

The relationship between Patterns of using Internet, Media Literacy, Alcohol Consumption and Drug Abuse: A Case of Malaysian Youths

Authors.

*Toktam Namayandeh Joorabchi¹, Amla Salleh², Majid Fouladiyan³

Affiliations

¹ Post-Doctoral, Faculty of Education, The National University of Malaysia (UKM), Malaysia.

² Invited guest writer at Islamic Science University of Malaysia.

³ Associate Professor, Department of Social Sciences, Faculty of Literature and Humanities, Ferdowsi University of Mashhad, Iran.

* Corresponding Author

Toktam Namayandeh Joorabchi
E-mail: T.Namayande@gmail.com

Submitted on: 21st March 2024

Published on: 30th June 2024

<https://dx.doi.org/10.4314/ajada.v11i1.7>

ABSTRACT

The concerning statistics regarding alcohol consumption and substance abuse among young individuals in Malaysia necessitate endeavors to comprehend this occurrence. The aim of the current research was to ascertain the correlations between media literacy, Internet usage patterns, alcohol intake, and drug misuse among Malaysian youths. A quantitative research approach was employed to collect data from 440 students at University Putra Malaysia through a method of stratified random sampling. The findings of the investigation indicated that the association between media literacy and alcohol consumption was statistically

significant ($p=0.017$), whereas it was deemed insignificant for drug consumption ($p=0.90$). Notably, no statistically significant connections were found between the two dimension of Internet usage patterns and alcohol intake ($p=0.22$, $p=0.54$) or drug use ($p=0.41$, $p=0.48$). Nevertheless, the link between Internet usage patterns and media literacy was found to be significant ($p=0.00$). Additionally, outcomes from the independent t-test displayed that male participants exhibited higher levels of drug and alcohol usage compared to their female counterparts ($p=0.00$, $p=0.045$). Significant mean disparities were also observed between drug consumption and gender. The outcomes of the one-way ANOVA revealed notable mean differences between ethnic groups and alcohol consumption ($p=0.00$), while no mean differences were identified between ethnic groups and drug usage ($p=0.82$). The implications of this study are also deliberated.

Keywords: *Internet Usage Patterns, Media Literacy, Alcohol consumption, Drug abuse, Malaysian Youth*

INTRODUCTION

Youths are prevalent consumers of alcohol, with a significant rise in their consumption observed recently (Mungandi et al., 2022). An assertion from a public health institute revealed that almost half of alcohol consumers in Malaysia engage in binge drinking, a rate nearly twice that of nations such as the United Kingdom and Indonesia (CodeBlue, 2020). Data from the World

Health Organization in 2020 indicated that alcohol-related deaths in Malaysia amounted to 181, representing 0.11% of total deaths, with an age-adjusted death rate of 0.58 per 100,000 population, positioning Malaysia at 139 globally (World Health Organization, 2020). Research from the National Health and Morbidity Survey (NHMS) in 2017 showed that one in ten students were current alcohol drinkers, with over 70% having their first alcoholic beverage before the age of 14 years. It is generally observed that university students exhibit a higher prevalence of alcohol consumption and alcohol use disorders compared to non-college adolescents of the same age group (National Institute on Alcohol Abuse and Alcoholism (NIAAA), 2021; Ting & Essau, 2021). The adolescent phase represents a critical period where individuals are more susceptible to engaging in risky behaviors, including excessive alcohol consumption, as they are granted increased autonomy in making health-related decisions compared to earlier or later stages in life (Chu et al., 2016).

The unregulated use of drugs and substances (DSU) presents significant challenges to national development and a country's socioeconomic progress. Despite substantial interventions, Malaysia has witnessed a notable annual increase in DSU cases, primarily involving individuals aged between 15 and 40 years (Ismail et al., 2022). Among the 11,129,316 youth aged 15–40 years, the prevalence of lifetime DSU users was recorded at 5.5%, while the prevalence for those who used drugs in the past 30 days

or are current users stood at 3.5% (Ismail et al., 2022); Kratom or *Mitragyna speciosa* was identified as the most common drug among lifetime users, whereas cannabis was the preferred choice for current users. Additionally, Ah Hong and Peltzer (2019) highlighted a high prevalence of substance use among Malaysian adolescents, with rates ranging from 30–40% for boys and 10–20% for girls.

The study conducted by Russell, Grube, and McQuarrie (2017) demonstrated a correlation between exposure to media portrayals endorsing alcohol consumption and positive attitudes towards drinkers, while also underscoring the media's potential in mitigating the adverse impacts of alcohol-promoting content.

In a similar study, Berey et al. (2017) reported that alcohol advertising has a significant effect on the drinking behavior of the society, particularly among adolescents. They stated that alcohol advertisements have the power to change the norms and expectations of a society toward having more positive attitudes on the issue of drinking; therefore, media literacy projects are among productive strategies used to raise the youth's awareness. Radanielina Hita et al. (2018) studied parents' role in response to alcohol-related media messages in their adolescents' interaction with drinking alcohol and found that youth whose parents approved of displaying drinking scenes in the media were more vulnerable to alcohol harms.

