

FACTORS RELATED TO ALCOHOL-DRINKING BEHAVIORS ON SECONDARY SCHOOL STUDENTS GRADE 1-3 IN THE PROVINCE OF NAKHON SI THAMMARAT THAILAND

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ABSTRACT

Background. Globally, alcohol consumption is the major cause of mortality and disease. Future health and life quality may also be affected by early initiation of alcohol consumption. It is a cross-sectional design for a research survey.

Objective. This study aimed to investigate alcohol drinking behavior, the effects of alcohol consumption, and factors linked to alcohol drinking behavior among 410 secondary school students in grades 1-3 in the province of Nakhon Si Thammarat in southern Thailand.

Material and Methods. A simple sample was selected from a stratified random sample of 210 individuals. The data collection instrument was a questionnaire comprised of five sections and 78 items in total. The index of item objective congruence (IOC) of 0.90 and the reliability of 0.74 was used to evaluate the tool's quality. To analyze the data, descriptive statistics and chi-square statistics were employed.

Results. The results of the study showed that a total of 40.0% of the participants had previously consumed alcohol, that men were more likely than women to drink (54.8%), that beer was the most popular alcoholic beverage (57.7%), that most people drank alcohol at night while at home (47.6%) and with friends (83.6%), the majority of participants (13.9%) drank alcohol one to three times per week, and their attitudes toward alcohol were moderate (85.7%). Religion, knowledge about alcohol use, and the amount of money received each month from habitat for humanity were not found to be linked to drinking alcohol.

Conclusion. The conclusion is that the use of alcohol by students is influenced by a wide variety of circumstances. Health professionals, educational institutions, and relevant agencies should use these factors to promote alcohol use prevention behaviors and formulate guidelines and measures to prevent this by designing an effective prevention program to reduce the alcohol use behaviors of children and young people in the appropriate manner.

Key words: *alcohol-drinking behaviors, secondary school students, Nakhon Si Thammarat, Thailand*

INTRODUCTION

According to the World Health Organization's (WHO) Global Action Plan for the Prevention of Non-Communicable Diseases (NCDs), alcohol consumption is one of four major risk factors for non-communicable diseases (NCDs). Alcohol consumption should be protected in all countries around the world. By 2020, it is intended that the dangers associated with drinking will be reduced by 10% [1]. Furthermore, according to the Sustainable Development Goals (SDGs) for 2030 that was declared by the United Nations (UN), alcohol is a major impediment, as it is involved in 13

of the 17 primary goals [2]. The situation of alcohol use is always evolving, particularly among young people, who have a tendency to drink more and begin drinking at an earlier age. This is especially true in the United States. They are referred to as "new drinkers" due to the fact that people who begin drinking at a younger age have been discovered to have certain characteristics. This not only raises the risk of health repercussions and psychological illnesses connected with alcohol use, such as dangerous drinking behavior [2, 3], but it also increases the possibility that the individual would abuse other substances. [4, 5], has an effect on one's capacity for learning, and has an impact

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on both social difficulties and dangerous behaviors [6, 7]. As a result, there should be risk surveillance of alcohol consumption behavior in a variety of settings as a guide for the development of policies to regulate and avoid issues brought on by alcohol consumption.

Drinking alcohol is a problem for the person, the family, society, the economy, and the country as a whole. Because it is connected with five times as many causes of mortality and disability as narcotics, it requires a budget in order to prevent and treat the different issues that it creates. Accidents involving drunk drivers, homicides, and other violent crimes account for thirty percent of all fatalities, whereas one in every three deaths is the result of a mental health condition. According to the World Health Organization (WHO) alcohol consumption statistics in 2018, alcohol is the cause of approximately 1 in 20 deaths worldwide every year [8]. Additionally, according to the WHO-Alcohol Consumption Database, it is found that Thais are the 5th most likely to consume alcohol in the world and the first in Asia [9], with a percentage increase in new drinkers of 4.96 per year, and found that they were regular drinkers among all 42.20 percent of the total population. [10]. Worryingly, there are approximately 1.06 million male adolescents between the ages of 11 and 19 who drink alcohol, which accounts for 21.2% of the population in this age group. Additionally, during the past seven years (1996-2003), there has been a group of female teenagers between the ages of 15 and 19 who have engaged in alcohol consumption. The survey indicated that students who drank alcohol in high school and at the vocational certificate level started drinking at a younger age, with almost half of those students starting drinking at a younger age. This trend was seen in both male and female students 15 years, and children who begin consuming alcohol before the age of 13 years have a greater risk of developing an addiction to alcohol until they reach adulthood [11].

According to the information shown above, the problem of underage drinking among young people has been shown to diminish at younger ages, which implies that in today's culture, children and young people have a changing mindset and behavior in regard to consuming alcohol [12] which Thailand has given significance to managing the use of alcoholic beverages among children and young people with the Alcohol Control Act B.E. [12] which Thailand has given importance to controlling the use of alcoholic beverages among children and young people. Under the National Education Act, Article 27 forbids the selling of alcoholic drinks at educational institutions, and Article 29 prohibits the sale of alcoholic beverages to anyone under the age of 20 [13].

