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Smoking: in local wisdom and social environment perspective

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Abstract

This research purpose to investigate the contribution of local wisdom and social environment to smoking behavior. This research employs a mixed-method (quantitative and qualitative) design. The data were obtained through questionnaires, observation, in-depth interviews and focus group discussion. The results show that the socio-demographic factors are significantly influenced by local wisdom, except gender, men and women smoke based on individual will. The dominant influence for smoking behavior is coming from their family, especially imitation of the father performed; and social factors in the community. The socio-demography is significantly influenced by local wisdom, as it contributes to smoking behavior.

Keywords: local wisdom, social environment, smoking

Introduction

Smoking is still a global problem of public health because the impact of cigarettes is harmful to ones' health. It is known that tobacco cigarettes are a major cause of serious health problems experienced by the world population. Every year, about 6 million people worldwide lose their lives as a result of serious illnesses. World Health Organization (WHO) report estimated that one-fifth of the world's population dies annually from smoking-related diseases. A study conducted by researchers from Taiwan found that a carcinogenic substance in cigarettes called NNK causes lung cancer. Furthermore, a study conducted by researchers from England found that smokers suffering from Human Immunodeficiency Virus (HIV) suffer from acquired immune deficiency syndrome (AIDS) attacks two times faster compared to non-smokers (WHO, 2012).

It is ironic that even though various research results have reported the dangers of smoking, including even death, the number of smokers around the world has increased to nearly one billion people. According to a study by Arrazola et al. (2017) of the CDC, smoking has been shown to be very dangerous for all organs, and adults' smoking habits start in adolescence. Those who started the habit of smoking at a young age had higher rates of dependence on nicotine than those who started smoking in adulthood. Hence, efforts to prevent a smoking habit in adolescence become very important to reduce the death rate caused by diseases associated with smoking. About the effects of smoking on the lungs, measurement of breath length shows a shorter duration in smokers. Duration of breathing was 0–30 seconds in 29 people; 21 people breathed for 31–60 seconds, and none reached the standard of breathing duration of 61–90 seconds. In non-smokers, 7 individuals breathed for 0–30 seconds, 38 individuals breathed for 31–60 seconds, and 5 individuals breathed for 61–90 seconds (Leischow et al., 2016). There have been various activities to stop smoking, such as tobacco treatment research in Syria and in Indonesia since 2007, through programs to encourage avoiding passive smoking and prohibit people from smoking at home (Asfar et al., 2016). This program is one of the indicators of clean and healthy life behavior (PHBS). Since 2016, the program has become part of the Healthy Society Movement (GERMAS), which has six activities, including the non-smoking program (Nila, 2016).

According to tradition in Lebong, cigarettes are always provided in every gathering as a symbol to honor the guests. Special occasions, such as a marriage proposal or ceremony, are always accompanied by *baboa iben* (a jar filled with betel leaves) as a symbol of local tradition, and there must be a cigarette in the jar. A person will be

more likely to be exposed to toxins from cigarette smoke with higher frequency and for more extended periods of time. Passive smokers can also experience the same; the danger is higher if they inhale the smoke produced by active smokers (Thabrany, 2017).

Following the opinion of Sedyawati (2006), this tradition belongs to local wisdom because local wisdom is the traditional culture of ethnic groups, not only in the form of cultural norms and values but also including all elements of ideas, including those that have implications for technology, healthcare, habits, traditions, and aesthetics. With that understanding, the definition of local wisdom includes the various patterns of action and their cultural/material results. Another definition of local wisdom is the creative response to geographical, political, historical and situational situations that are local. Also, local wisdom can also be interpreted as a view of life and knowledge, as well as various life strategies that are reflected in activities by local communities in answering various problems in the fulfillment of their needs (Permana, 2017). Research needs support; although studies about smoking related to the social environment have been done, smoking research related to local wisdom is rare. The social environment in this context will be studied more deeply through two approaches, quantitative and qualitative, to be more meaningful.