The great Britain literature supports the fact that drug scene development has changed to a normalization process due to its frequent occurrence (Parker et al., 2002). For example, “the prevalence of drugs, their use, and the discourses surrounding them have increasingly become a normal and accepted element of daily life for youth” (p: 947). Additionally, many teenagers consider drinking and smoking as standard youth activities (Bachman et al., 2001). Moreover, in spite of their recognition of the dangers involved, it is widely believed that substance use, drinking alcohol and smoking is “cool” and trendy. In this regard, internet and broad casting have both been accepted as the main sources of information on substance use which can influence young people’s outlooks (Gutierrez et al., 2014; Hoek et al., 2013).

Research warns that alcohol usage in the movies or in advertisements motivates youth to consume alcohol as a normal act of their adulthood (Giesbrecht et al., 2024; Lapierre et al., 2017; Ruddock, 2009) This can lead to the alarming popularity of drinking and drinking settings, particularly in genres such as soap operas (Barker et al., 2021; Pitt et al., 2005). The alcohol industry vehemently denies allegations of targeting youth in its advertising efforts; however, these marketing campaigns inadvertently flood children and teenagers with positive depictions that shape their assimilation into drinking-related cultural norms (Ellickson et al., 2005; Lapierre et al., 2017). Chang et al. (2016) studied students’ drinking behavior and demonstrated that those

students who had more alcohol and tobacco media exposure were more prone to use them but that was not the case with media-literate students.

It is quite tragic that alcohol is known as one of the largest premature death risk factors around the globe (Ritchie & Roser, 2019). Previous studies of Primack et al (2009) and Wellmann et al (2006) showed that Internet usage has a relationship with alcohol and drug abuse. Therefore, it has been assumed that the Internet usage of Malaysian youths has a relationship with alcohol drinking and drug abuse.

Drug abuse is most prevalent among Malaysian youths according to Mohd Nawawi et al. (2024), thereby emphasizing the need for researchers to explore the factors contributing to this issue. The aim of the present research is to investigate these risky behaviors, particularly focusing on the influence of the Internet, which has contributed to the increasing prevalence of social problems among young individuals, a concern for Malaysian governmental bodies.

The audience, guided by the uses and gratification theory (U & G), consciously selects media outlets that align with their specific needs as outlined by Katz & Blumler (1974). Katz, Gurevitch, and Haas (1973) identified 5 fundamental needs that drive media consumption, including cognitive, affective, personal integrative, social integrative and escapist needs. This study delves into these needs and their fulfillment through Internet usage.

Patterns of using Internet, drug and alcohol usage

Hong and Peltzer (2019) studied youths' drinking and smoking behavior in some south-east Asian countries and revealed that tobacco use was relatively common among the youth. Tong et al. (2019) investigated pathological Internet use in Malaysia and discovered that problematic Internet usage (PIU) was significantly related to using Internet for more than three hours for online gambling, watching pornography, and alcohol consumption. (Turnbull et al., 2018) also reported quite similarly.

Doggett et al. (2019) discovered a positive relationship between screen time sedentary behavior particularly while using Internet, playing video games and watching films and substance use. Barker et al. (2019) also expressed that the prevalence of alcohol-related content in video-on-demand (VOD) services, normalizes smoking and drinking for the youths. Weitzman and Lee (2020) compared and contrasted many influential factors in using tobacco and alcohol and concluded that being constantly exposed to such scenes are closely associated with using them. McKay et al., (2020) also reported that the appearance of alcohol and tobacco related scenes is quite common in majority of films with 93% and 70% respectively. McKay et al. (2020) studied the occurrences of tobacco, alcohol and fast-food in different types of films and found that alcohol-related scenes were more popular in adult films.

NorAfiyah et al., (2015) observed that celebrity smokers, watching sex and violence in films, and using drugs can predict smoking among

Malaysian youths in rural areas. In a similar study, Jane Linget al. (2022) studied the factors affecting e-cigarette usage and found the following influential elements: being Malay, male, older age, current smoking and drinking, educated in urban areas, and having unmarried parents; accordingly, 17.2% of Malaysian adolescents used single substance and 5.1% used poly-substance.

In addition, male adolescents are also more exposed to experience higher exposure to e-cigarette advertisements online, which are accompanied by unverified health benefits of e-cigarettes (Richardson et al., 2015). Rodzlan Hasani and colleagues (2021) further substantiated an increased prevalence of male adolescents in Malaysia, asserting that the utilization of substances is intricately linked to ethnicity and culture. The study by Liu and colleagues (2024) revealed a notable correlation between heightened problematic internet usage and increased likelihood of having experimented with cannabis, e-cigarettes, as well as various other substances.

Fisoun et al., (2012) found that the higher rate of drug abuse has been related to "pathologic" internet abuse among teenagers. Despite the fact that specific personality attributes were associated with in both Internet addiction and substance abuse, Internet addiction has remained a significant predictor of substance abuse. Consequently, teenagers who reported drug abuse had suggestively higher Internet addiction.

Media literacy and drug and alcohol usage

The fundamental principle of media literacy involves the intellectual interaction, both as a consumer and a producer, with media and technology. Individuals proficient in media literacy possess the ability to decipher, assess, scrutinize, and generate content in both traditional and digital formats (Dorr, 2001).

Previous research studies utilizing a cross-sectional design have established that exposure to short-form videos has the potential to enhance individuals' motivation to combat alcohol consumption (Russell et al., 2021; Zeping, 2023). Chung and Meng (2024) corroborated a noteworthy and affirmative influence of exposure to anti-alcohol consumption short-form videos among Chinese university students on their perceived ability to control heavy drinking habits.