In 2017, 32.3% of the population aged 15 and over consumed alcoholic drinks, according to the

National Statistical Office. In 2017, 55.9 million 15- to 24-year-olds were identified as alcohol drinkers: around 15.9 million individuals (or 28.4%) are drunk, 6.98 million people (or 12.5%) always drink, and 8.91 million people (or 15.0%) seldom drink. 16.7 years of age is the average age at which people begin drinking. Young people consume alcohol for the following reasons: 1) socializing or partying (41.9%); 2) following friends or friends who invite them to drink (27.3%); and 3) desiring to try drinking (24.4%) [14]. According to the report cited above, adolescents are being encouraged to use more alcohol, indicating that prior alcohol control measures have not been effective in reducing the number of new drinkers as they should have if the government and society do not take appropriate action. When the future of Thai children is filled with alcohol drinkers who cause problems after drinking alcohol, such as road traffic accidents, which are severe accidents that cause many injuries and deaths, particularly during the holiday season with many consecutive holidays like New Year's Eve, Songkran festival, etc., where alcohol is the leading cause of death from traffic accidents 90% of the year, killing 26,000 people, the majority of whom are young adults [10].

The province with the biggest population and second-largest land area is Nakhon Si Thammarat. The assessment of the quality of life of the people of Nakhon Si Thammarat in 2017 [15] indicated that more than fifty percent of the working-age population in the southern region had the highest alcohol consumption rate in Thailand. This is consistent with the 2011 Nakhon Si Thammarat Province Alcohol Consumption Situation Report. The prevalence of adult drinkers is highest in the 20–59 age range, the highest of any population in the province, as evidenced by festival accident statistics. New Year's and Songkran Festival 2018-2019 in Nakhon Si Thammarat province has the highest number of drunk driving accidents and injuries in the country [16].

Therefore, the researcher wished to investigate the factors associated with alcohol drinking behavior and the impacts of alcohol use among secondary school students in grades 1-3 in the province of Nakhon Si Thammarat, categorizing the factors as follows: 1) predisposing factors were gender, age, religion, level of education, monthly income, knowledge, and attitude toward alcohol; 2) reinforcing factors included residential characteristics, family relationships, and access to alcoholic beverages; and 3) enabling factors included support from family, friends, educational institutions, and local government organizations. This research can be utilized as a foundation for monitoring and increasing knowledge, preventing factors that attract students to drink alcohol, and collectively resolving major problems from all parties

concerned, including family institutions, educational institutions, etc.

Objectives

To investigate the drinking behavior and effects of alcohol among secondary school students grade 1-3 in Nakhon Si Thammarat Province, as well as the relationship between drinking behavior and related factors.

MATERIAL AND METHODS

This study is a cross-sectional survey. The population consists of students in grades 1-3 during semester 2 of the Academic Year 2018 in Nakhon Si Thammarat Province schools. A sample of 210 participants was calculated from a population of 410. The population sample size was determined using stratified random sampling and *Yamane's* algorithm [17] with a tolerance of 0.05. All questionnaire responses were collected using sampling and simple random sampling. The period of data collection was one month following the validation of the questionnaires. Encoding and analysis of data using descriptive statistics such as mean, frequency, percentage, and analytical statistics such as *Chi-squares*.

Research instruments

This study's data-gathering instrument was a questionnaire comprised of five sections. The 78 items are as follows:

Part 1 is a general information questionnaire. It is a questionnaire with 12 questions regarding personal aspects, such as gender, age, religion, level of education, grades, family status, housing, and monthly income.

Part 2 is a 20-question survey about predisposing factors, which is divided as follows:

1. Inquire about your knowledge of alcohol consumption. There is a rating scale (estimation measure) with three options: yes = 1 score, no = 0 score, and unsure = 0 score. Regarding the negative questions, the scores were inverted, with a mean score of 0.00–59.99 indicating a low level of knowledge, 60.00–79.99 indicating a moderate level of knowledge, and 80.00–100.00 indicating a high level of knowledge.
2. It used rating scales to evaluate people's views regarding alcohol drinking, with an average score of 1.00-2.33 indicating a negative attitude, 2.34-3.66 indicating a moderate attitude, and 3.67-5.00 indicating a good attitude.

Part 3. The section consisted of a questionnaire of reinforcing factors containing questions regarding home characteristics, family relationships, and access to alcohol trading platforms. The average score for

the 12 rating scale questions was between 1.00 and 2.33. This suggests that living conditions, familial relationships, and alcohol distribution are insufficient for the availability of alcoholic beverages. A mean score between 2.34 and 3.66 indicated a moderate level of housing characteristics, family relationships, and access to sites for trading alcoholic beverages, while a mean score between 3.67 and 5.00 indicated a high level of housing characteristics, family relationships, and access to sites for trading alcoholic beverages.