Theory

A study in Thailand found that the harmful effects of globalization lead to harsh social, environmental problems, including loss of traditional knowledge and wisdom. Strategies that can be used include studying their problems collectively and restoring traditional wisdom and knowledge. Other studies are about recognizing the concept of health through local wisdom in Situbondo and the study of *tradisi memitu* in Setupatok Village Community, Cirebon. Research conducted in Lebong Bengkulu found local wisdom about traditions around *bakoa iben* and the habit of preparing cigarettes during a party or celebration. The condition is considered to have an impact on the social environment of smoking (Mungmachon, 2012; Basyari, 2014; Junianingsih et al., 2017).

A social environment is a place where citizens or communities interact or mingle together. It includes: (1) the family environment, having the most significant influence on one's behavior, especially children; (2) the school environment as a place to develop socializing lessons, interacting with school friends, teachers, school employees and merchants who sell snacks outside the school; (3) the college environment, where organizations have a more extensive range and more freedom to express opinions; (4) the working environment, an environment closest to the

community; and (5) the community environment, which individuals encounter when they are ready and mature enough to be able to plunge into it (Ayuniindya, 2012).

Experimental Procedure

Location of study

This study was conducted in Lebong District of Bengkulu Province, India on May 2018. The total area of 143,834.55 hectares consists of 103 villages, 10 sub-districts and 13 districts. The population consists of 112,412 (57,672 males and 54,740 females) and consists of 35,515 households.¹⁸ Lebong District is located at coordinates 105°–108° East longitude and 02° 65'–03° 60' South latitude. Based on law no. 39, year 2003, the birthday of Lebong District is on January 7, 2004. Muara Aman is the capital. Lebong Regency is bordered by Sarolangun Regency of Jambi to the north, Rejang Lebong Regency to the south, North Bengkulu Regency, North Bengkulu, to the west and Musi Rawas Regency of Lubuk Linggau City to the east.

This research employs mixed methods, in which the researcher uses quantitative and qualitative research in one research process or concurrent processes to gain more comprehensive and complete results about a phenomenon or problem that is examined. This research is quantitative in that it uses a survey design and qualitative in that it includes a case study (Neuman, 2008; Husmiati et al., 2016). This mixed study is based on the following considerations: (1) It can answer “unanswerable” questions, if only by using one of the research approaches, (2) it can provide more strengths and fewer weaknesses, (3) it yields more comprehensive evidence, (4) it makes it more critically and creatively possible to uncover the research problem more sharply and profoundly, to use methods structured more freely and to prioritize processes and products.

There were two principles used in determining informants and samples in the qualitative research: appropriateness and adequacy. Therefore, the determination of informants was done by purposive sampling to choose the person who could provide information with predetermined criteria, by the topic of the research. There were 60 people chosen as respondents who came from various social environments, such family, school, peers and the community environment, including teachers; culture experts; and executive, legislative and other public figures. Meanwhile, informant sufficiency was determined to occur when there was saturation or no more variations of answers that were quite prominent (Martha and Kresno, 2016). The quantitative data were analyzed by using a descriptive statistical

test, t-test and chi-square test with SPSS. Furthermore, a qualitative analysis was done with flow model analysis, including data collection, data reduction, data display and conclusion/verification (Miles et al., 1992).

Results

Socio-demographic Relationships with Social Environment

The research shows that the proportion of smokers by age (see Table 1) consists of those of adult age (21–51 years) at 40%, the elderly (52 years and over) at 25% and teens at 26.67%. Among children, the investigators found 3 children who smoke. Two started smoking at the age of 5 years, and one started smoking at the age of 6.

Table 1. Socio-Demographic Profile of the Respondents

Characteristics	Frequency	Percentage
Age:		
6-13 years old	7	11.67
13-20	9	15.00
21-27	6	10.00
28-35	6	10.00
36-43	6	10.00
44-51	6	10.00
52-57	8	13.33
58-65	7	11.67
Older than 66 years old	5	8.33
Sex:		
Male	45	75.00
Female	15	25.00
Education		
No school	9	15.00
Elementary school graduate	11	18.33
Junior High School graduate	19	31.67
Senior High School graduate	15	25.00
College Graduate	6	10.00
Occupation:		
Not yet go school	3	5.00

Student	13	21.67
Farmer	20	33.33
Merchant	8	13.33
Entrepreneur	7	11.67
Government Officer	6	10.00
Legislative member	3	5.00

Source: data Primer 2017

The relationship between Sex and Social Environment Factor

The relationship between sex and the impact of environmental factors on smoking behavior in Lebong District is summarized in Table 2.