Mutti-Packer et al. (2017) observed a significant impact of message credibility on moderating the relationship between health risk warnings related to tobacco and the perceived efficacy of these warnings. Essentially, the credibility of the message plays a crucial role in enhancing the effectiveness of preventive measures. Therefore, based on the literature review we can produce program and movies for informing youth and reducing the effects of media exposure of alcohol and drug consumption. Taking into consideration the findings from earlier research, this paper attempts to identify:

1. Any relationship between media literacy, using alcohol and drug
2. The effects of patterns of using Internet on alcohol and drug usage

The following hypotheses are proposed to examine the possible relationships among the variables of Internet usage, alcohol and drug usage:

H1: Media literacy will be positively related to alcohol usage.

H2: Media literacy will be positively related to drug usage.

H3: Pattern of using internet will be positively related to drug usage.

METHOD

Location and Sampling

A questionnaire was distributed among 440 Malaysian male and female students of University Putra Malaysia (UPM) who voluntarily participated in the study. The students aged between 18 to 40 years old and stratified sampling method was applied. The sample size for each faculty was determined by dividing the student population of each faculty by the total population and multiplied by 440.

Regarding the ethical concern, all questionnaires were anonymous and the identity of the respondents were not published anywhere. In addition, all participants were free to fill in the questionnaire and even in the middle of answering the questions they were free to return the questionnaire and stop the fill-in process. There was no punishment or fine for quitting. There is no

animal treatment in this study. Participants received no treatment either.

MEASURES

The present study included a set of questions for measuring Independent Variables including the patterns of using Internet, media literacy, and demographics of respondents (ethnicity and gender) as well as Dependent Variables such as alcohol and drug usage, all variables measured by 35 items.

Pattern of using the Internet scale consisted of four items about respondents' pattern of Internet usage which included years of using the Internet, hours of Internet usage per week, as well as the location of using Internet, and the search engines which were operationalized as an ordinal measure. Media literacy was measured through one item by an interval measure, ranging from 'very skillful' to 'not skillful at all'.

Alcohol usage was measured by 11 items from Alcohol Use Disorders Identification Test (AUDIT) on a 5-point Likert scale which was designed and validated by the World Health Organization. The scales ranged from never, monthly or less, 2-4 times a month, 2-3 times a week, to 4 or more times a week. There was only one nominal scale asking about the source of the information "Where do you find most information about the alcohol" with four options of TV, Internet, friends, and parents. Respondents were supposed to choose one of the answers.

Drug usage was measured by 17 items through a Likert scale with five response options ranging from never; monthly or less; 2-4 times a month; 2-3 times a week; to 4 or more times a week. The data were coded from 1 to 5 for the purpose of analysis. This section asked the respondents for using all kinds of drugs and one ordinal item asked "Where do you find most information about the drug" with four options of TV, Internet, friends, and parents, through applying a nominal scale. Students had to choose one of the answers. Demographics of the respondents were measured by two items of gender and ethnicity being measured through four items of Malay, Chinese, Indian, and others.

A pilot test of the instrument was conducted with 30 respondents to ensure the validity and reliability of the instrument. For validity two professors from University Putra Malaysia approved the validity of all questions and for reliability a pre-test was applied. The results of the Cronbach's Alpha showed that reliability was more than 0.7. For drug usage $\alpha=0.748$ and for alcohol usage it was 0.952.

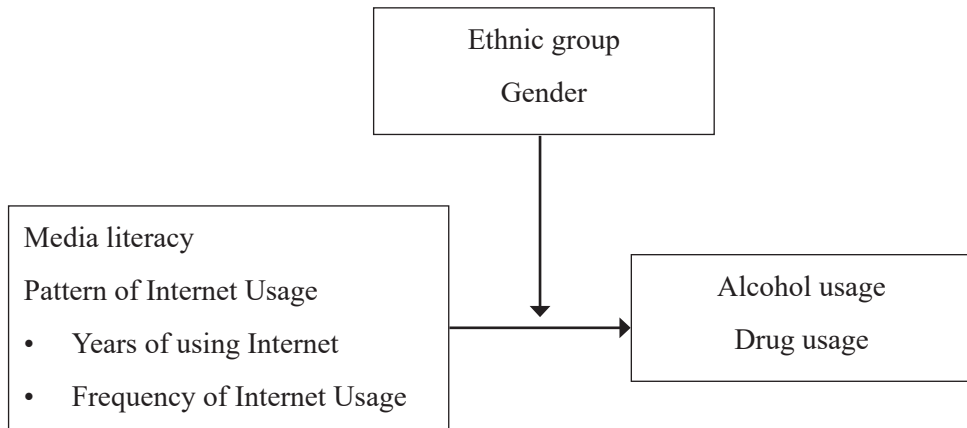


Figure 1: The relationship between Internet usage, alcohol and drug usage

ANALYSIS

Descriptive as well as inferential statistics through the employment of Statistical Package for Social Science (SPSS) were run to determine the relationship among variables. Descriptive analysis was used for the determination of the patterns of Internet usage, media literacy, alcohol usage, drug usage and demographics of the respondents by using frequency, percentage, mean, and standard deviation. Correlation was employed to find the relationships of media literacy and pattern of using Internet with alcohol and drug usage. In order to measure the mean differences between gender, alcohol, and drug usage a t-test was used, and to measure the mean differences among ethnicities, alcohol, and drug usage, ANOVA was employed.

