

Knowledge, Attitudes and Practices of Alcohol Consumption and Smoking among Students in Naypyitaw State Academy

Thin Myat Naing¹, Aye Thanda²

Abstract

Alcohol, cigarette and vape consumption is one of the most important issues for future health and social impact. The main objective of the study is to identify the knowledge, attitude and practices of alcohol and smoking among students of Naypyitaw State Academy. It is aim to analyze the relationship between knowledge and attitudes, and practices of alcohol and smoking among students in Naypyitaw State Academy. This study uses the descriptive and correlation analysis. The primary data is collected by simple random sampling method and the sample size covers 262 students from different disciplines of Naypyitaw State Academy. The study uses the self-administered questionnaires with five-point Likert scales. This study found that most of the students of Naypyitaw State Academy have better knowledge about the negative effects of alcohol consumption and smoking which is proved by its mean score of 3.85. The overall mean score for an analysis of respondents' attitudes toward alcohol and smoking is 3.76, which can be interpreted that most of the students have moderately high level of attitudes toward preventing the use of alcohol and smoking. As a practice, about 70% to 80% of the students do not use at all and only 20% to 30% of the students have practices to use alcohol, vape, and cigarette. Among them, most of the students have consumed alcohol and the second largest shares of respondents are the vape users. This study found out that there is a negative relationship between knowledge, attitudes and practices of alcohol, cigarette and vape which can be concluded that the better knowledge on the harmful effects of drug usage, the more excellent the attitude toward preventing the use of cigarettes, vaping and alcohol, and the less consumption of it.

Key words: Knowledge, attitudes, practices, alcohol, cigarette, vape.

Introduction

Alcohol and cigarette smoke are chemical substances that cause a change in an organism's physiology and psychology when consumed. Alcohol and smoking usage is often a single episode for medicinal or recreational purposes. Commonly used forms include vape, alcohol, beers, cigarettes, and cigars, which can affect the brain, body, mood, awareness, thoughts, feelings, and behavior. They also create negative economic, health, and social consequences, impacting individuals, communities, and nations. These consequences include mental health issues, productivity loss, economic disparities, social disintegration, increased healthcare costs, and spread of diseases, violence, and crime. The effects vary based on type, frequency, and individual health, with risks to the lungs, heart, and kidneys, potentially leading to death. Smoking is particularly linked to lung diseases, including cancer. Among university adolescents, persistent alcohol and smoking usage can disrupt education, cause health issues, and lead to social vices such as fighting, bullying, and rule violations. While young people have reduced usage, assessing their knowledge, attitudes, and practices remains essential for prevention. Education is crucial in raising awareness, with teachers, parents, and healthcare providers playing key roles in preventing substance use and addiction. This study aims to examine university students' knowledge, attitudes, and practices regarding alcohol and smoking to inform effective interventions. There are no previously published studies specifically examining both alcohol consumption and smoking attitudes and practices among university students in Myanmar. The present research attempts to fill the gap.

¹ Mecon (Eco) 1- 1, Department of Economics, Naypyitaw State Academy

² Lecturer, Department of Economics, Naypyitaw State Academy

Objectives of the Study

The objectives of this study are as follows:

- (i) To identify the knowledge and attitude of alcohol and smoking among university students
- (ii) To examine the practices of alcohol and smoking
- (iii) To analyze the relationship between knowledge, attitudes, and practices of alcohol
- (iv) and smoking

Method of Study

The descriptive and correlation analysis is used to describe the demographic information of the respondents and respondents' perspectives on knowledge, attitudes, and practices of alcohol consumption and smoking, respectively.

Scope and Limitations of the Study

This study examines the attitudes and knowledge of alcohol and smoking usage among the university students of Naypyitaw State Academy (NSA) during the academic year, 2023-2024. There are many types of drugs such as alcohol, cannabis, cocaine, cigarettes and vaping but it is limited to study cigarettes, vaping and alcohol only. The primary data is collected by simple random sampling method and the sample size covers 262 students out of 659 students from different disciplines of Naypyitaw State Academy to conduct a questionnaire survey on the alcohol and smoking usages by using Cochran's sample size formula¹.