Table 2. The relationship between sex and social environment factor

	Environmental Influences					Total
	Family	School	College	Office/Working	Community	
ex Male	14	8	4	7	12	45
Female	5	5	0	2	3	15
Total	19	13	4	9	15	60

Source: data Primer 2017

Table 2 shows that respondents from the male group dominated the overall research respondents. The group of male respondents admitted that smoking is mostly influenced by the family, community, school, office/working and college environments. The group of female respondents said that their choice to smoke is affected by the family, office/working, school, and community environments.

Furthermore, from the statistical test, it was known that the relationship between sex and social, environmental factors affecting smoking behavior is not significant. This can be seen from the value of chi-square, 2.844 with a p-value of 0.584, more significant than the alpha of 0.05 (see Table 3). The test result proves that the social environment factor does not significantly influence the behavior of male or female smokers. It can be said that both men and women have the same habits in consuming cigarettes.

Table 3. Testing Statistics Relationships between Gender and Social Environmental Factors

	Value	Df	Asymp. Sig. (2-sided).
Pearson Chi-Square	2.844 ^a	4	.584
Likelihood Ratio	3.709	4	.447
Linear-by-Linear Association	.539	1	.463
N of Valid Cases	60		

Source: data Primer 2017. a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is 1.00

The relationship between Education and Social Environment Factor

The relationship between education level and social environment in the smoking behavior of people in Lebong District is summarized in Figure 1.

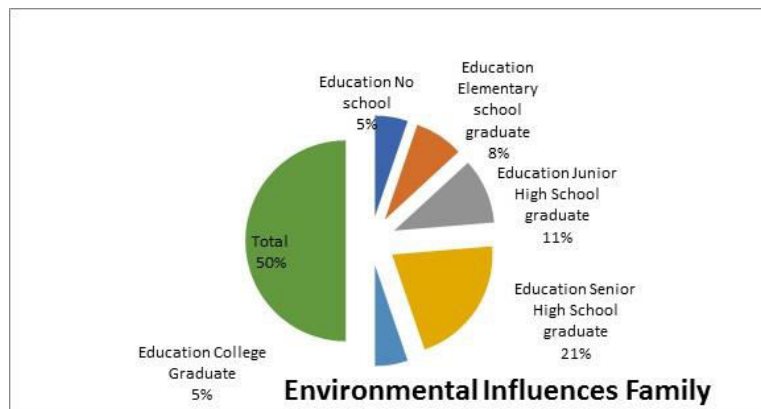


Figure 1. The relationship between education and social environment factor

Figure 1 shows that the smokers who responded to the study were dominated by junior high school respondents, followed by high school graduates and those who did not complete primary school. These results indicate that the education level of respondents is relatively good, but they lack understanding about the dangers of

smoking, so the activity of smoking becomes a daily habit. The family becomes the primary driving factor in people's smoking behavior, followed by the factors of the community, school, work and college environments.

The relationship between Occupation and Social Environment Factors

The relationship of job and the impact of environmental factors on smoking behavior in Lebong District is summarized in Figure 2.

