# Prevalence and influencing factors of energy drink consumption among youth in Laamu Hithadhoo Maldives

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ABSTRACT *Consumption of energy drinks has been popular among different age groups, especially among the youth, since the introduction of the highly demanded drink called Red Bull, in Austria in the year 1987. Energy drink (ED) consumption among youth has become an escalating health problem throughout the world including Maldives. The main purpose of this study is to identify the prevalence and influencing factors of energy drink consumption among the youth living in Laamu Hithadhoo, the Maldives. A quantitative descriptive study was conducted using systematic sampling. The questionnaire was shared with 152 participants who belonged to the age group 18-40 years… The study revealed that more than half, (65.1%) of the youth population aged between 18-40years who live in Laamu Hithadhoo consume energy drinks and have high chances of using energy drinks due lack of understanding and awareness about the adverse effects of ED consumption. The result of the present study can contribute to promote awareness programs among the youth to reduce chronic long-term diseases and as well as minimize obesity.*

*Keywords: Energy drinks, Consumption, Prevalence, Youth, Influencing factors*

Since late 1990s, energy drink (ED) consumption has been emerging as an escalating health problem throughout the globe including the Maldives (Firasha, 2015). With the accelerating ED consumption, the reported cases of adverse health effects associated with ED consumption have been growing which has become a public health concern (Breda et al., 2014). The consumption of energy drinks is popular among different age groups especially among the youths and adolescents (Firasha, 2015). During the last two decades, energy drink consumption has become a critical global health issue and it is estimated that a significant proportion of the youth in the Maldives consume energy drinks daily. (Firasha, 2015) Energy drinks are beverages that contain ingredients including caffeine, Vitamin B and taurine (Buxton & Hagan, 2012). Though, energy drinks have a lot of psychomotor side effects the popularity among the youth never decline due to boost of stamina and high fatigue relieving effects (Breda et al., 2014).

Energy drinks are harmful for health as they contain large quantities of caffeine and sucrose which cause various negative impact on health (Reid et al., 2015). The effects of consumption of ED leads to potential dehydration and changes in blood pressure and heart rate (Firasha, 2015). Furthermore, high level of caffeine in ED leads to disturbance of normal sleeping patterns and causes insomnia in severe cases (Subaiea, Altebainawi & Alshammari, 2019). Generally, consumers never

ISSN 2308-5959/20211231 

thought of the negative impact of ED due to improving strength, satisfaction and enhancing performance within no limit of time after consumption.

Energy drinks are highly in demand amongamong the Maldivians especially among the youth population (Muneer, 2016). A research study done on energy drink consumption among the students of the Maldives National University in 2015, revealed that 54% of the participants consume energy drinks in their normal daily life (Firasha, 2015). A study done among youth in the Capital Male' city in the year 2016, revealed that 93.3% of the participants were aware of the negative health impact, and 36%of them were not decided whether they will continue or stop (Muneer, 2016). ED consumption among youth in the Maldives became a trend and most of the youth population rely on ED in their daily life. The aim of this study is to estimate the prevalence of energy drink consumption identify the factors influencing energy drink consumption among youth in Hithadhoo, Laamu atoll, Maldives.

## Literature Review

Consumption of caffeinated beverages such as energy drinks are popular among youth throughout the globe (Subaiea, Altebainawi & Alshammari, 2019). The prevalence of this issue became a trend due to urbanization and globalization and has reached the oceanic island countries including the Maldives. The literature review includes a theoretical framework and further continue with identifying the prevalence, influencing factors of ED consumption among youth, main adverse effects of ED, and chief ingredients being used. Latest evidence-based literature from several databases such as Google Scholar and PubMed were searched using the keywords energy drink, consumption, prevalence, youth, and influencing factors.

