Application of Demand Elasticity: Measuring the Effectiveness of Online Gambling Prevention Strategies

Khabiburrahman Ikhsan

(Postgraduate Program in Economic Education, PGRI Jombang University)

Fahmi Rahmatulloh Adzani

(Islamic Religious Education, Ma`had Aly Al-Hikam Islamic College, Malang)

Agus Prianto*)

(Professor of the Postgraduate Program in Economic Education, PGRI Jombang University)

Firman*)

(Professor of Civic Education, PGRI Jombang University)

Nanik Sri Setyani*)

(Associate Professor of Postgraduate Program in Economic Education, PGRI Jombang University)

Tahliyati

(Postgraduate Program in Economic Education, PGRI Jombang University)

Lilik Fauziah

(Postgraduate Program in Economic Education, PGRI Jombang University)

Eka Wulandari

(Postgraduate Program in Economic Education, PGRI Jombang University)
*) Corresponding author

ABSTRACT: Online gambling has become a national issue and involves the wider community, including those who work in government institutions, whose main task is actually to block online gambling sites. Online gambling has a negative impact on people's lives. Many people from various social strata are exposed to and addicted to online gambling. For this reason, the government has formed an Online Gambling Eradication Task Force Team which aims to save the Indonesian people from exposure to online gambling. This research aims to identify the elasticity of demand for online gambling. In addition, this study aims to analyze the effectiveness of law enforcement strategies, closing online gambling sites, and strategies for providing education and counseling about the dangers of online gambling to reduce public interest in getting involved in online gambling. The application of the elasticity of demand for online gambling is used to analyze the effectiveness of various online gambling prevention strategies. This study revealed that the elasticity of demand for online gambling for high school students and government employees is in the "unitary" category, with the level of interest in online gambling in the "interested" category. The elasticity of demand for online gambling for college students and entrepreneurs is in the "elastic" category, with the level of interest in online gambling in the "somewhat is interested" category. The elasticity of demand for online gambling among students and government employees is in the "unitary" category. Thus, the implementation of law enforcement strategies and the closure of online gambling sites does not change the overall value of online gambling transactions. Therefore, if the elasticity of public demand for online gambling shows an increase, from the "elastic" level to the "unitary" level; then it is necessary to increase understanding and awareness of the dangers of online gambling. For this reason, it is recommended that socialization of the dangers of online gambling to all levels of society be carried out intensively.

KEY WORDS: demand elasticity, online gambling, effectiveness

Date of Submission: 01-12-2024 Date of acceptance: 10-12-2024

I. INTRODUCATION AND LITERATURE REVIEW

Online gambling has become a national issue and is increasingly disturbing the public. Online gambling involves the wider community, including those who work in government institutions, whose main task is actually to block online gambling sites. Many people from various social strata are exposed to and addicted to online gambling. In fact, those who are exposed to online gambling even work as law enforcement officers, students, and ordinary citizens (cnnindonesia.com, 2/11/2024).

Online gambling has a negative impact on people's lives. Some of those involved in online gambling take shortcuts, committing suicide because they are in debt from losing online gambling. Some of the others sell assets as capital for online gambling. Some of those exposed to online gambling commit crimes because they are addicted to online gambling. Some workers, with low wages; are addicted to online gambling because they dream of getting a lot of money instantly (Syahputra et al., 2022; iainkerinci.ac.id, 11/102024; liputan6.com, 21/11/2024). Among students and college students, there are quite a few who are addicted to online gambling, and this has an impact on their declining academic achievement (Gabrito et al., 2023).

A shocking case is the incident involving a policewoman who burned her husband because he used his salary for online gambling (Kompas, 6/6/2024). This tragedy reflects how serious the impact of online gambling is on a person's life and household. This fact shows how online gambling can lead to deviant behaviour, even though those involved in online gambling are law enforcement officers and highly educated.

Various incidents caused by online gambling show that online gambling is at an acute level, and has infected all levels of society. For this reason, the government has formed an Online Gambling Eradication Task Force Team which aims to save the Indonesian people from exposure to online gambling. The report of the Head of the Financial Transaction Reports and Analysis Centre (PPATK) revealed that there were more than 1000 members of the legislature involved in online gambling, with a total of 63,000 transactions, including 7,000 transactions involving members of the legislature; with the turnover of money per person reaching billions of rupiah. (Kompas, 6/26/2024). These facts show that Indonesia is in an online gambling emergency. For this reason, serious preventive measures are needed so that people can be free from online gambling addiction.

Albert Bandura, the inventor of social learning theory, emphasized that individuals learn through their social environment. They observe the actions of others and imitate the behaviour they see (Abdullah et al., 2020). In the context of online gambling, someone is interested in online gambling after seeing friends or family members involved in online gambling, then imitates that behaviour. If they see their friends benefit from online gambling, this can strengthen their desire to imitate the behaviour.

Robert K. Merton, the inventor of the strain theory, stated that the inability of individuals to achieve their desired goals through legitimate means can drive them to seek illegitimate means (Agnew, 2001). Many individuals from the lower middle class face significant economic pressures, and online gambling offers the promise of quick and big profits with relatively little effort. This is what triggers many people to get involved in online gambling.

Online gambling has become an increasingly worrying phenomenon in Indonesia. Wide internet access makes it easy for people to be exposed to online gambling advertisements that are often disguised as harmless-looking game applications. Users who initially just mess around, unknowingly get caught up in gambling games that offer quick wins, then become addicted and entangled in a vicious circle of gambling that is difficult to break.

