

# The Influence of Emotional Demonstration on the Smoking Behavior of Junior High School (SMP) Adolescents in South Sinjai District, Sinjai Regency

Vicky Milenia Ramadhina\*, Muhammad Syafar and Ridwan M. Thaha

Hasanuddin University, Indonesia

**Abstract:** *Purpose:* This research aims to determine the influence of emo demonstrations on smoking behavior among junior high school (SMP) teenagers in Sinjai Selatan District, Sinjai Regency (Theory of Planned Behavior Approach).

*Method:* This research used a research method, namely quantitative research using a quasi-experimental design with a nonequivalent control group design. The location of research and sampling was in the Sinjai Regency area. Samples were taken using the Accidental Sampling technique with as many as 250 respondents from the intervention and control groups. Analysis was carried out using the paired sample T test if the data was normally distributed and if the data was not normally distributed then the Wilcoxon test.

*Results:* Show that knowledge ( $p=0.319$  to  $p=0.689$ ), attitude ( $p=0.032$  to  $p=0.004$ ), subjective norms ( $p=0.000$  to  $p=0.087$ ), and behavioral control ( $p=0.000$  to  $p=0.003$ ).

*Conclusion:* It can be said that there is no change in knowledge and subjective norms in junior high school (SMP) teenagers in South Sinjai District regarding smoking behavior after being given emotional demonstration education and there is a change in attitude and behavioral control in junior high school (SMP) teenagers in Sinjai District South regarding smoking behavior after being given emotional demonstration education.

**Keywords:** Smoking behavior, knowledge, attitudes, subjective norms, behavioral control.

## 1. INTRODUCTION

Globally, tobacco used remains one of the leading causes of preventable death. Every year, more than 8 million people die from tobacco use worldwide. More than 7 million of these deaths were the result of direct tobacco use, while around 1.2 million were non-smokers who were exposed to secondhand smoke. In the European region of the World Health Organization (WHO), the highest users has been reported, namely an estimated 186 million people (26.3%) were tobacco users in 2018 [1]. Worldwide, around 7% or more than 24 million children aged 13-15 years smoked in 2000-2017 based on estimates of the number of smokers by the World Health Organization (WHO) region. The estimated percentage of smokers among boys is 9-10% and for girls, the substantially higher prevalence is in the Americas and Europe compared to other regions, namely 9.7% and 8.6%. Meanwhile, in the Southeast Asia region, the average number of children who smoke is 5.7%, consisting of 8.8% boys and 2.2% girls [2].

In 10 countries, the prevalence of tobacco use remains the same and even increases over time. In Bosnia and Herzegovina, the prevalence of tobacco use was 15.7% in 2008 and 24.4% in 2019. In the

Republic of Moldova, the prevalence of tobacco use was 13.4% in 2008 and 16.3% in 2019. The prevalence of smoking among vulnerable students Ages 13-15 years is currently reported to be higher in boys than girls. However, there are several regions of the country where the prevalence has decreased from 2002 to 2019. The big difference is that in the Czech Republic in 2007 it was 30.7% to 15.2% in 2016, in Croatia, it was 24.1% in 2007 to 14.6% in 2016, and in Slovenia by 20.3% in 2007 to 6.1% in 2017 [3].

Smoking behavior is a behavior that has very dangerous health impacts on our bodies, many people still do this behavior. Smoking behavior is a behavior that we encounter almost every day in our environment, from teenagers to the elderly. The various negative impacts that can result from this behavior can have an impact both on yourself and on others [4]. This smoking behavior is one of the behaviors carried out by burning tobacco products which include burning, smoking, and inhaling, including all those referred to are white cigarettes, cigars, kretek, or other types of cigarettes and forms produced from the nicotina rustica, nicotina tabacum plants, and other species whose smoke contains tar and nicotine, whether in the presence or absence of additional ingredients [5].

In Indonesia in 2014 the number of smokers aged 13-15 years was 33.9% for boys and 2.5% for girls [6]. In 2019, the prevalence of tobacco use (smoking and/or smokeless) based on the results of a survey

\*Address correspondence to this author at the Hasanuddin University, Indonesia; E-mail: mileniavicky@gmail.com

conducted by The Youth Tobacco Survey (GYTS) was 19.2%, consisting of boys at 35.6% and girls at 3.5% [3]. The percentage of smoking in the population aged  $\leq 18$  years from 2020, 2021, to 2022 experienced an insignificant decrease, namely 3.81%, 3.69%, and 3.44% respectively from this total percentage consisting of 3 age groups namely 10-12 years, 13-15 years, and 16-18 years. Based on the 13-15 year age group in Indonesia from 2020, 2021, to 2022, the percentage of smoking did not show a significant change, namely 1.64%, 1.44%, and 1.45% respectively [7].