### Theoretical Framework

The central concept utilized in this study is the reciprocal triadic determinism (RTD). The theory mainly focuses on understanding the human behaviour and cognition of an activity in a certain way (Bandura, 1991). Generating a theoretical framework from the Social Cognitive Theory (SCT) assists to understand the main factors influencing energy drink among the youth. This theory was established in 1963 by Albert Bandura. The main three aspects of the theory focus on behavioural factors and individual personal factors and environment factors. The environmental factors consist of social power, remodelling and socio-cultural aspects. The personal factors consist of cognitive-affective factors such as knowledge and attitude whereas behaviour consist of action and habits such as self-monitoring, smoking sensations and exercises. The main environmental factor that influences energy drink consumption is peer pressure. Each aspect of the theory is connected and influences the other (Bandura, 1999).

Since there are limited studies done in the Maldives, it is essential to find out the main reasons and the influencing factors to understand the prevalence of energy drink consumption among the youth.

## Reasons of consumption

Energy drinks are profoundly advertised by the manufacturers (Goodhew et al., 2020). The perception of youth consumers towards energy drink consumption increases due to these advertisements (Breda et al., 2014). The manufacturers promote energy drinks asserting that energy drinks are beneficial beverages that assist in boosting stamina in sports and hard work, relieve fatigue, enhance endurance and boost both physical and mental health. Therefore, the young brains of adolescents and youths are attracted towards it. Products which can be easily accessed and readily available are consumed by larger groups of customers. Since energy drinks are easily available in the market, the young customers usage will be higher than the other age groups because younger groups are more engaged in sports and games. Youths prefer to get energy from the artificial beverages rather than from natural beverages that generate energy such as tender coconut. Goodhew et al. (2020) states that people engaged in sports are more likely to consume energy drinks. Furthermore, the good taste and the stimulatory effect of energy drinks increases the likelihood ratio of energy drink consumption among youth (Goodhew et al., 2020).

## Negative impact on health

Consumption of energy drinks among youth has particularly has accelerated incidents of health emergencies (Alrasheedi, 2021). Energy drinks cause negative impact on health mainly due to caffeine content. Caffeine causes numerous unusual psychological and behavioural changes in humans. Studies done in United States and Australia found that ED consumption leads to development of high-risk behaviours such as smoking, drinking behaviour, alcohol abuse, illicit drug use and risky sexual activity (Breda et al., 2014). Consequently, the risky behaviours lead to mental illness and mental disorders later in life. Previous studies show have that Energy drinks have severe side effects during heavy consumption (Naif et al., 2014). The caffeine content in energy drink may lead to intoxication and may present serious side effects such as tremors, arrhythmia, sleeping disturbance, electrolyte imbalance such as hypokalaemia, hyperglycaemia and metabolic acidosis. In addition, excess caffeine intake may lead to an increase of serum lactate and may cause medical emergencies such as seizures (Naif et al., 2014). Overconsumption of energy drinks can cause adverse effects such as cardiac arrest, and reported death. A study done in Australia and Sweden revealed that high consumption of energy drinks causes cardiac arrest and death (Breda et al., 2014).

## The main adverse effects

Consumption of energy drinks are known to lead to various adverse effects, mainly due to the high amounts of caffeineand sugar in it (Reid et al., 2015). These adverse effects are equally experienced by male and female consumers. Previous studies (Reid et al., 2015) have shown that one of the potential adverse effects of energy drinks is due to the sudden elevation of energy caused by the stimulant, caffeine. A study done in Caribbean countries in 2015 revealed 62.2% of the energy drink consumers have experienced such adverse effects (Reid et al., 2015). The study

also found, restlessness, increased urination, anxiety, tremors, irritability, elevated heart rate and headache are the common adverse effects among the participants (Reid et al., 2015). In addition to that, chest pain, dehydration, dry mouth, nausea, vomiting, paranoia, lethargy, and sleeping disturbance are some of the reported adverse effects. However, the adverse effects related to consumption of ED does not surface immediately and may take more than months and years. Some of the consumers of energy drinks self-report the adverse effects. The adverse effects experienced by the energy drink consumers depend on the consumer's health status, usage rate and the reasons for consumption. Those who consume energy drinks to prevent dehydration during sports have reported slowed fluid absorption rates due to large amounts of carbohydrate contained in energy drinks. In addition, excessive sweating may lead to dehydration during sports and cardiovascular complication (Reid et al., 2015).

