

นิพนธ์ต้นฉบับ

ความรู้ ทักษะและพฤติกรรมการใช้กัญชา ในกลุ่มเยาวชนอายุ 15-22 ปี ในเขตกรุงเทพมหานคร

ขวัญชนก มีบ้านแก้ง*, ปางธรรม สอนเจริญ**, อีร จูฑา***, ศุภณัฐ ช่วยชีพ****, ศุจิมน มังคลรังสี*****✉

*โรงเรียนบ้านไผ่ (ข.ก.5)

**โรงเรียนชลราษฎรอำรุง

***โรงเรียนสาธิตนานาชาติ มหาวิทยาลัยมหิดล

****โรงเรียนหาดใหญ่วิทยาลัย

*****มหาวิทยาลัยอัสสัมชัญ

✉ hhunsujimon@gmail.com

บทคัดย่อ

ความชุกของการใช้กัญชาที่เพิ่มขึ้นในหมู่วัยรุ่นก่อให้เกิดความกังวลด้านสุขภาพและด้านสังคม การศึกษานี้ มีวัตถุประสงค์เพื่อประเมินระดับความรู้ ทักษะและพฤติกรรมที่เกี่ยวข้องกับการใช้กัญชาของวัยรุ่นในกรุงเทพมหานคร ระบุปัจจัยที่มีผลต่อการใช้กัญชา การศึกษานี้เป็นแบบภาคตัดขวางศึกษาวัยรุ่นอายุ 15-22 ปีในกรุงเทพมหานคร ใช้สูตรของ Cochran ในการคำนวณหาขนาดกลุ่มตัวอย่าง มีอาสาสมัครเข้าร่วมการศึกษารั้งนี้ทั้งหมดจำนวน 357 คน เก็บข้อมูลโดยใช้แบบสอบถามที่มีโครงสร้างเพื่อรวบรวมข้อมูลความรู้ ทักษะและพฤติกรรมที่เกี่ยวข้องกับการใช้กัญชาใช้สถิติเชิงพรรณนาและแบบจำลองเชิงเส้นทั่วไปในการวิเคราะห์ข้อมูล

ผลการศึกษาพบว่ากลุ่มตัวอย่างมีความรู้เกี่ยวกับกัญชาในระดับปานกลาง ทักษะต่อการใช้กัญชาอยู่ในระดับปานกลาง และพฤติกรรมการใช้กัญชาอยู่ในระดับต่ำ โดยปัจจัยด้านการเคยใช้กัญชาและเคยใช้บุหรี่เป็นปัจจัยทำนายพฤติกรรมการใช้กัญชาของกลุ่มตัวอย่าง

สรุปได้ว่า การศึกษาชี้ให้เห็นถึงความสำคัญของการพิจารณาปัจจัยต่างๆ เช่น เพศระดับการศึกษาประสบการณ์การทดลองใช้กัญชา หรือ บุหรี่ ที่ผ่านมาและแหล่งข้อมูลความรู้เกี่ยวกับกัญชาสำหรับการออกแบบการเข้าถึงข้อมูลเกี่ยวกับกัญชาที่มีประสิทธิภาพ

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Knowledge, attitude, and Cannabis use behavior among adolescents aged 15-22 in Bangkok

Kwanchanok Meebankreng*, Pangdham Suancharoen**, Thee Jootar***, Supphanat Chuaichip****, Sujimon Mungkalarungsi*****✉

*Banphai School (K.K.5)

**Chonradsadornumrung School

***Mahidol University International Demonstration School

****Hatyai Wittayalai School

*****Assumption University

✉ hhunsujimon@gmail.com

Abstract

The increasing prevalence of marijuana use among teenagers raises health and social concerns. This study aims to assess the level of knowledge. Attitudes and behaviors related to marijuana use among teenagers in Bangkok. Identify factors that affect marijuana use. This study was a cross-sectional study of adolescents aged 15-22 years in Bangkok. Use Cochran's formula to calculate sample size. A total of 357 volunteers participated in this study. Data were collected using a structured questionnaire to gather knowledge. Attitudes and behaviors related to marijuana use used descriptive statistics and general linear models to analyze the data.

The results of the study found that the sample had a moderate level of knowledge about marijuana. Attitudes towards marijuana use are moderate and marijuana use behavior is low. The factors of having previously used marijuana and having used cigarettes were the factors predicting marijuana use behavior of the sample group.