Literature Review

Alcohol is a psychoactive substance with dependence-producing properties, widely used for centuries. Its harmful use contributes to diseases, injuries, and social and economic consequences, affecting individuals, families, and communities. Alcohol consumption is linked to over 200 health conditions, including liver cirrhosis, cardiovascular diseases, and cancers (WHO, 2019). It can impair organ function, cause high blood pressure, irregular heartbeats, and fetal abnormalities, and contribute to road accidents, violence, and reduced productivity. While some studies suggest moderate alcohol consumption may lower the risk of heart disease, excessive use leads to severe health and social problems (Ling and Farrukh, 2022). Adolescents are highly vulnerable to alcohol and smoking due to social, psychological, and environmental factors (Nkambule and Madiba, 2018). Family dynamics, peer influence, stress, risk-taking behavior, parental neglect, strict authority, and lack of emotional support push young people toward alcohol and smoking (Alenazi and Alabdali, 2023).

Smoking involves inhaling fumes from burning plant material, primarily tobacco, which contains nicotine, a highly addictive substance. Tobacco use is strongly associated with cardiovascular diseases, lung cancer, COPD (Chronic Obstructive Pulmonary Disease), and birth defects. Various forms of smoking include cigarettes, cigars, pipes, and electronic cigarettes (vaping). E-cigarettes produce vaporized nicotine, mimicking traditional smoking (WHO, 2019). Smoking damages nearly every organ and increases the risk of chronic lung disease, oral cancer, and fetal harm. It also affects non-smokers through second-hand smoke exposure, contributing to respiratory diseases and heart conditions (Asery et. al., 2010).

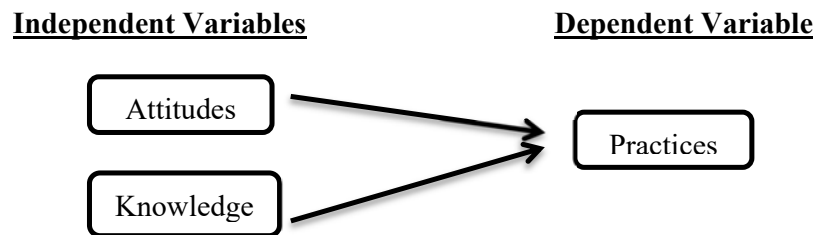
¹ Cochran's sample size = $n \geq \frac{n_0}{1 + \frac{n_0 - 1}{N}}$

The social impact of alcohol consumption and smoking extends to family disruption, financial strain, and negative role modeling for younger generations. Health consequences include weakened immunity, mental illness, and increased disease risks. Educational performance declines due to reduced concentration and absenteeism, posing barriers to academic success. Creating awareness and promoting a healthy lifestyle through education is crucial for preventing alcohol and smoking abuse among youths (UNDCP, 1995).

Conceptual Framework of the Study

The conceptual framework is developed based on the previous studies and literature review to meet the objectives of the study. Figure (1) shows the conceptual framework of the study.

Figure (1) Conceptual Framework



Source: Own Compilation

Knowledge: Knowledge means the awareness or understanding the facts, information, descriptions which is obtained through experience or education by perceiving, discovering, or learning.

Attitude: Attitude can be defined as how a person observes and evaluates something or someone, a predisposition or a tendency to respond positively or negatively toward a certain idea, object, person, or situation.

Practices: It is any activities that allow students to apply the knowledge and skills gained through the study material. In this study, it examines the level of knowledge and attitudes of the respondents which can have correlated with the practices of the respondents.

Results and Findings
Table (1) Profile of Respondents

Attribute	Category	No. of Respondents	Percentage
Academic Year	First Year	169	64.5
	Third Year	26	9.9
	Fourth Year	42	16.0
	First Year Honours	13	5.0
	Second Year Honours	12	4.6
	Total	262	100
Gender	Male	58	22.1
	Female	204	77.9
	Total	262	100
Age (Years)	16-20	154	58.8
	21-25	108	41.2
	Total	262	100

Source: Survey Data (2024)

Most of the respondents are first year students with 64.5% and the rest of the respondents are attending in third year, first year honours, fourth year and second year honours students who are contributed about 35.5% of the total students. In terms of gender, 77.9% are female students and 22.1% are male students. Therefore, female respondents are more than male respondents in this study. In the case of respondents' age, 16-20 years old is the highest percentage by 58.8% of the total respondents. The rest 41.2% of the respondents are aged between 21 to 25 years old.