Excessive caffeine in energy drinks not only causes physical adverse effects but mental effects have also been reported by the consumers. Excessive caffeine in the blood can also cause lead to psychotic pathogenesis (Hernandez-Huerta et al., 2017). A recent study has shown that energy drink consumers reported having various psychotic symptoms (Hernandez-Huerta et al., 2017). Experiences of insomnia by the consumers were reported with elevated persecutory thoughts even in healthy persons. In addition, self- reported cases of anxiety, sleep deprivation, semantic complaints, mania and paranoia were also identified among the consumers (Hernandez-Huerta et al., 2017). To alleviate these symptoms the consumers significantly required psychotic drug administration. Psychotic drug administration itself have various side effects which may have secondary adverse effects (Hernandez-Huerta et al., 2017). QTc prolongation and sinus bradycardia cases, which are serious cardiovascular complications were identified from a reported case (Stöllberger et al., 2005). Furthermore, myocardial infarction also has been reported among energy drink consumers after psychotic drug administration (Stöllberger et al., 2005).

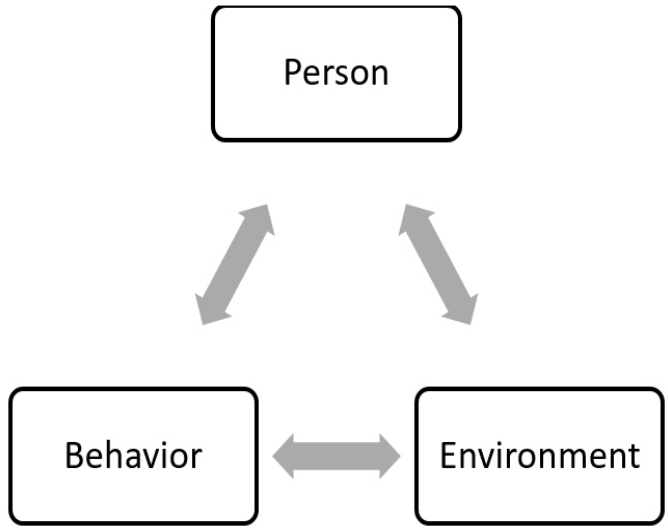


*Figure 1.* The Reciprocal Triadic Determinism(Bandura, 1999).

**Conceptual framework**

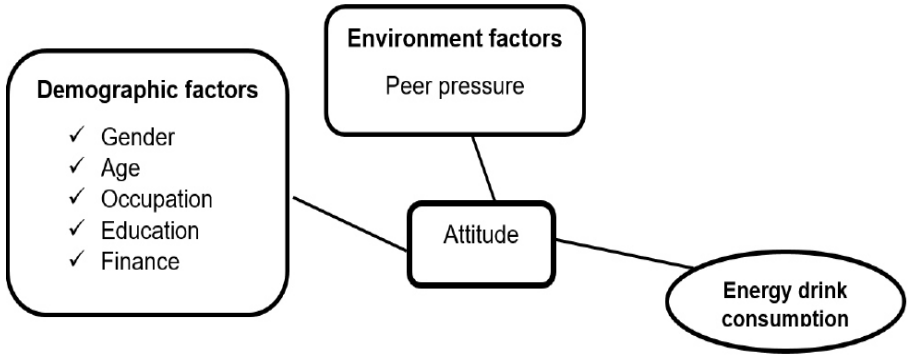


*Figure 2.* Conceptual framework

## Methodology

This study was carried out using a quantitative cross sectional descriptive design to identify prevalence and influencing factors of energy drink consumption among youth in Laamu Hithadhoo Maldives. The main focus of the study is towards youth as this is the most active age group of the Maldivian society between 18 and 35, data was additionally collected for the people between the ages, 35 to 40 years as well to broaden the spectrum. According to the census of Laamu Hithadhoo Council Office, there were 250 people aged between 18 and40years in Laamu Hithadhoo (Hithadhoo Council, 2021). The study was carried out using systematic sampling techniques which is a probability sampling method (Ibrahim, 2018). The accessible population aged between 18 and40 years in Laamu Hithadhoo is 250. Based on 95% confidence interval and 5% error, the sample size calculated for the study is 152.

