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Response substitutions to prevent smoking habits in adolescents

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Abstract

The habit of smoking among adolescents at junior high school level is very worrying and requires early prevention. One of the ways to prevent this is by applying self-management to students by Physical Education teachers at schools. Stimulus Substitution is one part of cell management that the Physical Education teacher tries to suggest to students at SMP Negeri 2 Rajagaluh as an effort to divert students' attention from smoking habits. In accordance with their interests, each student chooses several activities offered to avoid smoking, namely (1) carrying out religious activities, (2) studying and reading, (3) working, (4) eating or snacking, (5) playing games, (6) exercise, and (develop artistic talent. Answers to observation sheets and interviews, students have a positive tendency to suppress smoking habits through response substitution strategies according to their respective choices.

Keywords: Smoking habits, adolescents, physical education teachers

Introduction

Smoking behaviour in adolescents is now a common sight. Some people understand, but actually more do not agree with the habit. People who give proclamations are more because of their powerlessness to ban, while those who disagree are based on several reasons. The classic prohibition put forward by ordinary people is that because children do not have an income, they automatically do not or cannot afford to buy cigarettes. While the scientific reasons include that smoking has a bad effect on health, because cigarettes have several components that are toxic to the body, namely carbon monoxide, tar and nicotine. (Uswah, 2022) ^[17].

Carbon monoxide is one of the contents of cigarettes in the form of a toxic gas that has no taste and smell. If you inhale too much carbon monoxide gas, red blood cells will bind more to carbon monoxide than oxygen, as a result, muscle and heart function will decrease. This will cause fatigue, weakness, and dizziness. On a large scale, people who inhale this gas can experience a coma or even die. (Tirtonegoro, 2022) ^[16].

Tar is a chemical particle produced from burning cigarettes. This substance forms a sticky brown or yellow residue. The longer the cigarette is burned, the levels will increase. The last puff of a cigarette can contain twice as much tar as the first puff. Tar can cause: 1) lung disease, 2) cancer development, 3) trigger changes in the brain, increasing chronic health problems. (Makarim, 2022) ^[7].

The third dangerous ingredient in cigarettes is nicotine. Nicotine can cause temporary pleasure effects in the brain. The effects of nicotine can make a person feel comfortable, but they are at risk of becoming addicted. Nicotine addicts will usually feel anxious and irritable when they don't get nicotine intake, for example when they stop smoking.

The dangers of smoking, as stated above, are often conveyed by teachers at schools or related parties in the hope that the effect of fear will arise in adolescents. However, instead of avoiding it, they were curious and wanted to try it. This curiosity may arise because in the environment around them, they see adults, even their parents, doing continuous smoking activities. They witness how smoking is really enjoyed by society (addicts), and this is the cause of how young people are curious about the sight that is in front of their eyes.

Novrisza (2022) ^[2] states that a 2021 study conducted by Puspitasari *et al.* (2021) ^[12] (Afifah, 2022) ^[2] found that: "Most of the smoking behaviour in adolescents starts at the age of 15 years.

The biggest source of influence for smoking comes from friends for fun reasons or just trying. (Puspitasari, 2021) ^[12] Most of the respondents know that smoking is harmful to health, such as lung cancer and heart disease. Most of this knowledge is obtained from cigarette packs. The reason for adolescents to maintain smoking attitudes is that they feel calm and release stress when smoking. The low awareness of smokers to stop smoking behaviour is an indicator that efforts need to be made to reduce the prevalence of teenage smokers by holding health promotion activities.

Intimate friendships are allegedly a strong cause of influencing a teenager to smoke. This is as stated by Wulandari (2017) ^[19], (Wulandari & Meikawati, 2017) ^[19] "That this influence will be stronger in intimate friendships, namely friends. In an intimate situation like this, like it or not, friends' habits become familiar in everyday life together, which in the end the friends' habits are tried and eventually become new addicts, matching friends smoking together." There is a tendency to be afraid of not being seen as social if you don't join in smoking. This is as stated by Mahyar Suara *et al.* that if they don't smoke, they are considered not social. So that many school-age children casually smoke outside school while still wearing school uniforms. They do not care about the consequences of smoking even though there have been many advertisements that say that smoking is prohibited. (Suara, Rusman, & Kusnanto, 2020) ^[15].

From the results of observations at SMP Negeri 2 Rajagaluh, Rajagaluh District, Majalengka Regency, it was found that out of 220 students, 30% had smoked, 10% still smoked in secret, and 5% smoked openly.

From the total percentage available, for junior high school-age youth, this is included in the worrying category. Teachers at the school classify children who like to smoke into the group of 'students with problems'.

Facing the negative phenomena above, the Physical Education Teacher together with the Student Council Advisor took preventive measures to suppress the increase in the number of smokers among students at SMP Negeri 2 Rajagaluh. One of the efforts made is to apply self-management techniques. According to Nurzaakiyah and Budiman (2005): (Budiman, 2005) ^[20].

"Self-management in educational, psychological and business terminology is a method, skill and strategy that can be carried out by individuals in directing effectively the achievement of the goals of the activities they carry out, including goal setting, planning, scheduling, task tracking, self-evaluation, self-intervention, self-development. In addition, self-management is also known as the process of execution (decision making)".