RESULTS

Patterns of Internet usage

The design of the study required data from multi-racial and multi-religion local students including Malay (66.8%), Chinese (25%), and Indians (3.9%). Worthy of

note is that 68.9% of the respondents were Muslims, 19.1% were Buddhists, 7.5% were Christians and 3.9% were Hindus. Descriptive statistics were employed in order to summarize the data related to the participants. The sample consisted of both genders with females outnumbering the males: 142 males (32.3%) and 298 females (67.7%).

Respondents were multi-racial including Malays, Chinese, Indians and others. In the patterns of Internet usage, the majority of the respondents (44.5%) had 5 to 8 years of Internet usage, followed by Internet usage of between 9 to 12 years which accounted for the 28.2% of the respondents. Respondents with more than 16 years of Internet usage constituted the minority. Sixty-three percent (63%) used the Internet less than 23 hours per week; 22.7% of the respondents used it from 24 to 43 hours per week followed by 9.3% who used it from 44 to 63 hours per week. Forty percent (40%) of the respondents used the Internet at university followed by 35% usage in hostels, with majority of

the students (96.4%) using Google as their primary search engine.

Media literacy

One question was designed to gather information regarding respondents' media literacy. A total of 42.7% of the respondents described their media literacy level as skillful, 42.3% of respondents claimed to be somewhat skillful and 10.5% reported their media literacy level as very skillful.

Alcohol usage

Regarding alcohol usage by the respondents, the item "seen drink education films on the Internet" had the highest mean ($M = 1.23$, $SD = 0.60$) and the lowest mean related to the item "unable to remember what happened the night before because of drinking" ($M = 1.03$, $SD = 0.25$). Eighty-four percent (84%) of the respondents said they did not have drinks containing alcohol. A majority of the respondents (91.6%) did not injure anyone because of drinking. Most of the respondents (84.8%) did not drink alcohol. All students were asked about list of sources of potential information about drinking that they had found to be the most helpful. Fifty percent (50%) of the respondents found information on alcohol via TV, followed by 46.4% who found it through the Internet.

Drug Usage

Regarding drug usage by the respondents, the item "use Pain Reliever" had the highest mean" ($M = 1.26$, $SD = 0.62$) followed by "smoke cigarette" ($M = 1.20$, $SD = 0.81$). The lowest mean related to "use Heroin" ($M = 1.03$, $SD = 0.31$). In addition, 79.3% of the respondents claimed that they did not visit the drug websites at all.

Pearson Correlation between IVs and DVs

RQ1: Is there any relationship between media literacy and alcohol/drug usage?

RQ2: What is the effect of Internet usage pattern on alcohol and drug usage?

Correlation coefficients were computed among the media literacy, pattern of Internet usage, and alcohol consumption (Table 1). The results showed a positive relationship between media literacy and the alcohol usage ($r = 0.114$, $p < 0.05$). According to the rule of thumb (Bond, 2010) the relationship is negligible. Moreover, the results of correlation coefficient showed that there was no relationship between media literacy and drug usage ($r = -0.006$, $p > 0.05$). Therefore, H1 regarding the positive impact of media literacy on alcohol usage was accepted, however, H2 was rejected regarding media literacy and its impacts on drug usage.

In addition, no relationship was found between years of using the Internet and the alcohol usage ($r = -0.053$, $p > 0.05$), the frequency of Internet usage, and alcohol usage ($r = 0.029$, $p > 0.05$). Therefore, there was no relationship between two dimensions of pattern of the Internet usage and alcohol drinking. Besides, no relationship was found between pattern of Internet usage (years of using) and drug usage ($r = -0.039$, $p > 0.05$), and between pattern of the Internet usage (frequency of using) and drug usage ($r = 0.033$, $p > 0.05$). In general, there was no relationship between two dimensions of Internet usage patterns and drug usage. Therefore, H3 regarding to the patterns of

using Internet and their impact on drug usage was rejected.

Table 1: Pearson Correlation between IVs and Alcohol and Drug Usage (n=440)

Variables	Alcohol usage		Drug usage	
	r s	P	r s	P
Media literacy	0.114	0.017	-0.006	.904
Pattern of Internet Usage				
Years of using Internet	-0.53	0.226	-0.039	0.41
Frequency of Internet usage	0.029	0.540	0.033	0.48
Patterns of using Internet	Media literacy			
Years of using Internet	0.319	0.00		
Frequency of using Internet	0.143	0.003		

* $p < 0.001$

The results also showed a positive relationship between frequency of using the Internet and media literacy ($r=0.319$, $p < 0.05$) in spite of the low correlation. There was a positive relationship between the frequency of using the Internet and Media literacy ($r=0.143$, $p < 0.05$). To conclude, there were positive relationships between pattern of Internet usage and media literacy.

The Mean Differences between Gender and Alcohol Usage

The mean differences for each group of respondents' gender with alcohol and drug usage were measured through an independent t-test (Table 2). The results showed a significant difference between male and female respondents in alcohol consumption. The consumption of using alcohol among males was higher than females. The results of the independent t-test showed a significant mean difference between drug usage and gender. In general, some differences were observed between males and females in alcohol consumption and drug usage with males using more alcohol and drug than females (Table 2).

