Vol. 26 No.1 (2026) Jurnal al- Sirat
https://doi.org/10.64398/alsirat.v26i1.517

No. 1 Vol. 26 (2026)
ISSN: 1823-4313 / e-ISSN: 2785-9169
https://ejournal.uniqsaas.edu.my/

EXAMINING GAMBLING-LIKE BEHAVIOUR IN GACHA USAGE FROM AN ISLAMIC PRINCIPLE

Atiqa Sofea Aminudin[1], Aisyah Suaida Mohammad Hizam[1]

[1]Faculty of Management and Informatics, Universiti Islam Pahang Sultan Ahmad Shah, 25150 Kuantan, Pahang, Malaysia

Abstract

The present research examines gambling-like behaviour in gacha usage among Malaysian youth, focusing on how repeated exposure to chance-based mechanics influences behaviour from an Islamic principle. A quantitative method was applied to gather data from 54 participants aged 16 to 29 in Selangor. The results show that the psychological thrill of pulling gacha multiple times makes players love the game more while also promoting gambling-like behaviour. An issue that is concerning from an Islamic perspective due to uncertainty, chance, and high risk. Researchers found that pleasant feelings about the excitement, peer pressure, and the ease of earning in-game money are the primary reasons people keep trying their luck on gacha systems. These tendencies make it harder to tell the difference between safe, playable gameplay and reckless play over time, which raises fears of addiction. This research aims to examine the relationship between gacha game usage and gambling-like behaviour among Malaysian youth. It evaluates the risk associated with repeated gacha usage and underscores the need for greater awareness that aligns with Islamic principle on harmful habits

Keywords: Gacha system, Online Games, Gambling Behaviours, Islamic Perspective

Perkembangan Artikel

Diterima: 27 Februari 2026
Disemak: 7 April 2026
Diterbit: 30 April 2026

*Corresponding Author:
Atiqa Sofea Aminudin, Faculty of Management and Informatics, Universiti Islam Pahang Sultan Ahmad Shah.
Email: sofea@uniqsaas.edu.my

INTRODUCTION

As a growing trend in the mobile gaming sector, gacha games combine engaging gameplay with a business model centered on acquiring virtual items through random chance. Originating in Japan, the term “gacha” refers to capsule toy vending machines and is derived from the sound produced when the machine’s lever is turned, creating anticipation and uncertainty in the outcome (Kesuma & Princes, 2024). Initially associated with physical vending machines, the concept evolved into digital loot box systems widely implemented in online and mobile games. The term later became globally recognized as developers adopted similar mechanics in popular online games and social media–integrated platforms, making them easily accessible to a wide range of players (Jusoh Yusoff & Abd Razak, 2023). Consequently, gacha gameplay has drawn scholarly attention due to its resemblance to gambling mechanics, particularly when players can spend real money to obtain in-game currency for randomized rewards, thereby blurring the distinction between entertainment and gambling behaviour (Hodge et al.,

2022).

One of the most common ways to have fun these days is to play online games, as many people use game consoles, laptops, and smartphones. Because they can easily connect to the internet, players can quickly download free games, get in-game currency, and use gacha features. These new technologies have made gaming broadly available, and it may now be a part of everyday activity. Some online games, especially those that reward players by chance, have raised concerns about their effects on players' mental health and behaviour (Zendle & Cairns, 2018).

From an Islamic perspective, gambling (*maisir*) is explicitly prohibited, especially when transactions involve elements of uncertainty (*gharar*) (Khairul et al., 2023). The nature of gacha systems, which rely on chance-based outcomes and repeated spending, raises concerns regarding their permissibility for Muslim players. Islamic teachings emphasize the principle of *Sadd al-Żarī'ah* (blocking the means to harm), encouraging individuals to avoid activities that may lead to prohibited practices (Khairul et al., 2023). Without appropriate awareness and regulation, sustained engagement with gacha systems may have adverse effects on individuals, families, youth, and broader social institutions (Khairul et al., 2023). Therefore, the growing prevalence of gacha games warrants scholarly examination of their behavioural impacts and Islamic ethical concerns regarding risk and uncertainty (Bin Salamon et al., 2015).