### Research Instrument

A self-administered questionnaire developed by Firasha (2015) was adopted and used for this survey to identify prevalence and risk factors of energy drink consumption of youth in Laamu Hithadhoo. The questionnaire was distributed via online applications through Viber, Gmail and WhatsApp. The questionnaire was translated into local language to enhance better understanding of questions among respondents.

The questionnaire contains five main sections. Section 1 covers socio demographic information, section 2 addresses medical history, section 3 covers general views on energy drinks, section 4 personal behaviour, and section 5 addresses risk factors of energy drink consumption. The questionnaire was pretested before conducting the research by administering it to 10 participants from the selected population to assess the validity of the questionnaire. The reliability of the data was tested and the Cronbach alpha value was 0.9 indicating that reliability of the questionnaire is high.

### Data collection Techniques

In this research the questionnaire was administered online through Viber, Gmail and WhatsApp. The data collection was carried out in 15 days. Along with the questionnaire, a consent form was sent to participants for taking individual consent. After collecting the data, the data was saved in Google drive safely and anonymity was maintained throughout the data collection procedure.

### Data Analysis

The completed questionnaires were rechecked before data entry. The collected data was analysed using the software, Statistical Package for Social Science (SPSS) version 22 and Microsoft Excel. Descriptive statistics such as frequency distributions, mean medium and mode were generated for all the variables. Chi-square test was used to measure the association between dependent (energy drink consumption) and independent (risk factors) variables.

### Ethical Consideration

Before conducting the research, permission was taken from Centre for Post-Graduation (CPS) of Villa College, University of West England UWE and Laamu Hithadhoo Council Office. Informed consent from participants was taken before data collection. Participants were assured of confidentiality of the information obtained and that participation in the study would not harm them in any way.

## Findings

A total of 152 participants took part in this study, with 92 male participants and 60 female participants of aged between 18 and 40 years. The online questionnaire was sent to prospective participants through online applications. A total of 152 participants responded to the survey. Table 1 shows the percentage of gender distribution among the participants.

Table 1
*Demographic (Gender)*

| | Frequency | Percent | Valid Percent | Cumulative Percent | |
|---|---|---|---|---|---|
| Valid | Male | 92 | 60.5 | 60.5 | 60.5 |
| | Female | 60 | 39.5 | 39.5 | 100.0 |
| | Total | 152 | 100.0 | 100.0 | |

Table 1: Shows the demographic data by gender of the participants of the study. A total of 152 participants aged between 18 and 40 years participated in the current study. Majority, 60.5% (n=92) participants were male and 39.5 % (n=60) were female participants.

Table 2
*Prevalence of Energy Drink Consumption*

| | Did you consume energy drink? | Total | | | |
|---|---|---|---|---|---|
| | Yes | No | | | |
| Gender | Male | Count | 78 | 14 | 92 |
| | | % within Gender | 84.80% | 15.20% | 100.00% |
| | | % of Total | 51.30% | 9.20% | 60.50% |
| | Female | Count | 21 | 39 | 60 |
| | | % within Gender | 35.00% | 65.00% | 100.00% |
| | | % of Total | 13.80% | 25.70% | 39.50% |
| Total | Count | 99 | 53 | 152 | |
| | % within Gender | 65.10% | 34.90% | 100.00% | |
| | % of Total | 65.10% | 34.90% | 100.00% | |

The proportion of participants who reported energy drink consumption was 65.1% (n=99) and among them 51.3% (n=78) were male participants and 9.2% (n=39) were female participants. The study reported that the percentage of male participants was higher than that of female participants. Among the consumers, 46.1% reported that Red Bull is their favourite energy drink. whereas 13.1% of the participants prefer XL. Participants who did not drink energy drink was reported to be 34.9%. Among them25.7% were females. Moreover, half of the respondents (50%) reported that most of theirfriends consume energy drinks. Fewer respondents, (6.6%) reported that none of their friends consume energy drinks, 27.6% reported some of the friends consume energy drinks and 15.8% reported few of their friends consume.