Smoking behavior in adolescents is influenced by various factors, such as the smoking behavior of classmates which can be a factor in smoking behavior. However, a good neighbor's attitude towards teenage smoking behavior can be a protection for those who have a negative attitude towards smoking, who are less likely than teenagers who live in an environment that is indifferent to teenage smoking behavior [8]. Another factor that supports smoking behavior is attitude. Based on research conducted that examined knowledge, attitudes, and smoking behavior in adolescents, the results showed that there was a relationship between attitudes and smoking behavior in adolescents [9]. In other research on factors related to smoking behavior in teenagers at SMPN 7 Langgudu, Bima Regency, the results show that there is a relationship between attitudes and smoking behavior, where overall the students agree that smoking behavior is a negative action and some students who have the desire to smoke want to smoke given freedom regarding this behavior [10]. However, other research examining knowledge and attitudes about smoking behavior in adolescents found that there was no significant relationship between knowledge and smoking behavior in adolescents [11].

Other research that examines attitudes and intentions that directly or indirectly influence the non-smoking behavior of teenagers in Yogyakarta shows that there is a direct influence between teenagers' intentions not to smoke and the non-smoking behavior of teenagers in the area [12]. Another study on the determinants of teenage smoking behavior in Kulon Progo Yogyakarta showed that if there were teenagers who had a strong intention not to smoke, then there were some teenagers who smoked and the majority of teenagers smoked because they had a high intention to smoke. This means that if a teenager's intention to smoke is higher, then the teenager's smoking behavior will also be higher [13].

Emo demo (Emotional Demonstration) is an alternative method for providing or delivering health education as a form of intervention that uses a type of approach called Behavioral Centered Design (BCD). This is because to obtain changes in behavior that are quite effective, support is needed in conveying just information, although if it is conveyed repeatedly it can create an attachment to the information, on the other hand it can make the target subject apathetic towards the information they receive so that a method is needed. which can support the delivery of this information, one of which is the emo demo method. Through this method, not only conveys information to the subject, it also uploads the subject's emotions so that they can make changes to their behavior [14]. A study shows that the use of the emo demo method is effective, namely research that conducted research on nutrition promotion through the emo demo method to change mothers' perceptions about local food-based snacks which obtained results that based on the Wilcoxon test showed that there was a difference in the target answer scores before and after being given emo demo which means that there is a change in the mother's perception of giving snacks to her child [15].

Another study that examined the influence of emo demos on providing MP ASI menus to BADUTA showed the results that there was a relationship between emo demos and providing MP ASI menus to BADUTA. This emo demo succeeded in increasing respondents' knowledge significantly, as well as their attitudes [16]. Another similar study also conducted research using the emo demo method to increase the knowledge and attitude of Washing Hands with Soap (CTPS) in school-age children which found that there was a significant difference in the increase in the average value of knowledge and attitude of Washing Hands with Soap (CTPS) between the intervention group (emo demo) and the control group (leaflet) [17].

## 2. MATERIAL AND METHODS

### 2.1. Type of Research

This research is quantitative research using a quasi-experimental design with a nonequivalent control group design.

### 2.2. Place and Time of Research

This research was conducted in the South Sinjai District, Sinjai Regency and this research was conducted in July-August 2023.

### 2.3. Population and Sample of the Research

The population in this study were all 8th-grade male and female teenagers in 7 Junior High Schools (SMP) in the South Sinjai District area, totaling 523 students. The control group in this study was all male and female teenagers in 2 schools determined based on the best school assessment sheet for Clean and Healthy Living Behavior (PHBS). Based on the results of calculations using the Slovin formula, a sample size of 227 people was obtained. According to (Juwita et al, 2022) to anticipate the possibility of dropout, the sample size was increased by 10%, so that the sample in this study was 250 students.

### 2.4. Variables of Study

The dependent variables of this study are; behavioral intentions and behavioral. The independent variables of this study are; Knowledge, attitude, subjective norms, and behavioral control.

### 2.5. Data Collection Tools

Data collection tools are Emotional Demonstration and questionnaire.

### 2.6. Data Collection

The data collection technique used in this research is primary data, in this case including attitude data, subjective norms, perceived behavioral control, and knowledge related to smoking behavior both before and after being given education in the intervention group and control group.

The questionnaire used was in the form of closed questions using a Likert scale. According to Sugiyono (2019; 146), the Likert scale is used to measure opinions, attitudes, and perceptions of groups or individuals regarding a social phenomenon. The Likert scale used uses 4 answer choices Strongly Agree (SS), Agree (S), Disagree (TS), Strongly Disagree (STS) [18].