Table (2) Analysis on Respondents' Knowledge of Alcohol and Smoking

No.	Reasons	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Standard Deviation
1	Alcohol, cigarette, and vape usage cause addiction.	3.8	3.8	10.3	61.8	20.2	3.91	0.892
2	Smoking and drinking alcohol can cause cancer, heart disease, and respiratory disease.	1.5	1.5	3.8	55.7	37.4	4.26	0.739
3	Smoking and drinking alcohol can increase the mortality rate.	1.5	4.6	11.5	54.6	27.9	4.03	0.846
4	Alcohol, cigarette, and vape usage can cause mental illness and societal crime.	4.2	8.8	16.0	50.4	20.6	3.74	1.017

No.	Reasons	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Standard Deviation
5	Alcohol, cigarette, and vape usage can cause poor personality and quality of life.	2.3	2.7	12.6	55.3	27.1	4.02	0.844
6	A person who uses alcohol, cigarettes, and vapes spends more money.	1.1	5.7	12.6	53.8	26.7	3.99	0.853
7	Most of the students started using alcohol, smoking, and vaping because of people in the environment who use it.	1.9	10.3	21.8	51.5	14.5	3.66	0.915
8	Smokers are perceived as cool and attractive more friends compared to nonsmokers.	13.7	25.2	16.4	34.4	10.3	2.98	1.250
9	Women who use alcohol, cigarettes and vape can have harmful effects on childbirth.	1.5	3.1	12.6	57.3	25.6	4.02	0.802
Overall Mean							3.85	

Source: Survey Data (2024)

SD = Strongly disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly agree

Table (2) shows the knowledge of respondents on alcohol, cigarette and vape consumption. The mean score for alcohol, cigarette, and vape usage causing addiction is 3.91, which can be interpreted as most of the respondents are agreed with the addiction to alcohol, cigarettes and vaping. Similarly, the respondents who agree on smoking and drinking alcohol can cause cancer, heart disease, and respiratory disease are the highest mean score of 4.26, which can be interpreted as most smokers and drinkers should avoid alcohol, cigarettes and vaping since it has serious effects on human health. Significantly, the respondents who agree on smoking and drinking alcohol can be increased the mortality rate are the mean score of 4.03, that can be interpreted that most of the respondents have the knowledge about the use alcohol, cigarettes and vaping can have harmful effects on women's childbirth. According to the mean scores of the survey, it means that the students of Naypyitaw State Academy are good at the knowledge of alcohol and smoking on diseases. The respondents who agree alcohol, cigarette, and vape usage can cause mental illness and societal crimes are the most common, which mean score is 3.74. The mean score of the respondents who believed on alcohol, cigarette, and vape usage can cause poor personality and quality of life is 4.02. In addition, the mean score about consumption expenditure on alcohol and smoking is 3.99. According to the mean scores of this survey, it means that the students have good thinking about the negative effects of alcohol and smoking.