The government has published a guidebook to prevent the spread of online gambling in Indonesia, which is briefly grouped into 3 ways, namely: first, law enforcement strategies by imposing harsh penalties on perpetrators who are proven to be involved in online gambling; second, closing online gambling sites; third, providing education and guiding, including involving religious figures about the dangers of online gambling and issuing a fatwa on the prohibition of online gambling practices (Kurniawan et al., 2022; Yuliati et al., 2024). However, previous studies have not revealed how effective the various strategies chosen can be in preventing people's addiction to online gambling.

The research questions in this study are: (a) How is the elasticity of demand for online gambling in Indonesia? (b) By considering the elasticity of demand for online gambling, how effective is the strategy to prevent online gambling?

This study aims to analyse the effectiveness of law enforcement strategies, closing online gambling sites, and strategies for providing education and counselling about the dangers of online gambling to reduce public interest in getting involved in online gambling. The application of the elasticity of public demand for online gambling offers is used to analyse the effectiveness of various online gambling prevention strategies.

The 2024 Populix Survey revealed that groups of people exposed to online gambling based on (a) occupation, including: workers (60%), students (15%), entrepreneurs (14%), housewives (6%), and other groups (5%); (b) age group, including: 17-25 years (45%), 26-30 years (21%), 31-35 years (17%), 36-40 years (9%), 41-45 years (5%), and over 45 years (2%); (c) marital status, including groups: single (57%), married with kids (36%), married without children (6%), and widowed with children (1%); (d) socio-economic status, including: upper (37%), middle (42%), lower (21%) (Populix, 2024). Based on the survey results, it was revealed that online gambling is dangerous because it targets productive age groups and upper and middle socio-economic groups. Online gambling presents the illusion of momentary pleasure. If not addressed, online gambling is feared to reduce productivity levels.

The Indonesian Internet Service Providers Association (APJII) stated that in 2024, the number of internet users in Indonesia will reach 221,563,479 people out of a total population of 278,696,200 people, with a

high internet penetration rate of up to 79.5%. This figure shows that almost 80% of the population is at risk of being exposed to online gambling content, making it a national problem that must be addressed immediately (apjii.or.id., 7/2/2024).

The results of the Populix 2024 survey revealed that 63% of various community groups access online gambling sites. Almost 80% of the community has the potential to be affected by online gambling, so Indonesia is facing an online gambling emergency. The impact is not only on individual finances, but also on the social and economic structure of society. To overcome this problem, quick action and comprehensive solutions are needed to protect society from the dangers of the increasingly widespread impact of online gambling (Populix, 2024).

According to Kartono (2014), gambling is a deliberate bet, namely betting anything that is considered valuable by realizing the risks and certain expectations on game events, matches, competitions, and events that are not certain. Online gambling is gambling that uses the internet media to place bets, where in the game the gambler must make an agreement about the terms of the game and what is at stake (Adli, 2015). If his team wins the match, then he is entitled to everything that is at stake.

Another opinion explains that online gambling uses the internet network in the game process. The internet is a very familiar technological device for students. Among students, online gambling is used as entertainment or a game that promises victory (Isjoni, 2002). Meanwhile, according to Wahib and Labib (2005), online gambling is a social activity that involves a certain amount of money where the winner gets money from the loser. Thus, there is always false hope offered by online gambling.

In recent years, many online gambling sites have emerged and are easily accessible to various groups of people. Gambling is often interpreted as a form of game that relies on luck, and those who are unlucky must bear the loss by giving up the money they have bet (Asriadi, 2020; Nurdiana et al, 2022). The influence of the development of information technology and communication today has an impact on the gambling game model and the payment method (Trisnawati et al, 2015). Online gambling offers various types of games, from sports betting, virtual casinos, to online poker, all of which can be accessed with just a few clicks. This ease of access makes online gambling increasingly popular, especially among young people who are more familiar with digital technology. Online gambling platforms often use aggressive promotions and attractive advertisements to attract new users, including through social media and online advertising. The development of information technology with the internet has given rise to a new form of crime in gambling, namely online gambling (Jonyanis & Adli, 2015).

The impact of online gambling is not only limited to the individuals involved, but also spreads to families and surrounding communities. Economically, many families experience financial difficulties because family members are addicted to online gambling. Psychologically, individuals who are addicted to online gambling often experience mental health problems such as stress, anxiety, and depression. The pressure to win and ongoing losses can lead to high levels of stress, which in turn can affect the individual's mental and emotional well-being (Laras, et al., 2024). From a psychological aspect, individuals who are entangled in online gambling addiction may experience various feelings such as depression, mental pressure, hopelessness, loss of power, and even potentially harm themselves and others (Karli et al, 2023).

Several studies have also revealed that the development of information technology has contributed to the growing gambling business. Gambling always has a bad impact on society. Therefore, the attitude of society basically strongly agrees with the eradication of gambling continuously, firmly without discrimination against the perpetrators so that it appears deterred and aware that gambling is a social disease (Jadidah et al, 2023).

Medically and psychologically, people who are addicted to online gambling are recognized by the following characteristics (megasyariah.co.id, 10/22/2024):

- Feeling the need to gamble with large amounts of money, because they feel that the more money they get from gambling, the happier they will be
- Continuing to gamble, until they drain their savings, resulting in financial losses.
- Prioritizing the money they get for gambling over their living expenses.
- Often playing online gambling when stressed.
- Feeling restless and irritable when they can't gamble because they run out of money.
- Getting into debt through online loans, because their financial condition has worsened due to gambling.
- If they lose in gambling, they will try to get their money back by gambling even more.
- Not feeling a problem if they lose their job, skip school, or lie to others in order to gamble.

Currently, there are not many studies on the characteristics of public demand for online gambling in Indonesia. Theoretically, it is known that public demand for goods or services is elastic or inelastic. Public demand for goods and services is in the elastic category if the proportion of price changes is greater than the proportion of changes in the amount of goods and services demanded. This means that if there is a slight increase in the price of goods and services, it will be responded to by a large reduction in demand for goods and services.