### 2.7. Statistical Analysis

Data processing is carried out using a data analysis program, namely the SPSS program which consists of several processing stages according to Notoatmodjo (2018), including:

#### 1. Editing Data

Data that has been collected through online questionnaires is checked for completeness to avoid

questions in the questionnaire that are not filled in by respondents.

#### 2. Coding

Coding is done by assigning symbols or codes to respondents' answers to make the data entry process easier.

#### 3. Entry

Respondent data or answers that have previously been changed into codes (letters or numbers) are entered into a computer program or software for data analysis.

#### 4. Cleaning Data

Cleaning is the activity of checking the data that has been entered again to see if any errors may have occurred or not on the computer worksheet. If an error is found, it is deleted and the correct one is re-entered.

#### a. Univariate Analysis

The data that has been processed and presented in the form of a frequency table will then be carried out by univariate analysis which aims to explain or describe the characteristics of each variable both before and after being given education using the emotional demonstration method.

#### b. Bivariate Analysis

Bivariate analysis was carried out using the paired sample T test if the data was normally distributed and if the data was not normally distributed then the Wilcoxon test. This analysis was used to get an idea of the differences in each research variable both before and after being given education in the two groups.

### 2.8. Limitations of the Research

Based on the researcher's direct experience in the research process that has been carried out, several research limitations were discovered and experienced and could be factors that could be paid more attention to by other researchers who will come to further perfect their research because this research itself certainly has several significant shortcomings. Needs to be improved in future research. Some of these limitations include:

1. Use of Google form media which cannot be directly accessed by students, because they are not allowed to bring cell phones to school.
2. Students can fill out the Google form from home, possibly together.

- Using Google form media can make students tired and lazy about reading every statement and question.

### 3. RESULTS

Table 1 shows that 69.2% of respondents were female and 30.8% were male. Most respondents were born in the Sinjai Regency (88.0%) and 12.0% were born outside Sinjai Regency. Most of the respondents were aged 12-15 years (95.6%) and 4.4% were aged 16-18 years. All respondents were at grade 8 (100%).

**Table 1: Frequency Distribution of Respondent Characteristics**

Variable	Frequency	Percentage (%)
<b>Gender</b>		
Male	77	30.8
Female	173	69.2
<b>Place of Birth</b>		
Sinjai Regency	220	88.0
Outside of Sinjai District	30	12.0
<b>Age</b>		
12-15	239	95.6
16-18	11	4.4
<b>Class</b>		
VIII	250	100.0

Source: Primary Data, 2023.

**Table 2: Pretest Frequency Distribution of Smoking Behavior of Junior High School (SMP) Adolescents in South Sinjai District**

Variable	Frequency	Percentage (%)
<b>Knowledge Level</b>		
Low	169	67.6
High	81	32.4
<b>Attitude</b>		
Negative	10	4.0
Positive	240	96.0
<b>Subjective Norms</b>		
Negative	102	40.8
Positive	148	59.2
<b>Behavior Control</b>		
Negative	32	12.8
Positive	218	87.2

Source: Primary Data, 2023.

Table 2 shows that based on the pretest results it is known that the majority of respondents' knowledge is still low (67.6%) and 32.4% already have high

knowledge. Most respondents had a positive attitude (96.0%) and 4.0% still had a negative attitude. For the subjective norm variable, it is known that 59.2% of respondents had positive subjective norms and 40.8% had negative norms. Meanwhile, the positive behavioral control of respondents was 87.2% and the negative was 12.8%.

Table 3 shows that based on the results of posttest 1, it is known that the majority of respondents knowledge is still low (65.6%) and 34.4% already have high knowledge. Most respondents had a positive attitude (89.6%) and 10.4% still had a negative attitude. For the subjective norm variable, it is known that 74.4% of respondents have positive subjective norms and 25.6% have negative norms. Meanwhile, the positive behavioral control of respondents was 91.2%, and the negative was 8.8%.

**Table 3: Frequency Distribution of Posttest 1 on Smoking Behavior of Junior High School (SMP) Adolescents in South Sinjai District**

Variable	Frequency	Percentage (%)
<b>Knowledge Level</b>		
Low	164	65.6
High	86	34.4
<b>Attitude</b>		
Negative	26	10.4
Positive	224	89.6
<b>Subjective Norms</b>		
Negative	64	25.6
Positive	186	74.4
<b>Behavior Control</b>		
Negative	22	8.8
Positive	228	91.2

Source: Primary Data, 2023.

