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Determinants of Smoking Behavior in Adolescents



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Abstract

Smoking behavior, as one of the riskiest behaviors carried out by teenagers, has always been a problem throughout the ages. One of the districts in East Java with the highest number of smokers is Tuban. This study aimed to determine the dominant factors that influence adolescent smoking behavior. The population of this study was junior high school teens, both smokers and non-smokers. The design of this study was analytic with a cross-sectional approach. The population was 2,866, and the sample size was 287 using the purposive sampling technique. The independent variables included gender, puberty status, self-esteem, motivation, health status, occupation, economy, environment, friends, family, model/role model. The data collection used a questionnaire prepared by the researcher. The collected data was processed by a logistic regression test. The results showed that the majority of adolescents did not smoke (98.61%), more than half of the adolescents were female (58.89%), the majority had experienced puberty (96.17%), most had negative self-esteem (88.50%), all stated that smoking did not give motivation to be active and not smoke during illness, the majority did not have a side job (97.56%), more than half of parents earn above the minimum wage (53.31%), and the majority stated that the environment did not affect smoking behavior (99.30%), friends did not influence smoking behavior (98.95%), family did not influence smoking behavior (99.65%), and the model/role model did not affect smoking behavior (99.65%). The results of statistical tests showed that all factors had a significance level greater than 0.05, meaning that there was no dominant factor influencing smoking behavior in adolescents. Related parties such as schools, health offices, and health education continue to improve education for teenagers about the dangers of smoking

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INTRODUCTION

Smoking behavior, as one of the riskiest behaviors carried out by teenagers, has always been a problem throughout the ages. As long as the root cause is still there and supported by various policies that are in favor of the owners of the cigarette industry, then during that time the problem of smoking will always exist.

Various parties have taken many actions to prevent and improve smoking behavior that poses a health risk, ranging from increasing knowledge through counseling, socialization, and legislation on non-smoking areas, workshops on the dangers of smoking, public service advertisements about the negative impacts of smoking, the formation of a smoke-free organization, and so on. But the facts speak differently. From year to year, the number of smokers has never decreased; it is increasing, including in East Java Province, including Tuban Regency. Until now, no data explains what factors influence the smoking behavior of people in Tuban Regency.

All age groups engage in smoking behavior. The Southeast Asia Tobacco Control Alliance (SEATCA) report, The Tobacco Control Atlas, shows that Indonesia has the highest number of smokers in ASEAN, which is 65.19 million people. This figure is equivalent to 34% of the total population of Indonesia in 2016 (Widowati Hari, 2019). In Indonesia, the proportion of smokers aged between 10 and 14 years is 30.3%. In East Java Province, the proportion of smokers aged 10–14 years is 23.91% and that aged 15–19 years is 26.20%. In Tuban Regency, the percentage of daily smokers at the ages of 10–14 years is 23.99% (Riskasdas, 2018). The results of research by Sumiatin et al. (2019), regarding the implementation of the PIS-PK Healthy Indonesia Program at the Sumurgung Health Center, Tuban Regency, showed that the indicator that was not good enough to achieve was smoking behavior. The results of research by Sumiatin et al. (2021) show that smoking is the riskiest behavior carried out by adolescents in the Tuban district among 12 risky behaviors carried out by adolescents.

WHO has set the Sustain Development Goals (SDG'S) to be achieved by 2030. These achievements will not be possible without investment in the health and well-being of adolescents (WHO, 2017). On the other hand, smoking behavior has a direct and indirect impact

on health and welfare, namely poor educational attainment, future morbidity and premature death (diseases caused by cigarette consumption), and economic problems due to increasing cigarette prices. The impact on health caused by smoking behavior in adolescents and the importance of adolescent health is an investment to achieve the SDG's 2030 target, requiring efforts to prevent or reduce the effects that will occur. Nurses can carry out health promotion through the Health Promotion Model (HPM) theoretical approach to address risky behavior in the community. Health promotion encourages lifestyles and behaviors that enable people to maximize their potential through individual, organizational, and community change. HPM combines the perspectives of nursing and behavioral science with the factors that influence health behavior. This model offers a guide for looking at the complex biopsychosocial processes that motivate individuals to engage in behaviors that lead to improved health (Pender, Murdaugh, & Parsons, 2015; WHO, 2017).