A demand for goods and services is categorized as inelastic if the proportion of price changes is smaller than the proportion of changes in the quantity of goods and services demanded. This means that if there is a large increase in the price of goods and services, it will be responded to with a slight decrease in demand for goods and services. In other words, high prices are not the dominant factor that determines the decrease in demand for goods and services (Mankiw, 2008).

However, currently there is no data showing the nature of the elasticity of public demand for online gambling. Those involved in online gambling are parties who can provide information on the nature of their demand elasticity for online gambling. Theoretically, if someone reaches the stage of online gambling addiction; then it can be identified that he will be involved in online gambling even though it is very expensive (as explained in the characteristics of people who are addicted to online gambling in this article). In other words, someone who is addicted to online gambling is someone who is very interested in participating in online gambling. Thus, the demand for people who are addicted to online gambling is included in the inelastic demand category. Conversely, if someone is not interested in participating in online gambling, then he will not be interested in gambling online even though it is very cheap. Thus, the demand of people who are not interested in online gambling is included in the elastic demand category.

In addition to the price factor, there are many qualitative measures to explain whether the public demand for online gambling is elastic or inelastic. Some of these qualitative measures are: (a) the attractiveness of goods and services compared to other goods and services. If online gambling games are more attractive than other activities, then the public demand for online gambling tends to be inelastic, and vice versa; (b) whether the goods or services consumed are considered very urgent or not. If online gambling activities are prioritized by the public, then the elasticity of demand for online gambling tends to be inelastic, and vice versa; (c) whether consumers are willing to pay for goods or services as determined by the seller. If people are willing to pay any amount for online gambling, then the elasticity of public demand for online gambling tends to be inelastic, and vice versa; (d) whether the goods and services have high popularity. If online gambling is very popular, then it has the potential to attract public interest, so that public demand for online gambling tends to be inelastic, and vice versa; (e) whether the goods and services have loval consumers. If online gambling has loval customers, then public demand for online gambling tends to be inelastic, and vice versa; (f) uniqueness and superiority of goods and services. If online gambling is considered by the public to have uniqueness and superiority in providing hope for life in the future, then public demand for online gambling tends to be inelastic, and vice versa; (g) public views on the cost or price of goods and services. If the public views that the price paid for online gambling is considered equivalent to the expectations given, then the elasticity of demand for online gambling tends to be inelastic; and vice versa.

If the nature of the elasticity of public demand for online gambling can be mapped, then the effectiveness of various strategies for preventing the spread of online gambling can be measured. Theoretically, the strategy of law enforcement and closing online gambling sites will reduce the number of offers. Meanwhile, the strategy of education, counselling, and public awareness of the dangers of online gambling will reduce public demand for online gambling.

An effective strategy to prevent the spread of online gambling is greatly influenced by the nature of public demand for online gambling. If public demand for online gambling is elastic, then the strategy of law enforcement and closing online gambling sites is an effective choice. This will significantly reduce the supply of online gambling. Conversely, if public demand for online gambling is inelastic, then the strategy of education, counselling, and public awareness is an effective strategy; because it will reduce public demand for online gambling.

II. RESEARCH METHOD

This study was conducted using a quantitative descriptive research approach. This study aims to describe the elasticity of demand for online gambling. The population in this study were people in Jombang Regency who were involved in online gambling, namely: government employees (gov. official), entrepreneurs (entrep), college students (college), and high school student (student). The consideration for determining the population is because these population groups are suspected of being the most involved in online gambling, as per the results of the Populix's survey (Populix, 2024). Considering the large and diverse backgrounds of the population, the research sample was determined using a systematic random sample, so that the research sample was spread throughout the population.

The number of samples was determined using the formula developed by Lemeshow and David (1997) because it considered a very large population spread across various regions in Jombang Regency. By setting the z value = 1.96; maximum estimate = 50%, and sampling error = 10%, the number of samples obtained was 192 samples. Thus, the number of samples for each population group is 48 people.

To measure the elasticity of demand for online gambling, a questionnaire was given to respondents. The research questionnaire contained statements related to respondents' views on online gambling, covering 7 indicators: (a) the attractiveness of online gambling games (attractiveness), (b) attention to online gambling

games (attention), (c) willingness to pay for online gambling (willingness to pay), (d) popularity of online gambling (popularity), (e) attachment to online gambling (attachment), (f) uniqueness of online gambling (uniqueness), (g) expectations given by online gambling (expectations).

Respondents were asked to determine the urgency weight of each indicator, through a questionnaire developed by researchers using a Likert scale, with the lowest score of 1 and the highest score of 5 (Azwar, 2007; Azwar, 2015). Interpretation of the level of elasticity of demand and attractiveness of online gambling, as in the following table.

Table 1: Guidelines for interpreting the level of demand elasticity and the interest in online gambling

No	Score Range	Elasticity of Demand	Level of interest in online gambling
1	1.00 - 1.80	Perfectly elastic (PE)	Not interested at all
2	1.81 - 2.60	Elastic (E)	Somewhat interested
3	2.61 - 3.40	Unitary (U)	Interested
4	3.41 – 4.20	Inelastic (IE)	Very interested
5	4.21 – 5.00	Perfectly inelastic (PIE)	Addiction

Example of questionnaire statement, as follows: "online gambling applications really attract my attention". Respondents are asked to give a score to the statement, starting from the lowest score of 1, to the highest score of 5. If the respondent gives a very low score, it means that the online gambling application is not a concern at all. In other words, the elasticity of demand for online gambling is in the perfectly elastic category. Conversely, if the respondent gives a very high score, it means that the respondent is very interested in participating in online gambling. In other words, the elasticity of demand for online gambling is perfectly inelastic. Thus, the higher the score given by the respondent, the more inelastic the demand for online gambling. Conversely, the lower the score given by the respondent indicates the level of elasticity of demand for online gambling is very elastic.