This research aims to examine the relationship between gacha game usage and gambling-like behaviour among Malaysian youth. It evaluates the risk associated with repeated gacha usage and underscores the need for greater awareness that aligns with Islamic guidance on harmful habits. This research also enhances scholarly comprehension of the parallels between online gaming and gambling, offering valuable insights for educators, scholars, policymakers, and industry practitioners.

Similar to loot boxes, gacha games allow players to obtain randomized virtual items such as skins, characters, or unique items (King & Delfabbro, 2019). To obtain these rewards, players usually use in-game currency, which in many cases is bought with real money. Although these systems resemble gambling mechanics, it is important to note that once players make a purchase, the items or currency cannot be exchanged back into real-world money and remain confined within the game environment (Hodge et al., 2022). The unpredictable results build excitement and expectation, which is very similar to how gambling works (Drummond & Sauer, 2018). Because of this similarity, researchers and policymakers are interested in gacha systems, as they fear these systems could lead to reckless behaviour. Gacha systems are so appealing because they make games more interesting and unpredictable, which is a strong psychological incentive (Kesuma & Princes, 2024).

Previous studies indicated that gacha systems often lead to patterns of addictive behaviour. One important reason for this trend is the use of virtual currency, which makes people feel like they are not really spending money (King et al., 2019). As a result, users may spend a lot of money without realizing how much they are spending in the game. The uncertainty of reward outcomes can exacerbate compulsive spending, as players are driven to persist until they acquire rare or highly coveted items (Zendle et al., 2020). This situation also raises concerns about how transparent and fair the chances of winning items from loot boxes really are. In some cases, game developers may design certain parts of the game to feel slow or less engaging, which can subtly push players toward buying loot boxes to progress faster or gain better rewards (Hodge et al., 2022). These identified behavioural patterns correspond with accepted theories of reinforcement and reward-seeking, which are essential to the

examination of gambling behaviour (McCaffrey, 2023).

An important part of gacha engagement is how players become emotionally attached to the objects or characters they get. These prizes have symbolic value because they help players advance in the ranks and demonstrate their status and accomplishments within gaming communities (McCaffrey, 2023). Players' emotional attachment to virtual items can make them more likely to keep using the gacha system, even if the results do not matter. This loop of waiting, getting a prize, and playing again shows how addictive gacha mechanics can be and how they can change behaviour over time (King & Delfabbro, 2020).

OBJECTIVES

To examine the relationship between gacha game usage and gambling-like behaviour among Malaysian youth.

LITERATURE REVIEW

An Overview of Cookie Run Kingdom Online Game

Cookie Run: Kingdom, developed by Devsisters, is a highly popular mobile action role-playing game (RPG) that appeals to a worldwide audience through its unique characters, compelling storytelling, and captivating gameplay (Poole-Evans, 2021). As part of the Cookie Run franchise, the game is available across multiple platforms, including smartphones, tablets, personal computers, Chromebooks, and Apple devices. Its freemium model, which offers free downloads and access, aligns with prevailing mobile gaming trends, where free-to-play models are predominant (Kesuma & Princes, 2024). This extensive accessibility and engaging design have established its position as a leading RPG mobile game in recent years.

Even though Cookie Run Kingdom is quite popular, much of the professional and research interest has focused on how it makes money, especially its use of gacha systems. Like loot boxes, gacha mechanics make players pay either real money or in-game currency for random rewards, such as rare characters or items (King & Delfabbro, 2019). Because of this, experts are concerned that these mechanisms encourage people to take risks and may increase their likelihood of gambling, especially among young people (Zendle & Cairns, 2018). The gacha system is a key part of Cookie Run: Kingdom's progression system because gaining strong characters significantly affects gameplay. So, this design not only keeps players interested but also raises questions about the ethical problems of making money off random events in games that are claimed to be family-friendly fun.