The purpose of this study was to determine the dominant factors influencing smoking behavior in adolescents in Tuban Regency.

METHOD

The research design used analytic with a cross-sectional approach. The population in this study was 2,866 junior high school students in Tuban Regency. The sample was some of the teenagers who attended Junior High School in Tuban Regency, as many as 287 teenagers. The inclusion criteria in this study were teenagers who lived in Tuban, were cooperative, willing to sign the Inform Consent, and filled out a questionnaire. The sampling technique used purposive sampling.

The independent variables in this study were gender, puberty status, self-esteem, motivation, health status, work, economy, environment, friends, family, models/role models. Data was collected using a questionnaire compiled by the research team using the Pender Model theory approach. The collected data was processed using a logistic regression test.

RESULT

The characteristics of more than half of the respondents are female (58.89%), more than half are 15 years old (50.17%), the majority are Muslim (96.52%), and most have a low BMI (47.04%).

Table 1: Distribution of Respondents Characteristics

| Characteristics | Amount | |
|-----------------|---------|-------|
| | n = 287 | % |
| Gender | | |
| Male | 118 | 41.11 |
| Female | 169 | 58.89 |
| Age | | |
| 13 years old | 35 | 12.20 |
| 14 years old | 144 | 50.17 |
| 15 years old | 100 | 34.84 |
| 16 years old | 8 | 2.79 |
| Relegion | | |
| Islam | 277 | 96.52 |
| Christian | 9 | 3.14 |
| Catholic | 1 | 0.35 |
| IMT | | |
| not enough | 135 | 47.04 |
| Normal | 95 | 33.10 |
| More | 57 | 19.86 |

According to the results of the study, the majority of adolescents did not smoke by 98.61%.

Table 2: Smoking Behavior in Adolescents

| Smoking Behavior | Amount | |
|------------------|---------|-------|
| | n = 287 | % |
| <i>Yes</i> | 4 | 1.39 |
| <i>No</i> | 283 | 98.61 |

Factors that influence smoking behavior in adolescents are as follows: More than half of adolescents are female (58.89%), almost all of them have experienced puberty (96.17%), most have negative self-esteem (88.50%), all of them state that smoking does not motivate activity; they did not smoke during their illness; almost all of them did not have a side job (97.56%), more than

half of their parents had income above the minimum wage (53.31%), almost all stated that the environment did not affect smoking behavior (99.30%), their friends did not influence smoking behavior (98.95%), their family did not influence smoking behavior (99.65%), and their model/role model did not influence smoking behavior (99.65%).

Table 3: Factors Affecting Smoking Behavior in Adolescents

| Factor | Amount | |
|-----------------------|---------|-------|
| | n = 287 | % |
| Gender | | |
| Male | 118 | 41.11 |
| Female | 169 | 58.89 |
| Puberty status | | |
| Already | 276 | 96.17 |
| Not yet | 11 | 3.83 |
| Pride | | |
| Positive | 33 | 11.50 |
| Negative | 254 | 88.50 |
| Motivation | | |
| Yes | 0 | 0 |

| Factor | Amount | |
|----------------------|---------|-------|
| | n = 287 | % |
| No | 287 | 100 |
| Health Status | | |
| Yes | 0 | 0 |
| No | 287 | 100 |
| Pofession | | |
| Work | 7 | 2.44 |
| Not work | 280 | 97.56 |
| Economy | | |
| < UMR | 134 | 46.69 |
| ≥ UMR | 153 | 53.31 |
| Environment | | |
| Yes | 2 | 0.70 |
| No | 285 | 99.30 |
| Friend | | |
| Yes | 3 | 1.05 |
| No | 284 | 98.95 |
| Family | | |
| Yes | 1 | 0.35 |
| No | 286 | 99.65 |
| Role Model | | |
| Yes | 1 | 0.35 |
| No | 286 | 99.65 |

All factors have a significance > 0.05, so there are no factors that significantly affect smoking behavior in adolescents.