Based on the coefficient of elasticity of demand for online gambling, the level of interest in online gambling can be interpreted. If the elasticity of demand for online gambling is in the "perfectly elastic" category, then the level of interest in online gambling is "not interested at all". If the elasticity of demand for online gambling is in the "perfectly inelastic" category, then the level of interest in online gambling is in the "addiction" category.

The effectiveness of online gambling prevention through law enforcement, closing online gambling sites, and strengthening education and counselling is analysed by considering the elasticity of demand for online gambling. How the elasticity of public demand for online gambling will describe the amount of demand for online gambling when there is a change in price. Theoretically, the strategy of law enforcement and closing online gambling sites will have an impact on reducing the supply of online gambling. Meanwhile, the strategy of strengthening education and counselling on the dangers of online gambling will have an impact on reducing the demand for online gambling. Thus, prevention of the spread of online gambling can be done by reducing supply and demand.

III. RESULT AND DISCUSSION

1. Result

This study has revealed the elasticity of demand for online gambling based on 7 indicators, namely: (a) the appeal of online gambling, (b) attention to online gambling, (c) willingness to pay, (d) popularity of online gambling, (e) attachment to online gambling, (f) uniqueness of online gambling, (g) expectations offered by online gambling. Table 2 and table 3 describe the elasticity of demand and respondents' interest in online gambling based on their work background.

Table 2. Average of demand elasticity and interest in online gambling

Indicator	Occupation	Mean score	Std. error	Elasticity categories	Level of interest
	Government official	2,750	0,025	Unitary	Interested
Overall average of	Entrepreneur	2,125	0,028	Elastic	Somewhat interested
elasticity indicators	Student	2,875	0,029	Unitary	Interested
	College	2,166	0,026	Elastic	Somewhat interested

Source: Summary of descriptive analysis

The data in table 2 describes the average elasticity of demand for online gambling for government officials and high school students in the unitary (U) category. The level of interest in this group for online gambling is in the "interested" category. This shows that this group is already in the category of being exposed and actively involved in online gambling activities. Meanwhile, the level of interest for the entrepreneur and

college school students is in the "somewhat interested" category. This means that this group is starting to get to know online gambling applications even though the level of interest is low. However, the average score of their group's elasticity of demand shows that their level of interest is approaching the lower threshold of the "interested" category.

The data in table 3 describes the average elasticity of demand for online gambling based on each elasticity indicator.

First, the aspect of Attractiveness. The elasticity of demand for online gambling for the government officials and high school students is in the "unitary" category and the level of interest in online gambling is in the "interested" category. For the entrepreneur and college student groups; the elasticity of demand for online gambling is in the elastic category with the level of interest in the "somewhat interested" category.

Second, the aspect of attention. The elasticity of demand for online gambling for government officials and high school students is in the "unitary" category and the level of interest in online gambling is in the "interested" category. For the entrepreneur and college student groups; the elasticity of demand for online gambling is in the elastic category with the level of interest in the "somewhat interested" category.

Third, the aspect of willingness to pay. The elasticity of demand for online gambling for government officials, high school students and college students is in the "unitary" category and the level of interest in online gambling is in the "interested" category. While for the entrepreneur group, the elasticity of demand for online gambling is in the elastic category with the level of interest in the "somewhat interested" category.

Indicators	Occupation	Mean score	Std. error	Elasticity category	Level of interest	
	Government official	2,667	0,057	Unitary	Interested	
Attractiveness	Entrepreneur	2,020	0,063	Elastic	Somewhat interested	
Attractiveness	Student	2,729	0,068	Unitary	Interested	
	College	2,203	0,061	Elastic	Somewhat interested	
	Government official	2,771	0,063	Unitary	Interested	
Attention	Entrepreneur	2,083	0,070	Elastic	Somewhat interested	
Attention	Student	3,166	0,075	Unitary	Interested	
	College	2,259	0,067	Elastic	Somewhat interested	
	Government official	2,625	0,061	Unitary	Interested	
William and a to may	Entrepreneur	2,125	0,068	Elastic	Somewhat interested	
Willingness to pay	Student	2,916	0,072	Unitary	Interested	
	College	2,759	0,065	Unitary	Interested	
	Government official	2,771	0,059	Unitary	Interested	
Popularity	Entrepreneur	2,020	0,066	Elastic	Somewhat interested	
Popularity	Student	3,041	0,070	Unitary	Interested	
	College	2.259	0,063	Elastic	Somewhat interested	
	Government official	2,896	0,061	Unitary	Interested	
Attachment	Entrepreneur	2,104	0,068	Elastic	Somewhat interested	
Attachment	Student	3,020	0,073	Unitary	Interested	
	College	2,185	0,065	Elastic	Somewhat interested	
	Government official	2,708	0,066	Unitary	Interested	
Uniquenega	Entrepreneur	2,145	0,068	Elastic	Somewhat interested	
Uniqueness	Student	3,205	0,073	Unitary	Interested	
	College	2,852	0,070	Unitary	Interested	
	Government official	2,750	0,057	Unitary	Interested	
Llong	Entrepreneur	2,125	0,063	Elastic	Somewhat interested	
Hope	Student	2,875	0,067	Unitary	Interested	
	College	2,166	0,061	Elastic	Somewhat interested	

Table 3. Indicators of demand elasticity and interest in online gambling

Source: Summary of descriptive analysis

Fourth, the popularity aspect. The elasticity of demand for online gambling for the government official and high school student groups is in the "unitary" category and the level of interest in online gambling is in the "interested" category. While for the entrepreneur and college school student groups, the elasticity of demand for online gambling is in the elastic category with a level of interest in the "somewhat interested" category.

