



## A Study of Player Behavior And Social Influences to Purchase Intention Mobile Legends: Bang Bang In-Game Item

**Windu Praditiyo Subarkah**

Management Departement, Muhammadiyah University of Ponorogo, Indonesia

**Adi Santoso \***

Management Departement, Muhammadiyah University of Ponorogo, Indonesia

**Wahna Widhianingrum**

Management Departement, Muhammadiyah University of Ponorogo, Indonesia

---

### Article Info

Keyword:  
Player behaviour, Social influences, Purchase intention, Mobile Legends, Uses and gratifications.

JEL  
ClassificationCode:M30,M31,M39

Corresponding author:  
[adisantoso@umpo.ac.id](mailto:adisantoso@umpo.ac.id)

DOI: [10.24123/jeb.v4i3.5639](https://doi.org/10.24123/jeb.v4i3.5639)

### Abstract

Purpose: This quantitative study aims to analyze the interest in buying items and skins in the online game Mobile Legends in Indonesia, especially in East Java Province, by looking at game players' psychological and social factors. Player behaviour is psychological, and social factors are social influence variables.

Method: The number of samples in this study was 310. The sampling method used purposive sampling. Data quality testing in this study used Partial Least Square (PLS) analysis, which is a Structural Equation Modeling (SEM).

Result: Player behaviour includes Achievement, Challenge, escapism, and social interaction. Social influences consist of network externality and community involvement. The results of our research show that player behaviour consists of Achievement, Challenge, escapism, and social influences such as network externality and community involvement have a significant positive effect on Purchase Intention. The results of this study indicate that if a company wants a product in the game to be purchased, they must pay attention that the game must have achievements and challenges and means of communication in the game, and pay close attention to the game community.

---

### INTRODUCTION

Game technology is currently developing very rapidly due to updates, and video games have become a world of everyday entertainment that is easily accessible (Rahman, 2017). Technological developments affect individual development from all aspects, one of which is human playing habits (Santosa & Sundari, 2018). Video games are developing very rapidly in various countries in the world (Firdaus & Rahadi, 2021). In the millennial era, technological developments are very influential (Azwar et al., 2020). Online games are played by hundreds of millions of users around the world, and data for every game played will always be forwarded to a central server, the data is stored and analyzed (Kokkinakis et al., 2016).

The development of online games in Indonesia is currently increasing significantly. One of the factors is the Internet revolution (Yulius, 2017). In Indonesia, games with mobile are the most popular platforms and are followed by console and PC games (Danjing Zhou, 2019). With the

birth of multiplayer online games, they have become popular entertainment worldwide (Aggarwal et al., 2020). All Online Games that are currently popular, such as PUBG (Player Unknown Battle Ground), AOV (Arena of Valor), Vain Glory, and MOBA (Multiplayer Online Battle Arena) (Wijaya & Paramita, 2019). MOBA games (Multiplayer Online Battle Arena) are mobile-based games where players are divided into two opposing camps (Tyran & Chomatek, 2021). Mobile legends games in Indonesia are developing very rapidly, and these games are included in the Multiplayer Online Battle Arena type (MOBA) game (Hakim & Indarwati, 2022). The Mobile Legends game is available on the Android PlayStore application and for iOS, namely the App Store. The Mobile Legends game in Indonesia is a game that is popular and gets top ratings in the App Store and Google Play Store applications (Sari & Nurwahyuni, 2022; Latifah & Kristiana, 2021). The popularity of this game can be seen in the number of downloads id Playstore, which has been downloaded more than 500 million times on the Playstore (Barseli & Sriwahyuningsih, 2023). The increasing number of gamers is a part of everyday life that makes players play excessively (Kim & Kim, 2017). Victory in the game depends on the ability of each and solid teamwork (Tyran & Chomatek, 2021).

Game companies, more precisely online games, benefit from selling virtual goods in games for the need to improve their games or players (Hamari et al., 2017). Virtual item assets are items that consist of avatar adjustments and video game characters that are owned by buying using real money (Cleghorn & Griffiths, 2019). To earn revenue, game creators provide virtual items for players to purchase (Hamari, 2015). Purchasing virtual items in video games can enhance experience and competition with other players (Lemmens et al., 2015). By buying virtual items, players want to be the best in terms of development, even though their consumption increases (Warouw, 2014).

Online games are referred to as part of social activities because players interact virtually with each other and often create communities in games (Fauziawati, 2015). The game has features that support social interaction, such as text chat, voice chat, and other channels, such as in-game avatars (emotes) (Fox et al., 2018). Social influence is determined based on consumption actions (Wang et al., 2019). Human social influence becomes an individual's perception of the social influences around them, and the goal is to make decisions or not to specific behaviours (Noor & Muhammad, 2019). The greater the social influence received, the more people benefit from social interaction behaviour (Hamari, 2015).

Player behaviour using a psychological perspective is explored through theory (U&G). Players seen from a psychological perspective consist of players who have achievements, players who feel challenged by mobile legends games, players who run away by playing mobile legends games, and players who interact in mobile legends games. The behaviour of these players is related to buying interest in the mobile legends game where the use of the U&G theory is that people are goal-oriented from active media use, so they evaluate needs that suit them and sort media that can meet these needs (Chen et al., 2010). That way, this research helps game developers, especially Mobile Legends: Bang Bang, which is more successful based on player involvement, to absorb revenue and determine player influence.

Player behaviour using a psychological perspective is explored through theory (U&G). Players viewed from a psychological perspective consist of players who have a feeling of Achievement, players who feel challenged by mobile legends games, players who escape by playing mobile legends games, and players who interact in mobile legends games. The behaviour of these players is related to buying interest in the mobile legends game where the use of the U&G theory is that people are goal-oriented from active media use, so they evaluate needs that suit them and sort media that can meet these needs (Chen et al., 2010). When players have this behaviour, there will be an increase in the intensity of playing players, so this research helps game developers, especially Mobile Legends: Bang Bang, to be more successful based on player involvement for the game company's sustainability.

The problem phenomenon that underlies this research is related to gamers' buying interest in virtual items in the Mobile Legends game. There is no research or research on the theory of uses & gratifications and social influence in Indonesia, especially in the Mobile Legends game, yet. The factor of interest in buying virtual items in the Mobile Legends game comes from psychological

and social factors. Problems from psychological factors of players, such as the use and fulfilment of satisfaction playing the Mobile Legends game do they affect the interest in buying virtual items in the Mobile Legends game. The use and satisfaction of players who are just entertainment to entertain themselves or those who are competent have an achievement, Challenge, and escape interaction in the Mobile Legends game. Players who have achievements in the game are sure to have deepened their skills to play the Mobile Legends game. Players who feel challenged by the Mobile Legends game make them have a long intensity of playing the Mobile Legends game because they are challenged. Players who are running away from a problem vent or divert it by playing the Mobile Legends game. Players who interact in the Mobile Legends game coordinate or just communicate with other players. Social problems stem from social influences, network externalities, and community involvement. Player behaviour and social influences, whether psychological or social factors, influence buying interest in virtual items in the Mobile Legends game.

This research, apart from being based on the above business phenomena, is also based on Gap Research from previous studies, as shown in Table 1 below.