Table 4: Determinants of Smoking Behavior in Adolescents

| Variabel | B | S.E. | Wald | df | Sig. | Exp(B) | 95,0% C.I.for EXP(B) | |
|-------------|---------|-----------|------|----|-------|------------------------|----------------------|-------|
| | | | | | | | Lower | Upper |
| Gender | 16,090 | 2811,261 | ,000 | 1 | ,995 | 9724377,885 | ,000 | . |
| Puberty | -16,063 | 11409,858 | ,000 | 1 | ,999 | ,000 | ,000 | . |
| Pride | -14,351 | 5596,719 | ,000 | 1 | ,998 | ,000 | ,000 | . |
| Proffesion | -,159 | 13875,167 | ,000 | 1 | 1,000 | ,853 | ,000 | . |
| Economy | -15,803 | 3073,102 | ,000 | 1 | ,996 | ,000 | ,000 | . |
| Environment | ,287 | 56992,160 | ,000 | 1 | 1,000 | 1,332 | ,000 | . |
| Friend | 41,013 | 40310,285 | ,000 | 1 | ,999 | 648505600272141820,000 | ,000 | . |
| Family | -,027 | 58043,402 | ,000 | 1 | 1,000 | ,974 | ,000 | . |
| Constant | -31,085 | 43490,844 | ,000 | 1 | ,999 | ,000 | | |

DISCUSSION

Gender factor

Based on gender, more than half of adolescents are female, and the rest are male. Of the four teenagers who smoke, one of them is female.

Adolescents' intention to engage in risky behavior was influenced by several factors, such as tobacco smoking, drug abuse, and alcohol abuse. Risk-taking behavior is always determined by the intention of the perpetrator to do so. In addition, risk behavior is also influenced by gender,

education level, and region (Sadzaglishvili, 2017). According to Maisya & Susilowati (2013), men are 8.43 times more likely to engage in risky behavior than women.

Smoking behavior is currently still dominated by male adolescents, which is related to their assumption of being recognized as male (So & Yeo, 2015). In male adolescents, the most common risk behavior is smoking (Ekawati et al., 2016). However, it is possible for young girls to engage in this behavior as well. Because at this point, gender differences are not really a benchmark for a behavior to be carried out. In various fields, demands for a balance of treatment for men and women always get the spotlight from many groups, so it is not a strange thing if, in behavior, women do the same thing done by men.

Puberty factor

Almost all teenagers have experienced puberty. Of the four teenagers who smoke, three of them have experienced puberty.

According to Soetjningsih and Ranuh (2015), the stages of adolescent growth and development are divided into three, namely, early adolescents (10–13 years) (early puberty), mid-teens (14–17 years) (middle puberty), and late adolescents (17–20 years) (late puberty). Signs of early adolescence are cognitively inclined to concrete thinking; in terms of morals, they don't see the long-term consequences of a decision made. According to Xi et al. (2013), tobacco use and exposure to regular cigarette smoke have decreased significantly among young adolescents aged 12–15 years in low- and middle-income countries.

The inability of early adolescents to see the long-term consequences of their actions makes them so easily influenced by temptation. What he sees is good and comfortable, and what he tends to do.

Self-esteem factor

Most adolescents have negative self-esteem. Of the four teenagers who smoked, all of them had negative self-esteem. In early adolescence, changes occur in adolescents due to changes in their bodies, awareness of appearance, and attractiveness (Soejtiningsih, 2018). Adolescents' early smoking initiation is influenced by the desire to be recognized as male, consider oneself thin or average (body image), have an even level of

happiness, and have parents who have a secondary education level or lower (So & Yeo, 2015).