Figure 1: The Interface View of Cookie Run Kingdom Online Game
(Source: Cookie Run Kingdom Official Website, 2025)

Virtual Currency Purchase and Gambling

Gacha-based games like Cookie Run Kingdom are becoming more popular in the mobile gaming industry. Instead of typical subscription-based revenue models, these games are making money by giving players random rewards. Researchers say these games are popular not just because they feature interesting stories and characters, but also because they use gacha mechanics that keep players engaged by introducing an element of chance and uncertainty (King & Delfabbro, 2019). Players in Cookie Run Kingdom use real money to buy diamonds that can be traded for cookie cutters that let them use the gacha system. For instance, the game sells one cookie cutter for 300 crystals or three for 3,000 crystals, which is around RM129.90. Each pull has different odds and gives out things like power powders, power cookies, or regular cutters. The main draw is getting uncommon or powerful characters (Poole-Evans, 2021). This structure is quite similar to gambling because the outcomes are typically dismal and unexpected. Sometimes, players get "pity rolls" after failing several times. These segments show how Cookie Run Kingdom blends fun with financial risk by adding gambling-like elements to its ordinary gameplay.

Figure 2: Conversion of real-world currency into crystal and in-game items
(Source: Cookie Run Kingdom Official Game, 2025)

The use of gacha systems in Cookie Run Kingdom is part of a larger trend in digital games that rely on luck-based revenue models. For instance, research shows that converting real money into virtual currencies makes gamers feel less connected to their real spending, increasing the likelihood of overspending (Wardle & Zendle, 2020). Also, random draws make people keep putting money into the system even when they get the same results repeatedly or do not get what they want, just like in casinos, where the "house always wins" no matter how lucky a player is. These behavioural tendencies align with reinforcement theories, in which the excitement of unpredictability and sporadic rewards incite risk-taking and compulsive involvement (Zendle & Cairns, 2018). Emotional attachments to rare characters exacerbate this loop, strengthening the inclination to spend even when the likelihood of success is low (Tang et al., 2025). When placed in the context of this broader research, it becomes clear that gacha mechanics not only keep people interested but also raise important ethical and legal issues.

Operant Conditioning Theory

The concept of variable ratio reinforcement, where rewards are delivered unpredictably, helps explain why players remain engaged with gacha systems. In many digital games, players are uncertain when they will receive rare or desired items, creating anticipation and excitement that encourages repeated attempts. Research has shown that such random reward structures can strongly reinforce continued behaviour, as players remain motivated by the possibility of a reward despite repeated unsuccessful outcomes (D'Amico et al., 2022). This unpredictability makes it difficult for players to stop, as each attempt carries the hope of obtaining a better result. In addition, loot box and gacha systems are designed to sustain engagement and spending through these chance-based mechanics, which mirror gambling-like processes (Modrzyński, 2026). The variability of rewards has also been identified as a key factor contributing to the addictive potential of such gaming systems (Clark & Zack, 2023).

These patterns are clearly reflected in the findings of this research. As shown in Table 2, many respondents reported feeling frustrated when they failed to obtain limited items, yet a substantial proportion were still willing to try again. This indicates that unsuccessful outcomes do not discourage continued participation but instead reinforce repeated engagement. The variation in emotional

responses, including satisfaction, dissatisfaction, and neutrality, further reflects the uncertainty embedded in gacha systems. Previous studies have also found that engagement with such mechanics is associated with increased gaming involvement and gambling-like behaviours, particularly when players persist despite losses (Villalba-García et al., 2025). Additionally, the emotional and behavioural responses observed among respondents align with patterns commonly linked to reward-based reinforcement systems in gaming environments (Inaguma et al., 2024). Overall, these findings suggest that unpredictable reward mechanisms in gacha systems play a significant role in shaping player behaviour, encouraging persistence, and contributing to gambling-like tendencies among young Malaysian players.

Islamic View on Entertainment and Games

In Islamic understanding, entertainment and recreational activities are generally regarded as permissible (mubāḥ) provided they do not incorporate elements that are explicitly deemed unlawful. Such prohibitions include gambling (*maysir*), excessive uncertainty (*gharar*), causing harm (*darar*), and neglecting obligatory religious duties. Islamic scholars have maintained that leisure activities can be considered permissible when they serve beneficial purposes, such as fostering relaxation, promoting social cohesion, or enhancing community bonds. Moreover, these activities should not conflict with established moral and legal principles derived from Islamic teachings, ensuring that they align with the broader ethical framework of the religion (Kamali, 2008). However, when a game involves financial staking and outcomes determined predominantly by chance, it may fall under the prohibition of *maysir*, as derived from Qur'anic injunctions in Surah al-Baqarah (2:219) and Surah al-Ma'idah (5:90–91).