**Table 1.**  
**Research GAP**

No	GAP type	Findings
1	<i>Empirical GAP</i>	<ul style="list-style-type: none"> <li>- Souza &amp; Freitas, (2017). Ghazali et al., (2018), Firdaus &amp; Rahadi (2021), and E. M. Ghazali et al., (2022) found that player influence has a positive influence on purchase intention, while (Yulius, 2017) found that of the five variables of user behaviour, these three variables did not have a significant effect on purchase intention.</li> <li>- Chang et al., (2014), Hsieh &amp; Tseng (2018), Noor &amp; Muhammad (2019), Sutrisno (2020), and Putri &amp; Utama (2021) found that social influence has a positive effect on interest buying, while Palar (2019) found that social influence did not have a significant effect on purchase intention.</li> </ul>
2	<i>Conceptual Knowledge GAP</i>	The research that has been done so far turns out that no one has researched the type of MOBA game. So it is necessary to develop research on the player in the MOBA. Previous research showed that the research they conducted was related to the absence of research on Player Behavior in the Multiplayer Online Battle Arena (MOBA) game, so new research development with a different type of game was needed.

### Uses and Gratifications Theory

The uses and gratifications (U&G) theory assumes that people are goal-oriented active media users. Thus they evaluate the needs that suit them and select media that can meet these needs (Chen et al., 2010). U&G theory can describe user motivation to choose media to fulfil needs (Hardina & Irwansyah, 2021). In utilizing social media, individuals have the principle of obtaining the highest satisfaction (Saputra, 2019). U&G theory has been applied to be applied, understood, and explained in various forms of media such as television, magazines, and radio (Ullah & Khan, 2017; Lin et al., 2018; Luvena et al., 2019) as well as the Internet such as online payments and games (E. Ghazali et al., 2018; Alhassan et al., 2020).

U&G theory explains the reasons users use social media to meet their needs (Hardina & Irwansyah, 2021). Research that uses the theory of U&G provides an explanation and understanding of the reasons individuals use and get satisfaction from that use (Hardina & Irwansyah, 2021). Social media gives personal gain the highest satisfaction (Saputra, 2019). Mobile games are a new type of media that provide experiences that players choose to use for their needs (Wei & Lu, 2014). Needs performed by human attitudes affect the Intention of sustainable use (Alhassan et al., 2020). Therefore, this study uses a theoretical approach to the uses and gratifications of the Mobile Online Battle Arena (MOBA) mobile game.

Previous research used the theory of uses and gratifications with four constructs, namely Achievement, Challenge, escape, and social interaction towards buying interest through the

enjoyment of playing and flow as mediation (E. Ghazali et al., 2018). Two constructions do not have a positive effect on the mediation that has been determined, and this study identifies four constructions of the theory of uses and gratifications, namely Achievement, Challenge, escapism, and social interaction on interest in buying virtual items.

### **The Effect of Achievement on Purchase Intention**

Motivation for Achievement in playing the online game Mobile Legends: Bang Bang includes the desire to get a high level, develop playing skills, and collect several items to support the game. The main goal of players playing online games is to satisfy their desires and to show off their skills to other players. When they achieve what they want, they are satisfied and will continue to play (Merhi, 2016). McClelland stated in Dewi et al., (2016) there are several needs for human achievement motivation, Achievement, power, and affiliation. Only certain people who are intelligent and carry out creative activities can achieve high creative achievements (Jauk et al., 2014).

Shelton (2010) states that achievement motivation influences purchase intention. An achievement arises because of motivation from the individual. This is because players expect a higher level than other players. To achieve achievements, players buy items aiming to get something they want, namely Achievement. Players have an interest in buying because they want to get higher achievements in the game.

H1. Achievement positively affects purchase intention

### **The Effect of Challenge on Purchase Intention**

One of the motivations for playing games is the existence of a challenge (Vahlo & Karhulahti, 2020). The game contains challenges that focus on difficulty, which consists of competing with other players and completing missions given by the game (Liu & Shiue, 2014). Challenges in a game or skills have a positive effect on players' involvement and interest in a game (Hamari et al., 2016). The Challenge in Mobile Legends: Bang Bang is to provide several game modes in which each mode is different from the other modes. The most powerful Challenge is the goal of a victory that must be achieved by the player. The game mode that is influential and has its satisfaction is when it has a high-rank level.

According to Hamari et al., (2017), research on the factors that influence buying interest in in-game items produces a challenge that has a positive impact on buying interest in the application. This is because, with a challenge that arises, players will find ways to buy items, one of which is to answer challenges in the game. All these influences will have an impact on user loyalty and purchase interest in in-game items.

H2. Challenge positively influences purchase intention

### **The Effect of Escapism on Purchase Intention**

The need for escape provides a category if the individual has weak personal adjustments and low self-esteem (Humaizi, 2018). Escapism occurs because he is rejected by reality and his desire to stay away (Giardina et al., 2021). Melodia et al., (2020) state maintaining escapism is a process of leaving reality and avoidance as a game ability to help the person overcome "real" problems by supporting the management of unpleasant emotional states. Escapism is a function as experience, mental or psychological, as well as behaviour that influences increasing consumer pleasure (Loureiro et al., 2021). Knowledge of escapism from the real world increases understanding between individuals and video games (Giardina et al., 2021). Gamers escape into the virtual world from the real world because, according to them, the virtual world is the same as the real world (Melodia et al., 2020). When someone plays, for example, escapes because of self-problems or anxiety, the impact of escaping by playing will increase long-term play tendencies (Hagstrom & Kaldo, 2014). Escapism is carried out by realizing that because they are "trapped", they play in the virtual world so they can improve their situation and condition (Giardina et al., 2021). Playing in a virtual environment, more time is spent due to the escape from the real world, which is as realistic as the virtual world or video games (Kaczmarek & Drazkowski, 2014). The

escapism that causes the player to influence the user to use continuously is based on an escape from reality (Maxentia & Rahmandani, 2022).

When players play games other than to fill their free time, they have an escape where the goal is to avoid what makes them depressed or uncomfortable. This is supported by previous research, which states that escapism is an important factor that significantly influences purchase intention. The higher the escapism, the higher the purchase intention because when the escapist is playing games, it will increase the intensity of use (Dharmesti et al., 2019).

H3. Escapism positively affects buying interest

### **The Effect of Social Interaction on Purchase Intention**

Online interaction that occurs now is a daily necessity for people around the world (Golder & Macy, 2014). Social media is not always for building, seeking, and sharing knowledge but also for motivating people to interact and cooperate with others (Y.-W. Chuang, 2015). In terms of socializing, it seems pretty clear that having fun with friends and making new friends will be a powerful positive reinforcer and a protective rather than destructive reason for play (Hagstrom & Kaldo, 2014). Online games and games without an internet network can be distinguished by different social interactions, where this is important (Kim & Kim, 2017). Social interaction functions such as chatting in online games are needed to encourage gamers to engage in immersive use (Kim & Kim, 2017). Social interaction can provide social support in the game world, which is built from the real world to strengthen bonds (Kim & Kim, 2017). That way, the players will become familiar because of the exchange of knowledge from interactions that often take place (Chuang, 2015).