Adolescence has distinctive characteristics. Their developmental tasks center on overcoming infantile attitudes and behavior patterns and preparing for adulthood. Therefore, adolescence is also called a period of transition, change, trouble, identity search, and unrealistic expectations. In the identity search period, adolescents who no longer want to be called children try to display or identify behaviors that become status symbols of adulthood. One of the behaviors of adolescents that emerge is smoking, which they consider a symbol of maturity. This behavior often starts at junior high school age (Hurlock, 2004).

Adolescents, who have negative self-esteem tend to feel unappreciated, unnoticed, belittled, physically lacking, do not like being criticized, and feel pessimistic about the efforts they make. That encourages teenagers to dare to engage in risky behavior in the hope that others will pay more attention to them.

Job factor

Most teenagers do not have a side job. Of the four teenagers who smoked, all of them did not have a side job other than studying at school.

Factors related to smoking behavior are gender, age, experience, knowledge, and attitude (Wijayanti, Dewi, & Rifqatussa'adah, 2017).

In terms of work, in early adolescence, the majority of teenagers' needs are very dependent on their parents, so it is still unthinkable to have a side job. Adolescents feel that their needs are met because their families have a lot of money.

Economic factor

More than half of teenagers have parents whose income is above the minimum wage. Three of the four teenagers who smoke come from families with an income above the minimum wage.

Tobacco use and exposure to secondhand smoke are common among young adolescents aged 12–15 years in low- and middle-income countries. However, there is no relationship between the country's economic condition and the smoking behavior of its population (Xi et al., 2013).

Economically, teenagers who smoke cigarettes come from affluent families, meaning that there are no obstacles for them if they want to smoke, all comes back to the intentions and desires of the teenagers themselves, because many teenagers come from families who cannot smoke.

Friend factor

The results showed that almost all teenagers stated that friends did not influence their smoking behavior, but three out of four teenagers who smoked said that friends influenced them to smoke.

In early adolescence, adolescents tend to seek same-sex peers to cope with instability. At that time, adolescents were also intensely peeved towards peer involvement and the prevailing culture in peer groups (Soetjiningsih, 2018). Weiss (in Armsden & Greenberg, 1987) defines peer attachment as the ability of peers to support and encourage adolescents in increasing assumptions about adolescent growth changes. Factors related to smoking behavior include gender, age, experience, knowledge, and attitudes (Wijayanti, Dewi, & Rifqatussa'adah, 2017). Gottman et al. (in Ormrod, 2009) revealed that friends are generally the same age and sex, but some children and adolescents have friends of the opposite sex.

According to Gottman and Suttles (in Ormrod, 2009), friends find activities that can be enjoyed and interpreted together and gain a series of similar experiences that allow the exchange of some perspectives on life.

The pattern of interaction in adolescence is spent more with peers. Peers play an important role in adolescent development because they separate from their parents and join their peers. Teenagers' need to be accepted often makes teens do anything to get into their group. (Hurlock, 2004).

When teenagers are among their peers, they tend to follow what has been agreed and applied in the group. The condition of instability at the age of teenagers is one of their motivations to find an environment that they consider comfortable and appropriate. If they have found that environment, whatever applies in it, they will follow it. One of them is smoking behavior, which has been so synonymous with teenagers.

Family factor

Almost all adolescents stated that their family did not influence them to smoke. Three out of four teens who smoke say that their family does not influence their smoking behavior.

According to Septiana Nurul et al. (2016), family integrity affects smoking behavior in adolescents. The more intact a family is, the more intimate the relationship within it will be, so the activities of adolescents with their families tend to be controlled so that they can minimize the chances of adolescents carrying out risky behaviors such as smoking.

Many teenagers state that their family does not affect their smoking behavior. Maybe this is because they are harmonious, warm, caring, and full of love, so teenagers do not need to look for outside activities to fill the void or look for friends to share it with. let alone engage in risky behavior.

Role model factor

The results were interesting because almost all adolescents stated that the role model did not affect their smoking behavior. Of the four teenagers who smoked, three of them said the same thing.

Children whose parents smoke are more likely to become smokers in the future. This situation occurs for two reasons: first, children want to look like their fathers when smoking cigarettes; and second, children are used to cigarette smoke at home. They have become passive smokers when, as teenagers, it is easy to switch to being active smokers (Siquera, 2004).