Table 2: T-Test between Gender and Alcohol and Drug Usage (n=440)

Gender	Alcohol Usage			Drug Usage		
	Mean	t	p	Mean	t	p
Male	9.35	3.25	0.001	16.88	2.01	0.04
Female	8.49			15.83		

* $p < .05$

The Mean Differences between Ethnicity and Alcohol Usage

One-way ANOVA statistics were run to find out the significant differences among ethnic groups and alcohol and drug usage among the respondents (Table 3). Due to the differences in the number of respondents in each group, Welch test was used for the analysis. The ANOVA results revealed significant differences among ethnic groups and alcohol usage ($F=20.656$, $p<0.05$). Considering alcohol consumption, post-hoc analysis showed that Chinese were the first group followed by Indians and then Malays. However, no mean differences were found among ethnicity and drug usage ($F=0.299$, $p>0.05$).

Table 3: Differences between Ethnicity, Alcohol and Drug Usage (n=440)

Ethnicity	Mean	Alcohol usage	Sum of Square	df	mean2	F	p
Malay	8.28						
Chinese	10.08						
Indian	8.70	Between Groups	260.03	3	86.67	20.65	.000
Others	8.88	Within Groups	1829.57	436	4.19		
		Total		439			
Ethnicity	Mean	Drug usage	Sum of Square	df	mean2	F	p
Malay	16.2823						
Chinese	15.8559						
Indian	16.7647	Between Groups	23.441	3	7.81	0.299	0.826
Others	15.7778	Within Groups	11379.43	436	26.10		
		Total	11402.87	439			

* $p<0.05$

The regression model among IVs and DVs

Multiple linear regression was carried out to investigate the relationship between media literacy, pattern of using Internet, ethnicity and gender. Moreover, regression coefficient was used to explore whether the relationship was significantly positive or negative; the relative percentages of the dependent variables can be predicted by the independent variables. An R-square value of 0.217 revealed that Internet usage explained about 21% of variance on alcohol usage. Findings also revealed that based on the reported value of the F-statistics ($f=30.141$, $p<0.05$), the model fits the data which means that the slope of estimated linear

regression model line was not equal to zero. Therefore, it is confirmed that there was a significant linear relationship between Internet usage and alcohol usage (Table 4).

Table 4: Regression analysis (ANOVA) between IVs, alcohol and drug consumption (n=440)

	Df	Mean Square	F	Sig	R Square	R
Regression	4	113.369	30.141	0.000	.217	0.466
Residual	435	3.761				
Total	439					

*p<.05

The coefficient showed the importance of Internet usage in predicting alcohol consumption. The beta coefficient was ($\beta=0.217$) at the level of 0.05, therefore, 21% of alcohol usage can be predicted by Internet usage (Table 4). Alcohol usage had positive significant effects on drug usage with ($\beta=0.158$) and Media literacy ($\beta=0.301$) and ethnicity ($\beta=0.560$) with 15% and 30% prediction and 56% prediction respectively. In addition, alcohol usage had negative significant effect on gender with ($\beta=-0.660$) 66% prediction (Table 5).

Table 5: Regression coefficient (n=440)

	B	Beta	t	Sig.
Drug usage	.158	.369	8.662	.000
Ethnicity	.560	.194	4.541	.000
Gender	-.660	-.141	-3.307	.001
Media literacy	.301	.106	2.485	.013

*p<.05

DISCUSSIONS

The present study was conducted as an attempt to find out any relationship between media literacy and patterns of using the Internet with alcohol consumption and drug abuse among Malaysian youth based on their ethnic and gender factors. The four main findings of the present study are as follows: 1) there was no relationship between patterns of Internet usage and alcohol and drug usage; 2) there was a significant relationship between media literacy and alcohol usage, although there was no significant difference between media literacy and drug usage;

3) the mean difference between gender, alcohol, and drug usage was significant; 4) the mean difference between ethnicity and alcohol usage was significant but the mean difference for drug usage was not significant.

The primary discovery indicates the absence of a correlation between Internet usage patterns and alcohol and drug consumption. One explanation for the lack of a significant association with drugs is the illicit nature of narcotics, which restricts their availability on the surface web or conventional internet platforms. These substances are solely accessible through the deep web or darknet.

Conversely, due to the legality of alcohol and tobacco, their promotion and advertising flourish on the surface web. This outcome contrasts with the findings of Mejia et al. (2019), who noted a link between exposure to alcohol-related content and alcohol consumption. Similarly, Nor Afiah et al. (2015) observed that young individuals in rural Malaysian areas can emulate smoking behaviors based on the influential portrayals by public figures.

There exists a connection between media literacy and the consumption of alcohol. This outcome aligns with the research by Chang et al. (2016), which highlighted that individuals exposed to alcohol and tobacco references in media were more inclined towards consuming these substances, while those with higher media literacy displayed greater awareness of their drinking and smoking habits. Furthermore, Berey et al. (2017) and Radanielina Hita et al. (2018) discovered that effective media literacy strategies can lead to a reduction in alcohol consumption.

The relationship between media literacy and drug usage was not deemed statistically significant as per the third finding. This outcome deviates from the findings of Chang et al. (2016), who identified a strong correlation between media literacy and drug usage. Nevertheless, the current study's results on drug consumption differ from previous research by Brewer (2003) and Nematı and Matlabi (2017), which highlighted a notable association between Internet usage and drug consumption. One

possible explanation for this disparity could be attributed to the predominant Muslim respondents in the study, given that drug use is forbidden in Islam, thus resulting in the absence of a significant relationship.