Part 4: The section is a questionnaire regarding enabling factors, which includes inquiries about family, friends, school, and local government assistance. There are a total of 14 questions and a grading scale with three possible responses. Frequent reception (once per week) equals 2. Points are occasionally awarded (at least once each month); 1 point is not awarded for every rejection question. A typical score between 1.00-1.66 indicates inadequate social support. The average score ranges between 1.67-2.33, representing moderate social support. A mean score between 2.34-3.00 suggests some level of social support.

Part 5: This section is a questionnaire about the behavior and effects of alcohol consumption, including how much you drank when you initially started drinking, why you drink, the sort of alcoholic beverage you consume, the frequency and duration of your drinking, and drinking parties. How much to drink, where to drink, etc. There are twenty questions in total, which form a checklist.

To evaluate the study instrument, the researcher did the following: Following a validity check by three experts, the questionnaire was tried on a sample representative of the actual sample, and the internal consistency reliability of the questionnaire (rating scale) in the index of item objective congruence (IOC) of 0.90 and the reliability of 0.74 was used to evaluate the tool's quality.

Protecting research participants' rights

In this study, the researcher reported the research project to the Human Research Ethics Committee at Walailak University, which issued certification number WUEC-18-071-01 for the project. In this study, the researcher has paperwork stating to the sample of participants answering the questionnaire that they are protecting the researcher's rights and gaining the sample's consent to engage in the study.

RESULTS

Part 1. General aspects

The general information research of the respondents revealed that the majority were female (55.2%), 44.8% were male students, 14 years old (34.8%), 15 years old (32.9%), and 13 years old (28.6%), and that 97.1% were

Buddhists. 49.0% with a cumulative GPA between 2.00 and 3.00, followed by 28.6% with a cumulative GPA of 3.00 or above and 22.4% with a cumulative GPA below 2.00. The majority of them received money from their parents, with 72.4% receiving an average of 2,001–3,000 baht per month or higher; 70.0% lived with their parents, while 21.4% stayed with relatives. 56.9% were divorced or legally separated, compared to 18.7% and 16.6%, respectively. Monthly family earnings were from 5,001 to 10,000 baht (43.8%), 10,001 to 20,000 baht (35.2%), and 20,000 baht or more (16.2%), respectively.

Part 2. General characteristics of predisposing, reinforcing, and enabling factors

The predisposing factors demonstrated that the majority of students had moderate and low knowledge of alcohol (48.1% and 33.8%, respectively). 74.8% of the population had moderate attitudes about alcohol drinking, while 23.8% had favorable sentiments. The attitude against alcohol use in the questionnaire was at its greatest level of positivity, namely that consuming alcohol is not a solution to one hundred life issues (59.0%), and that alcohol increased the danger of accidents and other diseases among students (41.9%). The questionnaire generated the most negative attitudes toward alcohol consumption. Alcohol consumption was a common practice among teenagers (23.8%), and alcohol consumption can alleviate stress (20.5%).

The reinforcing factors were shown that 45.2% of the dwelling features of college students were favorable to easy access to alcoholic drinks. Sex, age, level of education, attitude toward alcohol, family relationship, availability to alcohol trade, peer support, families, educational institutions, and local administrative organizations were statistically significant characteristics related to alcohol consumption. And 51.8 and 48.1% of them were at a good level and 60.5% of them found that their family relationships were also at a moderate and good level, respectively which to access have access to a source of alcohol trading with the majority indicating that family members understood one another and provided support when problems arose with students.

The enabling factors found that family support was at a medium level, for example, parents had warned and taught about alcohol drinking 78.6%. For friend support: 31.6% of low levels of alcohol use and peers often helped students avoid alcohol. As for the support from educational institutions, it was found that the students perceived that the educational institutions had clearly announced a policy prohibiting alcohol consumption at 69.5%. Campaign to reduce the consumption of alcoholic beverages in the community from local administrative organizations 64.8%

Part 3. Alcohol drinking behaviors of secondary school students

For the drinking behaviors of 84 students, it was found that a percentage of them used to drink. 40.0% of the sample group started drinking at the ages of 11–13 years (26.2%), 14–16 years (32.6%), and under 10 years (17.9%) of the year. Most of the reasons that they drank for the first time were wanting to try it (52.4%), followed by friends asking for a drink (28.6%), and stress relief (17.1%). The type of alcohol that was drunk the most was beer (45.2%) and wine (36.9%), and the frequency of drinking was 1–11 times a year, 58.2%. followed by 1-3 once/month, or 26.2%, most of the time they drank late at night (21.00 p.m.–04.59 a.m.), (47.6%), 42.9% in the afternoon (16.00 p.m.-21.00 p.m.). 55.2% of alcohol purchases were made at convenience stores, 43.2% at grocery stores, 45.2% at parties, 28.6% on New Year's Eve, and 17.9% on birthdays. 70.2% of friends, 17.9% of relatives, 47.6% of drinking places where their own homes, 34.5% of friends' houses, and 8.3% of restaurants or entertainment venues, respectively. The cost of each drink was 69.0% less than 200 baht and 12.2% from 200-500 baht. And while drinking, other drugs were also involved, including smoking (10.7%) and cough syrup (2.4%).