Table 4 shows that based on the results of posttest 2 it is known that the majority of respondents' knowledge is still low (73.2%) and 326.8% already have high knowledge. Most respondents had a positive attitude (95.2%) and 4.8% still had a negative attitude. For the subjective norm variable, it is known that 84.0% of respondents have positive subjective norms and 16.0% have negative norms. Meanwhile, the positive behavioral control of respondents was 96.0%, and the negative was 4.0%. Most of the respondents' knowledge was still low (73.2%) and 326.8% already had high knowledge.

**Table 4: Posttest 2 Frequency Distribution of Smoking Behavior of Junior High School (SMP) Adolescents in South Sinjai District**

Variable	Frequency	Percentage (%)
<b>Knowledge Level</b>		
Low	183	73.2
High	67	26.8
<b>Attitude</b>		
Negative	12	4.8
Positive	238	95.2
<b>Subjective Norms</b>		
Negative	40	16.0
Positive	210	84.0
<b>Behavior Control</b>		
Negative	10	4.0
Positive	240	96.0

Source: Primary Data, 2023.

Based on Table 8, it can be seen that the results of the Wilcoxon test on the results of pretest-posttest 1 obtained a value of  $p=0.319 > 0.05$ , so  $H_0$  is accepted. The conclusion was "there was no change in knowledge among junior high school (SMP) teenagers in South Sinjai District about smoking behavior after being given emo demo education."

**Table 5: Changes in Junior High School (SMP) Knowledge in South Sinjai District before and after being given Intervention**

Knowledge	p-Value
Pretest-Posttest 1	0,319
Posttest 1-Posttest 2	0,689

Source: Primary Data, 2023.

Meanwhile, in posttest1-posttest2, the value  $p=0.689 > 0.05$  was obtained, so  $H_0$  was accepted. The conclusion is "there is no change in knowledge among junior high school (SMP) teenagers in South Sinjai District about smoking behavior".

Based on Table 6, it can be seen that the results of the Wilcoxon test on the results of pretest-posttest 1 obtained a value of  $p=0.032 < 0.05$ , so  $H_0$  was rejected. The conclusion was "there was a change in attitudes among junior high school (SMP) teenagers in South Sinjai District regarding smoking behavior after being given emo demo education."

Meanwhile, in posttest1-posttest2, the value  $p=0.004 < 0.05$  was obtained, so  $H_0$  was rejected. The

conclusion is "there is a change in attitudes among junior high school (SMP) teenagers in South Sinjai District regarding smoking behavior".

**Table 6: Changes in Attitudes of Junior High School (SMP) Adolescents in South Sinjai District before and after being given Intervention**

Attitude	p-Value
Pretest-Posttest 1	0.032
Posttest 1-Posttest 2	0.004

Source: Primary Data, 2023.

Based on Table 7, it can be seen that the results of the Wilcoxon test on the results of pretest-posttest 1 obtained a value of  $p=0.000 < 0.05$ , so  $H_0$  was rejected. The conclusion is "there is a change in subjective norms among junior high school (SMP) teenagers in South Sinjai District regarding smoking behavior after being given emo demo education".

**Table 7: Changes in Subjective Norms for Junior High Schools (SMP) in South Sinjai District before and after Intervention**

Subjective Norms	p-Value
Pretest-Posttest 1	0,000
Posttest 1-Posttest 2	0,087

Source: Data Primer, 2023.

Meanwhile, in posttest1-posttest2, the value  $p=0.087 > 0.05$  was obtained, so  $H_0$  was accepted. The conclusion is "there is no change in subjective norms among junior high school (SMP) teenagers in South Sinjai District regarding smoking behavior".

Based on Table 8, it can be seen that the Wilcoxon test results for the pretest-posttest results obtained a value of  $p=0.000 < 0.05$ , so  $H_0$  was rejected. The conclusion is "there is a change in behavioral control among junior high school (SMP) teenagers in South Sinjai District regarding smoking behavior after being given emo demo education."

**Table 8: Changes in Behavioral Control in Junior High Schools (SMP) in South Sinjai District before and after being given Intervention**

Behavioral Control	p-Value
Pretest-Posttest 1	0,000
Posttest 1-Posttest 2	0,003

Source: Data Primer, 2023.

Meanwhile, in posttest1-posttest2, the value  $p=0.003 < 0.05$  was obtained, so  $H_0$  was rejected. The

conclusion is "there is a change in behavioral control among junior high school (SMP) teenagers in South Sinjai District regarding smoking behavior".