Fifth, the interest aspect. The elasticity of demand for online gambling for the government official and high school student groups is in the "unitary" category and the level of interest in online gambling is in the "interested" category. While for the entrepreneur and college student groups, the elasticity of demand for online gambling is in the elastic category with a level of interest in the "somewhat interested" category.

Sixth, the uniqueness aspect. The elasticity of demand for online gambling for the government official, high school student, and college student groups is in the "unitary" category and the level of interest in online gambling is in the "interested" category. While for the entrepreneur group, the elasticity of demand for online gambling is in the elastic category with a level of interest in the "somewhat interested" category.

Seventh, the expectation aspect. The elasticity of demand for online gambling for government official and high school student groups is in the "unitary" category and the level of interest in online gambling is in the "interested" category. Meanwhile, for entrepreneur and college student groups, the elasticity of demand for online gambling is in the elastic category with the level of interest in the "somewhat interested" category.

Based on the data in table 4, it is revealed that there is a significant difference in demand elasticity based on the following indicators: (a) Attractiveness aspect. Consecutively, the respondent groups with the strongest demand elasticity are high school students, government officials, college students, and entrepreneurs; (b) Attention aspect. Consecutively, the respondent groups with the strongest demand elasticity are high school students, government officials, college students, and entrepreneurs; (c) Willingness to pay aspect. Consecutively, the respondent groups with the strongest demand elasticity are high school students, college students, government officials, and entrepreneurs; (d) Popularity aspect. Attention aspect. Consecutively, the respondent groups with the strongest demand elasticity are high school students, government officials, college students, and entrepreneurs; (e) Attachment aspect. Attention aspect. In order, the respondent groups that have the strongest demand elasticity are high school students, government officials, college students, and entrepreneurs; (f) Uniqueness aspect. In order, the respondent groups that have the strongest demand elasticity are high school students, government officials, college students, and entrepreneurs; (h) The average elasticity of demand for online gambling in order from inelastic to elastic is: high school students, government officials, college students, and entrepreneurs.

Table 4. Multiple comparison of demand elasticity based on 4 profession groups

Indicators	Occupation (I)	Occupation (J)	Mean Diff (I-J)	Sig.
Attractiveness	Government official	Entrepreneur	0,6458	0,008
	Entrepreneur	High school student	-0,7083	0,004
	High school student	College student	0,5255	0,027
Attention	Government official	Entrepreneur	0,6875	0,013
	Entrepreneur	High school student	-1,083	0,000
	High school student	College student	0,9074	0,001
Willingness to pay	Government official	Entrepreneur	0,5000	0,049
	Entrepreneur	High school student	-0,7917	0,002
Popularity	Government official	Entrepreneur	0,7500	0,007
	Entrepreneur	High school student	-1,020	0,000
	High school student	College student	0,7824	0,004
Attachment	Government official	Entrepreneur	0,7917	0,004
	Government official	College student	0,7106	0,008
	Entrepreneur	High school student	-0,9167	0,001
	High school student	College student	0,8356	0,002
Uniqueness	Government official	Entrepreneur	0,5625	0,038
	Government official	High school student	0,5417	0,046
	Entrepreneur	High school student	-1,104	0,000
	Entrepreneur	College student	-0,7060	0,008
Норе	Government official	Entrepreneur	0,6250	0,026
	Government official	College school student	0,5833	0,032
	Entrepreneur	High school student	-0,7500	0,008
	High school student	College student	0,7083	0,009

Source: Resume multiple comparisons

The elasticity of demand for online gambling for government officials, entrepreneurs, high school students, and college students based on 7 indicators is explained as in Figure 1. Based on the data in Figure 1, it is revealed that the elasticity of demand for online gambling for government employees and high school students is in the "unitary" category. While the elasticity of demand for college students and entrepreneurs is in the "somewhat elastic" category.

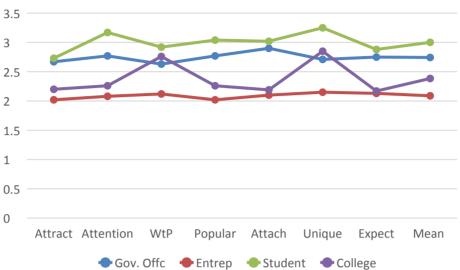


Figure 1. Elasticity of demand and interest in online gambling

2. Discussion

This study reveals the elasticity of demand for online gambling in the government official and high school student groups in the "unitary" category. This shows that both groups of respondents are interested in participating in online gambling. Meanwhile, the elasticity of demand for online gambling in the college student and entrepreneur groups is in the "elastic" category. This shows that both groups of respondents are somewhat interested in participating in online gambling. In other words, the demand for online gambling in the government official and high school student groups tends to be inelastic. Meanwhile, the demand for online gambling in the college student and entrepreneur groups tends to be elastic. This study has revealed that exposure to online gambling is more serious for high school students and government officials. The findings of this study are in line with the Populix report (Populix, 2024) which states that online gambling addiction in Indonesia is more prevalent in those who are not married, aged 17-25 years, workers, and students.

Based on the indicators of attraction and attention, this study reveals that online gambling has attracted the attention of students and government employees. These two groups are proven to have a higher interest compared to the college student and entrepreneur groups. This should be a serious concern for parents, teachers, and the government as policy makers. Various previous studies have revealed that young people have a high attraction to online gambling. This triggers young people's addiction to online gambling, causing various mental disorders and reducing academic achievement (Hume, 2011; Gainsbury, 2015; Budiman, et al., 2022; Gabrito, et al., 2023). Therefore, serious efforts are needed from all parties to prevent the spread of online gambling among young people.