Part 4. Effects of alcohol consumption among junior high school students

The results revealed that the majority of samples were influenced by alcohol use as follows: blurring, forgetfulness, absenteeism (21.4%), worse grades (3.6%), accidents (4.2%), and sex (2.4%). Conflicts with family and friends as a result of alcohol consumption. Alcohol-related health issues such as headaches, palpitations, and exhaustion account for 21.4%, 4.2%, and 2.4%, respectively.

Part 5. The relationship between predisposing factors, reinforcing factors, and enabling factors for the alcohol-drinking behavior of junior high school students

Predisposing factors: sex, age, level of education, and attitude toward alcohol were associated with alcohol-drinking behavior among secondary school students ($p < 0.001$), according to the research of the primary variables connected to alcohol use among that age group. According to Table 1, religious characteristics, monthly student income, and alcohol knowledge had no statistically significant relationship with alcohol drinking behavior.

Reinforcing factors: family relationship variables and availability of alcoholic beverage sources were shown to be associated with drinking behavior among secondary school students, according to the findings of housing characteristics into the determinants of alcohol

Table 1. The relationship between predisposing, enabling, and reinforcing factors and the drinking behavior of junior high students (n=210)

Factors	Alcohol consumption behavior		χ^2	p-value
	Drinking (n=84)	No drinking (n=126)		
Predisposing factors				
Gender				
Male	46	48	5.662	0.017*
Female	38	78		
Age				
12-13 years	15	51	17.341a	0.001*
14-15 years	69	75		
Education				
Secondary school grade 1	18	48	6.715	0.035*
Secondary school grade 2	33	36		
Secondary school grade 3	33	42		
Income (Baht per month)				
1,000-2,000 baht	16	31	2.986a	0.372
2,001-3,000 baht or more	68	94		
Knowledge of alcoholic beverages				
Excellent	13	25	1.180	0.554
Moderate	44	57		
Low	27	44		
Attitudes toward alcoholic beverages				
Excellent	11	39	9.412	0.004*
Moderate	73	87		
Enabling factors				
Housing				
Excellent	15	32	3.317	0.177
Moderate	36	59		
Low	33	35		
Family relationship				
Excellent	39	88	12.502	0.001*
Moderate	45	38		
Access to consumption of alcoholic beverages				
Excellent	25	76	19.350a	0.001*
Moderate	59	50		
Reinforcing factors				
Family support				
Moderate	57	93	4.099a	0.143
Low	30	30		
Friend support				
Moderate	9	46	18.350	0.001*
Low	55	64		
Institute support				
Moderate	16	47	8.071	0.015*
Low	53	63		
Local administrative support				
Moderate	24	66	12.004	0.003*
Low	52	54		

a = Fisher's Exact test, *p < 0.05

use ($p < 0.001$), however, there was no significant link between housing and alcohol use (Table 1).

Enabling factors: peer support, educational institutions, and local administrative organizations were shown to be connected with alcohol-drinking behavior among junior high school students ($p < 0.05$), according to research examining variables related to alcohol use. According to Table 1, there was no statistically significant link between family support and alcohol consumption.

Part 6. The relationship between alcohol drinking behavior and the effects of alcohol consumption among junior high school students

Research examining the association between alcohol drinking behavior and the consequences of alcohol consumption found that the cause of the initial alcohol intake and the frequency of drinking were connected to the effects of alcohol usage ($P < 0.05$). There was no correlation between the length of drinking and drug usage during drinking and the consequences of alcohol consumption.

Frequency of drinking was connected with post-alcohol accidents ($p < 0.05$), according to the findings of a study examining the association between alcohol use and subsequent accidents. The reasons of initial alcohol intake, length of drinking, and drug usage during drinking were not substantially associated with alcohol-related accidents as Table 2.

The results of the study examining the association between alcohol-drinking behavior and alcohol-related health issues revealed that the use of other substances while drinking was connected with alcohol-related health problems ($p < 0.05$). According to Table 2, initial alcohol consumption, drinking frequency, and drinking interval were not substantially associated with alcohol-related health concerns.

The findings of the study examining the association between alcohol-drinking behavior and brawling after alcohol consumption revealed that the reason for first-time alcohol consumption was connected to brawling after alcohol consumption ($p < 0.05$). According to Table 2, drinking frequency, drinking interval, and drug usage during drinking were unrelated to fights following alcohol intake as Table 2.

DISCUSSION

The following is a summary of the findings from the research on drinking behavior and its impacts on secondary school students in grades 1-3 in Nakhon Si Thammarat Province.