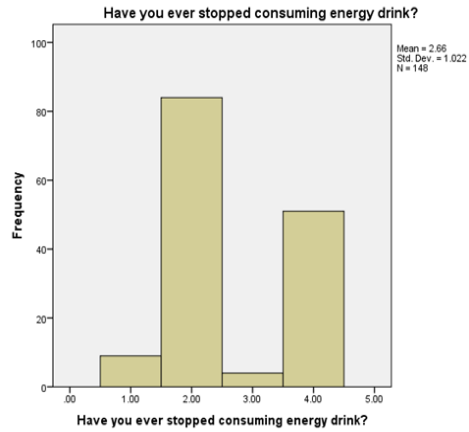


*Figure 3.* Have you ever stopped consuming energy drink?

Participants were asked whether they had been consumers of energy drinks in the past and whether they have stopped consuming. A small proportion, 7.9% of the respondents said that they have stopped using energy drinks. Among them 3.3% commented that they do not like to drink anymore and 2.6% believed that spending on ED was a waste of money and 2% of the respondents said that they have experienced adverse effects such as nausea and vomiting.

Table 3
*Frequency of Consume Energy Drink*

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Daily Once | 40 | 26.3 | 26.3 | 26.3 |
| More than 2 times/day | 18 | 11.8 | 11.8 | 38.2 |
| Every two days | 8 | 5.3 | 5.3 | 43.4 |
| Weekly once | 16 | 10.5 | 10.5 | 53.9 |
| In every 2 weeks | 5 | 3.3 | 3.3 | 57.2 |
| Monthly Once | 10 | 6.6 | 6.6 | 63.8 |
| Once in life | 6 | 3.9 | 3.9 | 67.8 |
| Never Consume | 49 | 32.2 | 32.2 | 100 |
| Total | 152 | 100 | 100 | |

Table 3 shows the percentage of respondents who consume energy drinks. Participants who consume energy drinks once a week was 10.5% (n=16) and participants who consumes ED every two weeks was 3.3% (n=5). The participants who reported that they did not consume energy drinks was 32.2% (n=49). A high proportion of the consumers (26.3%, n=40) reported that they consume energy drinks once daily, 11.8% (n=18) of the participants reported that they drink more than twice a day, 5.3% (n=8) of the participants reported that they consume energy drinks every two days, and 3.9% (n= 6) of the participants reported that they consume ED once in a life time.

Table 4
*Time of Consumption*

| | Frequency | Percent | Valid Percent | Cumulative Percent | |
|---|---|---|---|---|---|
| Valid | Morning | 7 | 4.6 | 7.1 | 7.1 |

| | | | | | |
|---|---|---|---|---|---|
| | Afternoon | 32 | 21.1 | 32.3 | 39.4 |
| | Evening | 6 | 3.9 | 6.1 | 45.5 |
| | Night | 4 | 2.6 | 4.0 | 49.5 |
| | All the time | 50 | 32.9 | 50.5 | 100.0 |
| | Total | 99 | 65.1 | 100.0 | |
| | No consumption | 53 | 34.9 | | |
| Total | 152 | 100.0 | | | |

Results presented in table 4 shows that 32.9 % (n= 50) who consume energy drinks has a habit of consuming them throughout the day. Few participants (2.6%. n=4) reported that they consume ED at night time and 21.1% (n=32) of the participants reported that they consume ED in the afternoon. Some participants, (4.6%) t reported that they consume ED in the morning and 3.9% participants consumed them in the evening.

Table 5
*Age to Consume Energy Drink*

| | Frequency | Percent | Valid Percent | Cumulative Percent | |
|---|---|---|---|---|---|
| Valid | 12-13 | 6 | 3.9 | 3.9 | 3.9 |
| | 14-15 | 6 | 3.9 | 3.9 | 7.9 |
| | 16-17 | 22 | 14.5 | 14.5 | 22.4 |
| | Above 18 | 42 | 27.6 | 27.6 | 50.0 |
| | Not good to consume | 76 | 50.0 | 50.0 | 100.0 |
| | Total | 152 | 100.0 | 100.0 | |

Table 5 shows that a large proportion of the respondents (50%, n=76) believe that energy drinks were not good to consume. The least and a relatively small proportion, 3.9% (n=6) of the participants agreed that energy drinks are ok to drink among age groups between 12-13years of age and 14-15 years. Further,27.6% (n=46) of the participants agreed above 18 years is good to consume energy drinks.