The fourth finding unveiled substantial mean variations in alcohol and drug usage between males and females. This discovery aligns with prior investigations conducted by Hamzah et al. (2012), Richardson et al. (2015), Hong and Peltzer (2019), Rodzlan Hasani et al. (2021), and Jane Ling et al. (2022), all of which documented significant disparities in negative behaviors exhibited by young males and females. The study concluded that a considerably higher proportion of males exhibited negative behaviors compared to females, suggesting that males could potentially be at a higher risk.

The fourth main finding ultimately revealed a significant correlation between ethnicity and alcohol consumption, albeit lacking any association with drug utilization. Notably, there was a substantial mean difference among the Malay, Chinese, and Indian ethnic groups in terms of their engagement in alcohol intake. It was evident from the results that the Chinese exhibited the highest number of drinkers, followed by Indians and Malays. This particular trend has been documented in earlier research studies (Idris et al., 2008; Mohd Hatta et al., 2013). Such outcomes are justifiable considering that the social acceptance of alcohol consumption is culturally ingrained among the Chinese. Consequently, their prevalence of alcohol

consumption surpasses that of other ethnicities. Nevertheless, Richardson et al. (2015) and Jane Ling et al. (2022) noted a higher prevalence of e-cigarette use among Malays compared to other ethnic groups in the country.

The current study's findings demonstrated that the majority of Malay students abstained from alcohol. This tendency could be attributed to the prohibition of alcohol consumption in Islam. Furthermore, there exist legal repercussions for Muslim individuals who engage in drinking. Hence, it is conceivable that students refrain from alcohol consumption due to religious beliefs, leading to a low percentage of drinkers. The outcomes of this study align with Hamzah et al.'s (2012) research, as well as Azimi et al.'s (2007) assertion that risky behaviors are inversely associated with an Islamic worldview. Specifically, an increase in Islamic worldview is linked to a decrease in risky behaviors. Additionally, their research findings indicated a lower prevalence of risky behaviors among college students compared to other young cohorts. Likewise, a study focusing on ethnic influences and alcohol misuse in Malaysia highlighted that the Chinese population surpassed both Malay and Indian communities in alcohol consumption, although they were among the least likely to engage in excessive drinking when compared to the other ethnic groups (Mohd Hatta et al., 2013).

CONCLUSIONS

From the evaluation of the research undertaken, it is evident that adolescents are confronted with various advertisements through the media, potentially steering them towards unfavorable actions like alcohol consumption and drug utilization. It is fortunate that, as indicated by the results of this investigation, the negative repercussions of media exposure can be mitigated through media literacy. This could be attributed to the observation that individuals possessing advanced digital skills are less susceptible to the adverse effects of media influence.

Limitation and Recommendation

The primary limitation of the current study pertains to the sample composition, which consisted of a group of university students aged between 18 and 40 years, aligning with the definition of youth in Malaysia. Consequently, the findings are not readily generalizable to the broader population of young individuals in Malaysia. It is imperative for future investigations to replicate the current study with larger and more diverse samples to assess alcohol consumption and drug abuse among students and youth effectively.

Secondly, as the present study employed a quantitative method, it is suggested to employ a mixed-method for future research in order to obtain broader and deeper understanding of the issue particularly the inconsistent behaviors.

Moreover, a significant proportion of the survey participants adhered to the Islamic faith, which prohibits the consumption of alcohol and tobacco. Hence, it is advised

that future studies implement a systematic sampling method that includes an appropriate representation of non-Muslim individuals. Furthermore, given the scarcity of research on alcohol consumption and drug usage among students in Malaysia, additional corroborative studies are evidently warranted. As the theories of intervention are mainly focusing on the relationship between advertising alcohol and creating certain norms and behavior, it is quite important to consider different variations of exposure to alcohol and alcohol consumption as well. The cross-sectional design of the current study constrains the ability to infer causality and temporality from the findings. Additionally, the results are derived from bivariate unadjusted analyses, indicating a lack of control for potential confounders.

In the realm of academia, it is imperative to orchestrate workshops and extend invitations to dignitaries to educate students on the adverse effects of alcohol and drug consumption. Providing them with up-to-

REFERENCES

- Bachman, J., Johnston, L., & O'Malley, P. (2001). *Monitoring the future: Questionnaire responses from the nation's high school seniors*. Ann Arbor: University of Michigan.
- Barker, A. B., Britton, J., Thomson, E., & Murray, R. L. J. J. o. P. H. (2021). Tobacco and alcohol content in soap operas broadcast on UK television: a content analysis and population exposure. *43*(3), 595-603.
- Barker, A. B., Smith, J., Hunter, A., Britton, J., & Murray, R. L. (2019). Quantifying tobacco and alcohol imagery in Netflix and Amazon Prime instant video original programming accessed from the UK: a content analysis. *BMJ open*, *9*(2), e025807.
- Berey, B. L., Loparco, C., Leeman, R. F., & Grube, J. W. (2017). The myriad influences of alcohol advertising on adolescent drinking. *Current Addiction Reports*, *4*(2), 172-183.

date statistics on risky behaviors and the societal implications thereof is crucial, given that students play a pivotal role in shaping the future of both society and the family unit, which represents the fundamental building block of communities. Moreover, a comprehensive strategy should be devised to ensure that parents also partake in alcohol education initiatives within the educational setting.

