

# Analysis of Quit-Smoking Motivation among Coffee Shop Visitors in Aceh

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**Abstract:** In controlling the tobacco problem, the government only concentrates on environmental factors that only promote people to smoke and prevent them from quitting smoking. One's knowledge of the health impacts of smoking coupled with a strong desire and motivation to implement it trigger their desire to quit smoking. Thus, high motivation is essential in the quit-smoking process. The attainment of physiological, social, achievement and maintenance need determine the motivation to quit-smoking. This study aimed at examining the factors that influence the motivation level of coffee shop visitors in Aceh to quit smoking in term of fulfilling physiological, social, achievement, and maintenance need. This study used an analytical survey method. A total of 250 respondents were selected by purposive sampling at several coffee shops in one of the districts in Aceh. Questionnaires were used to collect the data in the form of Likert scale and analyzed with the Chi-square test. The findings showed that the respondents' level of motivation to quit smoking was strongly influenced by physiological need ( $p = 0.004$ , Exp (B) = 0.605), social need ( $p = 0.000$ , Exp (B) = 0.975), achievement need ( $p = 0.000$ , Exp (B) = 0.862), and maintenance need ( $p = 0.004$ , Exp (B) = 0.605). Community nurses are encouraged to distribute leaflets about the dangers of tobaccos in coffee shops and work with coffee shop owners to establish no-smoking areas in the coffee shops.

## 1 INTRODUCTION

Smoking causes nearly 6 million people to die every year (World Health Organization (WHO), 2013). More than 5 million people died from smoking, while more than 600,000 people died from the exposure of cigarette smoke (WHO, 2013). In addition, WHO mentioned various types of smoking-related disease.

Indonesia is one of the countries with the highest smoking prevalence in the world. Around 34.8% of Indonesian population are smokers, and 67% of them are male (Global Adult Tobacco Survey (GATS), 2011). Indonesia's Ministry of Health estimated that the number of casualties caused by smoking-related diseases reached 190,260 people or around 12.7% population (MOH, 2015). A total of 1,163,800 out of 4.6 million people in Aceh said that they regularly smoke 19 cigarettes every day (MOH, 2010).

The lack of awareness among Acehnese about the dangers of smoking, both in active smokers and

passive smokers, contributes to the increasing number of smokers in this province. Furthermore, the regulation of non-smoking areas set by the municipal government of Banda Aceh has not been implemented to its full potential. Unrestricted cigarette advertisements are also believed in contributing to determine smoking as a "normal behavior" in Aceh. Almost all groups of people in Aceh seem to support this phenomenon. The increasing number of new coffee shops in Aceh do not only add up the list of new places for the Acehnese to gather, but even create opportunities for the community to continue, to get introduced to, and to try smoking cigarettes (Perwira, 2008).

Meanwhile, motivation affects the success of the quit-smoking process. One's knowledge about the danger of smoking, which is accompanied by a strong desire and motivation to achieve it, influences their desire to quit smoking (Nainggolan, 2004, in Kumboyono, 2011). Owers & Ballard (2008) who conducted a study on 560 respondents, reported that motivation to quit smoking can be

divided into two categories, low and high. Owers & Ballard also found that structural and cultural barriers are two obstacles in the process of quit smoking. Structural barriers include time, place and cost, while cultural barriers include peer pressure, smoking norms, and lack of support from the environment and family.

An initial data collection from three smokers who visited the coffee shop in one of the cities in Aceh indicated that the coffee shop was considered as the best place to enjoy cigarettes. They admitted that smoking is more enjoyable when they relax with friends. One of the respondents stated that the inhibiting factor of their desire to quit smoking was their perception in which smoking is a necessity they need to fulfil every day. Another visitor reported that it was difficult to quit smoking because his desire to smoke reappeared when he gathered with friends. Based on the aforementioned description, therefore this study aimed to examine further the influencing factors on the motivation of quit smoking among the coffee shop visitors in Aceh.

## 2 METHODS

This study is an observational analytic study with the cross-sectional approach, in which observation or data collection is carried out at one time by using one approach. A total number of 250 active smokers were purposively selected from five coffee shops (50 people in each coffee shop) in Banda Aceh.

A questionnaire consisting of 3 parts was used for data collection. Part A collected information on the background of respondents, which includes age, marital status, education, employment, income, and smoking behavior. Part B consisted of 40 statements in the form of a Likert scale measuring the factors that influenced individual motivation to quit smoking, encompassing physiological (10 statements), social (10 statements), achievement (10 statements), and maintenance needs (10 statement). Part C incorporated 10 statements measuring the motivation level of the respondents to quit smoking. The Cronbach alpha's reliability coefficient ranging from 0.80-0.82 is yielding from the questionnaire about the factors influencing the motivation to quit smoking, and 0.83 from the questionnaire about the individual motivation level to quit smoking.