### **1. The Effect of giving Emotional Demonstrations on Adolescent Smoking behavior Based on Pretest-Posttest 1 Results**

#### a. Knowledge

The level of emotional maturity in teenagers can be said to be quite good. This encourages curious behavior in teenagers to continue learning and developing. Everyone has senses that are capable of being used to think and be sensitive to various things. High curiosity in teenagers makes them proactive about new things or new stimuli which they think are more challenging and require the ability to think complexly [28].

Based on the results of the Wilcoxon Test analysis of the effect of giving emotional demonstrations on adolescent smoking behavior based on pretest-posttest 1, the value of  $p=0.319>0.05$  was obtained, so  $H_0$  was accepted. The conclusion is "there is no change in knowledge among junior high school (SMP) teenagers in South Sinjai District about smoking behavior after being given emotional demonstration education." This result is different from research conducted by [29] which showed that there were differences in the knowledge of Kotatinggi Health Center health cadres regarding feeding babies and children through the emo demo approach in the form of long-distance training.

A modification of Bloom's theory (1908) states that knowledge is the result that starts from the knowing process that occurs when someone has carried out/carried out sensing that occurs through a person's five senses, namely the senses of smell, touch, taste, hearing and sight. In a person's action process, a very important cognitive knowledge is the domain [31].

#### b. Attitude

Adolescence is a period of transition or transition from the category of child to teenager. During this period, teenagers often spend their time outside the home, especially hanging out with their peers. Teenagers in this era will find a new place to express themselves and will form a group of peers often known as a peer group. So, these peers can have quite a big influence on a person's attitude [20].

Based on the results of the Wilcoxon Test analysis of the effect of giving emotional demonstrations on adolescent smoking behavior based on pretest-posttest

1, the value of  $p=0.032<0.05$  was obtained, so  $H_0$  was rejected. The conclusion is "there is a change in attitudes among junior high school (SMP) teenagers in South Sinjai District regarding smoking behavior after being given emotional demonstration education." This is in line with the research conducted [14] where the results showed that there was a change in attitude in pregnant women after being given the emo demo which showed a significant increase in attitude when compared to the control group.

Based on a modification of Bloom's theory (1908), attitude is a person's closed response to an object or stimulus, which includes emotional factors along with the relevant opinion of agreeing or disagreeing, happy or unhappy, good or bad, and others [32].

Other research that is also in line is research conducted by [21] which concluded that there were differences in the attitudes of mothers of toddlers in Keputih Village before and after being given education about feeding toddlers using the emo demo method. Other research also obtained results that there were differences in the attitudes of baduta mothers towards education about MP-Asi after using the emo demo method in Trenggalek Regency [22].

#### c. Subjective Norms

Based on the results of the Wilcoxon Test analysis of the effect of giving emotional demonstrations on adolescent smoking behavior based on pretest-posttest 1, the value of  $p=0.000<0.05$  was obtained, so  $H_0$  was rejected. The conclusion is "there is a change in subjective norms among junior high school (SMP) teenagers in South Sinjai District regarding smoking behavior after being given emotional demonstration education." This is in line with the research conducted [15] which obtained the results that there was a change in mothers' perceptions of nutrition promotion using the emotional demonstration method regarding local food-based snacks.

Subjective norms are a function of normative beliefs, which represent significant preference perceptions (references) about whether a person should or should not engage in a behavior. Significant others are individuals or groups who have an opinion on a person's behavior in a domain that is considered important to him. It is calculated as the subjective probability that certain salient groups or individuals think a person should or should not perform that behavior, multiplied by that person's motivation to fulfill that reference expectation [23].

#### d. Behavior Control

Based on the results of the Wilcoxon Test analysis of the effect of giving emotional demonstrations on adolescent smoking behavior based on pretest-posttest 1, the value of  $p=0.000<0.05$  was obtained, so  $H_0$  was rejected. The conclusion is "there is a change in behavioral control among junior high school (SMP) teenagers in South Sinjai District regarding smoking behavior after being given emotional demonstration education." This is in line with research conducted by Purwanti, *et al.* (2020) [24] who obtained the results that there was a change in the behavior of preventing marriage at an early age using the emotional demonstration method for young women, namely by carrying out and participating in health consultation activities.

Perceived behavioral control is assumed to be based on accessible control beliefs. This belief is related to the existence of factors that can facilitate or hinder behavioral performance. These control factors include required skills and abilities, availability or lack thereof (time, money, other resources, cooperation with others, and so on). Control beliefs are defined as a person's subjective probability that a particular enabling or inhibiting factor will be present in the situation of interest. Each control belief contributes to perceived behavioral control in interaction with the perceived strength of the factor to facilitate or inhibit behavioral performance [25].

