Application of Android Game-Based Learning to Overcome Smoking Emergencies in Adolescents

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Abstract

Background: Teenagers tend to have a desire to know big. Studies show that students are more Possible To smoke than adults. Especially based on the results research latest says that smoking among teenagers every year the more increase. In general, they confess Already start smoking between 9 to 12 years old, Teenagers tend to have a desire to know big. Studies show that students are more Possible To smoke than adults, factors that have a very large impact on the emergence of various diseases. A smoker has a 2 to 4 times risk of developing coronary heart disease and a higher risk of developing lung cancer. Especially based on the results research latest says that smoking among teenagers every year the more increase. Purpose: To apply learning android games free as a try to overcome emergency smoking in adolescents. Method: This activity is Community Service that applies an Android game-based learning method to overcome smoking emergencies in Indonesian teenagers. The target of community service is 30 grade 11 vocational students. To measure motivation to stop smoking, the writer uses a questionnaire Richmond-Test. Results: Based on the results obtained mean pre-test value is 5.27 meanwhile mark the post-test mean is 8.27. Conclusion: The learning method is based on Android games that can increase the Spirit of teenagers To stop smoking.

Keywords: Teen, Danger Cigarette, Android Game.
1. Introduction

Teenagers tend to have a desire to know big. Studies show that students are more possible to smoke than adults. Especially based on the results of research latest says that smoking among teenagers every year the more increase. In general, they confess already start smoking between the ages of 9 to 12 years. Habit smoking for students started because of a lack of information and misunderstanding information, inedible advertisement, or persuaded seduction of friends. The results of the questionnaire obtained by the Indonesian Heart Foundation were 77 percent of student smoke because offered friends, without they realize poison slowly gnaw body. A cigarette contains >4,000 compounds chemicals and >400 substances poison, which is a very dangerous body.

Change behavior smoking child This too can be seen as not enough focus study, distraction study, distraction Power catch, energy decrease, distraction anxiety, to depression light. No easy thing for a smoker to stop. When someone has addicted to cigarettes, contained nicotine in tobacco stimulates the brain to let go of a comfortable substance. Addicted nicotine can result in a feeling of not convenient, easily angry, and difficult concentrate (Ministry of Health RI, 2022)

10.9 per mile (2018), disease heart coroner fixed at 1.5% (2013-2018), disease fail kidney chronic, from 0.2% (2013) to 0.38%. Data from the Ministry of Health of the Republic of Indonesia shows that the prevalence of smokers increased from 27% in 1995 to 36.3% in 2013. This means that 20 years ago one in three people was a smoker, and now every three people in Indonesia, two people are smokers. Twenty years ago, in every 100 Indonesian women, 4 of them were smokers, and now this number has increased and the number is very worrying because it means that 97 million people in Indonesia are exposed to cigarette smoke.

Currently, out of every 100 women in Indonesia, seven of them are smokers. Increased consumption of cigarettes also occurs in the younger generation. Data shows that the prevalence of adolescents aged 16-19 who smoke has tripled from 7.1% in 1995 to 20.5% in 2014. What is more surprising is that the age of smoking in Indonesia is getting earlier, this is evidenced by the presence of novice smokers aged 10-14 years. Beginner-age smokers increased by more than 100% in less than 20 years, namely 8.9% in 1995 to 18% in 2013 (Azis, 2018)

Citing research data at Friendship Hospital (2013) it shows that the level of addiction or addiction in high school children who smoke is quite high, namely 16.8%. This means that 1 out of every 5 teenagers who smoke has experienced addiction. This study also shows that the average child born to pregnant women who smoke has a lighter weight (<2500 grams) and is shorter (<45 cm) compared to mothers who don’t smoke (>3000 grams) and longer (>50 cm). These data show the fact that smoking hurts the health of the Indonesian people. Smoking is a factor that has a huge impact on the emergence of various diseases. A smoker has a 2 to 4 times risk of developing coronary heart disease and a higher risk of developing lung cancer and other non-communicable diseases (NCDs).