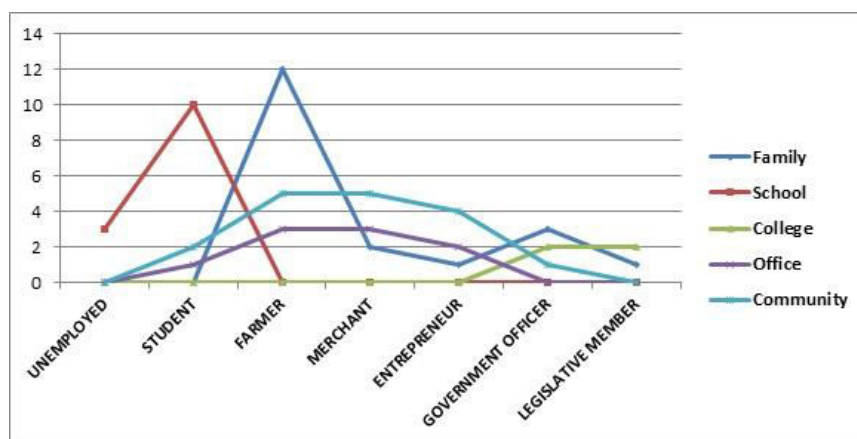


Figure 2. The relationship between occupation and social environment factors

The relationship between Social Demography and Local Wisdom

When tested with the chi-square test, the relationship between socio-demography and local wisdom in all demographic levels of respondents shows a significant influence of local wisdom on the people in Lebong Regency. The age, education and occupation p-value is 0.000, less than the alpha of 0.05, meaning that local tradition influences the smoking behavior for all three variables of respondents. On the other hand, the gender factor does not show significant influence: here, the p-value of 0.000 is less than the alpha of 0.257, meaning there is no correlation of the local wisdom factor for woman and men about their smoking behavior. Respondents smoke because of their factors (Table 4).

Table 4. Testing Statistics Relationships between Gender and Traditional/Lokal Wisdom Factors

Tradition/Local Wisdom	Total
------------------------	-------

		Ashamed if				Becoming	
		not smoking (considered cannot mingle)	Considered not knowing own tradition	Avoid being seen as poor or stingy	Do not want to be considered unmanly	need, respecting host, guest smokes	
Gender	Male	9	13	8	3	12	45
	Female	3	6	0	3	3	15
Total		12	19	8	6	15	60

Chi-Square Tests			
	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.305 ^a	4	.257
Likelihood Ratio	6.955	4	.138
Linear-by-Linear association	.062	1	.803
N of Valid Cases	60		

a. 6 cells (60.0%) have expected count less than 5. The minimum expected count is 1.50.

Discussions

The relationship between Sex and Social Environment Factor

The funding relationship between sex and the impact of environmental factors on smoking behavior in Lebong District is not much different from the study by Neuberger and Min (2017), which proves that the prevalence of smoking from time to time decreases significantly in men, but not in women. However, within a few days, there was a significant increase in female and male smokers. The average number of cigarettes consumed remains the same.

According to MGW, a retired government officer/nurse,

Most of the women in the village of Semelako and surrounding areas are smokers. Women smoking in public places is seen [as] inappropriate, even considered to be naughty, because

women are usually *nyirih*, not smoking. Commonly, smoking is influenced by the environment and work. I sometimes smoke to prevent being sleepy while waiting for the patient to give birth. There are also pregnant women who smoke. Some of the babies have low body weight, but some others are normal.

Mr. DRMYT, head of health promotion at the Public Health Office in Lebong, explained, Currently, women in Lebong have started to be dare to smoke in public places, not appropriate to see. The reason they smoke is that it is more practical than carrying *nyirih* equipment and does not cause the clothes dirty. Another reason is to relieve the cold and drowsiness during night time.

The findings are not much different from the results of research in Malang stating that most of the female visitors (80.0%), that is, 24 female visitors, in STMJ SOB in Malang are heavy smokers. This phenomenon is due to the influence of the environment. It proves that there is a relationship between the social environment and smoking behavior in women (Riyandi et al., 2017).

The relationship between Education and Social Environment Factor

The result of a statistical test shows that the correlation between educational level and the social environment factor in influencing smoking behavior is significant. This can be seen from the chi-square value of 55.385, with a p-value of 0.000, less than the alpha of 0.05. The results of these tests provide evidence that social, environmental factors significantly affect people's smoking behavior at all levels of education. The findings are consistent with the statement that there is no influence on the smoking behavior of the teacher's role. Although the teacher provides counseling about smoking restrictions, students keep smoking outside the school (Stanislaus et al., 2014; Febrianika, 2016).

The relationship between Occupation and Social Environment Factors

From the data in Figure 2, it is generally known that farmers are the dominant smokers in Lebong District, followed by students, merchants, entrepreneurs and so on. The family environment becomes the primary driving factor in farmers' smoking behavior, while students like to smoke because of the school environment. The community environment factor drives another group of respondents. The results of statistical tests showed that the relationship

between occupation and the social environment factor in the development of smoking behavior is significant. This can be seen from the value of chi-square, 85.268 with a p-value of 0.000, less than the alpha of 0.05. The social environment factor is very influential in every kind of occupation. This finding is supported by the following statement by Mr. SA, a religious leader in Lebong. He said that in Islamic law,

Smoking is *makruh* (if you smoke, you do not sin, [but] if you do not smoke you get a reward). I

used to be a farmer. There are many mosquitoes around the garden, and smoking makes the mosquitoes run. Based on my experience, and I often see some cases, if bitten by venomous animals smokers are more immune than people who do not smoke.