يَسْـَٔلُونَكَ عَنِ ٱلْخَمْرِ وَٱلْمَيْسِرِ ۖ قُلْ فِيهِمَآ إِثْمٌ كَبِيرٌ وَمَنَٰفِعُ لِلنَّاسِ وَإِثْمُهُمَآ أَكْبَرُ مِن نَّفْعِهِمَا ۗ وَيَسْـَٔلُونَكَ مَاذَا يُنفِقُونَ قُلِ ٱلْعَفْوَ كَذَٰلِكَ يُبَيِّنُ ٱللَّهُ لَكُمُ ٱلْـَٔايَٰتِ لَعَلَّكُمْ تَتَفَكَّرُونَ

They ask you ˹O Prophet˺ about intoxicants and gambling. Say, "There is great evil in both, as well as some benefit for people—but the evil outweighs the benefit." They ˹also˺ ask you ˹O Prophet˺ what they should donate. Say, "Whatever you can spare." This is how Allah makes His revelations clear to you ˹believers˺, so perhaps you may reflect.

يَٰٓأَيُّهَا ٱلَّذِينَ ءَامَنُوٓا۟ إِنَّمَا ٱلْخَمْرُ وَٱلْمَيْسِرُ وَٱلْأَنصَابُ وَٱلْأَزْلَٰمُ رِجْسٌ مِّنْ عَمَلِ ٱلشَّيْطَٰنِ فَٱجْتَنِبُوهُ لَعَلَّكُمْ تُفْلِحُونَ

O believers! Intoxicants, gambling, idols, and drawing lots for decisions are all evil of Satan's handiwork. So, shun them so you may be successful.

Contemporary scholars have extended this analysis to digital gaming environments, particularly those that incorporate monetization systems based on randomized rewards. Studies on loot boxes and prize-based mechanics argue that such systems resemble gambling because they involve paying real money for uncertain virtual outcomes (Yusoff, 2023). These monetization models often rely on

probabilistic rewards, which may raise concerns regarding excessive uncertainty and unjust wealth transfer. Furthermore, empirical research has linked loot box engagement with problem gambling behaviours, highlighting risks of psychological dependency and financial harm, especially among young users who form a significant portion of online gaming audiences. From an Islamic perspective, these concerns are relevant to the objectives of Shariah (*maqāṣid al-sharī'ah*), particularly the protection of wealth and intellect. Therefore, the intersection between digital gaming, randomized reward systems, and the concept of *maysir* presents an important area of contemporary scholarly discussion.

A monetization model that has received significant attention is the "loot box" system. A loot box is an in-game reward mechanism that players can purchase multiple times using real money in exchange for a randomized virtual item or set of items. Because the probability of obtaining a specific high-value or desired item is typically very low, players may need to buy an unknown number of loot boxes before successfully acquiring it. This structure closely resembles gambling slot machines, as the outcome is determined entirely by chance and does not depend on player skill. However, loot boxes often do not meet certain legal definitions of gambling. In many jurisdictions, money spent on loot boxes is not legally classified as a financial "loss," and the virtual items obtained are not recognized as possessing real-world monetary value. Additionally, players cannot directly convert these virtual rewards into financial returns. Such monetization practices are frequently described as predatory because they can create psychological pressure to continue spending. This dynamic can be explained through the concept of "entrapment," where individuals feel compelled to continue investing because they have already spent a substantial amount of money. As a result, players may increase their spending in an attempt to justify prior expenditures or to improve their chances of obtaining desired virtual items. Although the money spent cannot be recovered, players may perceive their continued purchases as an "investment" that increases the probability of eventually receiving valuable in-game rewards (Daniel L. King, 2018).