Table 6
*Influencing Factors of Energy Drink Consumption*

| | Frequency | Percent | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Due to peer pressure | 34 | 22.4 | 22.4 | 22.4 |
| Just to fill up the stomach | 12 | 7.9 | 7.9 | 30.3 |
| To gain energy/ strengths | 45 | 29.6 | 29.6 | 59.9 |
| To avoid fatigue/ sleepiness | 20 | 13.2 | 13.2 | 73.0 |
| To concentrate on studies | 4 | 2.6 | 2.6 | 75.7 |
| Other | 12 | 7.9 | 7.9 | 83.6 |
| Don't know | 25 | 16.4 | 16.4 | 100.0 |
| Total | 152 | 100.0 | 100.0 | |

Table 6 represents the main influencing factors of energy drink consumption among youth in Laamu Hithadhoo. Some participants (29.6%, n=45) agreed that they consume energy drinks to gain energy and strength during heavy workload, and 22.4% (n=34) indicated the cause of ED consumption was peer pressure. The data shows that 50% of the consumers indicated that most of their friends consume energy drinks. Fewer proportion of the participants said that they consume energy drinks to increase concentration on their studies. A small percentage (7.9%, n=12) of participants stated that they consume to fill their appetite and respectively equal percentage of respondents reported that they have other influencing factors.

## Discussion

The current study was conducted in Laamu Hithadhoo, Maldives. A total of 152 participants were in this study, with 92 male participants and 60 female participants of age between 18 years to 40 years. Increase in of energy drink consumption among youth has become an emerging public health issue (Naif et al., 2014). The present study aimed to identify the prevalence and influencing factors of energy drink consumption among youth of age between 18 and 40 years in Laamu Hithadhoo, Maldives. The study findings show that energy drink consumption is popular among the youth among youth age between 18-40 years in Laamu Hithadhoo. In an earlier study done in the capital city Male', among the Maldives National University students 54% of the participants were energy drink consumers (Firasha, 2015). The current study reported a higher percentage than the previous similar study done in capital Male. However, the majority of the participants (65.1%)

reported that they consume energy drinks. The prevalence predicted in this study is higher than the rate in the study done by De Sanctis et al. (2017) who reported 51% of American college students consume energy drinks daily. as the prevalence rate of energy consumption in other countries are; 56% in Australia (Breda et al., 2014), 70.5% in China (Luo et al., 2021) and 48% in Greece (Breda et al., 2014). The current study showed that the most popular energy drink among youth in Laamu Hithadhoo is Red Bull and most of the consumers drink them during any time in the day. Red Bull is the first released energy drink in the world (Bawazeer & AlSobahi, 2013) and Goodhew et al. (2020) stated that most of the consumers prefer Red bull as their prime energy drink. The result of this study also shows that the consumption of ED among males were higher when compared to females. A similar result was shown from a study done among 257 college students in 2013 in Saudi Arabia and a study done in Canada. (Reid et al., 2017). The majority of the consumers (41.4%) agreed that the reason for consuming energy drink was due to good taste and that they enjoy the taste. The present study shows that 25% of the participants do not choose any specific occasions to use energy drink and 22.4% of the participants consume before sports, 14.5% of the participants use when they feel thirsty.

One of the objectives of the present study was to identify the influencing factors of energy drink consumption among the youth. Most of the participants (29.6%) reported that they consume ED mainly to get energy and strength during strenuous work and during sports. 22.4% of participants reported that peer pressure was the influencing factor which persuades them to consume the same. Fatigue and sleepiness were the factors which prompt them to consume energy drink by 13% of the participants concentration during studies is a reason for energy drink consumption reported by fewer participants (4 These findings are consistent with other similar studies such as Goodhew et al. (2021), which identified sports, arduous work, and peer pressure as contributing factors leading to the consumption of energy drinks