Table (3) Analysis on Respondents' Attitude toward Alcohol and Smoking

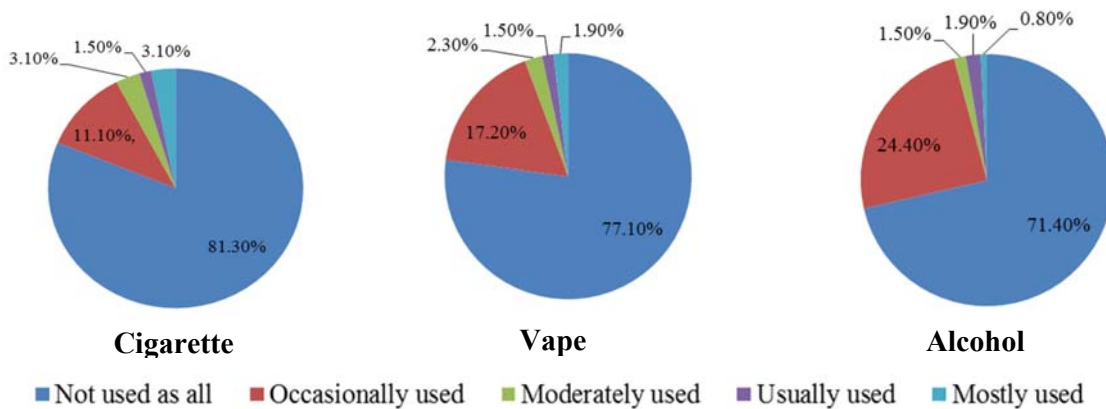
No .	Reasons	SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	Standard Deviation
1	Parents and teachers should prohibit alcohol, cigarette, and vape usage among students.	8	3.8	15.6	43.9	35.9	4.10	0.854
2	Smoking and alcohol control seminar provides the chances for quitting smoking and alcohol.	4.2	15.6	29.8	43.1	7.3	3.34	0.968
3	Selling tobacco and alcohol to teenagers should be banned.	1.1	4.6	10.3	47.3	36.6	4.14	0.860
4	Excise taxes on tobacco and alcohol-related products should be increased.	3.4	5.0	16.8	45.0	29.8	3.93	0.986
5	Drinking alcohol and smoking at social events such as birthday parties and weddings is often considered fashionable.	14.9	20.2	31.3	27.9	5.7	3.11	1.140
6	Consumption of alcohol, cigarettes and vapes should be prohibited in relevant areas.	2.3	4.6	12.2	43.1	37.8	4.10	0.940
7	The advertisement and promotion of cigarettes, vape and alcohol should be banned.	2.7	9.9	26.3	45.8	15.3	3.61	0.951
8	Smoking and alcohol drinking can increase the ability to fit in a group and make more friends.	19.5	32.8	22.9	21.4	3.4	3.44	1.129
9	Smoking and drinking alcohol should be strictly prohibited for students.	1.5	4.2	11.8	48.9	33.6	4.09	0.869
Overall Mean							3.76	

Source: Survey Data (2024)

Table (3) shows the attitude of respondents on alcohol, cigarette and vape consumption. Most of the students have positive attitudes toward selling tobacco and alcohol to teenagers should be banned which is proved by its highest mean score of 4.14. According to the survey results, the highest proportions of the respondents have good attitudes toward the prohibition of alcohol and smoking in the relevant areas by parents and teachers, which is proved by its mean score of 4.10. In addition, most of the respondents have attitudes toward the prohibition smoking and drinking alcohol for students, which verified by its mean score of 4.09. Those survey results are interpreted that most of the respondents have positive attitudes on consumption of alcohol and smoking including cigarettes and vaping can be disturbing the third parties in their community. On the other hand, some of the respondents have attitudes toward imposing an excise tax on tobacco and alcohol-related products. It is proved by its mean score of 3.93. Moreover,

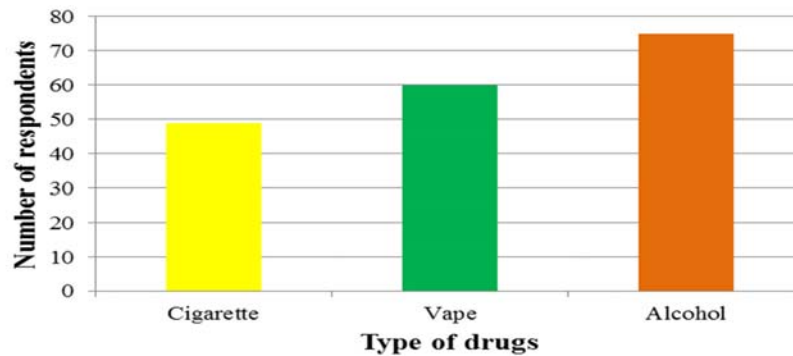
some of the respondents have good level of attitudes on prohibition of advertisement and sale promotion of cigarette, vape and alcohol which is verified by its mean score of 3.61. In addition, some of the respondents have attitudes toward providing the public seminars as well as programs which can help to control the use of smoking and alcohol among the university students. It is proved by moderating mean score of 3.34. However, very few respondents have negative attitudes toward drinking alcohol at social events (example: birthday and farewell party) can create friendship in their community and more fashionable. It was proved by mean score of 3.11 and 3.44, respectively. The overall mean score for an analysis of respondents' attitudes toward alcohol and smoking is 3.76, which can be interpreted that most of the students have moderately high level of attitudes toward preventing the use of alcohol and smoking.