The government ought to establish initiatives aimed at enlightening young individuals about the dangers associated with alcohol and drug use, while concurrently enhancing their capacity for media literacy and critical analysis through said efforts. The primary objective of alcohol and drug education campaigns in the media should center on mitigating the adverse repercussions of substance abuse; as youths become more adept at interpreting media messages, their susceptibility to the detrimental effects of alcohol diminishes.

Bond, C. S. (2010). Surfing or still drowning? Student nurses' Internet skills. *Nurse Education Today*, 30(5), 485-488.

Chang, F.-c., Miao, N.-f., Lee, C.-m., Chen, P.-h., Chiu, C.-h., & Lee, S.-c. (2016). The association of media exposure and media literacy with adolescent alcohol and tobacco use. *Journal of health psychology*, 21(4), 513-525.

Chu, J. J., Jahn, H. J., Khan, M. H., Kraemer, A. J. J. o. H., Population, & Nutrition. (2016). Alcohol consumption among university students: a Sino-German comparison demonstrates a much lower consumption of alcohol in Chinese students. 35, 1-11.

Chung, D., & Meng, Y. J. F. i. p. (2024). Willingness to reduce alcohol consumption predicted by short-form video exposure, media involvement, psychological bias, and cognitive factor. 15, 1213539.

CodeBlue. (2020). Malaysians Binge Drink More Than British? Survey Claims. Retrieved 6/3/2024 from <https://codeblue.galencentre.org/2020/06/03/malaysians-binge-drink-more-than-british-survey-claims/>

Doggett, A., Qian, W., Godin, K., De Groh, M., & Leatherdale, S. T. (2019). Examining the association between exposure to various screen time sedentary behaviours and cannabis use among youth in the COMPASS study. *SSM-Population Health*, 9, 100487.

Dorr, A. (2001). Media Literacy. In N. J. Smelser & P. B. Baltes (Eds.), *International Encyclopedia of the Social & Behavioral Sciences* (pp. 9494-9497). Pergamon. <https://doi.org/10.1016/B0-08-043076-7/04354-0>

Ellickson, P., Collins, R., & Hambarsoomians, K. (2005). 'Does alcohol advertising promote adolescent drinking?'. *Addiction*, 100(2), 235-246.

Fisoun, V., Floros, G., Siomos, K., Geroukalis, D., & Navridis, K. (2012). Internet addiction as an important predictor in early detection of adolescent drug use experience-implications for research and practice. *J Addict Med*, 6(1), 77-84.

Giesbrecht, N., Reisdorfer, E., Shield, K. J. D., & Review, A. (2024). The impacts of alcohol marketing and advertising, and the alcohol industry's views on marketing regulations: Systematic reviews of systematic reviews.

Gutierrez, N., Kindratt, T. B., Pagels, P., Foster, B., & Gimpel, N. E. (2014). Health literacy, health information seeking behaviors and internet use among patients attending a private

and public clinic in the same geographic area. *Journal of community health*, 39(1), 83-89.

Hoek, J., Maubach, N., Stevenson, R., Gendall, P., & Edwards, R. (2013). Social smokers' management of conflicted identities. *Tobacco control*, 22(4), 261-265.

Hong, S. A., & Peltzer, K. (2019). Early adolescent patterns of alcohol and tobacco use in eight Association of South-East Asian Nations (ASEAN) member states. *Substance use & misuse*, 54(2), 288-296.

Hong SeoAh, H. S., & Peltzer, K. (2019). Early adolescent patterns of alcohol and tobacco use in eight Association of South-East Asian Nations (ASEAN) member states.

Ismail, R., Abdul Manaf, M. R., Hassan, M. R., Mohammed Nawi, A., Ibrahim, N., Lyndon, N., Amit, N., Zakaria, E., Abd Razak, M. A., Zaiedy Nor, N. I. J. I. j. o. e. r., & health, p. (2022). Prevalence of drug and substance use among Malaysian youth: A nationwide survey. 19(8), 4684.

Jane Ling, M. Y., Ahmad, N., Mohd Yusoff, M. F., & Lim, K. H. (2022). Current e-cigarette use among in-school adolescents in West Malaysia: Examining the interactions between sociodemographic characteristics and lifestyle risk behaviours. *PloS one*, 17(1), e0263355.

Katz, E., & Blumler, J. G. (1974). The uses of mass communications: Current perspectives on gratifications research.

Katz, E., Haas, H., & Gurevitch, M. (1973). On the use of the mass media for important things. *American Sociological Review*, 38, 164-181.

Lapierre, M. A., Fleming-Milici, F., Rozendaal, E., McAlister, A. R., & Castonguay, J. (2017). The effect of advertising on children and adolescents. *Pediatrics*, 140(Supplement 2), S152-S156.

Liu, J., Charmaraman, L., Bickham, D. J. S. U., & Misuse. (2024). Association Between Social Media Use and Substance Use Among Middle and High School-Aged Youth. 1-8.

McKay, A. J., Negi, N. S., Murukutla, N., Laverty, A. A., Puri, P., Uttekar, B. V., Mullin, S., & Millett, C. (2020). Trends in tobacco, alcohol and branded fast-food imagery in Bollywood films, 1994-2013. *PloS one*, 15(5), e0230050.