High interest and addiction to online gambling cause young people to have the willingness to pay and get involved in online gambling. Various previous studies have revealed that online gambling is perceived by young people as providing hope, attractive, providing perceived value, and satisfaction (Kim et al., 2013; Steinmetz et al. 2022). They are willing to pay a certain amount of money, even though they do not actually have the financial ability. This causes deviant behaviour and various criminal acts (Laras, et al., 2024; Setterstrom & Pearson, 2010; Lelonek Kuleta & Bartczuk, 2021).

Various life activities cannot be separated from internet technology. Especially for young people, the existence of internet technology cannot be separated from their lives. At any time they can easily access various online gambling applications. Therefore, young people are a population group that is very vulnerable to online gambling addiction. The dangers of online gambling among young people are getting bigger, because this illegal activity can generate instant economic benefits for its managers. The more internet technology develops, the easier it is for online gambling activities to be accessed by all levels of society at all times (Griffiths & Parke, 2002). This is what makes it difficult to eradicate online gambling among young people. Every day, more and more young people are addicted to online gambling (Gainsbury, 2015).

Various previous studies have revealed that online gambling activities for young people who do not yet have sufficient financial capabilities are perceived as very attractive. For young people, online gambling activities are easily accessible, do not require paying large amounts of money, are perceived as safer because

they are not easily known by many people, are not scary, are more anonymous, more fun, and are very tempting for young people to try them (Griffiths & Parke, 2002). Although it only provides false hope, various studies have shown that more and more people, especially young people, are addicted to online gambling. The Populix Survey (2024) revealed that 45% of young people aged 17-25 years were addicted to online gambling. They are fooled by the false hopes that are promised to be enjoyed after engaging in online gambling activities. Previous studies have revealed that online gambling has long been known to have the potential to cause addiction. Various studies have also reported that internet technology is also addictive (Griffiths, 1999a; 1999b; 2000a). Therefore, it can be concluded that internet-based online gambling activities will create a two-fold addiction (Griffiths & Parke, 2002).

he findings of this study confirm the Populix survey (2024) which states that online gambling has infected young people, workers, and those in the middle to upper socioeconomic groups. This study revealed that high school students and government employees are the most exposed and addicted to online gambling.

To overcome the problem of online gambling addiction, strategies to strengthen education, counselling, and awareness must be implemented intensively to strengthen their understanding of the dangers of online gambling. Increasing understanding and awareness of the dangers of online gambling is expected to reduce their demand for online gambling (see Figure 2). A study conducted by Fahrudin et al. (2024) revealed that strengthening understanding of the dangers of online gambling involving the government, health services, and online gambling operators is very effective in preventing online gambling addiction. A study conducted by Siricharoen (2024) proved that a good understanding of the dangers of online gambling can prevent students from getting involved in online gambling.

The elasticity of demand for these two groups for online gambling is in the "unitary" category and the level of interest is in the "interested" category. The elasticity of demand for online gambling for college students and entrepreneurs is in the "elastic" category and the level of interest is in the "somewhat interested" category. However, these two groups also have the potential to become addicted to online gambling.

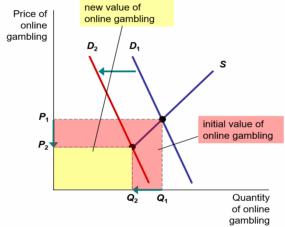
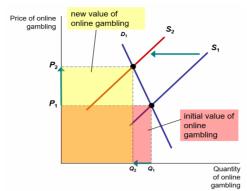


Figure 2. The influence of education in suppressing online gambling

The elasticity of demand for online gambling for those who are addicted is inelastic. Various studies have shown that for those who are addicted to online gambling, various law enforcement efforts, including closing online gambling sites, have actually given rise to a black market for online gambling (Chen et al., 2023; Regulus Partners, 2024). A study conducted by Yazdi and Katzian (2017) revealed that if someone is addicted to online gambling, the strategy of law enforcement and closing online gambling sites is often ineffective, and will only give rise to a "black market" for online gambling, which will increase the value of online gambling transactions (see Figure 3).

Figure 3. Impact of addiction and economic value of online gambling



This study revealed that high school students are the most exposed to online gambling. Thus, preventing online gambling is not enough to be done only with law enforcement strategies, for example by closing online gambling sites. Strengthening public understanding of the dangers of online gambling through education and counselling activities needs to be continuously strengthened, so that the demand for online gambling can be reduced.

IV. CONCLUSIONS AND SUGGESTIONS

1. Conclusions

This study reveals that online gambling is already known to all levels of society, which in this study are represented by high school students and college students (representing young people), government employees and entrepreneurs (representing workers and professionals. The elasticity of demand for online gambling for high school students and government employees is in the "unitary" category, with the level of interest in online gambling in the "interested" category. This shows that high school students and government employees have been strongly exposed to online gambling.

The elasticity of demand for online gambling for college students and entrepreneurs is in the "elastic" category, with the level of interest in online gambling in the "somewhat interested" category. This shows that college students and entrepreneurs are starting to be interested in online gambling. This study reveals the parties exposed to online gambling, from the most strongly exposed to the least exposed, namely: high school students, government employees, college students, and entrepreneurs.

If the elasticity of demand for online gambling is "unitary", then various law enforcement efforts and the closure of online gambling sites will only have an impact on reducing supply, but at the same time increasing the price of online gambling. Thus, the implementation of law enforcement strategies and the closure of online gambling sites does not change the overall value of online gambling transactions. In other words, if the elasticity of demand for online gambling is in the "unitary" category, or more extreme; inelastic or perfectly inelastic; then efforts to prevent online gambling are ineffective if only carried out by implementing a law enforcement strategy - closing online gambling sites.

Cases in various countries, including Indonesia; when its citizens are already at the stage of addiction; then the implementation of law enforcement strategies and the closure of online gambling sites actually gives rise to a black market for online gambling. Therefore, if the elasticity of public demand for online gambling indicates an increase, from the "elastic" level to the "unitary" level; then it is necessary to increase understanding and awareness of the dangers of online gambling.