Generation Z is a generation that is no stranger to gadgets and games. Children generally like games, so the use of game-based learning is suitable for the current digital generation. Android game-based learning is a learning method that uses game/game applications that have been specifically designed to assist in the learning process.

By using game-based learning we can provide a stimulus to three important parts of learning, namely emotional, intellectual, and psychomotor. We don’t need to be afraid if we don’t have a background as a game developer or lack technology literacy if we want to apply game-based learning. There are many educational games that we
can find on smartphone devices, many of which are even web-based applications. We only need to choose a game that is adapted to the material that we will provide. We also don't need to worry about students not being able to use the games that we will use, because generally there are instructions for each game, whether it’s on a smartphone or a web-based application.

Game-based learning that can be applied to students is one of the Android games. Android games are easier to implement for students because they are easier to implement where students currently always have an Android smartphone. Android games can be made in such a way as to be able to provide health education to students about the dangers of smoking so that students can become more familiar with the dangers of smoking and the impacts that will arise when teenagers become addicted to smoking.

2. Method
Activity This activity gives devotion to the public with method education health with a game-based learning method to increase students' knowledge and awareness about the dangers and effects of smoking to overcome the emergency problem of smoking in Indonesia. With use consider Richmond Test, given with method pretest and posttest.

3. Results and Discussion

Table 1
Distribution Frequency Characteristics Respondents Based on Gender (n= 30)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>10</td>
<td>33.3%</td>
</tr>
<tr>
<td>Female</td>
<td>20</td>
<td>66.7%</td>
</tr>
<tr>
<td>Amount</td>
<td>30</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Primary Data 2023

From the data above can conclude the characteristics of respondents based on gender obtained results amount to females as many as 20 (66.7%) meanwhile gender males as many as 10 (33.3%) respondents.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Before</th>
<th>Knowledge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation stop smoke</td>
<td>Means</td>
<td>Median</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.27</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Primary Data 2023

From the above data obtained results motivation to stop smoking pre-post mean is 5.27 meanwhile mean result after given learning android games free is 8.27.

Discussion

Gender teenager men are expected to give influence positive meaning If teenagers the manifold gender males so increases the possibility teenagers for smoke daily. Age teenagers are expected to give an influence positive to the possibility smoke daily teenager which means the increased age of teenagers so will increase the possibility of teenagers the for smoke daily.

gender show signs positive and youth men have the opportunity to smoke 206.522 times bigger than teenage girls. this result is in line with research by Zahrani & Arcana (2019), Kusumawardani et al (2018), and Ra et al. (2018) which shows the possibility man smoke is bigger compared to girls.

Gender is one factor insidious intrinsic back teenagers become smokers, based on the data mentioned that 63% of the male is smoker whereas 45% of women are smokers. Based on data among Indonesian adolescents obtained consistent data with WHO where smokers
circle teenager is man as much as 24.1% meanwhile teenage women 4%. teenager man more many smokes more compared to teenage girl. Study This by data submitted by WHO and Erliana, 2017 which is divided teenage man is the top symbol of power, manhood, and maturity.

Teenagers No want to be called cowards so teenager man braver to take risks than Women one example is smoking behavior. 9 Results of research conducted with a researcher The statement submitted by Diah, 2016 said that a woman smoker reported becoming belief self like, and in a social say, situation This is different from smoker man who is socially No safe. at the moment this, upgrade incident smoke No only happens to teenager’s man. Likewise, with women, women who smoke reported becoming belief self like opposing, and independent. But in case This influence exists a culture that considers that smoke is a very despicable thing for women, this pushes growth smokers to the settlements in the area researchers, that researched place is A village, so women in the area place study for smoke they are very taboo for know cigarettes because perception they smoke That done by men who have mature and not proper done by one Woman.

Conclusions & suggestions
Based on the results research and discussion above, got concluded that android game-based learning can increase the Spirit of youth SMK Muhammadiyah 2 Palembang to stop smoking. Result study This expectation can become a reference for the public in giving care to nursing families to patients with smoke activity.

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Conflict Interest
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Saying Thank you
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Reference

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