Online games of the Mobile Online Battle Arena (MOBA) type are extensive virtual environments where players need a problem and intense social interaction (Kokkinakis et al., 2016). A game that requires team strategy and creates direct interpersonal interactions mediated by real-time messages and judgments between players (Kokkinakis et al., 2016). In games where the end of the game, players are encouraged to evaluate their team playing the online game (Kokkinakis et al., 2016). One of the factors that encourage online game players to play excessively is social interaction (Kim & Kim, 2017). Social interactions that occur have a positive effect on the pleasure felt when playing games. The more intense the social interaction that is carried out, the higher the pleasure of playing. When the pleasure of playing is high, it is certain that the impact on the use of the game is also high (Lee et al., 2019).

Previous research stated that social interaction has a significant effect on purchase intention (Jang et al., 2021). The social interaction of fellow players or friends in real life can influence other players or other game friends to recommend an item to buy.

H4. Social interaction positively influences purchase intention

### **The Effect of Network Externality on Purchase Intention**

The loyalty of users of a service and retaining users is very influential on the success of the platform as well, which pays attention to the facilities provided to users for continued use (Gao & Bai, 2014). The higher the perceived network externality can affect the continued use of platform users in the future due to the existence of network references and the feeling of complementarity in network externalities (Gao & Bai, 2014). When the user interaction network is wide, it will also cause a high level of interaction carried out by users. An increase in interaction affects the feeling of pleasure present from the player. This leads to perceived experience and perceived level of satisfaction (E. Ghazali et al., 2018). The higher the network externality that occurs can enhance an experience.

Network externalities encourage users to share information and reviews provided or recommended to other users. Because they buy and already feel it if an item in the game is worth it to buy, they will recommend that item. Thus, network externalities influence buying interest. This is supported by research by Bai et al., (2015), where social support that can recommend purchases influences purchase intention.

H5. Network Externality positively influence purchase intention

### **The Effect of Community Involvement on Purchase Intention**

The definition of community involvement is interpreted broadly because there are formal and informal (Ghimire & Skinner, 2019). Community members play an important role in social life, which is the driving force of various communities (Ghimire & Skinner, 2019). Even though people participate in communities to help others without expecting any economic benefits, community involvement can bring several benefits to individuals and the community (Ghimire & Skinner, 2019). Community involvement and volunteerism can enhance individual development as well as improve the abilities of those participating (Leviten-Reid & Campbell, 2016). Community interest and sociodemographic factors positively and statistically influence community involvement (Theodori & Robinson, 2019). Community involvement is influenced by the sociodemographic type, age, gender, education, income, occupation, length of service, and presence of children in the family (Ghimire & Skinner, 2019). Existing commitment and community participation are the main determinants of brand loyalty (Zhang et al., 2015).

Game community members share common interests and hobbies, and they connect and build mutual and emotional connections. How engaged members of the gaming community can demonstrate their willingness to continue using the item. In a virtual community, members who show high activeness to participate in group activities affect other uses that are constantly promoted by the community. In other words, active users can increase purchase impulse by suggesting other members participate in community activities. This is supported by previous research (Hsu, 2017), where involvement in the community influences purchase intention.

H6. Community involvement positively influences purchase intention

### **Purchase Intention**

Consumer purchase intentions are generally related to attitudes, perceptions, and consumer behaviour (Mirabi et al., 2015). A state of “the possibility of a customer to purchase a product or subscribe to a service based on their experience or purchase history” is known as purchase intention (Ma, 2017). The basis of the Intention to buy is the relationship between behavioural Intention and action. An individual behavioural intention will determine an actual behavioural action (Dachyar & Banjarnahor, 2017). Referring to the purchase intention for the future, before the active cognitive processes behind several factors of consumer perception of the product are influential (Jamil & Hassan, 2014). Purchase intention occurs when the customer's preference is to buy. Purchase intention is another factor that consumers will buy products or services after considering (Younus et al., 2015). When the perpetrator has a strong intention, there is a high probability that the behaviour will be carried out (Haque et al., 2015). E-commerce problems are consumer doubts that arise from various problems. Understanding purchase intention is important for an e-commerce goal to know the customer's perspective and customer behaviour (Dachyar & Banjarnahor, 2017). The main reason why customers want to buy or have certain products and services is based on their needs. Getting customers is one of the main goals of the company. Based on the process of exchanging money for products, it is the customers who will generate revenue for the company. Customer purchases are one step in the process of completing transactions (Ha & Janda, 2014).

### **RESEARCH METHODS**

This type of research is quantitative data quality testing. This study used Partial Least Square (PLS) analysis, which is a Structural Equation Modeling (SEM). (SEM-PLS) SMART PLS 3.0. The selected population is Mobile Legends game players in East Java. The number of samples in this study was 310 respondents. Data was collected using the purposive sampling method. This research is quantitative research with a survey approach using a questionnaire. The variables in the research model are used as items on a Likert scale (Yulius, 2017). Primary data was collected using the survey method via Google Forms online. Furthermore, an online questionnaire was designed using Google Forms from 30 October 2022 to 22 December 2022, and this survey form was distributed through media platforms such as email, WhatsApp, Instagram, and Telegram because the site has reached gamers. The questionnaire uses a 10-point Likert-based scale from 1 = strongly disagree to 10 = strongly agree.

**Table 2.**  
**Appendix Table**

No	Variable	Indicator	Source
1.	Achievements	<ul style="list-style-type: none"> <li>• Raise rank</li> <li>• Accumulating Items and Skins</li> <li>• Get Rare Skin</li> </ul>	(E. Ghazali et al., 2018; Bueno et al., 2020; Li et al., 2015)
2.	Challenge	<ul style="list-style-type: none"> <li>• Become a great player</li> <li>• Feeling challenged</li> <li>• Reach high level/rank</li> <li>• Mastering aspects</li> <li>• Best ability</li> <li>• Sharpen Skills</li> </ul>	(E. Ghazali et al., 2018; C. H. Jin, 2014; Hamari et al., 2019)
3.	Escapism	<ul style="list-style-type: none"> <li>• Spend time</li> <li>• Avoiding trouble</li> <li>• Escape</li> <li>• Reducing stress</li> </ul>	(Alhabash et al., 2014; Quinn, 2016; Leiner et al., 2018)
4.	Social interaction	<ul style="list-style-type: none"> <li>• Find new friends</li> <li>• Get closer to the players</li> <li>• Interact</li> </ul>	(Bueno et al., 2020; Leiner et al., 2018; Li et al., 2015)
5.	Network Externality	<ul style="list-style-type: none"> <li>• Played a lot</li> <li>• More players</li> <li>• Many communities</li> </ul>	(Gong et al., 2020; E. Ghazali et al., 2018; Zhou, 2015)
6.	Community Involvement	<ul style="list-style-type: none"> <li>• Participate in the community</li> <li>• Participate in competition events</li> <li>• It is important to participate in the community</li> <li>• Active in the community</li> <li>• Responsive</li> </ul>	(Rasoolimanesh et al., 2017; Shen et al., 2019; E. Ghazali et al., 2018)
7.	Purchase Interest	<ul style="list-style-type: none"> <li>• Want to buy skins/items</li> <li>• Want to buy Starlight</li> <li>• Periodic purchases</li> <li>• Recommend to others</li> </ul>	(Alhaa et al., 2019; Kaur et al., 2020; Hussain & Ali, 2015)