The number of adolescents who did not smoke in this study said that the model/role model also did not influence them to participate in smoking behavior. It is possible that they lived in a non-smoking family, or that they had received good knowledge and understood that smoking was not good for health. Especially if there are regulations at school that prohibit students from smoking, and they will be penalized if they violate them.

Environment factor

Almost all adolescents stated that the environment did not affect their ability to smoke. Two out of four teens who smoke say that the environment influences their decision to smoke.

Environmental factors related to tobacco use include parents, siblings, and peers who smoke. In addition, because of the exposure to cigarette advertisements in the media, Parents greatly influence the development of smoking behavior in adolescents. A cohort study of high school students

found that the significant predictors of the transition from occasional smoking to regular smoking were parental smoking and family conflict (Siquera, 2004). According to Wulan (2012), the psychological factor that most plays a role in influencing adolescent smoking is environmental or adolescent context factors, but not a few respondents said they smoked because they saw friends smoking, seeing parents smoking, and seeing siblings smoking.

Apart from family and peers, the environment has a significant influence on adolescents' behavior. At this time, adolescents feel more comfortable dealing with emotional and psychological instability by being in the environment of their peers. When the peer environment he occupies is smoking, teenagers may follow suit, and it is difficult to reject or avoid.

Health status factor

Almost all adolescents stated that being sick or healthy did not affect their smoking behavior. Of the four teenagers who smoked, three of them said that their health or illness did not affect their smoking.

Adolescents, according to Santrock (2003), reach a level of health, strength, and energy that will not be achieved again for the rest of their lives. They also think that they are unique and invulnerable, which makes them feel like disease or disorder will not enter their life. Many factors influence the behavior of a teenager, including cognitive factors and socio-cultural factors. Among these cognitive factors is the problem of health belief.

Adolescent beliefs about health or illness, feeling immune to various diseases, can obscure adolescent behavior that poses a health risk. So, it is not unusual for teenagers to think that when they are sick, if they want to smoke, they will do it.

Motivation factor

Almost all adolescents stated that smoking behavior is not a separate motivation for carrying out an activity. And of the four teenagers who smoked, all of them said that there was no relationship between smoking and the motivation/spirit of doing an activity. That means that, without smoking, teenagers can still carry out activities with enthusiasm. According to Soetjningsih and Ranuh (2015), in early adolescence, namely the age of 10–13 years,

adolescents are engrossed in body changes, self-awareness of appearance and attractiveness, fantasy, and present orientation. Adriansyah and Rahmi (2012) stated that factors that affect the morale of early adolescents include less open social interactions and ambiguous parenting styles, which can make them feel bad.

Adolescents without a specific motivation have focused on how to motivate themselves to complete developmental tasks in the early stages. Although no one guarantees that all teenagers will do that. Teenagers, in the early stages of their development, are dominated by emotional instability and other things. They need the right and good direction so that they don't go astray. Social interaction between adolescents and parents must be more open so that adolescents feel they have a place to exchange ideas. Parenting patterns are more assertive, meaning that if a behavior is not good, then say it is not good, and vice versa, if it is good, say it is good, so teenagers are not confused about choosing and deciding.

CONCLUSION

From the factors of gender, puberty status, self-esteem, motivation, health status, work, economy, environment, friends, family, model/role model, there is no dominant and significant factor influencing smoking behavior in adolescents.

SUGGESTION

For related parties such as schools, the health office, and health education, they participate in maintaining and continuing to improve education for adolescents about the dangers of smoking so that adolescents do not engage in behaviors that are riskier to their health than the benefits obtained.