In conclusion, the study points to the importance of considering factors such as gender, educational level, past experience with cannabis or cigarette use, and cannabis knowledge resources when designing access to cannabis information. Productive

Keywords: Cannabis, adolescents, knowledge, attitude

คณะสาธารณสุขศาสตร์

มหาวิทยาลัยราชภัฏอุบลราชธานี

Faculty of Public Health, Ubon Ratchathani Rajabhat University

Ubon Ratchathani Rajabhat University

Background

According to a statement from the Ministry of Public Health regarding the classification of drugs under Category 5 (Version 2) on December 14, 2020, certain parts of cannabis and cannabis are not classified as addictive drugs. This has resulted in easier access to cannabis, including among adolescent groups. Research has shown that cannabis use among teenagers has increased by 10 times after legalization (Thai PBS., 2023; Bunthae, 2020). The recreational use of cannabis has increased over the past three years in all age groups, especially in the year 2022. The use of cannabis among Thai children and teenagers aged 18-19 has increased by 10 times, from 1-2% in 2020 to 9.7% in 2022 (Thai PBS, 2023). The prevalence of cannabis usage among teenagers is a growing concern. (H focus, 2022).

The use of cannabis among adolescents has physical, mental, and social implications. From previous studies, it has been found that cannabis use among teenagers can lead to various health-related issues, including problems with memory, learning, and decision-making (Power et al, 2021). increased risk of encountering mental health problems such as anxiety disorders or depression. The social impact results in affecting feelings of privacy and increases the risk of lawbreaking, leading to social problems and the risk of engaging in other substance abuses (Chayasirisopon, 2023). It escalates the risk of using other substances with more severe health consequences. There are respiratory system impacts from smoking cannabis, such as inflammation of the respiratory tract and the risk of developing heart disease (Department of Medical Services(Thailand), 2022). Understanding adolescents' sources of information, attitudes, and behaviors regarding cannabis is crucial for addressing this issue effectively. Previous studies have revealed the diverse sources from which adolescents acquire information about cannabis, such as the internet, social media and peers (Akaphin & Saodaen, 2019; Phupanrai, 2016; Tongboriboon, 2018). However, inaccurate or limited knowledge about cannabis can lead to confusion and uninformed decision-making among adolescents. Therefore, studying cannabis knowledge is essential for designing effective educational interventions tailored to adolescents' needs (Jintapaputhanasiri & Chansom, 2020).

Adolescents' attitudes towards cannabis play a significant role in influencing their decision-making regarding experimentation and regular use (Kayotha & Phakdeekul, 2018). These attitudes are shaped by various factors, including social norms, peer influence, family environment, and cultural context. Exploring adolescent attitudes towards cannabis provides valuable insights into their experiences and perspectives on cannabis. While previous research has examined different aspects of adolescent cannabis use, there is a notable gap in comprehensive research specific to the Bangkok context. This study aims to address this gap by investigating the unique factors influencing cannabis usage among teenagers in this urban setting. By gaining insights into the

background factors contributing to cannabis use, we can develop targeted interventions to mitigate its negative consequences effectively.

Research Objectives

This research aims to achieve the following objectives:

1. To assess the level of knowledge, attitude and behavior regrading cannabis use among teenagers in Bangkok
2. To identify the factors influencing knowledge, attitudes, and behavior towards cannabis among teenagers.

Study Design

The study design employed for this research was a cross-sectional study. This design allowed for the collection of data at a specific point in time, capturing the knowledge, attitude, and behavior of teenagers towards cannabis usage in Bangkok.

Population and Sampling

This study examines adolescents aged 15-22 years in the Bangkok metropolitan area, due to their vulnerability to experimentation, the influence of the social environment in an urban setting, who have access to the internet. The population size is unknown (infinite population). A sample size of 346 was determined using Cochran's formula (Uakarn, Chaokromthong, and Sintao, 2021) for sample size determination to ensure statistical significance. The invitation to participated in this study was sent to various social media groups such as education groups, hackathon groups, cannabis groups, game groups, travel groups, part time job groups and etc. There were 357 volunteers response the invitation and willing to participate in the study. Therefore, the researchers decided to utilize all available data for this study.

Instrument

A structured questionnaire was developed based on previous literature and relevant factors identified in the literature review and used to collect data for this study. The questionnaire of which involve the following processes: 1) Studying information about cannabis from the Department of Mental Health, Ministry of Public Health (Thailand), and the Faculty of Pharmacy, Mahidol University, and 2) Studying documents and academic works related to cannabis usage behaviors among various populations, both domestically and internationally. These were developed into a questionnaire comprising four parts as follows:

Part 1: Personal information of the sample group, consisting of 6 items including gender, grade level, sources of health information, family income, history of cigarette smoking, and history of cannabis use.

