Original Research

Perceived Behavioral Control and Intention Related to The Smoking Behavior of Early Adolescents in North Surabaya

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ABSTRACT

Introduction: Smoking behavior in adolescents is a phenomenon that should be considered and can be easily found nowadays. The prevalence of teenage smokers aged 10-18 years in Indonesia increases every year. Smoking behavior can have various negative impacts both in terms of health, but also economic, social and psychological. The purpose of this research was to analyze factors related to smoking behavior in adolescents.

Methods: A descriptive analysis with a cross-sectional approach was used in this research. 96 early adolescents participated in this research who were selected using a purposive sampling technique. The data was obtained from Belief-based Tobacco Smoking Scale questionnaires then analyzed using regression statistical tests (α<0.05).

Results: The results showed that perceived behavioral control and intention are significantly related to the smoking behavior of early adolescents in North Surabaya. The most influencing factor is perceived behavioral control. Weak perceived behavioral control by parents and strong intentions in adolescents to smoke the following month affect the behavior of early adolescents in North Surabaya to smoke.

Conclusion: This finding can be used as one of the topics that need to be considered in improving community nursing services in the prevention of smoking phenomena in adolescents by providing adequate information through counseling about smoking cessation and treatment efforts that can be done.

INTRODUCTION

The prevalence of adolescent smokers aged 10-18 years old in Indonesia is increasing annually (Ministry of Health, 2018). The Global Youth Tobacco Survey in 2014 reported that Indonesia has the largest number of teenage smokers in the world (WHO, 2015). Based on a preliminary study, 113 students out of 3076 students or 3.6% of students in 3 junior high schools located in North Surabaya have been found smoking by the counseling teachers. They found their students smoking in school areas and the cafeteria around the school, and the teacher said that they come from smoker families.

Adolescence is called a period of change. It includes the changes in emotions, body performance, interests and behavior patterns (Hurlock, 2011). Adolescents begin to abandon childish attitudes and behavior, strive to achieve the ability to behave in an adult manner (Widayatun, 2009). Many studies already focus on smoking behavior of late adolescents, which leads this study to ask the contribution of the early adolescents in the age category 12-15, because we find that early adolescents have shown smoking behavior at such a young age (based on a preliminary study).

According to the Theory of Planned Behavior, a person can act on intentions only if he has control of his behavior (Ajzen, 2005). Intention plays a unique
role in directing behavior, namely connecting between profound behavior that is believed and chilled by a person with certain behaviors (Ajzen, 2005). This intention is influenced by attitudes toward behavior, social pressure to perform behaviors known as subjective norms, and control over behavior that is referred to as behavioral control (Ajzen, 2005). Smoking behavior can have a variety of negative effects both in terms of health, but also economic, social and psychological.

Viewed from the negative impact on health, the effects of chemicals contained in cigarettes such as nicotine, CO (carbon monoxide) and tar will stimulate the central nervous system and cause the heart rate to accelerate, stimulate cancer and various other diseases (Aula, 2010). The negative impact of the economic aspect is smoking behavior basically burns teenagers' money who do not have their own income. Another impact is social, the smoke from cigarettes can inconvenience those around them. The psychological impact is that smoking can cause dependence if individuals feel anxious because they cannot smoke (Komasari & Helmi, 2000).

This research is expected to provide benefits for students who are early teens to be able to control the factors that can cause them to smoke. The benefit for schools is that this research becomes basic information in developing and rearranging more effective ways in the school program especially about healthy behavior programs, forbidding smoking in schools. The purpose of this study was to explain the influence of perceived behavioral control and intention on the smoking behavior of early adolescents in North Surabaya.

MATERIALS AND METHODS

The design of this study was cross-sectional. A sample of 96 early adolescent smokers in three of Surabaya State Junior High Schools was selected using a purposive sampling technique. The variables in this research are perceived behavioral control, intentions and smoking behavior. The data were obtained using Belief-based Tobacco Smoking Scale questionnaires, which evaluate the psychometric properties of the constructs of the Theory of Planned Behavior (Barati, Allahverdipour, Hidarnia, Niknami, & Bashirian, 2015).

The data were collected after obtaining permission from the Head Principal of Junior High School. The data were collected in a classroom containing a maximum of 20 respondents with 1 table for 1 respondent, and the study was conducted after students finished the school hours. This research has been reviewed and stated as ethically approved by the Health Research Ethics Committee, Faculty of Nursing, Airlangga University, Surabaya with number 1890-KEPK in January 2020. The data were analyzed using regression statistical tests (α<0.05).