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REFERENCE

Aboytes-alvarez, A., Olvera-villanueva, G., Raygoza, N. P., Lourdes, M., & Jinez, J. (2017). Promotion of Health in Self-efficacy , to Reduce Tobacco Consumption in Young

- Adults. *International Journal Of Tropical Disease*, 27(2), 1–9. <https://doi.org/10.9734/IJTDH/2017/37546>
- Adriansyah, Rahhmi., (2012). Faktor-faktor yang mempengaruhi moralitas remaja awal. *Jurnal Psikostudio Universitas Mulawarman*. Vol 1 no 1 Juni 2016, 1-16
- Armsden, G.C., & Greenberg, M.T. (1987). The inventory of parent and peer attachment : Individual differences and their relationship to psychological well-being in adolescence. *Journal of youth and adolescence*. 16 (5), 427-454.
- Agung, I. M. (2012). Model Perilaku Pengendara Berisiko Pada Remaja. *Jurnal Psikologi Integratif*, 2(2), 35–41. Retrieved from <http://ejournal.uin-suka.ac.id/isoshum/PI/article/view/232/228>
- , A. De, & Harakeh, Z. (2017). The Effect of Active and Passive Peer Discouragement on Adolescent Risk taking : An Experimental Study. *Journal Of Research On Adolescence*, 27(4), 878–889. <https://doi.org/10.1111/jora.12320>
- Brooks, F. M., Magnusson, J., Spencer, N., & Morgan, A. (2012). Adolescent multiple risk behaviour: an asset approach to the role of family, school and community. *Journal of Public Health*, 34(suppl 1), i48–i56. <https://doi.org/10.1093/pubmed/fds001>
- Duell, N., Steinberg, L., Icenogle, G., Chein, J., Chaudhary, N., Di, L., ... Skinner, A. T. (2018). Age Patterns in Risk Taking Across the World. *Journal of Youth & Adolescence*, 47, 1052–1072. <https://doi.org/10.1007/s10964-017-0752-y>
- Ekawati, Y. N., Psi, S., Psi, M., Saputra, N. E., Psi, S., Periantalo, J., ... Psi, M. (2016). Risk Behavior on Students Jambi. *Jurnal Psikologi Jambi*, 1(1), 19–28.
- Ersin, F., & Bahar, Z. (2017). Effects of Nursing Interventions Planned with the Health Promotion Models on the Breast and Cervical Cancer Early Detection Behaviors of the Women. *International Journal of Caring Sciences*, 10(1), 421–432. Retrieved from <https://pdfs.semanticscholar.org/6ebf/fbf474d85f1c1b756975caa4793112288016.pdf>
- Fidancı, B. E., Akbayrak, N., & Arslan, F. (2018). Assessment of a Health Promotion Model on Obese Turkish Children. *The Journal Of Nursing Research*, 6(December 2017). <https://doi.org/10.1097/JNR.0000000000000238>
- Hale, D. R., Fitzgerald-Yau, N., & Viner, R. M. (2014). A Systematic Review of Effective Interventions for Reducing Multiple Health Risk Behaviors in Adolescence Wesystematically. *American Journal of Public Health*, 104(5), 19–41. <https://doi.org/10.2105/AJPH.2014.301874>
- Hurlock, E. (2004). *Psikologi Perkembangan*. Jakarta : PT. Gramedia Pustaka
- Jaworska, N., & MacQueen, G. (2015). Adolescence as a unique developmental period. *Journal of Psychiatry & Neuroscience*, 40(6), 386–386. <https://doi.org/10.1503/jpn.150268>
- Khodaveisi, M., Omidi, A., Farokhi, S., & Reza, A. (2017). The Effect of Pender ' s Health Promotion Model in Improving the Nutritional Behavior of Overweight and Obese Women. *Int J Community Based Nurs Midwifery*, 5(2), 165–174.
- Kipping, R. R., Campbell, R. M., MacArthur, G. J., Gunnell, D. J., & Hickman, M. (2012). Multiple risk behaviour in adolescence. *Journal of Public Health*, 34(suppl 1), i1–i2. <https://doi.org/10.1093/pubmed/fdr122>
- Kohut, T. (2019). Associations between adolescents ' use of sexually explicit material and risky sexual behavior : A longitudinal assessment. *PLoS ONE*, 14(6), 1–14. Retrieved from <https://doi.org/10.1371/journal.pone.0218962>
- Liu, L., Wang, N., & Tian, L. (2019). The Parent-Adolescent Relationship and Risk-Taking Behaviors Among Chinese Adolescents : The Moderating Role of Self-Control. *Frontiers in Psychology*, 10(March), 1–8. <https://doi.org/10.3389/fpsyg.2019.00542>
- Made, N., Dewi, P., & Ketut, N. (2018). Faktor Yang Berhubungan Dengan Perilaku Berisiko Pada Remaja. *Journal Center of Research Publication in Midwifery and Nursing*, 2(1), 25–31. Retrieved from <http://ejournal.binausadabali.ac.id/index.php/caring/article/view/34>
- Maisya, I. B., & Susilowati, A. (2013). Faktor Pada Remaja Muda Dan Tersedianya Media Informasi Hubungannya Dengan Perilaku Berisiko. *Jurnal Kesehatan Reproduksi*, 5(3), 1–7. Retrieved from Google Scholar
- Muhtar, R. F., Arsyad, D. S., & Dwinata, I. (2015). *Gambaran Perilaku Berisiko pada Siswa SMA dan SMK Negeri di Kabupaten Sidrap*. Universitas Hasanudin.
- Oktan, V. (2018). An investigation of problematic internet use among adolescents in terms of self-injurious and risk-taking behavior Children and Youth Services Review An investigation of problematic internet use among adolescents in terms of self-injurious and risk-taking. *Children and Youth Services Review*, 52(May), 63–67. <https://doi.org/10.1016/j.chilyouth.2015.03.009>