This study concludes that if the community is at the stage of exposure and addiction, then online gambling prevention is more effective through strengthening education, counselling, and public awareness of the dangers of online gambling. This strategy is expected to reduce public demand for online gambling, so that the value of online gambling transactions will also decrease.

2. Suggestions

Based on the research conclusions, several recommendations are proposed, as follows: *First*, to prevent more and more young people from being exposed to online gambling, there needs to be intensive socialization about the dangers of online gambling. For this reason, educational activities, counselling, and awareness about the dangers of online gambling need to be continuously strengthened. *Second*, information and communication technology literacy should be strengthened so that high school students are able to choose information that is useful for their future lives. *Third*, the dangers of online gambling need to be included as part of the education curriculum. This is intended so that all citizens have an early awareness of the dangers of online gambling. *Fourth*, there needs to be a collective commitment between the government, law enforcement officers, schools, parents, and community leaders to protect young people from the dangers of online gambling.

10 | Page

BIBLIOGRAPHY

- [1] Abdullah, N., Syed Hassan, S. S., Abdelmagid, M., & Mat Ali, S. N. (2020). Learning from the Perspectives of Albert Bandura and Abdullah Nashih Ulwan: Implications Towards the 21st Century Education. *Dinamika Ilmu, 20 (2),* 199–218. https://doi.org/10.21093/di.v20i2.2423
- [2] Adli, M. 2015. Online Gambling Behaviour (Among Students University RIAU). Riau Jom Fisip, 2 (2), 1-15
- [3] Agnew, R. 2001. Building on the foundation of the general strain theory" Specifying the types of strain most likely to lead to crime and delinquency. *Journal of Research in Crime and Delinquency*, 38 (4), 319-361
- [4] Asriadi. 2020. Analisis kecanduan judi online (studi kasus pada siswa SMAK AN NAS Mandai Maros Kabupaten Maros. Makasar:

 Jurusan Psikologi Pendidikan dan Bimbingan Fakultas Ilmu Pendidikan, Universitas Negeri Makasar.