From an Islamic legal perspective, the structure of loot boxes raises important concerns in relation to the prohibition of gambling *(maysir)* and excessive uncertainty *(gharar)*. Although loot boxes may not legally qualify as gambling in some regulatory systems, Islamic jurisprudence does not rely solely on statutory definitions but instead examines the substance and underlying structure of a transaction. Classical jurists define maysir as the acquisition of wealth through chance, where gain or loss depends primarily on uncertain outcomes rather than productive effort or skill. In the case of loot boxes, players spend real money in exchange for a randomized virtual reward, with no guarantee of receiving a specific desired item. Therefore, the transaction contains a significant level of uncertainty, as the outcome is unknown at the time of payment.

Moreover, the continuous buying of loot boxes for the chance at rare items may mimic gambling tendencies, especially when players stake larger sums of money for uncertain rewards. The lack of immediate financial return does not inherently diminish the concern from an Islamic viewpoint, as the fundamental issue revolves around the existence of chance-based profit and the disparity between payment and result. The aspect of gharar is apparent in the uncertain nature of the reward, whereas the potential for unequal gain or loss may correspond with the traits typically linked to maysir. Moreover, Islamic legal tenets highlight the safeguarding of property (hifz al-mal) and the avoidance of injury (darar) (Ahmad Roihan, 2025). Should loot box systems lead to excessive expenditure, psychological

reliance, or financial instability, particularly among younger gamers, this could bolster the case that these mechanisms contradict the ethical principles of Shariah. Consequently, examining digital gaming monetization models necessitates not just a legal comparison with gambling definitions but also a wider assessment rooted in Islamic economic ethics and the goals of Islamic law.

Previous Findings

Author (Year)	Focus	Method	Key Findings	Relevance to This Study
Zendle & Cairns (2018)	Loot boxes & problem gambling	Survey (n=7,422 gamers)	Significant correlation between loot box spending and problem gambling severity	Supports idea that gacha systems have gambling
Zendle et al. (2019)	Adolescent loot box use	Survey	Loot box use linked with risky gambling behaviours among young players	Shows vulnerability of users
King & Delfabbro (2019)	Gambling-like features in games	Review	Identifies structural similarities between loot boxes and gambling (random rewards, real money)	Provides conceptual basis linking gacha to gambling
Drummond & Sauer (2018)	Compliance with gambling laws	Content analysis	Many games with loot boxes meet criteria for gambling	Strengthens argument that gacha may fall under gambling definition
Xiao (2022)	Gacha monetization ethics	Review	Gacha systems encourage repeated spending through chance-based mechanics	Explains behavioral design behind gacha
Al-Qaradawi (2001)	Islamic law on gambling (*maisir*)	Conceptual (Fiqh analysis)	Any gain based on chance without effort is prohibited (*haram*)	Provides Islamic foundation for analysis
Kamali (2008)	*Gharar* (uncertainty) in Islam	Conceptual	Transactions with excessive uncertainty are not permissible	Relevant to randomness in gacha mechanics

Previous empirical studies have consistently shown a relationship between loot box involvement and gambling-related behaviour. For instance, Zendle and Cairns (2018) reported a significant association between loot box spending and problem gambling severity among gamers. Similarly, Zendle et al. (2019) found that adolescents who engage with loot boxes are more likely to display risky gambling tendencies. From a structural viewpoint, King (2019) argued that loot boxes share key similarities with traditional gambling, particularly in terms of chance-based outcomes and financial stakes. In addition, gacha systems are intentionally designed to promote repeated spending through randomised reward mechanisms, which may lead to compulsive behaviour. From an Islamic perspective, Al-Qaradawi (2001) describes gambling as any activity involving gain through chance without productive effort, which is strictly prohibited.

However, limited research has examined these behaviours within the framework of Islamic principles, particularly in relation to *maisir* and *gharar*.

METHODOLOGY

Study Area

This research was conducted in Selangor, Malaysia, an urbanized state with high accessibility to mobile gaming platforms and internet connectivity. The area was selected due to its dense population of young digital users and active engagement with mobile games. A total of 54 young Malaysian respondents aged between 16 and 29 years, comprising both male and female participants, were involved in the research. The focus on this age group reflects the demographic most actively engaged with mobile gaming and gacha-based systems in urban settings. The research specifically examined players of the Cookie Run: Kingdom game within this geographical context to explore patterns of engagement with gacha features and their potential influence on gambling-related attitudes and behaviours.