- Ormrod, J.E. Educational psychology developing learners. Psikologi pendidikan: Membantu siswa tumbuh dan berkembang. Wahyu, L., Eva, S., Airin, Y.S., & Puji, L. (terj). (2009). Jakarta: Penerbit Erlangga.
- Pender, N. J., Murdaugh, C. L., & Parsons, M. A. (2015). *Health Promotion Model in Nursing Practice* (7th ed.). Pearson Education.
- Rahmayanti, D., & et al. (2019). Faktor Yang Mempengaruhi Perilaku Berisiko Pada Remaja Daerah Tambang. *Jurnal Keperawatan Dan Kesehatan*, 7(1), 41–47. Retrieved from <http://dx.doi.org/10.20527/dk.v7i1.5677>
- Richter, M. (2010). *Risk Behaviour in Adolescence: Patterns, Determinants and Consequences*. Germany: VS Research
- Sadzaglishvili, S. (2017). Adolescent Risk Taking Behaviors: the Case of Georgia. *Education Science and Psychology*, 3(45), 143–154. Retrieved from <http://e-resources.perpusnas.go.id:2402/eds/pdfviewer/pdfviewer?vid=13&sid=36a54b32-3bfb-4930-828c-65ded51dd108%40sessionmgr103>
- Safitri dkk .(2013). Faktor-faktor yang mempengaruhi perilaku merokok pada remaja. TAZKIYA Journal of Psychology. Vol 18 no 1 April 2013
- Santrock, J. W. 2003. Adolescence. Perkembangan Remaja. Jakarta : Erlangga
- Septian Nurul dkk. (2016). Family factors Affecting Smoking Behaviour among Junior High Scholl student. *Jurnal Ilmu Keperawatan* :4:1
- Sevinc, S., & Argon, G. (2018). Application of Pender’s Health Promotion Model to Post-Myocard.pdf. *International Journal of Caring Sciences*, 11(1), 409–418. Retrieved from http://www.internationaljournalofcaringsciences.org/docs/47_sevis_original_11_1.pdf
- Shaheen, A. M., Nassar, O. S., Amre, H. M., & Hamdan-Mansour, A. M. (2015). Factors Affecting Health-Promoting Behaviors of University Students in Jordan. *Health*, 7(1), 1–8. <https://doi.org/10.4236/health.2015.71001>
- Siquera,dkk.(2004).Smoking cessation in adolescent: The Role of nicotine dependence, stress, and coping methods: Archives of Pediatrics & Adolescent Medicine. Chicago. [http://www.proquest.com/\[on-line\]](http://www.proquest.com/[on-line])
- So, E. S., & Yeo, J. Y. (2015). Factors Associated with Early Smoking Initiation among Korean Adolescents. *Asian Nursing Research*, 9(2), 115–119. <https://doi.org/10.1016/j.anr.2015.05.002>
- Sultan, D., & Yaman, M. (2014). Survey for describing students ’ smoking behavior. *Procedia - Social and Behavioral Sciences*, 116, 298–302. <https://doi.org/10.1016/j.sbspro.2014.01.211>
- Sumiatin, dkk. (2021). Analysis of Health Behavior of Adolescents in Tuban, Indian Journal of Forensic Medicine & Toxicology. Apr-Jun2021, Vol. 15 Issue 2, p3604-3609. 6p.