Figure (2) Numbers of Cigarette, Vape and Alcohol Users in the Respondents



Source: Survey Data (2024)

According to the Figure (2), 81.3% of the respondents (213 students) do not use the cigarettes. The rest of the respondents, 18.7% are users of the cigarettes. Among them, 14.2% of the respondents (37 students) use the cigarettes occasionally, and 4.6% (12 students) usually use the cigarettes. 77.1% of the respondents (202 students) have not used the vape, which shows that most of the students in Naypyitaw State Academy do not use at all the vape. However, 22.9% of the respondents, 60 students out of 262, are the vape users. Among them, 19.5% of the respondents (51 students) used the vape occasionally, and, 3.4% of the rest (9 students) are usually used the vape. 71.4% of the respondents (187 students) do not use the alcohol. The rest of the respondents, 28.6% are the users of alcohol. Among them, 25.9% of the respondents (68 students) have used alcohol occasionally, and 2.7% of the rest (7 students) are usually used the alcohol.

Figure (3) Comparison of the Number of Users on Type of Drugs

Source: Survey Data (2024)

According to Figure (3), most of the students drink alcohol because of their curiosity and releasing stress. The largest share of respondents (75 students) is the alcohol users. Then, the second largest share of respondents (60 students) is users of vaping. Finally, the least share of the respondents (49 students) is the users of cigarettes. It can be interpreted that teenagers mostly use the various types of drugs especially alcohol and vaping nowadays. In addition, this study also examines the respondents' practices relating to starting age who are using the alcohol and smoking, the reasons why used it, the time of accidents after using it, and the discouragement of the drug used by their friends and community.

Table (4) Analysis on the Practices of Cigarette, Vape and Alcohol

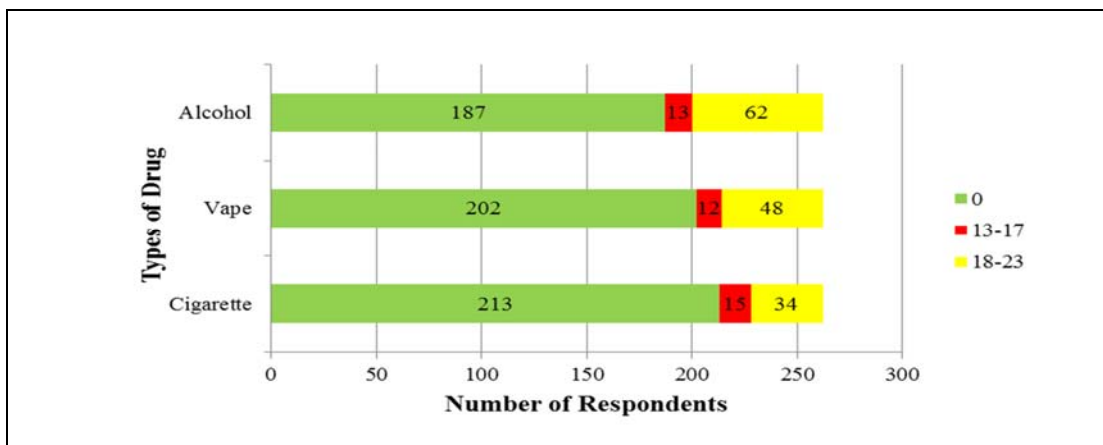
No	Attribute	Classification	Percentage		
			Cigarette	Vape	Alcohol
1	What is the reason for cigarette, vape and alcohol use?	Not used at all	81.3	77.1	71.4
		Imitating parents, relatives and people around them	1.1	0.8	1.1
		Curiosity	6.9	13	9.5
		For style and fun	1.5	3.4	1.1
		Peer pressures	1.1	2.3	4.6
		To release stress	8.0	3.4	12.2
2	Where is a favorite place for cigarette, vape and alcohol use?	Not used at all	81.3	77.1	71.4
		Home	6.9	8.4	5.7
		Friends' Home	1.9	4.6	11
		Public space	8.0	6.5	-
		alcohol restaurant	-	-	9.2
		University	0.8	2.3	0.8
		Social event	1.1	1.1	1.9