Self-management techniques can be done in several ways, namely self-monitoring, stimulus control, changing responses, and entering into contractual agreements. Self-monitoring is the individual's ability to observe and evaluate the extent to which he has smoking habitual behaviour. Stimulus control is how individuals attempt to regulate and control stimuli that arise from within or from outside themselves. Changing the response is the individual's ability to change the response when facing a stimulus that directs him to smoke. Enter into contract agreements with other people, namely an agreement made between himself and another person with the aim of stopping smoking. Other people can be friends, parents or professionals. (Dariyo, 2008) ^[5] of the four methods contained in the self-management technique, the Physical Education Teacher at SMP Negeri 2 Rajagaluh chose response substitutions as an alternative to smoking prevention in

students. Several choices of activities are then offered to students as a form of diverting the response from the desire to smoke. Some of the choices include: Religious activities, studying and reading, working, eating or snacking, playing games, sports activities, and developing artistic talent.

Research on efforts to prevent smoking in adolescents empirically refers to several studies that have been conducted by several researchers, in collaboration with new findings in the field.

Research Method

The research method used is descriptive method with the aim of uncovering a problem or situation as it is and revealing existing facts. (Anwar, 2018) ^[4] In other words, descriptive research methods are used to describe problems that occur in the present or are ongoing. (Margareta, 2013) ^[8] The research approach used was qualitative research to describe complete information about "Physical and Health Teacher Strategies in Preventing Smoking Habits in Teenagers at SMP Negeri 2 Rajagaluh". Data collection techniques for research are by using observation and interviews. While the method of data analysis consists of data reduction, descriptive presentation of data, and drawing conclusions.

Research Results and Discussion

The strategy for preventing smoking habits for students at SMP Negeri 2 Rajagaluh is carried out by referring to self-management strategies. This strategy can be carried out in several ways, namely self-monitoring, stimulus control, changing responses, and entering into contractual agreements. These four points were then added to the question points on the following observation sheets and interviews.

For the purposes of this study, response substitution or replacing stimuli was selected and developed into 5 (five) points for students' choices when they receive smoking stimuli that come either from themselves (desires) or from outside. The five points are: (1) Learning and reading; (2) Work; (3) Eating and snacking; (4) Playing games; and (5) exercise. The table below shows the results obtained.

Table 1: Observation Points (Stimulus Substitutions) and Data

S. no	Observation Points (Stimulus Substitutions)	Data			
		M	W	Amount	%
1	Religious activity	20	15	35	16
2	Study or read	10	30	40	18
3	Work	13	14	27	12
4	Eat or snack	21	10	31	14
5	Playing game	16	10	26	12
6	Exercising	15	20	35	16
7	Develop artistic talent	5	11	16	7
	Amount	100	120	220	100

Information: M: Man, W: Women

The table reveals information that diversion or replacement of stimulation by students from smoking stimuli in point (1) namely carrying out religious activities, both at school and at the place of recitation, at the prayer room or religious private at home, totals 35 people or 16%. Students who carry out (2) study or read, are as many as 40 people or 18%. Students who transfer stimulation to activities (3) Work, such as group work, doing homework, etc. is as much as 12%. In point (4) Eating or snacking is done by 31 students, or 14%. Points (5) Playing games, both offline games and online games are played by 26 students or 12%. Point (6) exercise, carried out by 35 students or 16%. And students who do point (7)

develop artistic talent, as many as 16 people or 7%.

Meanwhile, the results of the interviews that were collected according to the points of focus of observation were revealed as follows. Students who give reasons for choosing point (1) to carry out religious activities, are that religious activities are important to equip themselves, both in this world and in the hereafter. Most of the students who have point (1) are children who study at Islamic boarding schools and come from outside the Rajagaluh area. Most of them come from Indramayu who study and become students at Islamic boarding schools which are located not far from Rajagaluh 2 Public Middle School.

Point (1) Carrying out religious activities in preventing smoking habits is based on the idea that life must be healthy. As a Muslim, we have responsibilities and obligations, both during the day and night, such as praying or matters related to the benefit of the family, community, and even the state. However, all these responsibilities will not be carried out properly, except for those who are able-bodied. Islam reminds us not to be negligent in taking advantage of healthy time. Islam is also very concerned about its people maintaining health before it reaches its time (died) or contracted a disease. (AbuKhatib, 2015) ^[1].

One way to maintain health suggested by Islam is to avoid smoking. Regular smoking prevention programs can raise awareness and remind people about the importance of being aware of cigarettes and cigarette smoke. Therefore it is felt important to cooperate with cross-sectoral programs in a comprehensive manner so that prevention activities can become an appropriate strategy to prevent adolescents from smoking. (Rahayuwati, 2018) ^[13] In this regard, diverting attention from smoking to religious activities is the best choice.

Students who chose point (2) study and read, giving reasons, that learning (memorizing, re-reading lessons, group study) and reading (in the library, at home), are positive and fun activities. They mentioned that by studying and reading they could forget about other activities, especially smoking.