40% of junior high school students drank alcohol, 54.8% of whom were male and 54.8% of whom were female, according to their alcohol consumption patterns. 45.2 is a comparable percentage. Those

who drank for the first time because they wanted to try it with their friends were 11–2 years old when they began, and 54.8% were female students. 45.2 is a comparable percentage. First-time drinking was motivated by a desire to sample alcohol with friends. I began drinking between the ages of 11 and 2 (56.0%) Beer and spy wine coolers are the most common alcoholic drinks. They do not become intoxicated and consume less alcohol. Places to drink include your house, the homes of your friends, and entertainment venues. The average cost of each drink is between 100 and 200 baht. The frequency of alcohol use is one to three times each month. The drinking hours are from 9 p.m. to 4:59 a.m. Participants drank with family and friends. During celebrations such as birthdays and New Year's, the chance of consuming alcoholic drinks was greater, and 10.7% of drinkers also smoked cigarettes and used cough syrup. This is consistent with the findings of Chomsri et al [18], who found that more alcoholic beverages are used to celebrate various occasions because they are easy to obtain illegally and come in a wide variety of styles and flavors, which affects young drinkers who are passionate, curious, and eager to be socially accepted. There is some drinking, but the samples are unable to earn money, so their purchasing power is low, and the majority of the family lives, indicating that other causes are at play. However, poverty is a common reason why students consume alcohol. The effects of alcohol usage on junior high school kids include absenteeism, worse marks, and so on. Health difficulties such as headaches, palpitations, exhaustion, accidents, early sex, etc., and social issues such as disputes with friends were reported as having moderate to poor views of the impacts of alcohol consumption. Younger individuals used less alcohol, with easy access to trading sources and peer support having a role (see Table 1). This is consistent with data from the Office of the Alcohol Control Board [19] and the study by Treemek [20], which indicate that alcoholic beverages may be a predisposition to violence such as quarrels, assaults, killing others, etc., as well as social problems including drunk driving accidents, rape, and other forms of substance abuse.

The link between predisposing variables, reinforcing factors, and enabling factors for the alcohol-drinking behavior of junior high school students was examined in the research.

The drinking habit was substantially connected with predisposing factors variables such as gender, age, educational level, and attitude. Males were substantially more associated to drinking behavior than females, according to the findings ($p < 0.05$) because male teenagers are inherently inquisitive and desire peer acceptance, the opposing sex is more likely to be welcomed by society. While women were taught to abstain from alcohol use, this was consistent with

Table 2. The relationship between drinking behavior and alcohol's repercussions among junior high school students. (n=84)

Alcohol consumption behavior	Effects of alcohol consumption			Accident after drinking alcohol			Alcohol abuse causes health concerns			Brawl after drinking alcohol						
	Ever (23)	Never (61)	χ^2	p-value	Ever (3)	Never (81)	χ^2	p-value	Ever (3)	Never (81)	χ^2	p-value	Ever (4)	Never (80)	χ^2	p-value
Initial alcoholic beverage consumption causes																
1) Friend encouraged to drink	5	19	11.02 ^a	0.07*	0	24	11.35 ^a	0.23	0	24	18.41 ^a	0.07*	1	23	16.60 ^a	0.02*
2) Broken heart	1	4			0	5			0	5			0	5		
3) Imitate advertisements	1	1			1	1			1	2			2	0		
4) Hoping to attempt	11	33			2	42			0	44			1	43		
5) Family problems	1	0			0	1			0	1			0	1		
6) Relax	4	2			0	6			0	6			0	6		
Frequency of alcohol consumption																
1) Drinking 3-6 days a week.	4	4	11.49 ^a	0.01*	2	6	6.88 ^a	0.08*	1	7	7.09 ^a	0.24	1	7	4.23 ^a	0.28
2) Drinking 1-3 days per month.	11	16			0	27			0	27			1	26		
3) Drinking 1-11 days per year.	8	41			1	48			0	49			2	47		
Period of drinking alcoholic beverages																
1) 16.00 p.m.– 20.59 p.m.	11	35	2.08 ^a	0.58	2	44	3.05	0.72	1	45	6.23 ^a	0.52	2	44	2.03 ^a	1.00
2) 21.00 p.m.– 04.59 a.m.	13	27			1	39			0	4			2	38		
Co-use of additional drugs																
1) Use	1	3		1.00	1	3		0.14	1	3		0.05*	1	3		0.18
2) No use	22	58			2	78			0	80			3	77		

^a = Fisher's Exact test, *p < 0.05

the findings of *Maneeapat Saimek's* [21] study, which indicated that gender was a factor affecting alcohol consumption. This is consistent with the research of *Ponpaipan et al.* [22] which concluded that gender is a factor related to the alcohol-drinking behavior of students, and with the research of *Ucharattana et al.* [23] which concluded that gender was associated with alcohol-drinking behavior, which explains why social norms accepted more male alcohol-drinking behavior than female students, but this study found that female students had higher alcohol-drinking rates than male students. Age was connected with alcohol use ($p = 0.001$). The average age at which people began drinking for the first time was revealed to be between 10 and 11 years old. Currently, the majority of drinking pupils are between the ages of 13 and 15, which is the younger age range. The age of legal access to alcoholic drinks suggested that the samples were from new drinkers who had begun drinking during the last one to two years. There is a correlation between education level and drinking habits. Drinking alcohol ($p < 0.05$), with moderate alcohol-drinking behavior, found that the majority were in the second and third grades, can be explained by the fact that the years of study may not represent a significant difference in age, so there may be no difference in the concepts and behaviors displayed. This contradicts the findings of *Rattanamanee* [24], who discovered that age had no correlation with alcohol drinking attitude and that academic year had no correlation with alcohol consumption behavior among Bangkok undergraduates.