The statement is contradictory to the findings of Qiu et al. (2017). The research proved that, in particular, cigarette smoke worsens the pathological immune responses or reduces standard defensive functions of the immune system. Furthermore, it is explained that as a result, smokers will need a more extended healing period than usual. Smokers, in general, have lower antioxidant levels than non-smokers. The toxicity of carcinogens and tar causes the body to be less effective in fighting infection.

The relationship between Social Demography and Local Wisdom

In Lebong, there is a tradition of providing cigarettes at every gathering or event as a symbol of respect for guests, such as at weddings, *bedendang* (traditional musical performances), *hitanan* (the ceremony for circumcision) and so on. Furthermore, in the *hantaran* event or wedding ceremony, the people carry a basket filled with betel leaves and cigarettes (*bakoa iben*). If the items are not complete, i.e., there are no cigarettes, then the traditional leader will postpone the event. Some arguments are saying that if men do not smoke and do not provide cigarettes, the event is to be postponed or canceled because the tradition is still active and the people feel afraid or do not want to break the tradition. Some examples of public opinions can be seen in Figure 3.

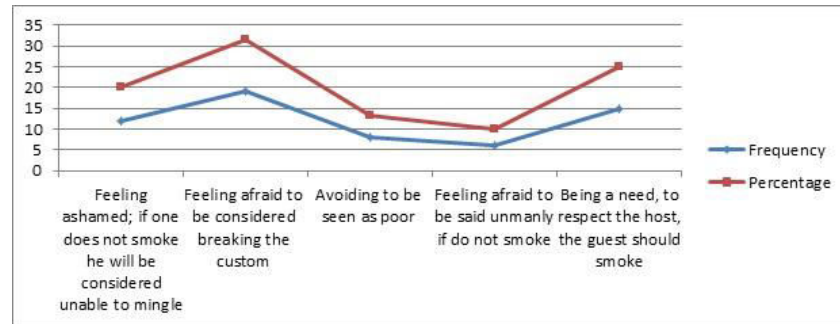


Figure 3. Respondents on the influence of local wisdom in smoking behavior

According to Mr. SJ, a cultural expert in Lebong:

Yes, traditionally, in Lebong, the container of betel leaves (*bakoa iben*) is filled with betel and cigarettes as a symbol that must be brought by the groom's family to propose [to] a woman or in the marriage ceremony. To honor the guests who hold celebrations, such as weddings, *bedendang*, prayers and so on, the host provides cigarettes for his guests. Otherwise, it will be considered stingy and ignoring the tradition. It has become a custom or tradition, especially in Lebong area and generally the people of Bengkulu.

YT, speaker of DPRD, in Lebong, says,

If you do not smoke, most women and their parents think you are poor [and] cannot afford to buy cigarettes. Cigarettes are always provided in any parties or events so that people will smoke. If the price of the cigarettes provided by the host for his guests is high, people will assume that the host is rich, able to mingle, appreciate the guests and not stingy.

According to Mr. HRMS, chairman of Lebong's Customary Meeting Council,

It is true that in every event, the host provides cigarettes, and commonly man guests offer cigarettes to their friends. If they do not do that, they are considered disrespectful, so their friends do not want to come [to] their house. If they see a man not smoking, he will be said to be a sissy because they believe that man must smoke.

The findings are supported by the findings of a research by Riza et al., (2017) which reported a correlation between culture and smoking behavior in adolescents in Pesantren Baitulsabri Lam Ateuk District of Aceh Besar in 2016

with a p-value of 0.005 ($p < \alpha$). This shows that there is a relationship between culture and smoking behavior in adolescents, and both bad and good culture and tradition will be followed by the community, especially among adolescents.

The author conclude that the socio-demography of respondents is significantly influenced by local wisdom, as it contributes to smoking behavior. However, it is found to be not significant for the gender factor; men and women smokers smoke for individual reasons. Family, mainly the father, is the most influential factor in smoking behavior performed by children aged 5–7 years. The children tend to imitate their fathers. Social factors (friendship) in the community also encourage people to become smokers.

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