3	How many times have you been in an accident after cigarette, vape and alcohol using?	0	99.6	100	97.3
		1	0.4	-	2.3
		2	-	-	0.4
4	Have you ever thought about quitting cigarette, vape and alcohol use?	Not drink	81.3	77.1	71.4
		Yes	11.1	9.5	9.9
		No	7.6	13.4	18.7
5	Have you ever encouraged your friend to stop cigarette, vape and alcohol use?	Yes	73.3	51.9	62.6
		No	26.7	48.1	37.4

Source: Survey Data (2024)

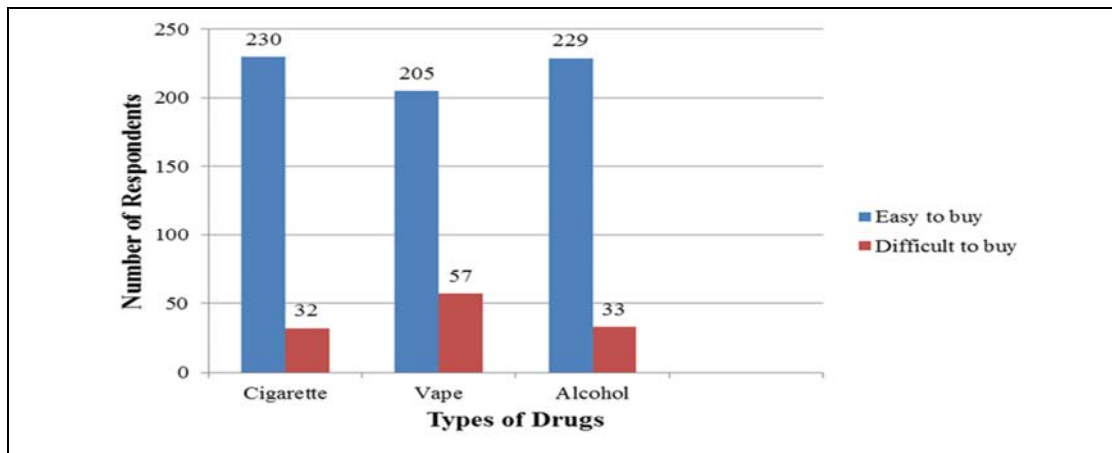
According to the survey results, most of the students do not use cigarettes, vape and alcohol. However, among the users of drugs, some of the students have used cigarettes and alcohols in order to release their stress are 8% and 12.2%, respectively. Among them, 13% of the respondents have used the vape because of their curiosity about the brand-new product. Also, the students who have used the vape for their style and fun is reported as 3.4% of the respondents. Other reasons for using drugs are imitating parents, relatives and people around them and peer pressure of their community.

Figure (4) Starting Age Using Cigarette, Vape and Alcohol by the Respondents



Source: Survey Data (2024)

According to Figure (4), the students who aged 13-17 years have been trying to use the cigarettes, which is proved by 15 students or 5.7% of the respondents. However, the highest share of the respondents who have used the alcohol is aged 18-23 years old, that is verified by 62 students or 23.7% of the respondents. Therefore, it can be concluded that most teenagers want to try the various types of drugs, especially cigarettes and alcohol, rather than vape because of the price of vape is more expensive than alcohol and cigarettes.