Research Design

This research employed a quantitative cross-sectional research design to examine behavioural patterns associated with gacha engagement in Cookie Run: Kingdom. The design enabled systematic collection of data on players' spending habits, gameplay frequency, and risk-taking tendencies linked to chance-based game mechanics, which have been shown to resemble gambling systems (King & Delfabbro, 2019). Data were gathered through a structured survey questionnaire comprising demographic items and behaviour-related questions to identify patterns of excessive engagement and potential gambling-like tendencies among young Malaysian players.

Sampling

Purposive Sampling

This research employed purposive sampling to select respondents who met specific inclusion criteria aligned with the research objectives. Participants were required to be Malaysian players aged between 16 and 29 years who had prior experience engaging with the gacha system in *Cookie Run: Kingdom*. Purposive sampling enables researchers to intentionally select individuals who possess relevant knowledge or experience related to the phenomenon under investigation, thereby ensuring that the data collected are directly applicable to the research's aims (Etikan et al., 2016). This approach allowed the researcher to obtain targeted insights into players' engagement patterns, spending behaviour, and gambling-like tendencies associated with gacha usage. Although purposive sampling does not aim for broad statistical generalisation, it is widely used in behavioural and social science research when the focus is on understanding specific characteristics within a defined population (Taherdoost, 2016).

Research Instrument

Data were collected using a structured questionnaire created through Google Forms and distributed online via social media platforms and WhatsApp. The instrument was designed in accordance with the research objectives and consisted of two sections. The first section collected demographic information, including age, gender, education level, employment status, and general gaming habits. The second section measured behavioural indicators related to gacha usage, including gameplay frequency, spending patterns, emotional reactions, retry behaviour, and perceived influence of gacha mechanics in Cookie Run: Kingdom. The use of an online questionnaire allowed for efficient data collection from active players within the targeted age group and gaming community.

Data Analysis

Data will be collected using a well-structured survey questionnaire aligned with the research's objectives. The instrument consists of two components that directly assess respondents' general demographics, excessive engagement, risk-taking tendencies, and potential gambling related to the gacha system by examining their responses to specific questions. This research aims to deliver quantifiable insights into the potential impact of gacha systems on broader societal issues related to digital gambling behaviours. Table 2 of the survey is meant to determine how likely respondents are to become addicted, which will help clarify how gacha systems affect people differently. Table 2 also includes the differences between players who have bad habits, spending too much money, playing too often, and players who play more moderately. There are eight specific questions people can answer, all about how much they spend on gacha pulls and how much they play games.

RESULTS AND DISCUSSION

The collected data are shown in Table 1 and Table 2 along with a discussion of how respondents relate to the aims of this research. The findings focus on spending habits, risk-taking tendencies, excessive engagement patterns, and potential gambling traits connected to gacha use in Cookie Run: Kingdom.

Demographic Characteristics

Table 1: Demographic Characteristics of Respondents

Demographic	Subcategories	Frequency (N)	Percentage
Sex	Male	19	35.2
	Female	35	64.8
Age group/ year	16–22	8	14.8
	23–29	46	85.2
Education qualification	Diploma	18	33.3
	Bachelor’s degree	31	57.4
	Master’s Degree	5	9.3
Employment status	Employed Full-Time	28	51.9
	Students	18	33.3
	Self Employed	3	5.6
	Employed Part-Time	2	3.7
	Seeking Opportunities	3	5.6
Monthly income	Below RM1,000	20	37

	RM1,000–RM1,999	15	27.8
	RM2,000–RM2,999	14	25.9
	Above RM3,000	5	9.3
Marital status	Single	49	90.7
	Married	3	5.6
	Prefer not to answer	2	3.7
Residence	Urban area	36	66.7
	Suburban	15	27.8
	Rural area	3	5.6
Gaming regularity	Everyday	22	40.7
	2–3 times per week	15	27.8
	Once a week	5	9.3
	2–3 times per month	2	3.7
	Less than once a month	10	18.5
Number of hours	1–4 hrs/Daily	44	81.5
	5–9 hrs/Daily	8	14.8
	More than 10 hrs/Daily	2	3.7
Gaming devices	Smartphones	37	68.3
	Personal computer	14	25.9
	Gaming console	3	5.6
Total		54	100