## Finding

**Table 3.**  
**Description of the Respondent**

No	Respondent identity	classification	Frequency	Percentage
1	Gender	Male	192	61.9%
		Female	118	38.1%
		<b>Total</b>	<b>310</b>	<b>100%</b>
2	Age	15 - 19	43	13.8%
		20 - 24	257	83%
		25 - 33	10	3.2%
		<b>Total</b>	<b>310</b>	<b>100%</b>
3	Income	< Rp. 1.900.000	216	69.7%
		Rp. 2.000.000 –	54	17.1%
		Rp. 3.000.000		
		Rp. 4.000.000 –	25	7.9%
		Rp. 5.900.000		
		>Rp. 6.000.000	15	4.8%
<b>Total</b>		<b>310</b>	<b>100%</b>	

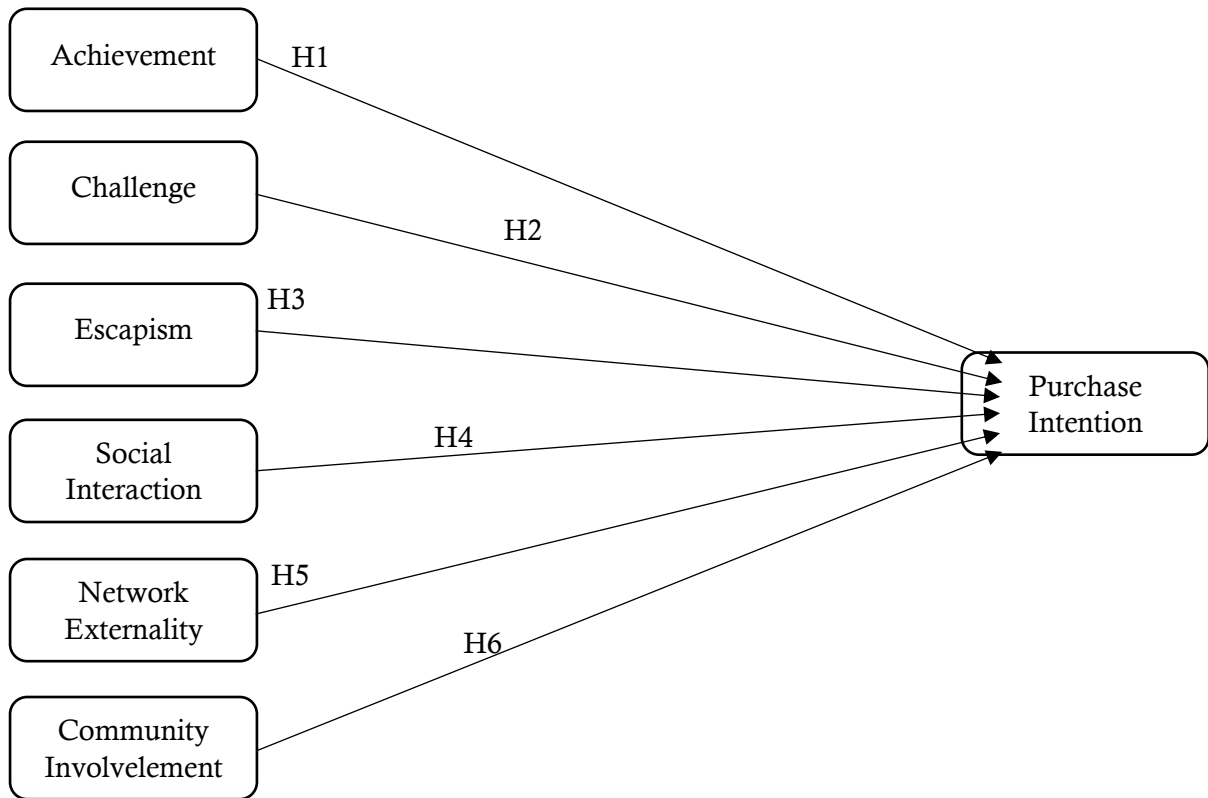


Figure 1. Conceptual framework

**RESULT & DISCUSSION**

Measurement model test results (Outer Model)

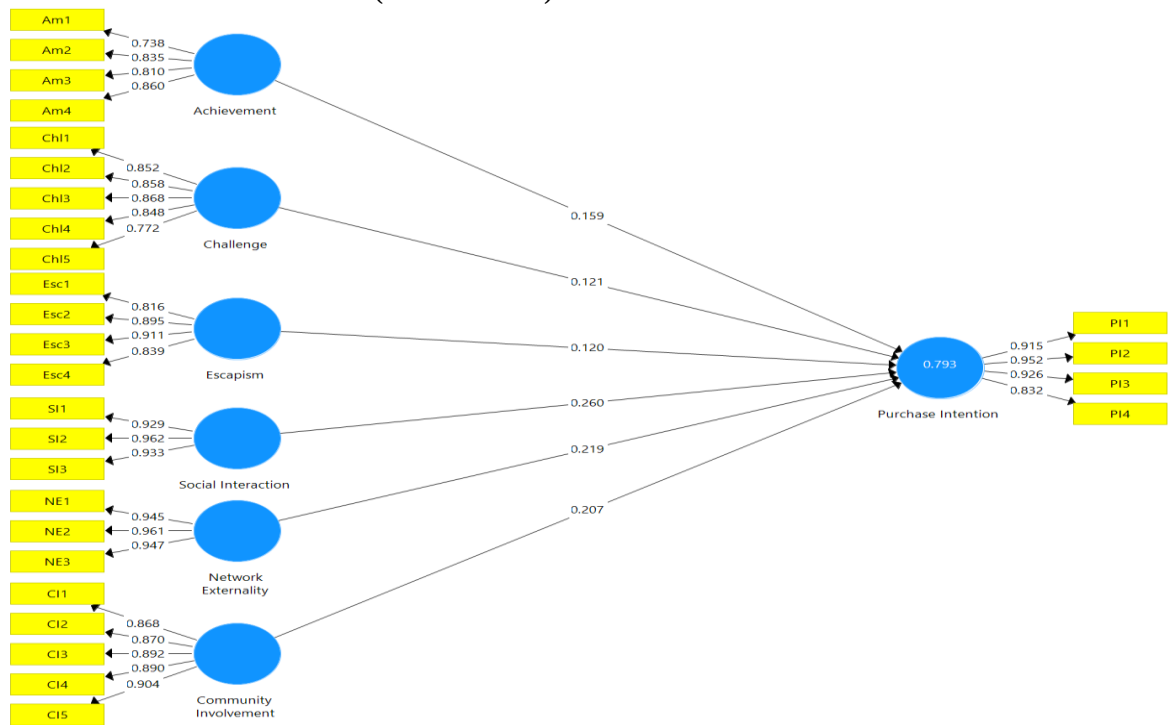


Figure 2. PLS Algorithm Result (Source: Smart PLS 3.0)



*Convergent validity*

The following are the results of the convergent validity test, which includes the loading factor and AVE value in each research variable.