Figure (5) Purchasing Availability of Cigarette, Vape and Alcohol

Source: Survey Data (2024)

The status of purchasing availability of cigarettes, vape and alcohol is shown in Figure (5). According to the survey data, it is easy to buy cigarettes, vape and alcohol in the market although the laws are prohibited to selling drugs under the age of 18 years old. In this survey, the results indicated that it is easy to the purchase cigarettes and alcohol in the market.

Table (5) Correlation among the Variables for Cigarette, Vape and Alcohol

Types of drugs	Variables	Practices	Knowledge	Attitude
Cigarette	Practices	1.000	-0.352 (0.000) ***	-0.453 (0.000) ***
	Knowledge	-0.352	1.000	0.576 (0.000) ***
	Attitude	-0.453	0.576	1.000
Vape	Practices	1.000	-0.350 (0.000) ***	-0.493 (0.000) ***
	Knowledge	-0.350	1.000	0.576 (0.000) ***
	Attitude	-0.493	0.576	1.000
Alcohol	Practices	1.000	-0.287 (0.000) ***	-0.422 (0.000) ***
	Knowledge	-0.287	1.000	0.576 (0.000) ***
	Attitude	-0.422	0.576	1.000

Source: Survey Data (2024)

(Note: *** Significant at 0.01% level)

In this study, the relationship between dependent variable (practice) and independent variables (knowledge and attitudes) is negative, which can be interpreted that the better knowledge and attitude toward the use of alcohol, vape and cigarette, can contribute to less consumption of it. On the other hand, the correlation between knowledge and attitude is 0.576 with significant at 0.01% level, which means that there is a positive relationship between knowledge and attitude of using cigarette, vape and alcohol. Therefore, it can be concluded that the better the knowledge about the usage of drugs, the more excellent attitudes toward prevention the use of cigarettes, vaping and alcohol.

Discussion

This study examines the relationship between knowledge and attitudes, and practices of alcohol drinking and smoking among university students of Naypyitaw State Academy. The purpose is to promote knowledge and attitude concerning alcohol and smoking, which can reduce students' health physically, mentally, and socially. The overall mean score for knowledge is 3.85, indicating good awareness of diseases related to alcohol and smoking. Respondents have better knowledge about cancer, heart disease, respiratory disease, mortality, and harmful effects on childbirth, with mean scores over 4.02. Some also recognize the impact on personality, quality of life, and consumption expenditure. Students have good attitudes toward preventing alcohol drinking and smoking, with an overall mean score of 3.76. Most agree that alcohol and smoking disturb third parties and support higher taxes on cigarettes, vape, and alcohol (75%). Nearly half agree that public seminars can reduce consumption, and 80% believe in prohibition among students, as well as banning sales to teenagers. Regarding practices, 70% to 80% do not use alcohol, vape, or cigarettes, while 20% to 30% do. Those who use them perceive smoking as cool and believe drinking at social events is fashionable. The relationship between knowledge and attitude, and practices is negative, meaning better knowledge and attitude lead to less consumption. The positive relationship between knowledge and attitude suggests that better knowledge results in an improved attitude toward preventing use. This study concludes that increased knowledge of the harmful effects of alcohol, vaping, and cigarettes leads to better attitudes and reduced consumption.

Conclusion and Suggestion

The risk of cancer can be reduced by stopping smoking, avoiding passive smoke, limiting alcohol consumption, eating healthy, and performing regular physical activity. Knowledge-sharing campaigns will help youth against smoking and drinking. The government should intensify restrictions on alcohol, cigarette, and vape promotion and advertising. Stricter laws are needed to prevent teenagers from smoking and drinking. Progressive excise taxes should apply to both imports and domestic production, as these products are easy to buy. Although official restrictions exist in public areas, enforcement is poor. Authorities must monitor, penalize, and effectively enforce laws to reduce public consumption. It would strengthen the research if the findings included gender-based analysis on alcohol, smoking, and vaping practices. While the study presents the demographic distribution of male and female respondents, it does not provide a comparative analysis of consumption patterns between male and female students.

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