Another study that obtained the same results is the research conducted [26] memperoleh hasil bahwa terdapat perubahan perilaku patuh minum obat sebelum dan after being given education using the emo demo method for hypertensive patients in Prolanis participants. The results of other research also prove that there is a change in the behavior of giving exclusive breast milk at 1-3 days postpartum after being given education using the emotional demonstration method of the breast milk module alone [27].

### **2. The Effect of giving Emotional Demonstrations on Adolescent Smoking behavior Based on the Results of Posttest 1-Posttest 2**

#### a. Knowledge

Based on the results of the Wilcoxon Test analysis of the effect of giving emotional demonstrations on adolescent smoking behavior based on posttest 1-posttest 2, the value of  $p=0.689>0.05$  was obtained, so  $H_0$  was accepted. The conclusion is "there is no

change in knowledge among junior high school (SMP) teenagers in South Sinjai District about smoking behavior after being given emotional demonstration education."

This result is the same as the control group which was not given any intervention, where the results of posttest 1–posttest 2 were respectively 61.6% to 60.4%, which shows an increase in knowledge in adolescents. The results of the Wilcoxon test analysis of the effect of giving emotional demonstrations on adolescent smoking behavior based on posttest 1-posttest 2 obtained a value of  $p=0.572>0.05$ , so  $H_0$  was accepted. The conclusion is "there is no change in behavioral control among junior high school (SMP) teenagers in Sinjai Regency regarding smoking behavior. Sikap

#### b. Subjective Norms

Based on the results of the Wilcoxon Test analysis of the effect of giving emotional demonstrations on adolescent smoking behavior based on posttest 1-posttest 2, the value of  $p=0.087>0.05$  was obtained, so  $H_0$  was accepted. The conclusion was "there was no change in subjective norms among junior high school (SMP) teenagers in South Sinjai District after being given emotional demonstration education about smoking behavior." This conclusion is different from the conclusion in the previous point.

#### c. Behavior Control

Based on the results of the Wilcoxon Test analysis of the effect of giving emotional demonstrations on adolescent smoking behavior based on posttest 1-posttest 2, the value of  $p=0.003<0.05$  was obtained, so  $H_0$  was rejected. The conclusion is "there is a change in behavioral control in junior high school (SMP) teenagers in South Sinjai District after being given emotional demonstration education about smoking behavior."

This result is the same as the control group which was not given any intervention, where the results of posttest 1–posttest 2 were respectively 91.6% to 97.2%, which shows an increase in behavioral control in adolescents. The results of the Wilcoxon test analysis of the effect of giving emotional demonstrations on adolescent smoking behavior based on posttest 1-posttest 2 obtained a value of  $p=0.649>0.05$ , so  $H_0$  was accepted. The conclusion is "there is no change in behavioral control among junior high school (SMP) teenagers in Sinjai Regency regarding smoking behavior.

#### 4. CONCLUSION AND RECOMMENDATIONS

1. There is no change in knowledge among junior high school (SMP) teenagers in South Sinjai District, Sinjai Regency about smoking behavior after being given emo demo education
2. There is a change in attitudes among junior high school (SMP) teenagers in South Sinjai District, Sinjai Regency regarding smoking behavior after being given emo demo education
3. There is no change in subjective norms among junior high school (SMP) teenagers in South Sinjai District, Sinjai Regency regarding smoking behavior after being given emo demo education
4. There is a change in perceived behavioral control among junior high school (SMP) teenagers in South Sinjai District, Regency Sinjai tentang perilaku merokok setelah diberikan edukasi emo demo

##### a. Government and Agencies

1. Based on the results of this research, there is an opportunity to change behavior in teenagers by utilizing the emo demo method. So, it can be used as a reference when carrying out activities at school.
2. The level of students' knowledge regarding smoking behavior is still low. So, it can be used as a consideration for carrying out activities for teenagers related to smoking behavior, to raise awareness among teenagers that this behavior is not good.

##### b. For Further Researchers

It is recommended for future researchers to research increasing teenagers' knowledge about smoking behavior by using emotional demonstration methods which are more interesting and easier to accept and understand by the target audience.

#### REPRESENTATIONS

No representations.

#### ETHICAL APPROVAL

Obtain ethical approval by the Ethics Committee of the Faculty of Public Health, Hasanuddin University with number: 3964/UN4.14.1/TP.01.02/2023.

#### CONFLICT OF INTEREST

The authors declare that there is no conflict of interest in this study.

#### FINANCIAL SUPPORT

No Financial support was received from any person or institution for the research.

#### AUTHORSHIP CONTRIBUTIONS

Planning, implementation, statistical analysis of the research, writing, and reviewing the article.