Part 2: Knowledge assessment questions about cannabis, consisting of 13 items in multiple-choice format with 4 options, of which only 1 is correct. The scores for correctly answered questions are totaled, with a possible score range of 0-13. The interpretation of knowledge scores regarding cannabis is as follows:

Percent	Score	Level
80-100	10-13	Good
60-79	8-9	Moderate
<60	<8	Low

Part 3: Attitude assessment questions regarding cannabis, consisting of 14 items. The questions are measured using a Likert Scale with 5 levels: Strongly Disagree = 1, Disagree = 2, Neutral = 3, Agree = 4, and Strongly Agree = 5. Scores for each item are totaled, with a possible score range of 14-70. The interpretation of attitude scores towards cannabis is as follows:

Percent	Score	Level
80-100	56-80	Good
60-79	42-55	Moderate
<60	<42	Low

Part 4: Behavior assessment question regarding cannabis usage, consisting of 1 item. The question measures the level of cannabis usage behavior using a Likert Scale with the following levels: 1 = Never Used, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Regularly.

Ethical Consideration

In collecting data for this study, informed consent was obtained from participants or their legal guardians, and those who agreed to participate were included in the study.

The researchers clearly explained the objectives of the study to the volunteers, and the volunteers made a voluntary decision to participate in the study. This research is anonymous, and no personal data of the respondents is collected in the questionnaire. The researchers ensure the confidentiality of all data.

Data Collection

The data collection phase of this study involved administering the structured questionnaire to the selected sample of teenagers in Bangkok. Trained research assistants facilitated the process, ensuring consistency and adherence to ethical guidelines. The questionnaire was filled out by participants individually, either online or in a controlled environment to maintain privacy. The data was collected during 1 December 2023 – 31 January 2024. The data collection process also included a debriefing session to address any concerns or questions raised by the participants. The data collection phase aimed to gather comprehensive and accurate information regarding the knowledge, attitude, and behavior of teenagers towards cannabis usage in Bangkok.

Data Analysis

The collected data was analyzed using a quantitative technique. Quantitative data were analyzed using descriptive statistics, such as frequencies, percentages, mean and standard deviation to summarize the participants' knowledge, attitude, and behavior towards cannabis usage. Predictive factors for cannabis use were analyzed by a generalized linear model. The results were then interpreted and presented in

a comprehensive manner in the findings and discussion section of the research report.

Study Results

There were 357 teenagers participated in this study. Majority of them were female (65.83%), in grade 10 (38.66%), received health news from the internet and social media sources (70.87%), in family income group of 20,001-40,000 Baht per month (36.98%). Most participants indicated that they had no experience smoking cigarette (76.19%) or experience using Cannabis (77.03%).

For knowledge about cannabis, the result showed that sample group had a moderate level of knowledge about cannabis (Mean=7.89, SD=2.33). Female participants (Mean=8.12, SD=2.27) had a higher knowledge score than male participants (Mean=7.45, SD=2.38). Participants group who had the highest knowledge score were university year 3 students (Mean=8.56, SD=2.15), received health news from the internet and social media source (Mean=8.17, SD=2.27), monthly income group of 40,001-80,000 Baht (Mean=8.66, SD=2.27), had no experience smoking cigarette (Mean=7.94, SD=2.36) and had no experience using cannabis (Mean=7.93, SD=2.38).

Concerning attitude toward cannabis use, participants showed a moderate level of attitude toward cannabis use (Mean=50.07, SD=6.23). Female participants (Mean=50.34, SD=5.80) had a higher level of attitude toward cannabis use than male participants (Mean=49.54, SD=6.99). Participants group who had the highest attitude score regarding cannabis use were university year 4 students (Mean=52.95, SD=7.12), received health news from TV, Radio and Magazine sources (Mean=53.18, SD=4.77), monthly income group of 40,001-80,000 Baht (Mean=53.00, SD=5.61), had no experience smoking cigarette (Mean=50.22, SD=6.35) and had no experience using cannabis (Mean=50.15, SD=5.99).