**Table 4.**  
**Convergent Validity Results**

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variances Extracted (AVE)	Information
Achievement	0.827	0.837	0.885	0.660	Valid
Challenge	0.896	0.896	0.923	0.706	Valid
Community Involvement	0.931	0.935	0.948	0.783	Valid
Escapism	0.889	0.894	0.923	0.750	Valid
Network Externality	0.947	0.948	0.966	0.904	Valid
Purchase Intention	0.928	0.931	0.949	0.823	Valid
Social Interaction	0.936	0.939	0.959	0.887	Valid

Source: Smart PLS Processed Data

Table 4 shows that the seven variables each have a large AVE value compared to the critical value of 0.5. It can be concluded that all variables meet the requirements of convergence validity.

*Discriminant Validity*

To find out whether the indicators in the construct have a greater load factor in the resulting construct when compared to other load factor constructs, a discriminative validity test was carried out.

**Table 5.**  
**Discriminant Validity Results**

	Achievements	Challenge	Community Involvement	Escapism	Network Externality	Purchase Intention	Social Interaction
<b>Am1</b>	0,738	0,553	0,532	0,321	0,389	0,476	0,421
<b>Am2</b>	0,835	0,487	0,575	0,487	0,499	0,607	0,564
<b>Am3</b>	0,810	0,366	0,474	0,511	0,381	0,612	0,521
<b>Am4</b>	0,860	0,606	0,565	0,471	0,443	0,632	0,589
<b>CI1</b>	0,479	0,615	0,868	0,412	0,469	0,607	0,471
<b>CI2</b>	0,520	0,560	0,870	0,395	0,432	0,595	0,487
<b>CI3</b>	0,589	0,475	0,892	0,545	0,505	0,670	0,574
<b>CI4</b>	0,644	0,419	0,890	0,637	0,561	0,702	0,657
<b>CI5</b>	0,659	0,528	0,904	0,584	0,577	0,724	0,663
<b>Ch11</b>	0,453	0,852	0,449	0,414	0,388	0,509	0,434
<b>Ch12</b>	0,459	0,858	0,442	0,308	0,388	0,482	0,413
<b>Ch13</b>	0,548	0,868	0,488	0,329	0,398	0,530	0,438
<b>Ch14</b>	0,532	0,848	0,552	0,361	0,369	0,560	0,423
<b>Ch15</b>	0,570	0,772	0,500	0,388	0,462	0,569	0,512
<b>Esc1</b>	0,543	0,422	0,511	0,816	0,413	0,614	0,544
<b>Esc2</b>	0,432	0,327	0,533	0,895	0,279	0,496	0,444
<b>Esc3</b>	0,459	0,348	0,547	0,911	0,286	0,510	0,490
<b>Esc4</b>	0,478	0,377	0,437	0,839	0,336	0,482	0,467

	Achievements	Challenge	Community Involvement	Escapism	Network Externality	Purchase Intention	Social Interaction
NE1	0,447	0,475	0,534	0,367	0,945	0,713	0,746
NE2	0,538	0,446	0,564	0,380	0,961	0,713	0,803
NE3	0,521	0,445	0,555	0,353	0,947	0,683	0,779
PI1	0,629	0,663	0,681	0,505	0,754	0,915	0,743
PI2	0,659	0,613	0,718	0,562	0,712	0,952	0,758
PI3	0,702	0,535	0,654	0,601	0,661	0,926	0,767
PI4	0,630	0,484	0,667	0,568	0,545	0,832	0,666
SI1	0,609	0,483	0,630	0,516	0,753	0,716	0,929
SI2	0,635	0,501	0,632	0,584	0,763	0,779	0,962
SI3	0,593	0,515	0,578	0,501	0,788	0,788	0,933

Source: Smart PLS Processed Data

Based on Table 5, the results of cross-loading show good effectiveness because the correlation between constructs and indicators is greater than the correlation between indicators and other constructs. For example, the Am1 load factor (question indication for Achievement) is 0.738 higher than the load factor with other constructs, such as Challenge (0.553). The table also shows that each construct and indicator have a load factor that is greater than the correlation between indicators and other constructs.

#### *Composite Reliability & Cronbach's Alpha*

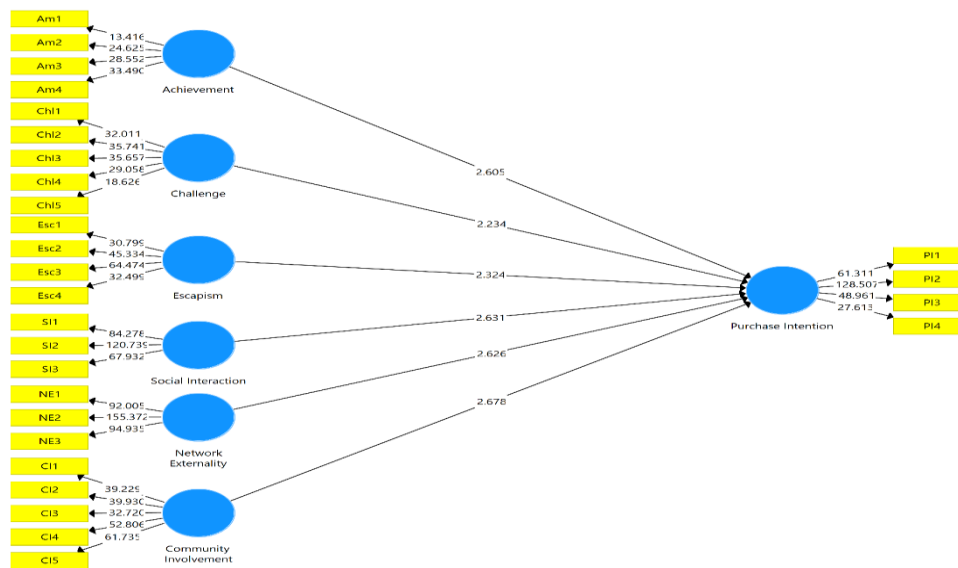
The construct reliability test that was carried out, in addition to the structural validity test, was evaluated using composite reliability and Cronbach alpha from the index block that tested the construct. Table 6 shows the results of the SMARTPLS test for the reliability of Cronbach alpha and composite materials.

**Table 6.**  
**Composite Reliability & Cronbach's Alpha**

	Cronbach's Alpha	Composite Reliability
Achievement	0.827	0.885
Challenge	0.896	0.923
Community Involvement	0.931	0.948
Escapism	0.889	0.923
Network Externality	0.947	0.966
Purchase Intention	0.928	0.949
Social Interaction	0.936	0.959

Source: Smart PLS Processed Data

If the construct has a multiple reliability rating of 0.7 and Cronbach's alpha above the average of 0.6, it is said to be reliable. It is possible to conclude from the SMARTPLS output that all constructs have a composite reliability value above 0.7 and a Cronbach's alpha value above 0.6, indicating a high-reliability score for the overall construct.