In general, the majority of the participants (80.3%) were unaware of the contents and health risk associated with energy drinks and 79.6% of participants stated that they are not aware of any health risks related to ED, and the majority of them stated that they have not seen any warning labels on the energy drinks. In the study 27.8% of the participants believed that energy drinks are less harmful to consume at the age above 18 years but then again 50% believed that energy drinks are not good to consume at any age. Further, fewer participants (17.1%) agreed that they would not have started using energy drinks if they knew the health risk. Among the consumers 44.7% of the participants conveyed that they may stop if they understand health risk but they were not confirmed yet. But then again, in the present study, 36.2% of the participants believed that if the youth become well aware of the health risk, they may minimize or stop use of energy drinks. Additionally, in the current study respondents were also assessed about their awareness of the ingredients of the energy drinks. The findings showed that 80.3% of the participants were unaware of the content of the energy drinks and the least percentage of participants said they were well aware of the ingredients. However, energy drinks contain excess sugar. Excess sugar intake leads to risk of developing obesity and non-communicable diseases. A similar study conducted in 2014 showed obesity prevalence rate among teenagers was 11-18% in Maldives (WHO, 2018).

One of the main risk factors of overweight and obesity is the overconsumption of unhealthy diets and sweetened beverages. In the current study, limited knowledge and lack of awareness about the ingredients of energy drinks contributes to the consumption of energy drinks. Since the energy drink consumption among youth in Laamu Hithadhoo is high in this study, they are at risk of developing obesity and NCDs later in their life.

The social cognitive theory, Reciprocal Triadic Determinism (RTD) focused on understanding human behavioural and environmental factors which lead to unhealthy lifestyle (Bandura, 1999). Similarly, the study found some factors which encourage the consumption of energy drink such as the tendency to keep and consume energy drinks at home. The study shows that the majority of the participants said that they consume ED at their living environment or home. Peer pressure is one the influencing factors of consumption. The majorityof the participants said that most of their friends consume energy drinks.

In the current study the highest proportion, 41.4% of the participants conveyed that good taste was the main reason of consumption and 11.8% believed that they get energy after consumption, where as 8.6% described that they consume the energy drinks to fill up the stomach. However, few participants said that they take such drinks for concentration while studying. The earlier studies showed similar reasons such as 65% to gain energetic effect and 50% to get concentration in study (Naif et al., 2014)

Mixing energy drinks with other beverages is a common practice among the youth around the globe (Breda et al., 2014). The main reasons for mixing energy drinks with other beverages such as alcohol is to add a new flavour, to reduce sedation of alcohol and to reduce depressive symptoms. However, the consequences of mixing energy drinks with other beverages may lead to respiratory distress and alcohol intoxication (Naif et al., 2014). In the Maldives alcohol consumption is an illegal action (Mudra, 2021). Furthermore, alcohol is not freely available in the markets and the habit does not exist in the country's culture and also prohibited by law as it is a Muslim country. Even though alcohol is prohibited, mixing energy drinks with other beverages was investigated because there were different brand beverages available other than alcohol in the market. The current study does not find a similar finding as the previous studies that found of mixing energy drinks with other beverages. In the extant study none of the participants mix energy drink with other beverages. In an online survey conducted in the United States of America in 2006, it was revealed that 24% of the participants mix energy drinks with other beverages (Breda et al., 2014) and thereby reduce the risk of developing medical emergencies due to intoxication. A study conducted in Taiwan stated that mixing energy drink with beverages like alcohol was due to the false belief that it would prevent sleeping caused by alcohol consumption (Breda et al., 2014). These misconceptions lead to excess energy drink consumption and consequently alcohol related adverse effects become prominent. Additionally, delayed brain development and poor academic performance are long-term effects energy drink consumption.

## Conclusion

The present study showed that the prevalence of energy drink consumption among youth aged 18 to 40years in Laamu Hithadhoo is high and the most commonly consumed energy drink is Red Bull. The consumption of ED among men are higher than that of women. The factors influencing energy drink consumption are being engaged in strenuous work and sports, peer pressure, lack of awareness about the health consequences of consuming ED, fatigue, and sleepiness. The study also reported that awareness on health risk of energy drink is less among youth. Most of the participants believe that improving awareness may reduce excessive consumption.

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