#### REFERENCES

- [1] World Health Organization, Global Adult Tobacco Survey in Kazakhstan 2019.
- [2] Commar A, Prasad V, D'Espaignet ET, Wolfenden L. WHO Global Report On Trends in Prevalence of Tobacco Smoking 2000-2025 2018; 76.
- [3] Indonesian Ministry of Health, "Global Youth Tobacco Survey 2019," World Heal Organ 2019.
- [4] Munir M. Gambaran Perilaku Merokok Pada Remaja Laki-Laki. *J Kesehatan* 2019; 12(2): 112. <https://doi.org/10.24252/kesehatan.v12i2.10553>
- [5] Fransiska M, Firdaus PA. Faktor yang berhubungan dengan Perilaku Merokok pada Remaja Putra SMA X Kecamatan Payakumbuh. *J Kesehatan* 2019; 10(1): 11. <https://doi.org/10.35730/jk.v10i1.367>
- [6] KKRI. Badan Penelitian dan Pengembangan Kesehatan, Jumlah Perokok Pelajar Berusia 13-15 Tahun 5 Tahun Terakhir. Kementerian Kesehatan RI, 2019; pp. 9-10.
- [7] Statistik BP. Persentase Merokok Pada Penduduk Usia ≤ 18 Tahun Menurut Kelompok Umur (Persen), 2020-2022. *γ α ρ η* 2022; 8.5.2017: pp. 2003-2005.
- [8] Albert-Lörincz E, Paulik E, Szabo B, Foley K, Gasparik AI. Adolescent smoking and the social capital of local communities in three counties in Romania. *Gac Sanit* 2019; 33(6): 547-553. <https://doi.org/10.1016/j.gaceta.2018.05.009>
- [9] Budiyati GA, Sari DNA, Suryati. Pengetahuan, Sikap dan Perilaku Merokok pada Remaja. *J Ilmiah Permas* 2021; 11(1): 11-18.
- [10] Damang SA, Syakur R, Andriani R. Faktor Yang Berhubungan Dengan Perilaku Merokok Pada Remaja Di Smp Negeri 7 Langgudu Kabupaten Bima. *J Komunitas Kesehat Masy* 2019; 1(1): 32-39. <https://doi.org/10.36090/jkkm.v1i1.294>
- [11] Julaecha J, Wuryandari AG. Pengetahuan dan Sikap tentang Perilaku Merokok pada Remaja. *J Akad Baiturrahim Jambi* 2021; 10(2): 313. <https://doi.org/10.36565/jab.v10i2.337>
- [12] Riyadi S, Handayani S. Determinan Perilaku Merokok Remaja di Kulon Progo Yogyakarta. *J Holist Nurs Sci* 2021; 8(1): 9-18. <https://doi.org/10.31603/nursing.v8i1.3290>
- [13] Riyadi S, Handayani S. Sikap Dan Niat Berpengaruh Secara Langsung Maupun Tidak Langsung Terhadap Perilaku Tidak Merokok Remaja Di Yogyakarta. *J Holist Nurs Sci* 2020; 7(1): 54-61. <https://doi.org/10.31603/nursing.v7i1.3045>
- [14] Muyassaroh Y, Fatmayanti A. Pengaruh Permainan Emo-Demo (Ati, Telur, Ikan) Terhadap Pengetahuan, Sikap, dan