RESULTS

Table 1. Characteristics of respondents in early adolescent smokers in North Surabaya, January 2020

<table>
<thead>
<tr>
<th>Respondents' Characteristics</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 y.o</td>
<td>8</td>
<td>8.3</td>
</tr>
<tr>
<td>13 y.o</td>
<td>37</td>
<td>38.5</td>
</tr>
<tr>
<td>14 y.o</td>
<td>19</td>
<td>19.7</td>
</tr>
<tr>
<td>15 y.o</td>
<td>32</td>
<td>33.3</td>
</tr>
<tr>
<td>Start smoking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>From elementary school</td>
<td>71</td>
<td>74</td>
</tr>
<tr>
<td>From the beginning of middle school</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>75</td>
<td>78</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>22</td>
</tr>
</tbody>
</table>

Table 2. Analysis result on perceived behavioral control and intention towards smoking behavior of early adolescents in North Surabaya.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Signification</th>
<th>OR Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived behavioral control</td>
<td>-1.754</td>
<td>0.000</td>
<td>0.172</td>
</tr>
<tr>
<td>Intention</td>
<td>1.386</td>
<td>0.004</td>
<td>0.250</td>
</tr>
</tbody>
</table>

Most of the respondents were 15 years (33.3%). Most teenagers have a history of smoking since elementary school, with 71 students (74%) and most of them come from smoker families, as many as 75 students (78%).

The results showed there was a significant relationship between knowledge, perceived behavioral control, and intention related to the smoking behavior of early adolescents in North Surabaya. The most influencing factor is perceived behavioral control. Factors that had no effect in this study were general attitude, values, media exposure, attitude toward behavior, subjective norms.

DISCUSSION

The effect of perceived behavioral control on smoking behavior

This study showed there is an effect of perceived behavioral control on smoking behavior of early adolescents in North Surabaya. The influence of the value of motivation to comply (desire/motivation to follow) with high smoking behavior that affects smoking behavior in early adolescents in North Surabaya. Respondents believe that many people around will approve of them smoking and the motivation to smoke, the respondent will approve him to become a smoker. This finding is supported by the results of respondents’ demographic data which shows that majority of early adolescent smokers come from families of smokers’ families.

This research is consistent with a previous study by Sari Hidayatullah (2017) that teen smokers’ junior...
activity started from the habit of smoking they have observed and felt in their environment, both within the family and their social environment. Subjective norms are factors outside the individual that contain one's perceptions about whether others will approve or disapprove of a behavior (Ajzen, 2005). A teenager would think that smoking behavior is something normal, fun, and profitable, they tend to have the urge to try because they feel like they could, thus making the intention to smoke stronger and forming the smoking behavior in the teenager (Hamdan, 2015).

Behavioral conditions last for so long as to form a habit or habitus that is difficult to quit. The smoking habit that is generally only practiced by adult men is now mostly practiced by junior high school students because it is the social environment that makes them behave that way. Things that are actually improper and considered deviant turn out to be normal and understandable behavior. The community is no longer surprised and considers the smoking behavior of junior high school adolescents, especially in big cities normal.

**The effect of intention on smoking behavior**

This study showed there is an effect of intentions on the smoking behavior of early adolescents in North Surabaya. Previous research carried out by Pandayu and Murti (2017) also states there is a relationship between intentions and teenage smoking behavior in adolescents.

The Theory of Planned Behavior states that a person can act on his intentions only if he has control of his behavior (Ajzen, 2005). Intention is a term associated with behavior and an important part of the range of actions that can or cannot be performed and directed to conduct current or future behavior. Intention plays a distinctive role in directing behavior, i.e. connecting profound behavior that is believed and chilled by someone and certain behavior.

This study found that almost half (46.8%) of early adolescents in North Surabaya smoked more than 15 cigarettes a day and they were categorized as early teen smokers in North Surabaya and heavy smokers. Most (52%) cigarettes consumed by early teens in Surabaya are clove cigarettes, with a high nicotine and tar content. Most (51%) the early teens said they would smoke every 1 to 2 hours and almost all (80%) teenagers would smoke when gathering with friends. This study is supported by the Theory Behavior Planning (TPB) stated by Ajzen that the intention was formed by attitudes toward behavior, subjective norms, and perceived behavioral control that each individual has. All three will interact and determine whether the intentions will be carried out or not (Azwar, 2013).

**CONCLUSION**

In this study, perceived behavioral control weakened by parents as well as a strong intention on teen smoking in the next month fatherly influence behavior of early adolescents in North Surabaya to smoke. Based on it, parents have a great influence on early adolescent smoking behavior, as early adolescents view smoking behavior as normal because parents become role models and increase smoking intention in adolescents. This leads to developing smoking behavior at an early age.

**CONFLICT OF INTEREST**

The authors declare there are no conflicts of interest or financial interest in this study or in the preparation of this article.

**ACKNOWLEDGEMENT**

The author of this study would like to thank all the respondents in three of Surabaya State Junior High Schools, Indonesia for their highly valuable contribution. Finally, the author would like to thank Universitas Airlangga for providing the opportunity to present and publish the valuable findings of this study.

**REFERENCES**


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