The correlation between the student's attitude toward alcohol consumption and alcohol consumption behavior ($p < 0.05$) explains why the sample group of students with a favorable attitude toward alcohol use drank alcohol. The group with a negative attitude regarding alcohol use exhibited little alcohol usage. According to the data in Table 2, the participants showed a positive attitude toward alcohol intake. Because the students considered that consuming alcohol was a normal teenage habit and easily socialized with their classmates, the level was good and moderate. This behavioral belief is a perception of the possibility of engaging in alcohol-drinking behavior, as seen in Table 2, which reveals that the sample group of students exhibited a high degree of alcohol-drinking activity. The sample with a medium drinking attitude implies that these students are more inclined to use alcohol. This is consistent with *Whiteside et al.* [25] research on the characteristics that influence students' intentions to smoke and drink in southern Africa. Attitude toward alcohol consumption was 7.70% predictive of intention to consume. Religion, parental monthly income, and alcohol knowledge were shown to be negligible, statistically significant, and linked with the sample group's alcohol consumption. It can

be explained because the sample consists of teenagers who have not yet attained moral maturity and their alcohol-drinking behavior tends to be shared with companions who share the average costs. Since alcoholic beverages are affordable, they do not impact the monthly income received from parents. In addition, the majority of the sample is aware of the effects of alcohol on health and pregnancy. Accidents, brawls, and legislation regulating alcohol use are moderate and low. This is comparable to the study by *Hashim et al.* [26] which explored the factors impacting high school students' alcohol use. Conscious of the knowledge, comprehension, significance, and repercussions of alcohol consumption. To limit alcohol use among children and adolescents, we must educate them about the hazards and bad consequences of alcohol drinking throughout the time short- and long-term.

Significantly correlated with the alcohol-drinking behavior of the sample group were family relationships and access to alcoholic beverage trade sites, which enabled factors to the alcohol-drinking behavior of junior high school students. It was shown that 60.5% of family ties were positive, indicating that students whose family members had positive relationships were encouraged, discussed, and displayed less alcohol-related behavior. Those with fewer family links are more likely to use alcohol than those with strong family ties [27, 28, 29]. Therefore, having strong family relationships is the first step in keeping students from abusing alcohol. It was determined that access to trading was moderate at 51.0%, leading to increased alcohol-drinking behavior and frequency. There was a strong association between easy access to alcoholic drinks and alcohol-drinking behavior. It was connected with increased alcohol use compared to students who had difficulty gaining access to alcohol, since alcohol was readily available from convenience stores, extensively distributed, affordable, and accessible to students. Even if the policy of the law is applied, such as regulating the age or time for purchasing alcohol, students have easy access to establishments that do not adhere to the law and are persuaded by advertising. Alcohol-drinking behavior is connected with public relations regarding alcoholic drinks [30, 32]. And this study found that there was no statistically significant correlation between living arrangements and alcohol consumption, which may explain why this sample group consisted of junior high school students, the majority of whom lived with their parents, and that living arrangements can prevent students from engaging in alcohol consumption.

High levels of peer support were identified as an additional factor associated with the alcohol use of junior high school pupils. *Chanamanee et al.* [33] revealed that the person with whom teenagers drink alcohol the most is the average of their friends.

($P=0.001$) showed that the majority of adolescents' alcohol intake resulted from peer soliciting by drinking with friends the most. In line with *Amanda's* research, *Chaikan* et al. [34] concluded that the majority of students' alcohol consumption behavior was connected to alcohol intake with friends and peer influence. It might explain why the sample group with alcohol-drinking close friends consumed more alcohol than the sample group without alcohol-drinking close friends. There was little support from educational institutions. Community support by local government organizations is low since educational institutions have established a clear alcohol prohibition policy and a campaign to prevent and closely monitor students' alcohol-drinking behaviors. This study found that family support was not substantially associated with students' alcohol intake. It can be explained by the fact that the majority of the target population lived with parents who closely monitored their children and disapproved of alcohol consumption as a factor that could prohibit their drinking behavior. On the other side, the fragmentation of families in modern nations has contributed to an increase in alcohol dependence among children and adolescents.