Regarding cannabis use behaviors, the result showed that participants had a low level of cannabis use behaviors (Mean=1.24, SD=0.66). Male participants (Mean=1.12, SD=0.49) revealed a higher cannabis use behaviors than female participants (Mean=1.12, SD=0.49). Participants who were not attending school showed the highest cannabis use behavior score (Mean=2.00, SD=1.12) as well as participants who received health news from TV, Radio and Magazine (Mean=2.00, SD=0.87), and monthly income group of 40,001-80,000 Baht (Mean=8.66, SD=2.27), compared within its category. Having experience in smoking cigarette (Mean=1.82, SD=0.97) or using cannabis (Mean=1.88, SD=0.95) showed the highest cannabis use behaviors compared to not having the experiences.

Having used cannabis (Beta=0.347, t=6.649, p-value <0.01) and having smoked cigarettes (Beta=0.284, t=5.524, p-value <0.01) are statistically significant predictors of cannabis usage behavior within the sample group. (Table 1), (Table 2)

Discussion

The sample group has a moderate level of knowledge about cannabis ($M=7.89$, $SD=2.33$), a moderate level of attitude towards cannabis usage ($Mean=50.07$, $SD=6.23$), and a low level of cannabis use behavior ($Mean=1.24$, $SD=0.66$). When analyzing the factors predicting cannabis use behavior, it was found that having used cannabis ($Beta=0.347$, $t=6.649$, $p\text{-value}<0.01$) and having smoked cigarettes ($Beta=0.284$, $t=5.524$, $p\text{-value}<0.01$) are statistically significant predictors of cannabis use behavior within the sample group.

The sample group may have a moderate level of knowledge about cannabis because they are predominantly students aged 15-22 years who are mostly under the supervision of their parents. Although 74.15% of participants were high school students (grade 10-12) and 22.96% were university students, their level of cannabis knowledge was relative in the same moderate level ($Mean=7.91$, $SD=2.29$ and $Mean=7.96$, $SD=2.34$). Cannabis knowledge score of participants who were not attending school obviously showed the lowest ($Mean=6.56$, $SD=2.40$). Under such supervision from school and parents may provide guidance to abstain from involvement with drugs, including cannabis. Even though cannabis was decriminalized on June 9, 2022, parental influence and guidance may still discourage its usage among adolescents (The Government Public Relations Department (Surin), 2022).

The majority of the sample group may not be involved with drug use or have a medical necessity to use cannabis, hence they may not be interested in studying or acquiring knowledge about this topic. Therefore, they may have a moderate level of understanding about cannabis. This study's findings align with the research conducted by Akaphinand Saodaen, 2019, which investigated the health knowledge of Thammasat University students regarding medical cannabis usage. The study found that the majority of the sample group had a low level of knowledge about medical cannabis, similar to the findings of Unjana and Leemingsawat, 2016 that study on knowledge, attitudes, and alternative medicine usage behaviors among Thai individuals aged 20-59 years found that the majority of the sample group had a low level of knowledge regarding alternative medicine usage. This may be due to historical prohibitions and stigmatization associated with cannabis, leading to a lack of interest in seeking deeper knowledge about its medical benefits among the general population. However, those who use medical cannabis tend to actively seek information about its usage and health benefits. This aligns with the agenda-setting theory proposed by McCombs and Becker, 1979, which suggests that individuals follow media coverage to stay informed about current events and consider them important for staying up-to-date and sharing stories with others. In summary, while the general population may lack significant knowledge about cannabis, individuals who have experienced its

benefits tend to possess a higher level of knowledge regarding its usage and benefits.

The study results show that the male participants had lower knowledge scores about cannabis compared to the female participants. This might be because males generally pay less attention to health matters than females, resulting in less interest in seeking knowledge about cannabis compared to females. This finding is consistent with the study by Mansfield, Addis and Mahalik, 2003 which found that males are less willing or motivated to seek information about health care. This study's findings align with the study by Alves, Samorinha and Precioso, 2021 regarding knowledge, attitudes, and preventive behaviors toward COVID-19 among higher education students in Portugal. In that study, male participants had lower knowledge about COVID-19 compared to female participants, indicating less interest in health matters among males.