The SPSS 16.0 for Windows was used for the data analysis. The test included univariate analysis to examine the percentage of each variable or sub-variable, and bivariate analysis such as Chi-Square

test and logistic regression. This study passed ethical review from the Institutional Review Board of Faculty of Nursing, Syiah Kuala University. Participation of respondent in this study is confidential and voluntary.

## 3 RESULTS

Results of this study, including respondents' demographic characteristics, level of motivation to quit smoking viewing from aspect of fulfilling physiological need, social need, achievement need, and maintenance need.

### 3.1 Demographic Characteristics

Characteristics of respondents are described in Table 1. Respondents were primarily unmarried (79.6%), entrepreneurs (50.4%), between 36-45 years old (37.6%), and had a bachelor's degree (40%). The majority of respondents had smoked over six months (66.8%), smoked more than five cigarettes per day (74.8%), used clove cigarettes (83.6%), and got money for smoking from their parents (54.0%).

### 3.2 Motivation to Quit Smoking and Physiological Need

Tables 2 and 3 show motivation levels of respondents to quit smoking based on physiological need fulfillment. There was a significant difference between the level of physiological need fulfillment and the level of motivation to quit smoking ( $p$ -value = 0.000). Further analysis indicates that the physiological need factor had a significant effect on the level of motivation to quit smoking ( $p$  = 0.004, Exp (B) = 0.605).

### 3.3 Motivation to Quit Smoking and Social Need

Table 2 and 3 show motivation of respondents to quit smoking based on social need attainment. There was a significant difference between the level of social need attainment and the level of motivation to quit smoking ( $p$ -value = 0.000). Further analysis shows that social need attainment has a significant influence on motivation to quit smoking ( $p$  = 0.000, Exp (B) = 0.975).

Table 1: Frequency Distribution of Respondents Based on Demographic Characteristics (n = 250).

Characteristics of Respondents	f (%)
Age	
17-25 years old	4 (1.6)
26 -35 years old	88 (35.2)
36 – 45 years old	94 (37.6)
46 – 55 years old	56 (22.4)
56 – 65 years old	8 (3.2)
Marital status	
Married	44 (17.6)
Unmarried	199 (79.6)
Widowed	7 (2.9)
Education	
Secondary school	8 (3.2)
High school	50 (20.0)
Diploma	55 (22.0)
Undergraduate	101 (40.0)
Postgraduate	36 (14.4)
Occupation	
Farmer	2 (0.8)
Private sector workers	65 (26.0)
Entrepreneur	126 (50.4)
Unskilled laborers	11 (4.4)
Civil servants	41 (16.4)
Merchandise	5 (2.0)
Duration of smoking	
Less than 6 months	83 (33.2)
More than 6 months	167 (66.8)
Number of cigarettes smoked per day	
Less than five cigarettes per day	187 (74.8)
5 – 15 cigarettes per day	26 (10.4)
More than 15 cigarettes per day	37 (14.8)
Type of Cigarette	
Clove Cigarette	250 (100)
Brand of Cigarette Smoked	
Mild	209 (83.6)
Dji Sam Soe	41 (16.4)
Source of Income	
Working	115 (46.0)
Parent	135 (54.0)

Table 2: The relationship between Motivation to Quit Smoking and the Physiological, Social, Achievement, and Maintenance Factors of the Coffee Shop Visitors in Aceh (n = 250).

Type of need	Level of motivation to quit smoking			Total (F,%)	p-value
	High (F,%)	Medium (F,%)	Low (F,%)		
Physiological Need					
Good	67(60.4)	56(51.4)	5(16.7)	128(51.2)	0.000
Adequate	39(35.1)	48(44.0)	14(46.7)	101(40.4)	
Poor	5(4.5)	5(4.6)	11(36.7)	21(8.4)	
Social Need					
Good	65(58.6)	53(48.6)	6(20.0)	124(49.6)	0.000
Adequate	45(40.5)	54(49.5)	14(46.7)	113(45.2)	
Poor	1(9.0)	2(1.8)	10(33.3)	13(5.2)	
Achievement Need					
Good	83(74.8)	69(63.3)	6(20.0)	158(63.2)	0.000
Adequate	27(24.3)	35(32.1)	15(50.0)	77(30.8)	
Poor	1(9)	5(4.6)	9(30.0)	15(6)	
Maintenance Need					
Good	83(74.8)	52(47.7)	10(33.3)	145(58.0)	0.000
Adequate	27(24.3)	53(48.6)	13(43.3)	93(37.2)	
Poor	1(9.0)	4(3.7)	7(23.3)	12(4.8)	

Table 3: Determinants of Motivation to Quit Smoking on Coffee Shop Visitors in Aceh.

