the statistical test used was a parametric test (*Independent T-test* ). However, if the data were not normally distributed and not homogeneous, then the statistical test used was a non-parametric test (*Wilcoxon Test and Mann-Whitney Test*).

## Results

Based on the results of the implementation of research activities at SMPN 1 Kuala, Nagan Raya Regency, the following research results were obtained:

**Table 1 .** Distribution Knowledge and Attitude Playing Online Games on Students of Kuala Nagan Raya 1 Middle School

No	Research Variables	Group			
		Intervention		Control	
		Mean ± SD	Min – Max	Mean ± SD	Min - Max
1	Knowledge				
	Pre-test	9.89 ± 1.69	7 – 13	10.29 ± 2.11	3 – 14
	Post-test	12.15 ± 1.15	9 – 14	11.57 ± 1.75	3 – 14
2	Attitude				
	Pre-test	31.01 ± 4.32	21 – 22	32.1 ± 4.18	18 – 41
	Post-test	31.08 ± 4.94	18 – 42	32.25 ± 3.92	18 – 42

Based on Table 1, it shows that the average knowledge of respondents before treatment in the intervention group was 9.89 with a minimum value of 7 and a maximum of 13, while in the control group it was 10.29 with a minimum value of 3 and a maximum of 14. After being given treatment, the average knowledge of respondents in the intervention group was 12.15 with a minimum value of 9 and a maximum of 14, while in the control group it was 11.57 with a minimum value of 3 and a maximum of 14.

The average attitude of respondents before treatment in the intervention group was 31.01 with a minimum value of 21 and a maximum of 22, while in the control group it was 32.1 with a minimum value of 18 and a maximum of 41. After being given treatment, the average attitude of respondents in the intervention group was 31.08 with a minimum value of 18 and a maximum of 42, while in the control group it was 32.25 with a minimum value of 18 and a maximum of 42.

**Table 2 .** Effectiveness Intervention Based School With Acehese Culture Video Against Knowledge and Attitude prevention Playing Online Games

Variables	Intervention Group (mean rank)	Control Group (mean rank)	<i>p-value</i> <sup>a</sup>
<b>Knowledge</b>			
Pre-test	72.44	84.57	0.090*
Post-test	86.26	70.74	0.026*
<b>Attitude</b>			
Post-test	69.84	87.16	0.016*

<sup>a</sup> Mann Whitney Test

\*  $p < 0.05$  , \*\*  $p < 0.01$

Based on Table 3. results test statistics use test man Whitney show there is difference score knowledge before given treatment between group intervention with group control ( $p\text{-value} = 0.090$ ). After given treatment , there is difference score knowledge between group intervention with group control ( $p=0.026$ ). This show that respondents given treatment in the form of intervention based school with effective Acehese cultural videos increase knowledge about online gaming prevention compared with group control .

Next , the results test statistics use test *man Whitney* Also show There is difference score attitude after given treatment between group intervention given treatment , there is difference score attitude between group intervention with group control ( $p\text{-value} = 0.016$ ). This show that respondents given treatment in the form of intervention based school with animated video effective Acehese culture increase attitude about online gaming prevention compared with group control .

**Table 3 .** Effectiveness Intervention Based School With Acehese Culture Video Against Pre Test Attitude About prevention Playing Online Games

Variables	Group Intervention	Group Control	<i>p- value</i> <sup>a</sup>
<b>Attitude</b>			
Pre-test	31.01	32	0.791

<sup>an</sup> Independent Samples Test,

\*  $p < 0.05$  , \*\*  $p < 0.01$

Based on Table 3. results test statistics using the Independent Samples Test shows No There is difference score attitude pre-test on group intervention And group control ( $p\text{-value} = 0.791$ ). This is show that respondents given treatment in the form of intervention based school with Acehese cultural videos no effective increase attitude about online gaming prevention compared with group control .

## Conclusion

Based on results research conducted on at SMPN 1 Kuala Regency Nagan Raya was acquired that the

cultural video approach Aceh based school proven effective in increase knowledge to online gaming prevention , but not effective in increase attitude to prevention of online games based on school on Students of Kuala Nagan Raya 1 Middle School .

From these results, it is recommended to : parents so they can limit use of cell phones at home and outside House with supervise in a way persuasive give understanding And education to for children , students of SMPN 1 Kuala Regency Nagan Raya in particular . For party school to continue educate danger online game addiction with display posters or other IEC in the environment school . To study others in order to be able to do study more deep on various variables other as well as use method others that can prevent playing online games in particular on students . Video playback can done longer , so that it happens change attitude And behavior to online gaming prevention .

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### **Author Contribution and Competing Interest**

Author 1: Conceptualization , Methodology and research manager

Author 2: Data Curation , Writing - Preparation draft beginning .

Author 3: Visualization , Investigation , Validation , Writing , Review And Editing .

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