CONCLUSION

The respondents are female (55.2%), 14 years old, enrolled in grade 3 (35.7%), with a cumulative GPA between 2.00 and 3.00 (4.9%), receiving 2,001 to 3,000 baht or more per month from their parents (72.4%), reside with their parents (70.0%) and with relatives (21.45). It was discovered that knowledge and attitudes concerning alcohol were at a moderate level, particularly favorable views that drinking alcohol was not a solution to life issues and the perception that alcohol increased the chance of injury. The level of hostility against alcohol drinking was at its maximum. It was a common occurrence among teens (23.8%) and can help alleviate stress (20.5%). There were three factors: 1) student housing characteristics that facilitated access to alcoholic beverages by students living with friends and in student housing near alcohol stores; 2) access to trading facilities for alcoholic beverages by being able to drink alcohol easily; and 3) family relationships in which family members understand each other and encourage the students to deal with their problems. The reinforcing factors revealed that family support was moderate, as parents had warned and educated their children about alcohol consumption, while school support was low, as students perceived that the school had clearly announced a prohibition policy on drinking alcohol, and support from local governments was low, as students had experienced campaigns to reduce alcohol consumption in the community. It was observed

that the drinking habits of the pupils had remained unchanged. The most often consumed alcoholic beverage was beer (45.2%), the frequency of drinking was 1-11 times a year (58.2%), and most drinking occurred between 9 p.m. and 5 a.m. Other substances were used while drinking (47.6%), alcohol was obtained at a convenience shop (55.2%), and alcohol was purchased from a store (55.2%). In addition, smoking (10.7%) and cough medication (2.4%) were included. According to the findings of a study of the leading factors related to alcohol consumption, sex, age, education level, and attitude toward alcohol were statistically significantly related to alcohol drinking behavior ($p<0.001$). Among the reinforcing factors to alcohol consumption, family relationships and access to alcoholic beverages were found to be significantly associated with alcohol-drinking behavior ($p<0.001$). Peers, educational institutions, and local government organizations were discovered to have a statistically significant relationship with alcohol-drinking behavior ($p<0.05$).

Recommendations

1. It was discovered that motivating, contributing, and enabling variables impacted the drinking behavior of students, particularly gender, age, and drinking attitudes. Family, availability to alcohol trafficking and social support were connected with heavy alcohol consumption. Therefore, preventative strategies should begin at the family, school, and local community levels and be pushed at the national level, especially in limiting underage access to alcohol, which is important.
2. This study was a quantitative examination of the behaviors and variables associated with a junior high school student's alcohol use in Nakhon Si Thammarat Province. It was impossible to accurately reflect the whole teenage population. To acquire a better understanding of the problem, further qualitative studies were undertaken on various demographic groups, focusing on the personal, behavioral, and attitudinal aspects that influence students' alcohol use.

Authors' contributions:

Conceptualization, P.T.; methodology, R.S. P.T.; formal analysis, S.M. P.B.; investigation, S.S.; writing original draft preparation, R.S., S.S.; writing, review and editing, S.S., and S.M.; supervision, P.T., P.B.

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Data Availability Statement

The data used to support the findings of this study are included in this article.

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Conflicts of interest

This publication is confirmed as having no known conflicts of interest. This endeavor has not been supported by any significant financial donator/grantor, which could have affected its outcome.