 https://eprints.unm.ac.id/20023/1/JURNAL Asriadi.pdf
- [5] Azwar, S. (2007). Sikap manusia: Teori dan pengukurannya. Yogjakarta: Pustaka Pelajar
- [6] Azwar, S. (2015). Sikap manusia teori dan penerapannya. Yogjakarta: Pustaka Pelajar
- [7] Budiman, R.; Romadini, N.A.; Aziz, M.A.H.; Pratama, A.G. 2022. The Impact of Online Gambling Among Indonesian Teens and Technology. *IAIC Transactions on Sustainable Digital Innovation (ITSDI)*, 3 (2), 162-167
- [8] Chen, G.; Huang, A.; Hu, B.; Chen, G. 2023. Analysis of Internet Black Market in New Types of Cyber-related Crime Taking Personal Information Transaction as an Example. SHS Web of Conferences 163, 04039 (2023). https://doi.org/10.1051/shsconf/202316304039
- [9] Ciri-ciri kecanduan judi online dan cara mengatasinya. https://www.megasyariah.co.id/id/artikel/edukasi-tips/lainnya/ciri-ciri-kecanduan-judi-online. Diakses 22/10/2024
- [10] Fahrudin, A.; Satispi, E.; Subardhini, M.; Andayani, R.H.R. 2024. Online gambling addiction: Problems and solutions for policymakers and stakeholders in Indonesia. *Journal of Infrastructure Policy and Development*, 8 (11), 1-17
- [11] Fakta-fakta pegawai komdigi terlibat judi online. cnnindonesia.com. https://www.cnnindonesia.com/nasional/20241101202320-12-1162186/fakta-fakta-pegawai-komdigi-terlibat-kasus-judi-online. Diakses 28/11/2024
- [12] Gabrito, R.C.; Ibanez, R.Y.; Velza, J.F.P. 2023. Impact of Online Gaming on the Academic Performance of DEBESMSCAT-Cawayan Campus Students. Scientific Journal of Informatics. 10 (4), 423-434
- [13] Gainsbury, S.M. 2015. Online Gambling Addiction: The Relationship Between Internet Gambling and Disordered Gambling. Current Addiction Reports, 2 (2), 185-193
- [14] Griffiths, M.D. & Parke, J. 2002. The Social Impact of Internet Gambling. Social Science Computer Review, 20 (3), 312-320
- [15] Griffiths, M. D. (1999a). Gambling technologies: Prospects for problem gambling. Journal of Gambling Studies, 15, 265-283.
- [16] Griffiths, M. D. (1999b). Internet addiction: Internet fuels other addictions. Student British Medical Journal, 7, 428-429.
- [17] Griffiths, M. D. (2000a). Does Internet and computer "addiction" exist? Some case study evidence. Cyber Psychology and Behaviour. 3, 211-218
- [18] Hume, M. 2011. Fun, Friend, or Foe: Youth Perceptions and Definitions of Online Gambling. *Social Marketing Quarterly, 17 (1)*, 109-133
- [19] Isjoni, I. 2002. Masalah Sosial Masyarakat. Pekan Baru: Unri Press
- [20] Jadidah, I. T., Lestari, U. M., Fatiha, K. A. S., Riyani, R., & Wulandari, C. A. (2023). Analisis maraknya judi online di Masyarakat. Jurnal Ilmu Sosial Dan Budaya Indonesia, 1(1), 20–27.
- [21] Jonyanis, J., & Adli, M. (2015). Perilaku Judi Online (Dikalangan Mahasiswa Universitas Riau) (Doctoral dissertation, Riau University)
- [22] Karli, K., Harvelian, A., Safitri, A. M., Wahyudi, A., & Pranacitra, R. (2023). Penyuluhan Pengabdian Hukum dalam Mengatasi Dampak Negatif Judi Online terhadap Kesejahteraan Buruh. *PUNDIMAS: Publikasi Kegiatan Abdimas*, 2(2), 86–92.
- [23] Kartono, K, 2014. Patologi Sosial 2: Kenakalan Remaja. Jakarta: Rajawali Press
- [24] Kim, H-W.; Gupta, S. & Lee, S-Y. 2013. Examining the effect of switching cost on customers' willingness to pay more. Asia Pacific Journal of Information System, 23 (1), 21-43. https://doi.org/10.1007/s10899-021-10015-4
- [25] Kurniawan, Y., Siregar, T., & Hidayani, S. (2022). Penegakan Hukum Oleh Polri Terhadap Pelaku Tindak Pidana Judi Online (Studi Pada Kepolisian Daerah Sumatera Utara). ARBITER: Jurnal Ilmiah Magister Hukum, 4(1), 28–44.
- [26] Lemeshow, S. dan David, J. (1997). Besar Sampel dalam Penelitian Kesehatan (terjemahan). Yogyakarta: Gadjah Mada University Press
- [27] Laras, A.; Salvabillah, N.; Caroline, C.; Delas H., J.; Dinda, F. dan Finanto M. 2024. Analisis dampak judi online di Indonesia. Concept: Journal of Social Humanities and Education, 3 (2), 320-331
- [28] LelonekKuleta, B. & Bartczuk, R.P. 2021. Online Gambling Activity, PaytoWin Payments, Motivation to Gamble and Coping Strategies as Predictors of Gambling Disorder Among esports Bettors. *Journal of Gambling Studies*. Springer. https://doi.org/10.1007/s10899-021-10015-4
- [29] Makin gawat, 960 ribu pelajar dan mahasiswa terjerat judi online. https://www.liputan6.com/tekno/read/5799064/makin-gawat-960-ribu-pelajar-dan-mahasiswa-terjerat-judi-online. Diakses, 28/11/2024
- [30] Mankiw, N.G.2008. Principlesofmicroeconomics. CengageLearning
- [31] Nurdiana, M., Aisyah, N., & Ilham, S. N. (2022). Fenomena Judi Online Di Daerah Jakarta Selatan. Perspektif, 2(2)
- [32] Opini: Fenomena Judi Online, Ancaman Nyata di Era Digital. https://www.iainkerinci.ac.id/id/read/berita/1037/opini-fenomena-judi-online-ancaman-nyata-di-era-digital
- [33] Pengguna internet di Idonesia meningkat di 2024. https://apjii.or.id/berita/d/pengguna-internet-di-indonesia-meningkat-di-2024. Diakses 10/11/2024
- [34] PPATK uangkap lebih dari 1.000 anggota legislative main judi online. nasional.kompas.com. 26/6/2024. https://nasional.kompas.com/read/2024/06/26/12485101/ppatk-ungkap-lebih-dari-1000-anggota-legislatif-main-judi-online. Diakses 28/11/2024
- [35] Populix. 2024. Unerstanding the impact of online gambling ads exposure. https://info.populix.co/reports/online-gambling-in-indonesia. Diakses 24/11/2024
- [36] Regulus Partners. 2024. Reducing online gambling black markets an analysis of international practices used to combat online gambling black markets. https://www.entaingroup.com/media/zh2n0i0s/regulus-report-2024-black-market-gambling.pdf
- [37] Setterstrom, A. & Pearson, J.M. 2010. Social Influence and Willingness to Pay for Online Video Games. Conference: Proceedings of the International Conference on Information Systems, ICIS 2010, Saint Louis, Missouri, USA, December 12-15, 2010
- [38] Siricharoen, N. (2024). Cultivating Critical Minds: Interdisciplinary Strategies for Empowering University Students Against Online Gambling Propaganda. Community and Social Development Journal, 25 (2), 173–194. https://doi.org/10.57260/csdj.2024.266169

Application of Demand Elasticity: Measuring the Effectiveness of Online Gambling ...

- [39] Steinmetz, F.; Fiedler, I.; von Meduna, M. & Ante, L. 2022. PaytoWin Gaming and its Interrelation with Gambling: Findings from a Representative Population Sample. *Journal of Gambling Studies*, 38:785–816 https://doi.org/10.1007/s10899-021-10042-1
- [40] Syahputra, D.; Afifa, A.; Slwa, A.M.; Yudhistira, N.; Lingga, L.A. 2022. Dampak Judi Online Terhadap Kalangan Remaja (Studi Kasus Tebing Tinggi). *Islamic Counseling: Jurnal Bimbingan dan Konseling Islam, 6* (2), 139-156
- [41] Trisnawati, P. A., Prakoso, A., & Prihatmini, S. (2015). Kekuatan Pembuktian Transaksi Elektronik dalam Tindak Pidana Perjudian Online dari Perspektif Undang-Undang Nomor 11 tahun 2008 tentang Informasi dan Transaksi Elektronik (Putusan Nomor 140/Pid. B/2013/PN-TB). *Jurnal Ilmu Hukum Universitas Jember*, 1(1)
- [42] Yuliati, R. dkk. (2024). Judi itu candu. Panduan anti judi online. Jakarta: Penerbit Kementerian Komunikasi dan Informatika RI
- [43] Yazdi, K., & Katzian, C. (2017). Addictive Potential of Online-Gambling. A Prevalence Study from Austria. *Psychiatria Danubina*, 29 (3), 276–378. https://doi.org/10.24869/psyd.2017.276
- [44] Wahib A dan Labib M. 2005. Kejahatan Mayantara (Cyber Crime). Bandung: Refika Aditama