The study findings indicate that the sample group receiving health information through the internet/social media has the highest knowledge about cannabis. This might be because the internet is the primary source of information for the general population, especially for students, due to its convenience in terms of time, location, and cost. Individuals can easily access various types of information, including in-depth knowledge, based on their interests. These results differ from the study by Nittayakosol et al, 2023 which focused on allergy-related knowledge and health behavior among high school students and found that those receiving information from TV and radio had the highest knowledge scores. Additionally, they differ from the study by Phettrakool et al, 2023 which examined knowledge about infectious diseases and preventive behaviors among upper secondary school students in Thailand and found that the group receiving knowledge from parents had the highest scores. These findings suggest that the most effective channel for providing health knowledge to a sample group depends on the specific health topic. If it's a health-related matter, the internet may be the most effective channel as it allows interested individuals to delve deep into the topic. However, for general health care, the most effective channel may be through parents or mainstream media. If we analyze having experience of cannabis use and cigarette smoking among the sample group, we can see that the group that has never smoked cigarettes or used cannabis has higher knowledge about cannabis than the group that has used cannabis and smoked cigarettes. This may be because the sample group that has never used cannabis or smoked cigarettes is more knowledgeable about the health impacts of these substances, so they choose not to experiment with cannabis or smoking.

The sample group has a moderate level of attitude towards cannabis use. Females ($M=50.34$, $SD=5.80$) have higher attitude scores than males ($M=49.54$, $SD=6.99$). This might be because females have higher knowledge about cannabis, thus understanding the various benefits of cannabis use. The sample group studying in the

fourth year or above has the highest attitude scores ($M= 52.95$, $SD= 7.12$). This might be because fourth-year or higher students have more knowledge and experience in various aspects, leading to the highest attitude towards cannabis use. The sample group that has smoked a cigarettes ($M=50.22$, $SD=6.35$) or used cannabis ($M= 50.15$, $SD= 5.99$) has a positive attitude towards cannabis use compared to the group that has never smoked e-cigarettes or used cannabis. This might be because the group that has smoked e-cigarettes or used cannabis has had positive experiences from smoking behaviors or cannabis use, leading to a positive attitude towards cannabis use, consistent with the study by Phupanrai, 2016 on factors influencing drug-related behaviors among high school students. The cannabis use behavior of the sample group is low ($M= 1.24$, $SD= 0.66$). When analyzing cannabis use behavior between males and females, it is found that males ($M= 1.48$, $SD= 0.86$) have higher cannabis use behavior than females ($M= 1.12$, $SD= 0.49$). This might be because males have a more adventurous lifestyle than females and have lower knowledge about cannabis, thus not understanding the health impacts, resulting in cannabis use behavior, consistent with the study by Phupanrai, 2016, which found that different gender factors have opinions on factors influencing drug-related behaviors among high school students.

The group of non-educated individuals ($M=2.00$, $SD=1.12$) exhibits the highest cannabis use behavior. This could be because this group has the lowest level of knowledge about cannabis compared to other groups. Additionally, since they do not attend school, this group has more freedom to experiment with substances as they please, which may contribute to higher cannabis use behavior than other groups (Phalanisong, 2021). Meanwhile, students with good academic performance have a high level of preventive drug use behavior. This might be because they receive information about cannabis from school and are in an environment with school supervision. On the other hand, the group that has smoked e-cigarettes ($M= 1.82$, $SD= 0.97$) and used cannabis ($M= 1.88$, $SD= 0.95$) exhibits higher cannabis use behavior than the group that has never smoked e-cigarettes, used e-cigarettes, or used cannabis. This is consistent with the study by Phupanrai, 2016 on factors influencing drug-related behaviors among high school students, which addresses the issue of prior drug use experiences and drug use behavior. Additionally, in

behavioral terms, engaging in behavior previously done can lead to feelings of satisfaction and relaxation, which may lead to repeated behavior due to the positive reflection and satisfaction gained from the behavior.

Conclusion

Results revealed a moderate level of knowledge about cannabis among participants, potentially influenced by parental supervision, societal norms, and historical stigmatization. Despite this, the sample group exhibited a moderate attitude toward cannabis use, indicating a level of openness or neutrality toward the topic. Actual cannabis use behavior was found to be low, with predictors including prior cannabis and cigarette use. Gender differences emerged, with males showing lower knowledge levels and higher cannabis use behavior compared to females. Moreover, non-educated individuals exhibited the highest cannabis use behavior, potentially due to lower knowledge levels and greater experimentation freedom. The study underscores the importance of considering various factors such as gender, education, prior experiences, and sources of information when examining cannabis-related outcomes among young individuals.