- Soetjningsih & IG. N. Gde Ranuh. (2015). Tumbuh Kembang Anak, Ed. 2. Jakarta: EGC.
- Soetjningsih. (2018) Perkembangan Anak sejak Pembuahan sampai denagn kanak-kanak akhir. Cetakan ke 3. KENCANA
- Thammaraksa, P., Powwattana, A., Lagampan, S., Vatanasomboon, P., & Stoddard, S. A. (2019). Effects of School-Based Participation Program to Prevent Multiple Risk Behaviors in Thai Male Adolescents. *Pasific Rim International Journal of Nursing Research*, 23(3), 228–242. Retrieved from <https://www.tci-thaijo.org/index.php/PRIJNR/article/view/145791/136101>
- Thornberry, T. P., Krohn, M. D., Augustyn, M. B., Buchanan, M., Greenman, S. J., Justice, C., ... States, U. (2016). The Impact Of Adolescent Risk Behavior On Partner Relationships. *Advances in Life Course Research*, 28, 6–21. <https://doi.org/10.1016/j.alcr.2015.04.002>. The
- Thullen, M. J., Taliaferro, L. A., & Muehlenkamp, J. J. (2015). Suicide Ideation and Attempts Among Adolescents Engaged in Risk Behaviors : A Latent Class Analysis. *Journal Of Research On Adolescence*, 26(3), 587–594. <https://doi.org/10.1111/jora.12199>
- Ulon, E. R. K., & Ndramayu, I. (2010). Perilaku Berisiko Pada Remaja Di Kampung Nelayan (Studi Kasus Di Desa Eretan Kulon,Indramayu). *Prosiding SNaPP2017*, 91–98.
- Wang, C., Lembeck, P. T., Collins, A., & Berry, B. (2015). Teachers Matter : An Examination of Student- Teacher Relationships , Attitudes Toward Bullying , and Bullying Behavior Teachers Matter: An Examination of. *Journal of Applied School Psychology*, 31, 219–238. <https://doi.org/10.1080/15377903.2015.1056923>
- WHO. (2017). *Global Accelerated Action for the Health of Adolescents (AA-HA!): guidance to support country implementation*. Geneva: World Health Organization.
- Wijayanti, E., Dewi, C., & Rifqatussa’adah. (2017). Faktor-faktor yang Berhubungan dengan Perilaku Merokok pada Remaja Kampung Bojong Rawalele, Jatimakmur,

- Bekasi. *Global Medical and Health Communication*, 5(November), 194–198.
- Wulan (2012). Faktor psikologis yang mempengaruhi perilaku merokok pada remaja. *HUMANIORA*.Vol 2 no 2, Oktober 2012. 504-511.
<https://journal.binus.ac.id/index.php/Humaniora/article/view/3355/2737>
- Xi, B., Liang, Y., Liu, Y., Yan, Y., Zhao, M., Ma, C., & Bovet, P. (2013). Tobacco use and second-hand smoke exposure in young adolescents aged 12 – 15 years : data from 68 low-income and middle-income countries. *The Lancet Global Health*, 4(11), e795–e805.
[https://doi.org/10.1016/S2214-109X\(16\)30187-5](https://doi.org/10.1016/S2214-109X(16)30187-5)