Variable	Wald	Sig	Exp {B}	95% CI	
				Lower	Upper
Physiological Need	8.1	0.004	0.605	0.188	1.021
Social Need	16.7	0.000	0.975	0.508	1.442
Achievement Need	14.07	0.000	0.862	0.412	1.312
Maintenance Need	25.92	0.000	1.226	0.754	1.698

### 3.4 Motivation to Quit Smoking and Achievement Need

Table 2 and 3 show motivation of respondents to quit smoking in terms of achievement need attainment. There was a significant difference between the level of achievement need attainment and the level of motivation to quit smoking (p-value = 0.000). Further analysis shows that achievement need attainment had a significant influence on the motivation to quit smoking (p = 0.000, Exp (B) = 0.862).

### 3.5 Motivation to Quit Smoking and Maintenance Need

Table 2 and 3 show motivation of respondents to quit smoking in terms of maintenance need factors. There was a significant difference between the level of maintenance need attainment and the level of motivation to quit smoking (p-value = 0.000). Further analysis shows that maintenance need attainment had a significant influence on the level

of motivation to quit smoking (p = 0.000, Exp (B) = 1.226).

## 4 DISCUSSION

This study aimed to analyze the motivation level of coffee shop visitors to quit smoking. This study involved 250 respondents; most of whom were 36-45 years old, unmarried, hold a bachelor's degree, working as entrepreneurs, smoking more than six months, and smoking more than five cigarettes a day. Wibowo (2015) argued that adults (aged 25-45) are economically independent, independent in making decisions, mindful and considerate in making choices compared to teenagers. Adults tend to quit smoking due to health considerations. They are more aware of health problems and functions than teenagers. Saputra & Sary (2013) suggested that the motivation to quit smoking in teenagers may arise and is often high due to the positive influence of their surroundings such as family, peers and

closest persons who do not smoke. Therefore, there is no relationship between age and motivation to quit smoking because, at every age level, motivation may arise from different reasons.

Intentions and motivation may influence someone to quit smoking. Motivation is a psychological process that reflects the interaction between attitudes, needs, perceptions, and decisions in a person (Ayu, 2014). Intrinsic and extrinsic factors modify the motivation to quit smoking. The intrinsic factors include age, knowledge, value, perception, and experience while extrinsic factors consist of the environment, closest persons (family), and economy (Marquis and Huston, 2000 cited in Barus, 2012). The current study found that the level of motivation to quit smoking was determined by physiological, social, achievement and maintenance need factors.

The study further found that the motivation level to quit smoking on coffee shop visitors in Aceh was mostly in the good category. The findings also indicate that their motivation to quit smoking is related to the fulfillment of physiological needs. Physiological and biological needs are the primary needs that everyone must fulfill. For some people, their daily habits have become primary needs such as food, breathing and rest and sleep. Maslow (2003) considers physiological needs as the primary needs in which someone must fulfill in order to gain other needs. Physiological needs significantly influence ones' smoking behavior because their daily habits have integrated with them and affect their desire to quit smoking. The current findings are in contrast with a similar study conducted by Febrijanto (2012) in a male student dormitory. Febrijanto (2012) reported that biological factors did not influence smoking behaviors in male students.

The current study also indicates a relationship between social needs and motivation to quit smoking. When smokers gather with their friends, who are also smokers, they presume comfort among them. Findings from the previous study by Farid (2005) reported that the factors influencing teenagers to quit smoking were mostly in the poor category. It means that most respondents have friends who support their smoking habit and encourage them to keep smoking. Farid (2005) mentioned some behaviors related to teenage smoking habit such as smoking together in the canteen, buying cigarettes around schools, giving cigarettes to friends, and smoking in the community security post (*poskamling*). A study conducted by Waramatias (2014) revealed that the factors that influence the motivation to quit smoking in

teenagers are the personal relationship, self-perception, self-image, and environmental influence and influence from other people.

The findings also show that there is a significant relationship between fulfilling achievement need and motivation to quit smoking. A similar account was observed between maintenance need and the motivation to quit smoking. Maintenance need are factors associated with the nature of humans to gain physical contentment. This fitness need, such as addiction or dependence on cigarettes, is an endless demand because it will reset itself after being fulfilled. Cigarettes have a lot of chemical substances such as nicotine which is addictive and dangerous. Nicotine is released when someone lights a cigarette and inhales its smoke. It enters the lungs and reaches the brain within seconds.

The maintenance need is the factor that most influences the level of motivation to quit smoking. Maintenance factors will provide satisfaction if fulfilled. Conversely, failing to fulfill the craving may cause dissatisfaction and lead to a desire to consume until the craving is satisfied. The system will repeat itself if it is not satisfied until it reaches the physical tranquility. At this point, smokers will not quit smoking before they satisfy the craving. Smoking will become a recurring cycle to satisfy the needs and made the smokers addicted.

## 5 CONCLUSION

Motivation to quit smoking is affected by physiological, social, achievement, and maintenance needs. The maintenance need is the factor that most influences the level of motivation to quit smoking.

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