**Figure 3. PLS Bootstrapping Results**  
(Source: Smart PLS 3.0 Outputs)

**Table 7.**  
**Hypothesis Test Results**

	Original Sample Estimate	Mean of subsamples	Standard deviation	T-Statistic	P Values	Desc.
Am → PI	0.159	0.160	0.061	2.605	0.009	**
Ch1 → PI	0.121	0.125	0.054	2.234	0.026	*
Esc → PI	0.120	0.122	0.052	2.324	0.021	*
SI → PI	0.260	0.259	0.099	2.631	0.009	**
NE → PI	0.219	0.219	0.084	2.626	0.009	**
CI → PI	0.207	0.200	0.077	2.678	0.008	**

Source: Smart PLS Processed Data

Note: Sig: \* $\alpha < 0.05$ ; \*\* $\alpha < 0.01$ ; TS: Not significant

**Table 8.**  
**R Square Result**

	R Square	R Square Adjusted
Purchase Intention	0.793	0.789

Source: Smart PLS Processed Data

**Structural Model Testing (Inner Model)**

Structural models such as the SMART PLS assessment model with path coefficients of the independent and dependent variables and the T statistical values for each path are used to determine whether the independent variables are significant to the dependent variable. In Figure 3, the results of the bootstrapping structural model are shown. Research using the T statistic between the independent variable and the dependent variable at the SMART PLS output path coefficient shows the relevance of the model to the structural model test.

Structural models in PLS are evaluated using R Square for the dependent construct, path coefficient values, or t-values for each path to test the significance between constructs in the structural model. The R Square value is used to measure the level of variation in the independent variable changes to the dependent variable. The higher the R Square value means, the better the prediction model of the proposed research model. Table 8 is the result of R Square, which has a value of 0.793 and R Square Adjusted of 0.789, meaning that the variation in changes in the dependent variable that can be explained by the independent variable is 79%, while the rest is explained by other variables outside the model that has been proposed.

The Uses & Gratifications theory plays a role in the selection and needs of media or online games, so it can be applied to the context of our game research, namely the type of multiplayer online battle arena (MOBA). The use of U&G theory is very suitable to explain how and why online game users will continue to play online games and satisfaction throughout the experience when their needs have been met (Li et al., 2015). The Uses & Gratifications theory plays a role in psychological and social motivational factors. Psychological factors, namely player behaviour, consist of the variable Achievement, Challenge, escapism, and social factors, namely social interaction, according to the previous research framework by E. Ghazali et al., (2018).

Bootstrapping testing is assisted by using a computer software program, namely Smart PLS 3.0. In this study, the t-table value is at a confidence level of 95% ( $\alpha < 5\%$ ). Hypothesis testing for each latent variable relationship is presented in Table 7. Based on the results of structural model testing, the coefficient value of the Achievement variable shows a positive number of 2,605, meaning that the greater the increase in the Achievement variable, the greater the Purchase Intention of Mobile Legends game players. If the result of the p-value (0.009) is less than 0.05 (\*\*), then the Achievement variable has a significant positive effect on the Purchase Intention variable. Thus, the first hypothesis is accepted. The results of this study are also consistent with research conducted by Shelton (2010), which states that Achievement has a significant effect on Purchase Intention. The results of this study prove that in Indonesia, especially in the East Java province for Mobile Legends game players, an Achievement greatly influences the Purchase Intention of items in the game. The perceived value of the player, one of which is an achievement, has an influence on purchase intentions in a game (Hsiao & Chen, 2016). Wu et al., (2010) showed that Achievement positively influences the continuation of a player's Intention to play because it provides a sense of Achievement by getting a higher rank in a game or getting a rare virtual item. According to players who increase ranks, accumulate items and skins, have rare skins, and become great players in the game is important because this is an achievement for players. Players who want to have an Achievement in the Mobile Legends game will have a Purchase Intention because to realize the player's wish, the player must buy items/skins in the game.

The next hypothesis tests the Challenge variable on Purchase Intention. The coefficient value of the Challenge variable shows a positive number of 2,234, meaning that the greater the increase in the Challenge variable, the greater the Purchase Intention. The result of the p-value (0.026) is smaller than 0.05 (\*), so the Challenge variable has a significant positive effect on the Purchase Intention variable. Thus, the second hypothesis is accepted. The results of this research are also the same as the research that has been conducted by (Hamari et al., 2019), which has research results that Challenge has a significant positive effect on Purchase Intention. Challenges in games not only have the effect of increasing engagement but also skilful play and have a positive effect on learning. Skills can be mastered with fairly consistent practice. After mastering, players can improve their skills again by passing or completing higher challenges (Hamari et al., 2016). With an increase in rank or level achieved, players will also get a higher challenge due to meeting higher or equal enemies according to the rank achieved. High challenges and skills make players try to develop their skills to the maximum in achieving goals (Hamari et al., 2016). Players consider the feeling of fun, Challenge, and proving to other players when purchasing in-game items/skins. This is supported by affordable item/skin prices, and players have a high intention to purchase (Joshi et al., 2015). By purchasing items/skins in the Mobile Legends game, players will get additional strength in passing even higher ranks. Players who feel the value of items, such as feeling challenged themselves, have the Intention or have to buy the item/skin as research has been conducted by Joshi et al., (2015).

Next is the variable Escapism to Purchase Intention. The coefficient value of the Escapism variable shows a positive number of 2,324, meaning that the greater the increase in the Escapism variable, the greater the Purchase Intention. If the result of the p-value (0.021) is less than 0.05 (\*), then the Escapism variable has a significant positive effect on the Purchase Intention variable. Thus, the third hypothesis is accepted. The results of this research are also the same as previous research conducted by Dharmesti et al., (2019), which found that escapism has a significant positive effect on Purchase Intention. Hedonic satisfactions, such as escapism, play an important role in interpreting an individual's continuance intention to use certain social network games (Li

et al., 2015). Escape activities by spending time in the game have the goal of improving real life. Players who choose to escape or escape into the game environment expect better changes due to bad situations (Giardina et al., 2021). Players who run away due to venting in the Mobile Legends game or putting aside problems in the real world. Negative escapes such as trouble and hassle make a stronger relationship to internet addiction (Hagstrom & Kaldo, 2014). The addiction that arises due to escape makes players intend to buy items/skins in the Mobile Legends game. Online shopping is an activity in a virtual place where users can easily access products. Escape by doing online shopping easily can make you feel better and will ultimately trigger an intention to buy (Lim, 2017). Game providers and game marketers of Mobile Legends can pay attention to appearance and ease of access when purchasing items/skins. These results support previous researchers (Hellstrom et al., 2012) who suggested escapism as an online shopping motive that influences purchase intention.

The next variable is the Social Interaction variable on Purchase Intention. The coefficient value of the Social Interaction variable shows a positive number of 2,631, meaning that the greater the increase in the Social Interaction variable, the greater the Purchase Intention will be. The result of the p-value (0.009) is less than 0.05 (\*\*), so the Social Interaction variable has a significant positive effect on the Purchase Intention variable. Thus, the fourth hypothesis is accepted. The results of this research are also the same as previous research conducted by Jang et al., (2021), which found that Social Interaction has a significant positive effect on Purchase Intention. Players receive pleasure from the game not only from playing the game but also from communication between players to interact with others, such as teams and communities (W. Jin et al., 2017). Social interaction and communication make game players feel connected to fellow game players physically (Li et al., 2015). Social relations Another aspect of social value has a perceived ability to help shape, maintain, and enhance interpersonal relationships (Kim et al., 2011). Players perceive games to offer emotional values, such as fun and value for reward, not only but also offer social values that make players connected and performance values, such as flexibility of access (Hsiao & Chen, 2016). Social ties are a strong reason to pay for in-game features (Hamari et al., 2017).