This data was collected on a different date, 2023

Table 1 presents the demographic profile of the 54 young Malaysian respondents who participated in this research. The data indicate that 64.8% of the respondents were female, suggesting a higher level of female participation in the Cookie Run Kingdom game and reflecting the growing popularity of the genre across genders. In terms of age distribution, most respondents (85.2%) were between 23 and 29 years old, indicating that the game is particularly popular among young adults who are generally more technologically literate, socially connected through online platforms, and financially capable of engaging in digital gaming activities.

The educational background of respondents shows that more than half (57.4%) held a bachelor's degree, suggesting that most participants were well educated and likely able to understand both the gameplay mechanics and potential risks associated with gacha systems. Employment data reveal that 51.9% were employed full-time, which corresponds with the income distribution where 62.9% reported earning between RM1,000 and RM2,999 per month. This may indicate that respondents had a moderate level of disposable income available for gaming-related expenditures. Additionally, most respondents were single (90.7%) and resided in urban areas (66.7%), highlighting the accessibility of mobile gaming platforms and reliable internet connectivity in urban settings.

Regarding gaming habits, Table 1 shows that 40.7% of respondents played daily, while 81.5% reported playing between one to four hours per day, suggesting consistent yet moderate engagement with the game. Smartphones were identified as the primary gaming device by 68.3% of respondents, reflecting the affordability, convenience, and widespread accessibility of mobile gaming in Malaysia. Overall, the demographic findings in Table 1 indicate that the primary audience for the Cookie Run Kingdom gacha-based mobile game consists of young, urban, and educated Malaysians. This pattern aligns with broader industry trends that emphasize accessibility, social interaction, and sustained engagement through mobile gaming platforms.

Players' Excessive Engagement, Risk-Taking Tendencies, and Potential Gambling

Table 2: Risk Taking and Gambling-Like Behaviour

No	Question	No. of players responding to Yes (%)	No. of players responding to No (%)	No. of players responding to Maybe (%)
1.	Did you know that the online games you play all the time have a Gacha system?	40 (74.1%)	11 (20.4%)	3 (5.6)
2.	Did you spend more time per day spinning the Gacha when new skins were released.	18 (33.3%)	28 (51.9%)	8 (14.8%)
3.	Does spending on the Gacha make you satisfied?	18 (33.3%)	20 (37%)	16 (29.6%)
4.	Do you feel frustrated if you don't get limited items after trying your luck on the Gacha	36 (66.7)	12 (22.2%)	6 (11.1%)

	spinning?			
5.	If you don't get lucky on the first try, are you willing to try again?	27 (50%)	11 (20.4%)	16 (29.6%)
6.	Do you wish to have what your friends obtained after playing the gacha?	35 (64.8%)	9 (16.7%)	10 (18.5%)
7.	Does the Gacha help you to speed up the game progress?	26 (48.1%)	22 (40.7%)	6 (11.1%)
8.	How much monthly expenses on the Gacha purchases?	Below RM100 38 (70.4%)	RM150–RM200 10 (18.5%)	RM250–RM300 2 (3.7%)

This data was collected on a different date, 2023

The results presented in Table 2 indicate that gacha systems are widely recognized and normalized among the respondents, with 74.1% reporting awareness of gacha mechanics in the games they play. Despite this awareness, respondents continued to report emotional and behavioural reactions associated with gacha participation. A total of 66.7% indicated feelings of frustration when they failed to obtain limited items, while 50% reported a willingness to try again after an unsuccessful attempt. This pattern suggests the presence of a reinforcement loop in which repeated unsuccessful outcomes do not discourage continued participation. Such behaviour has been associated with gambling-like mechanisms, where persistence despite losses may be influenced by perceived control over chance-based outcomes (Eben, 2025). Emotional responses to spending also varied, with 33.3% expressing satisfaction with their purchases, 37% reporting dissatisfaction, and 29.6% remaining neutral. These mixed responses reflect the uncertainty inherent in gacha systems, where outcomes depend largely on chance rather than player skill. Social influence was also evident, as 64.8% of respondents indicated a desire to obtain items like those acquired by their peers, suggesting that social comparison plays a role in motivating continued engagement and spending. The data presented in Table 2 were collected in 2023.