Recommendation

Based on the study's findings, several recommendations can be made to address cannabis-related issues among young individuals. Firstly, targeted educational programs should be developed to improve knowledge about cannabis, considering demographic factors like gender and education level. Additionally, parental guidance initiatives are crucial to equip parents with the tools to effectively communicate about cannabis and challenge societal norms. Preventive measures should be implemented for individuals with a history of cannabis and cigarette use. Gender-specific interventions are needed to address differences in knowledge and behavior. Enhanced education campaigns should provide balanced information through various channels. Longitudinal studies are essential for monitoring changes over time, while policymakers should consider these findings when shaping policies related to cannabis use among youth. Overall, these recommendations aim to promote informed decision-making and mitigate the complex factors influencing cannabis use among young people.

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Table 1 Personal Information, Knowledge Scores, Attitudes towards cannabis, and cannabis Usage Behavior of the Sample Group (n=357)

Variable	Frequency n (%)	Knowledge about Cannabis (Mean (SD)) 1-13	Attitude toward Cannabis (Mean (SD)) 14-70	Cannabis use behavior (Mean (SD)) 1-5
Gender				
Male	122 (34.17)	7.45 (2.38)	49.54 (6.99)	1.48 (0.86)
Female	235 (65.83)	8.12 (2.27)	50.34 (5.80)	1.12 (0.49)
Class Level				
Grade 10	138 (38.66)	8.13 (2.14)	50.04 (5.41)	1.09 (0.36)
Grade 11	80 (22.41)	8.03 (2.19)	50.48 (6.62)	1.20 (0.56)
Grade 12	48 (13.45)	7.10 (2.95)	49.77 (6.82)	1.69 (1.11)
University Year 1	19 (5.32)	7.89 (2.40)	50.47 (5.16)	1.26 (0.65)
University Year 2	25 (7.00)	7.36 (2.23)	47.36 (7.60)	1.12 (0.44)
University Year 3	18 (5.04)	8.56 (2.15)	49.78 (7.03)	1.06 (0.24)
University Year 4 and above	20 (5.60)	8.25 (2.20)	52.95 (7.12)	1.35 (0.81)
Not attending school	9 (2.52)	6.56 (2.40)	49.33 (4.06)	2.00 (1.12)
New channel received health news				
TV, Radio, Magazine	17 (4.76)	7.41 (1.77)	53.18 (4.77)	2.00 (0.87)
Internet, Social Media	253 (70.87)	8.17 (2.27)	50.15 (5.96)	1.16 (0.49)
Parent	23 (6.44)	7.74 (2.34)	47.61 (7.44)	1.17 (0.58)
School	42 (11.77)	7.17 (2.42)	50.29 (7.47)	1.40 (1.11)
Friends	17 (4.76)	6.53 (2.27)	48.41 (5.76)	1.41 (0.71)
Others	5 (1.40)	6.60 (3.44)	50.40 (5.59)	1.4 (0.89)
Family income				
<20,000	105 (29.41)	7.68 (2.42)	48.72 (5.92)	1.09 (0.40)
20,001-40,000	132 (36.98)	7.70 (2.26)	50.05 (6.54)	1.29 (0.76)
40,001-80,000	71 (19.89)	8.66 (2.27)	51.04 (6.32)	1.41 (0.82)
80,001-150,000	25 (7.00)	8.12 (2.59)	53.00 (5.61)	1.12 (0.33)
>150,000	24 (6.72)	7.38 (1.71)	50.12 (4.95)	1.33 (0.64)
Had experience smoking or e cigarette				
No	272 (76.19)	7.94 (2.36)	50.02 (6.21)	1.06 (0.38)
Yes	85 (23.81)	7.72 (2.24)	50.22 (6.35)	1.82 (0.97)
Had experience Cannabis usage				
No	275 (77.03)	7.93 (2.38)	50.04 (6.31)	1.05 (0.38)
Yes	82 (22.97)	7.76 (2.16)	50.15 (5.99)	1.88 (0.95)
Total	357 (100.00)	7.89 (2.33)	50.07 (6.23)	1.24 (0.66)

Table 2 Generalized Linear Model analyzing Factors Predicting cannabis Usage Behavior

Variable	B	Std. Error	Beta	t	Sig.
Gender	-.117	.065	-.084	-1.807	.072
Class Level	.026	.015	.078	1.760	.079
New channel received health news	.045	.027	.076	1.697	.091
Family income	.007	.026	.013	.279	.781
Had experience smoking or e cigarette	.440	.080	.284	5.524	.000
Had experience Cannabis usage	.545	.082	.347	6.649	.000