The effect of Network Externality on Purchase Intention based on the results of hypothesis testing in Table 7, it can be concluded that Network Externality has a positive and significant influence on Purchase Intention because it has a p-value (0.009) <0.05 (\*\*), with a coefficient value of 2,626 the greater the increase in the Network Externality variable will also increase the Purchase Intention. Thus, the fifth hypothesis is accepted. The results of this study are also consistent with research conducted by Bai et al., (2015), which states that Network Externality has a significant positive effect on Purchase Intention. Network externalities are concerned with increasing the value of a product or service to users due to the increasing number of people adopting it. This perception gives rise to a brand attitude that increases the Intention of potential consumers to buy a product or service (Lee, 2017). Communities that pay attention to network externalities will increase the purchasing power of digital goods within a community ( Kim et al., 2011). Network externality is characterized by the number of members and refers to the understanding that other people also use the same service (Zhao & Lu, 2012). The crowd effect plays an influential role in consumer behaviour in online group purchases (Yang & Mao, 2014).

The final hypothesis is to test the Community Involvement variable on Purchase Intention. Based on the results of hypothesis testing in Table 7, it can be concluded that Community Involvement has a positive and significant influence on Purchase Intention because it has a p-value (0.008) <0.05 (\*\*), with a coefficient value of 2,678 the greater the increase in the Community Involvement variable, the greater the Purchase Intention. Thus, the sixth hypothesis is accepted. The results of this study are also consistent with research conducted by Hsu (2017), which states that Community Involvement has a significant positive effect on Purchase Intention. Gamers can easily interact with fellow players and game companies through communities, online forums, and other channels of communication (Chuang, 2020). With high involvement, users have a close relationship with other people and with the community and contribute to their community. By engaging in this way, users are motivated to pay time and money on a game (W. Jin et al., 2017). Game providers pay attention to and support players by providing some of the best offers and

affordable prices that aim to benefit from in-game sales. Handling public relations and customer service becomes meaningful as well. In addition, maintaining social community in games is also important (Alha et al., 2014). When players have the Intention to continue to have positive social relations in the game, they will continue to play and even pay for it because they feel that they are connected to other players (Hsiao & Chen, 2016). Communities that pay attention to network externalities will increase the purchasing power of digital goods within a community (Kim et al., 2011).

## CONCLUSION

From the research results that have been obtained, it can be concluded that the Uses & Gratifications theory, namely Achievement, has a significant positive effect on Purchase Intention items in the Mobile Legends Game. The Challenge variable has a significant positive effect on Purchase Intention items in the Mobile Legends Game. The Escapism variable has a significant positive effect on Purchase Intention items in the Mobile Legends Game. The Social Interaction variable has a significant positive effect on Purchase Intention items in the Mobile Legends Game. For social influences, namely, the Network Externality variable has a significant positive effect on Purchase Intention items in the Mobile Legends Game, and the Community Involvement variable has a significant positive effect on Purchase Intention items in the Mobile Legends Game.

This research seeks to increase sales for game providers and game marketers Mobile Legends. Advice for mobile legends game developers and marketers on how to attract players' buying interest in purchasing items/skins. Gender and income affect buying interest in Mobile Legends game players. Male and female players with higher incomes will have an interest in in-game purchases. Game providers and marketers have to develop different marketing strategies for them. This research gave them an understanding of psychological factors and social factors, namely player behaviour and social influences. The first effect is to see from the player's behaviour using the uses and gratifications theory that it has a direct effect on buying interest. The second influence is the social influence which has a direct effect on buying interest. Game providers and marketers must pay attention to player behaviour and social influence. Game providers and marketers can make approaches in the form of outreach or events that can bring players closer to the Mobile Legends game and the Mobile Legends game with the community. Challenges, rewards, community, and interactions in the Mobile Legends game must be considered by the Mobile Legends game developers and marketers.

In terms of theoretical implications, this study makes several contributions to the literature by providing empirical support for multiple regression models that use the U&G Theory as a research basis. First, this study examines player behaviour from the perspective of psychology and social influence on purchase intention items in the game. Purchase intention is directly influenced by the psychological factors of players, such as players who have achievements (Achievements), players who feel challenged (Challenge), players who make an escape (Escapism), and players who engage in social interaction (Social interaction). Players who exhibit this behaviour will have a significant positive influence on their purchase intention. Second, this study also contributes to the gaming literature by considering network externalities and community involvement as social factors that directly affect purchase intention. Community involvement and network externalities support players in social interaction because, currently, social influence has a significant role in society regarding purchase intention. Thirdly, this research also highlights objects and locations that are different from previous studies, which were conducted in Indonesia and used the Mobile Legends game, which answers suggestions from previous research that wanted a variety of countries and different research objects.

Practical implications, this research provides valuable recommendations for game providers, especially in the Mobile Legends game. The results of the study show that player behaviour, viewed from a psychological perspective using U&G theory, has a significant influence on the Intention to buy items in the game. Therefore, it is important for game providers to pay attention and ensure that their games offer challenges that can arouse players' interest. In addition, game providers can increase player enjoyment by developing game applications that combine various elements, such as social interaction, achievements, and Challenges, to strengthen player

loyalty to the Mobile Legends game. Game factors also have an important role in increasing players' purchase intentions. Therefore, game providers need to gradually and regularly add new elements or atmospheres that are interesting and can provoke players' curiosity so that players continue to play the game. The findings of this study also show that community engagement and network effects have a positive impact on players' intentions to purchase. Therefore, game providers need to continue to integrate marketing strategies and leverage the power of word of mouth to accelerate network growth and broaden the user base. Judging from the current use of social media, game providers can take advantage of the opportunities offered by these platforms. For example, they can use advertising on social media to build a wider user base, create content that is popular with teenagers to engage players and encourage word of mouth, and receive criticism and suggestions that can help them improve their product in developing games. Better thus, game managers need to ensure that the online game community operates properly, provides good support services, cooperates with large regional communities, and establishes good relations with the community, such as holding competitive events to maintain the sustainability and health of the game community. It is this social influence that causes players to buy interest, which in turn will increase the company's revenue for the sustainability of the game company in the future.

## ACKNOWLEDGEMENT

Limitations and future suggestions. Our research model is multiple regression for future research using various regression models such as moderation or mediation models. Variables other than the variables described in the study include price, flow, loyalty, satisfaction, and other social influences, as well as adding to the influence of the respondent's length of time playing. The online survey method is suitable for collecting data from a sample that is free from geographical boundaries and includes only respondents in Indonesia's East Java province. Further research can be conducted in different countries and apply a more systematic sampling method from a more diverse sample. Future research that examines buying interest in Mobile Legends games in different countries can enable game developers and marketers to provide customized services for each server/country. Our research focuses specifically on the Mobile Legends game provided by one company, namely Moonton. Other types of paid online games should also be researched.