Spending patterns shown in Table 2 further highlight potential areas of concern. While most respondents in Table 2 (70.4%) reported monthly expenditures below RM100, a smaller proportion spent between RM150 and RM200 (18.5%), and 3.7% reported spending up to RM300. These findings suggest that although most players maintain relatively low spending levels, a subset demonstrates higher financial commitment that may indicate increased vulnerability to excessive spending. Additionally, 48.1% of respondents in Table 2 agreed that gacha systems help accelerate game progress, which may further encourage continued participation and purchases. Taken together, the findings indicate that gacha mechanics are associated with emotional responses, repeated engagement, and varying levels of financial expenditure that resemble gambling-like tendencies. These patterns support concerns that gacha usage in Cookie Run: Kingdom functions not only as a form of entertainment but also as a system that may influence risk-taking behaviour and sustained spending among players.

CONCLUSIONS

The conclusion of this research shows that time spent on gacha gaming alone does lead to gambling problems, due to how much money players spend, and the reasons behind their spending. Players who often buy in-game currency and continue pulling gacha out of excitement or shifting emotions are more prone to exhibit gambling-like behaviour. The gacha system promotes risk-taking and reward-seeking behaviours like gambling, and it poses as entertainment. This research also highlights that players who depend on gacha for thrill or as a coping mechanism are at higher risk compared to casual players. These high-risk players tend to overspend and repeat their behaviour even when the outcomes are disappointing. It shows that the problem is not only the gacha feature itself but also the psychological factors that keep players playing. Thus, at an early stage, especially for younger players, gacha mechanics can create patterns that resemble gambling.

In line with the aim of this research, this concludes that gacha usage in Cookie Run: Kingdom influences gambling-related behaviours, making it a valuable case for understanding how gaming and gambling overlap. In the Malaysian context, where mobile games are very popular among youth, this issue deserves special attention. Many young players are easily drawn to gacha systems because of peer influence and the appeal of new characters or rewards. These findings highlight the need for more awareness, education, and possible regulation to protect players from developing harmful spending habits.

By delving more into several important areas, future researchers could expand the current research. Including responders from other states in Malaysia will expand the sample size and diversity, which is vital for improving the findings. Some gacha-based games, such as Genshin Impact and Mobile Legends: Bang Bang, may be further analysed through comparative analysis to clarify whether certain game designs or reward systems exhibit stronger links with gambling-related behaviours. These kinds of research would not only help academics better understand the issues but also help regulators and developers make gaming environments safer and more responsible for young players.

It is possible that some players, and perhaps a majority, may not be fully aware of the Islamic legal implications (*hukum*) associated with participating in Gacha-based transactions. Limited understanding of concepts such as gambling (*maysir*) and excessive uncertainty (*gharar*) may contribute to continued engagement without critical reflection on their religious status. At the same time, it is also plausible that certain players persist in using the gacha system despite being aware of potential religious concerns, primarily because the entertainment value, excitement, and enjoyment offered by the game outweigh their consideration of its legal or ethical dimensions. The interactive design, visual rewards, and social aspects of digital gaming may further normalize such practices, making them appear as harmless leisure activities rather than transactions requiring religious evaluation. This situation highlights the need to distinguish between awareness of religious rulings and behavioural compliance, as knowledge alone may not necessarily translate into practice, particularly in environments designed to maximize engagement and enjoyment.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

AUTHOR CONTRIBUTIONS STATEMENT

Atiqa Sofea Aminudin (Conceptualisation, methodology, data curation, formal analysis, visualisation, writing original draft; supervision)
Aisyah Suaida Mohammad Hizam (Validation; writing review and editing).

AVAILABILITY OF DATA AND MATERIALS

The data supporting this research's findings are available on request from the corresponding author.

ETHICS STATEMENT

Not applicable.

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