Efforts to divert smoking stimulation to students as referred to in point (2) is an appropriate diversion of smoking stimulation because smoking habits will actually interfere with learning concentration. For students who are used to smoking and experience addiction (addiction) and dependency (dependence) will find it difficult to concentrate on the activities they are undertaking without smoking cigarettes, because tobacco withdrawal syndrome is an uncomfortable symptom both psychologically and physically, to overcome this problem will re-smoke cigarettes with increasing numbers and more often. (Ria, Imran, and Supriadi, 2016) ^[14].

Point (3) work, was chosen by students on the grounds that work activities are more beneficial than smoking activities which are clearly detrimental both to health and finances. The condition of the parents, with a mediocre income is the reason not to smoke first if you can't afford it yourself. So working activities (helping the mother with the housework, helping with the rice fields, helping with trading) are training so that they will be able to be independent and able to make their own money, but not for smoking.

According to Mirza (2021) ^[21] work is a learning process. Work in any field is intended as a learning process. Work is not a burden, but work can lead to more development. (Mutaqien, 2021) ^[9].

Eating and snacking on point (4) is the right choice for some students on the grounds that eating and snacking is enough to meet life's needs. Eating, including snacks in the school

cafeteria, eating meatballs, eating seblak, and so on can fulfil needs that don't need to be added to other activities that are not useful.

Meanwhile, snacking, especially done by female students, is a fun activity that can be done while chatting. In this connection, many foods can be consumed to prevent smoking, some of which are (1) Vegetables, namely vegetables that are low in calories, such as carrots, celery, broccoli, and tomatoes, (2) Fruits, such as oranges, pears, apples, and bananas, which are rich in fibre, antioxidants, and vitamins. These fruits can help clean up free radicals that accumulate in the body due to smoking habits. (3) Nuts rich in fiber, such as peas, kidney beans or soybeans, can keep a person full. Eating nuts as a snack will help distract you from the urge to smoke, without making you gain weight. (4) Popcorn, a snack that is usually consumed while watching or chatting can help avoid smoking. Besides making you busy chewing so you forget the desire to smoke, eating popcorn will also make you full quickly. And the next meal is (5) Chewing gum, these foods can help reduce the desire to smoke. (Pittara, 5 Jenis Makanan Ini Bisa Membantu Kamu Berhenti Merokok, 2022) ^[2].

Playing games (point 5), is an exciting activity for junior high school-age teenagers. They can play online games and offline games. Online games are carried out using cellphone media with the help of internet signals and other media such as computers, and others. Meanwhile, the offline games that they usually do are traditional games left in the community, such as playing rubber, cat and mouse, or guessing games. This activity for them is powerful enough to ward off the desire to smoke.

Playing games (video games) is one of the activities that can reduce smoking habits. This is as stated by Reskiaddin (2021) ^[22] that smokers will feel lonely and bored when not smoking because cigarettes are considered a friend to get rid of boredom and boredom. Therefore, to take advantage of this time, it is necessary to do things to keep oneself busy through activities related to hobbies and other positive activities such as playing music, playing video games, joining organizations, chatting, sleeping, reading books, listening to music, cycling. (al., 2021) ^[3].

Point six is exercise. This activity can be done at school (both during lessons/learning hours or in extracurriculars) and outside of school, for example joining a football, volleyball, futsal and badminton club. According to them, sports activities are effective enough to ward off the desire to smoke. Their awareness about the dangers of smoking to health is a strong reason for them to stay fit while exercising.

The choice of exercise as an effort to divert attention from smoking is in accordance with the opinion of Utami (2018) ^[23] in India *et al.* (2019) ^[24], (Wulandari & Wahyudi, 2019) ^[18] that exercise can make individuals distracted from the desire to smoke by increasing the production of endorphins which can improve mood for the better, besides that, it can reduce nicotine levels in the body and can change one of the hormones to balance nicotine levels in the body during exercise.

For some students, developing artistic talent in point (7) is the best choice to prevent smoking. There are artistic activities that are carried out at school (through a dance school), and there are also activities that are carried out outside of school, namely in art galleries. They reasoned, by doing artistic activities they forgot to think about smoking.

A study conducted by Darmayanta and Salimin (2017) ^[6] concluded that extracurricular activities can also train students to be independent and forget the smoking habits they often

do. With this activity, it will increase the enthusiasm and activeness of students in obtaining a healthier and better life. (Darmayanta & A., 2017) ^[6].

Conclusion

Prevention of smoking habits in adolescents can be overcome by applying self-management to students by Physical Education teachers at school. Stimulus Substitution is one part of cell management that the Physical Education teacher tries to suggest to students at SMP Negeri 2 Rajagaluh as an effort to divert students' attention from smoking habits. In accordance with their interests, each student chooses several activities offered to avoid smoking, namely (1) carrying out religious activities, (2) studying and reading, (3) working, (4) eating or snacking, (5) playing games, (6) exercise, and (develop artistic talent). Answers to the observation sheet and interviews, students have a positive tendency to suppress smoking habits through response substitution strategies according to their individual choices.

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