REFERENCES

- World Health Organization. Global action plan for the prevention and control of noncommunicable diseases 2013-2020. Geneva: World Health Organization; 2013. p. 65-70.
- Liang W, Chikritzhs T. A great first use of alcohol predicts the risk of heavy alcohol use in early adulthood: a longitudinal study in the United States. *Int J Drug Policy*. 2015;26(2):131-4.
- Kim MJ, Mason WA, Herrenkohl TI, Catalano RF, Toumbourou JW, Hemphill SA. Influence of early onset of alcohol use on the development of adolescent alcohol problems: a longitudinal binational study. *Prev Sci* 2017;18(1):1-11.
- Richmond-Rakerd LS, Slutske WS, Lynskey MT, Agrawal A, Madden PAF, Bucholz KK, et al. Age at first use and later substance use disorder: shared genetic and environmental pathways for nicotine, alcohol, and cannabis. *J Abnormal Psychology* 2016;125(7):946-59.
- Hingson RW, Heeren T, Edwards EM. Age at drinking onset, alcohol dependence, and their relation to drug use and dependence, driving under the influence of drugs, and motor-vehicle crash involvement because of drugs. *J Stud Alcohol Drugs* 2008;69(2):192-201.
- Jiang H, Xiang X, Hao W, Room R, Zhang X, Wang X. Measuring and preventing alcohol use and related harm among young people in Asian countries: a thematic review. *Glob Health Res Policy* 2018;3:14.
- Hingson RW, Edwards EM, Heeren T, Rosenbloom D. Age of drinking onset and injuries, motor vehicle crashes, and physical fights after drinking and when not drinking. *Alcohol Clin Exp Res* 2009;33(5):783-90.
- World Health Organization. Global status report on alcohol and health 2020. Geneva, Switzerland; 2020.
- World Health Organization.: Alcohol Consumption and Sustainable Development. Copenhagen, WHO Regional Office for Europe 2020.
- Thai Health Promotion Foundation. (2014). Prevent alcohol control - reduce young people, new drinkers. available online Jun 10, 2018 on <http://www.thaihealth.or/Content/26653>.
- National Statistical Office. The 2014 Survey of Smoking and Alcohol Drinking Behavior. available online Mar 10, 2018 on https://www.m-society.go.th/article_attach/13207/17336.pdf.
- Budsabong, Korawan.. Special study of Alcohol consumption behavior of health education students Science Education Kasetsart University Bangkok Institute. Bangkok: Kasetsart University, 2014. (in Thai)
- Office of the Council of State. Alcohol Control Act 2008. Government Gazette 2008;13February:34-49. (in Thai)
- National Statistical Office. Smoking and drinking behavior survey of the population 2017. Bangkok. Pimdee, 2018. (in Thai)
- Provincial Community Development Office of Nakhon Si Thammarat. Nakhon Si Thammarat Quality of Life Report 2018 available online Jan 4, 2018 on <http://nakhonsi.cdd.go.th/service/basic-minimum-needs-information>
- Provincial Social Situation Report (2017). Nakhon Si Thammarat Situation Report available online Aug 15, 2017 http://www.nakhonsithamarat.msociety.go.th/news/2560_12
- Taro Yamane. Statistics: An Introductory Analysis. 3rd Ed. New York. Harper and Row Publications 1973.
- Chomsri P, Aramratana A, Siviroj P, Kuntawee S. Prevalence of Substance Used, and Association between Substances Used with Sensation Seeking among Vocational Students. *Nursing Journal* 2017;44(2).
- Office of the Council of State. Alcohol Control Act 2008. Government Gazette 2008;13February:34-49. (in Thai)
- Treemek W, Autum J, Jampa S, Ritrot S, Santong J, Singthong U. Studying Knowledge, Behaviors and Attitude for Alcohol Drinking of Students at Institute of Physical Education Phetchabun. *Journal of Innovative Technology Research* 2019;3(11).
- Sihapark S, Phromthet P, Prommakool S, Janda S, Phailkhamanam N, Sihapark S. Alcohol Consumption Situations and Perceptions Regarding Provincial Alcohol Control in Khon Kaen Province. *Regional Health Promotion Center 9 Journal* 2020;14(35).
- Ponpaipan M, Bawornthip U. Selected factors related to alcoholic beverage drinking behavior among students of one faculty of nursing in Chaing Rai province. *Community Health Development Academy* 2017;5(1), 77-90.
- Ucharattana P, Khaikeow S, Punsakd W. Alcohol Consumption Behavior of Urban Thai: The Banbu Community, Bangkok-Noi District, Bangkok. *Journal Nursing Science* 2011;29 (1):53-62.
- Rattanamanee N, Phasunon P, Chantuk T. Factors affecting alcohol drinking of the royal Thainavy officials in Sattahip Chonburi province. *Journal of Humanities and Social Sciences Thonburi University* 2018;12(28):197-211.
- Whiteside LK, Ranney ML, Chermack ST, Zimmerman MA, Cunningham RM, Walton MA.: The overlap of youth violence among aggressive adolescents with past-year alcohol use-A latent class analysis: aggression and

- victimization in peer and dating violence in an inner city emergency department sample. *J Stud Alcohol Drugs*. 2013 Jan;74(1):125-35. doi: 10.15288/jsad.2013.74.125.
26. Hashim S, Lerdsuwansri R, Srihera R. Factor Affecting to Senior High School Alcohol Drinking in Pathum Thani Province. *Thai Journal of Science and Technology* 2017;6(1):5-13.
27. Saensunon C, Suwanaphant K. Factors associated with Alcohol Drinking among Hypertension Patients in Banphai District, Khon Kaen Province. *Thai Journal of Public Health and Health Sciences* 2022;5(3):124-137.
28. Saingam D, Pruphetkaew N. Alcohol drinking behavior and health risk behavior of high school students in Thailand. In: Saengow U, Vichitkunakorn P, Assanangkornchai S. Facts and figures: alcohol in Thailand. Songkhla: Center of Alcohol Studies 2016:17-22. (in Thai)
29. Murphey D. A., Lamonda K. H., Carney J. K., Duncan, P. Relationships of a brief measure of youth as sets to health-promoting and risk behaviors. *Journal of Adolescent Health*, 2004;34(3):187-191.
30. Saelim S, Moopayak K, Suwonnaroop N. Factors Related to Alcohol Drinking Behavior of Adolescents. *Songklanagarind Journal of Nursing* 2017;37(3):25-36.
31. Tepthai Chotchai. Factors associated with Alcoholic Consumption Behaviors among Secondary School Students in Khon Kaen Province. *Thai Dental Nurse Journal* 2019;30(2):1-12.
32. Chantaramanee A, Lojanapiwat S, Sathirapanya C. Factors and Alcohol Drinking Behaviors of Female Adolescent Students in Vocational Schools: Case Study Songkhla Province. *Academic Services Journal Prince of Songkla University* 2017;28(2):117-129.
33. Chaikan A, Chaikan A. Alcohol drinking behaviors among undergraduate students of Phranakhon Si Ayutthaya Rajabhat province. *Valaya Alongkorn Review (Humanities and Social Science)* 2017;(1):103-113.

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