Mohd Nawawi, N. A. A., Othman, E. A., Mohd Nasir, F., Abdullah, K. A., & Baharudin, M. N. J. J. o. e. i. s. a. (2024). Drug addictions in Malaysia: a mini-review on drug types, rehabilitation centers and therapeutic programs. 1-13.

Mungandi, K., Likwa, R. N., Hamoonga, T. E., Banda, J., & Zyambo, C. J. A. h. s. (2022).

Predictors of alcohol consumption among adolescents and young adults in Lusaka, Zambia. *22(4)*, 704-715.

Mutti-Packer, S., Reid, J. L., Thrasher, J. F., Romer, D., Fong, G. T., Gupta, P. C., Pednekar, M. S., Nargis, N., & Hammond, D. J. A. b. (2017). The role of negative affect and message credibility in perceived effectiveness of smokeless tobacco health warning labels in Navi Mumbai, India and Dhaka, Bangladesh: a moderated-mediation analysis. *73*, 22-29.

National Institute on Alcohol Abuse and Alcoholism (NIAAA). (2021). Alcohol Facts and Statistics. Retrieved 6/4/2024 from <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/alcohol-factsand-statistics>

Nor Afiah, M., Rahmah, M., Salmiah, M., Lye, M., Shamsul Azhar, S., & Fazilah, I. (2015). smoking behavior among adolescents in rural schools in Malacca, Malaysia-a case-control study. *Pertanika J Sci & Technol*, *23(1)*, 13-28.

Parker, H., Williams, L., & Aldridge, J. (2002). The normalization of “sensible” recreational drug use: further evidence from the North West England Longitudinal Study’. *Sociology*, *36(4)*, 941-964.

Pitt, G., Forrest, D., Hughes, K., & Bellis, M. (2005). Young people’s exposure to alcohol: the role of radio and television. Centre for Public Health, LJMU.

Primack, B., Kraemer, K., Fine, M., & Dalton, M. (2009). Media exposure and marijuana and alcohol use among adolescents. *Subst Use Misuse*, *44(5)*, 722-739.

Radanielina Hita, M. L., Kareklas, I., & Pinkleton, B. (2018). Parental mediation in the digital era: Increasing children’s critical thinking may help decrease positive attitudes toward alcohol. *Journal of health communication*, *23(1)*, 98-108.

Richardson, A., Ganz, O., & Vallone, D. (2015). Tobacco on the web: surveillance and characterisation of online tobacco and e-cigarette advertising. *Tobacco control*, *24(4)*, 341-347.

Ritchie, H., & Roser, M. (2019). Alcohol consumption. Our World In Data. ‘<https://ourworldindata.org/alcohol-consumption>

Rodzlan Hasani, W. S., Saminathan, T. A., Ab Majid, N. L., Miaw Yn, J. L., Mat Rifin, H., Abd Hamid, H. A., Robert Lourdes, T. G., Ahmad, A., Lsmail, H., & Rashid, R. A. (2021). Polysubstance use among adolescents in Malaysia: Findings from the National Health and Morbidity Survey 2017. *PloS one*, *16(1)*, e0245593.

Ruddock, A. (2009). *It’s the Stories You Tell: Binge Drinking, Violence and Celebrity*. The

tapestry of health, illness and disease, 55, 137.

Russell, A., Bergman, B. G., Colditz, J. B., Kelly, J. F., Milaham, P. J., Massey, P. M. J. D., & dependence, a. (2021). Using TikTok in recovery from substance use disorder. 229, 109147.

Russell, C. A., Russell, D. W., Grube, J. W., & McQuarrie, E. (2017). Alcohol storylines in television episodes: The preventive effect of countering epilogues. *Journal of health communication*, 22(8), 657-665.

Ting, C. H., & Essau, C. J. A. B. R. (2021). Addictive behaviours among university students in Malaysia during COVID-19 pandemic. 14, 100375.

Tong, W. T., Islam, M., Low, W. Y., Choo, W. Y., & Abdullah, A. (2019). Prevalence and Determinants of Pathological Internet Use among Undergraduate Students in a Public University in Malaysia. *International Journal of Behavioral Science*, 14(1).

Turnbull, N., Peltzer, K., Pengpid, S., Low, W. Y., Huu, T. N., Rochmawati, E., & Win, H. H. (2018). Pathological Internet use and psychosocial risk factors among ASEAN university students. *Iranian Journal of Psychiatry and Behavioral Sciences*, 12(1).

Weitzman, M., & Lee, L. (2020). Similarities between alcohol and tobacco advertising exposure and adolescent use of each of these substances. *Journal of Studies on Alcohol and Drugs*, Supplement(s19), 97-105.

Wellmanm, R., Sugarman, D., DiFranza, J., & Winickoff, J. (2006). The extent to which tobacco marketing and tobacco use in films contribute to children's use of tobacco: a meta-analysis. *Arch Pediatr Adolesc Med*, 160, 1285–1296.

World Health Organization. (2020). World health rankings: Live Longer Live Better. Retrieved 6/3/2024 from <https://www.worldlifeexpectancy.com/malaysia-alcohol#:~:text=Malaysia%3A%20Alcohol&text=According%20to%20the%20latest%20WHO,Malaysia%20%23139%20in%20the%20world>

Zeping. (2023). New Trends in Wine Industry: Good Wine, Low Alcohol, Young People, New Media ZPHG: Zeping. Retrieved 6/3/2024 from <https://baijiahao.baidu.com/s?id=1763488117766249507&wfr=spider&for=pc>