- Tingkah Laku Pencegahan Anemia pada Ibu Hamil. *J Ilmu Keperawatan dan Kebidanan* 2021; 12(2): 222-228. <https://doi.org/10.26751/jikk.v12i2.919>
- [15] Hidayanti L. Promosi Gizi Melalui Metode Emo Demo Untuk Merubah Persepsi Ibu Tentang Makanan Jajanan Berbasis Pangan Lokal. *GEMASSIKA J Pengabdian Kpd Masy* 2020; 4(1): 76. <https://doi.org/10.30787/gemassika.v4i1.463>
- [16] Zakiyyah M, Natalia MS, Ekasari T. Pengaruh Emo Demo Terhadap Pemberian Menu MP ASI Pada BADUTA The Influence Of Emo Demo Against Provision Of MP ASI Menu on BADUTA dilakukan desa lokus program pencegahan dan Probolinggo, salah satunya adalah Desa 2020; 7(1): 42-47. <https://doi.org/10.35316/oksitosin.v7i1.536>
- [17] Rosita A, Lestari W. Metode Emo Demo Meningkatkan Pengetahuan dan Sikap Cuci Tangan Pakai Sabun (CTPS) pada Anak Usia Sekolah 2021; 3: 11-22. <https://doi.org/10.33088/jkr.v3i2.690>
- [18] Lusia. Hubungan Pemberian Asi Eksklusif Dengan Kejadian Stunting Pada Balita 1-5 Tahun. *Heal Sci J* 2021; 4(1): 142. <https://doi.org/10.24269/hsj.v4i1.409>
- [19] Juwita SD, Susiarno H, Sekarwana N. Perbandingan pengaruh media promosi kesehatan leaflet dan flipchart terhadap peningkatan pengetahuan dan sikap ibu tentang stunting pada 1.000 hari pertama kehidupan di wilayah puskesmas cibarusah Sinta. *J Ilm Indones* 2022; 7(9).
- [20] Alviyan A, Mahardhani AJ, Utami PS. Peran Kelompok Teman Sebaya Dalam Upaya Pembentukan Moral. *J Ilmu Pendidik PKn dan Sos Budaya* 2020; 4(2): 1-14.
- [21] Mutiarani AL, Putri PH, Yuliani K. Perbedaan Edukasi Pemberian Makan Balita dengan Metode Emotional Demonstration dan Metode Ceramah terhadap Pengetahuan dan Sikap Ibu Balita di RT 06 RW 08 Kelurahan Keputih Kota Surabaya. *Prev Indones J Public Heal* 2022; 7(2): 18. <https://doi.org/10.17977/um044v7i22022p18-24>
- [22] Bidari GI, Ruhana A. Perbandingan Hasil Edukasi MP-ASI Antara Metode Emotional Demonstration dan Team Game Tournament Pada Ibu Baduta Kabupaten Trenggalek. *J Kesehat Masy Gizi* 2022; 5(1): 147-155.
- [23] Conner M. Theory of Planned Behavior. *Handb Sport Psychol* 2020; pp. 1-18. <https://doi.org/10.1002/9781119568124.ch1>
- [24] Purwanti D, Suparji, Nugroho HSW. Metode Emo-Demo Merupakan Metode Efektif Dalam Perubahan Perilaku Pencegahan Dalam Pernikahan Dini Pada Remaja Putri. *J Penelit Kesehat Suara Forikes* 2020; 11: 101-106.
- [25] Ajzen I. The theory of planned behavior: Frequently asked questions. *Hum Behav Emerg Technol* 2020; 2(4): 314-324. <https://doi.org/10.1002/hbe2.195>
- [26] Mahmuda IR, Roisah, Salam AY. Pengaruh Edukasi Berbasis Kelompok Terhadap Kepatuhan Minum Obat Pada Pasien Hipertensi. *J Sains Teknol dan Kesehat* 2023; 3(2): 287-298. <https://doi.org/10.55681/saintekes.v2i3.119>
- [27] Hakim BN, Yuliana W, Genggong JR, Pendidikan A, Pesantren H, Hasan Z. Pengaruh Metode Emodemo Modul Asi Saja Cukup Terhadap Pelaksanaan Asi Eksklusif 1-3 Hari. *Conf Res community Serv* 2020; pp. 725-730. <https://doi.org/10.33475/mhjns.v1i1.16>
- [28] Nugroho IP. Memahami Rasa Ingin Tahu Remaja Ditinjau Berdasarkan Jenis Kelamin. *J Bimbingan Dan Konseling Ar-Rahman* 2019; 5(1): 1. <https://doi.org/10.31602/jbkr.v5i1.1675>
- [29] Auliya Rahmy H, Dewi RK, Firdaus F, Symond D. Pelatihan Jarak Jauh Tentang Pemberian Makan Bayi dan Anak Kepada Kader Kesehatan Puskesmas Kotatangi dengan Pendekatan Emotional Demonstration. *I-Com Indones Community J* 2022; 2(1): 38-45. <https://doi.org/10.33379/icom.v2i1.1220>
- [30] Ardilla N, Herlina, Dewi WN. Hubungan Pendidikan Karakter Remaja terhadap Prestasi Belajar. *J Med Utama* 2022; 03(02): 2103-2111.
- [31] Notoatmodjo, Soekidjo. Promosi Kesehatan dan Perilaku Kesehatan. Jakarta: Rineka Cipta 2014.
- [32] Notoatmodjo, Soekidjo. Promosi Kesehatan: Teori & Aplikasi. Jakarta: Rineka Cipta 2010.

Received on 01-11-2023

Accepted on 28-11-2023

Published on 27-12-2023

<https://doi.org/10.6000/1929-6029.2023.12.31>

© 2023 Ramadhina et al.; Licensee Lifescience Global.

This is an open-access article licensed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the work is properly cited.