## REFERENCES

- Aggarwal, S., Saluja, S., Gambhir, V., Gupta, S., & Satia, S. P. S. (2020). Predicting the likelihood of psychological disorders in PlayerUnknown's Battlegrounds (PUBG) players from Asian countries using supervised machine learning. *Addictive Behaviors, 101*, 106132. <https://doi.org/10.1016/j.addbeh.2019.106132>
- Alha, K., Koskinen, E., Paavilainen, J., & Hamari, J. (2014). Free-to-Play Games : Professionals ' Perspectives. In *Proceedings of Nordic Digra 2014*.
- Alhabash, S., Chiang, Y. H., & Huang, K. (2014). MAM & U&G in Taiwan: Differences in the uses and gratifications of Facebook as a function of motivational reactivity. *Computers in Human Behavior, 35*, 423–430. <https://doi.org/10.1016/j.chb.2014.03.033>
- Alhassan, M. D., Kolog, E. A., & Boateng, R. (2020). Effect of gratification on user attitude and continuance use of mobile payment services: a developing country context. *Journal of Systems and Information Technology, 22*(4), 353–380. <https://doi.org/10.1108/JSIT-01-2020-0010>
- Azwar, A., Hamria, H., & Kaharu, M. N. S. (2020). Game Edukasi Pengenalan Teknologi Informasi Dan Komunikasi Berbasis Android. *Jurnal Ilmiah Informatika, 8*(02), 141–150. <https://doi.org/10.33884/jif.v8i02.2481>
- Bai, Y., Yao, Z., & Dou, Y. F. (2015). Effect of social commerce factors on user purchase behavior: An empirical investigation from renren.com. *International Journal of Information Management, 35*(5), 538–550. <https://doi.org/10.1016/j.ijinfomgt.2015.04.011>
- Barseli, M., & Sriwahyuningsih, V. (2023). *Game online mobile legends sebagai pemacu turunnya motivasi belajar siswa. 9*(1), 164–169.
- Bueno, S., Gallego, M. D., & Noyes, J. (2020). Uses and gratifications on augmented reality games: An examination of pokémon go. *Applied Sciences (Switzerland), 10*(5), 1–13.

- <https://doi.org/10.3390/app10051644>
- Chang, I. C., Liu, C. C., & Chen, K. (2014). The effects of hedonic/utilitarian expectations and social influence on continuance intention to play online games. *Internet Research*, 24(1), 21–45. <https://doi.org/10.1108/IntR-02-2012-0025>
- Chen, K., Chen, J. V., & Ross, W. H. (2010). Antecedents of online game dependency: The implications of multimedia realism and uses and Gratifications theory. In *Journal of Database Management* (Vol. 21, Issue 2). <https://doi.org/10.4018/jdm.2010040104>
- Chuang, Y.-W. (2015). Toward an Understanding of Uses and Gratifications Theory and the Sense of Virtual Community on Knowledge Sharing in Online Game Communities. *International Journal of Information and Education Technology*, 5(6), 472–476. <https://doi.org/10.7763/ijiet.2015.v5.552>
- Chuang, Y. (2020). Promoting Consumer Engagement in Online Gaming Communities through Virtual Experience and Social Identity. *MDPI*, 12(3). <https://doi.org/https://doi.org/10.3390/su12030855>
- Cleghorn, J., & Griffiths, M. D. (2019). *Why do gamers buy “ virtual assets ”? An insight in to the psychology behind purchase behavior Why do gamers buy ‘ virtual assets ’? An insight in to the psychology behind purchase behaviour International Gaming Research Unit , Psychology Division Notting. July*, 98–117.
- Dachyar, M., & Banjarnahor, L. (2017). Factors influencing purchase intention towards. *Intangible Capital*, 13(5), 946–966.
- Danjing Zhou. (2019). *Consumer Insights: Gamers in Indonesia*. [www.Newzoo.Com](http://www.Newzoo.Com). <https://newzoo.com/insights/articles/insights-into-the-indonesian-games-market>
- Dewi, E. R., Bundu, P., & Tahmir, S. (2016). The influence of the antecedent variable on the teachers’ performance through achievement motivation in senior high school. *International Journal of Environmental and Science Education*, 11(12), 5613–5618. <https://doi.org/10.12973/ijese.2016.912a>
- Dharmesti, M., Dharmesti, T. R. S., Kuhne, S., & Thaichon, P. (2019). Understanding online shopping behaviours and purchase intentions amongst millennials. *Young Consumers*, 22(1), 152–167. <https://doi.org/10.1108/YC-12-2018-0922>
- Fauziawati, W. (2015). Upaya Mereduksi Kebiasaan Bermain Game Online Melalui Teknik Diskusi Kelompok. *PSIKOPEDAGOGIA Jurnal Bimbingan Dan Konseling*, 4(2), 115. <https://doi.org/10.12928/psikopedagogia.v4i2.4483>
- Firdaus, A. S., & Rahadi, R. A. (2021). Conceptual Model for Factors That Influence Purchase Intention of In-game Purchase in Freemium Mobile Game. *International Journal of Accounting, Finance and Business*, 6(32), 74–87.
- Fox, J., Gilbert, M., & Tang, W. Y. (2018). Player experiences in a massively multiplayer online game: A diary study of performance, motivation, and social interaction. *New Media and Society*, 20(11), 4056–4073. <https://doi.org/10.1177/1461444818767102>
- Gao, L., & Bai, X. (2014). An empirical study on continuance intention of mobile social networking services: Integrating the IS success model, network externalities and flow theory. *Asia Pacific Journal of Marketing and Logistics*, 26(2), 168–189. <https://doi.org/10.1108/APJML-07-2013-0086>
- Ghazali, E. M., Al Halbusi, H., Abdel Fattah, F. A. M., Hossain Uzir, M. U., Mutum, D. S., & Tan, F. L. (2022). A study of player behavior and motivation to purchase Dota 2 virtual in game items. *Kybernetes*. <https://doi.org/10.1108/K-08-2021-0678>
- Ghazali, E., Mutum, D. S., & Woon, M. Y. (2018). Exploring player behavior and motivations to continue playing Pokémon GO. *Information Technology and People*, 32(3), 646–667. <https://doi.org/10.1108/ITP-07-2017-0216>
- Ghimire, R., & Skinner, J. (2019). The relationship between length of community tenure and residents’ volunteering at community events: Results from the Metro Atlanta Speaks Survey. *Journal of Rural Social Sciences*, 34(2), 3.
- Giardina, A., Starcevic, V., King, D. L., Schimmenti, A., Di Blasi, M., & Billieux, J. (2021). Research Directions in the Study of Gaming-Related Escapism: a Commentary to Melodia, Canale, and Griffiths (2020). *International Journal of Mental Health and Addiction*, 0123456789.



- <https://doi.org/10.1007/s11469-021-00642-8>
- Golder, S. A., & Macy, M. W. (2014). Digital footprints: Opportunities and challenges for online social research. *Annual Review of Sociology*, 40, 129–152. <https://doi.org/10.1146/annurev-soc-071913-043145>
- Gong, X., Zhang, K. Z. K., Chen, C., Cheung, C. M. K., & Lee, M. K. O. (2020). What drives self-disclosure in mobile payment applications? The effect of privacy assurance approaches, network externality, and technology complementarity. *Information Technology and People*, 33(4), 1174–1213. <https://doi.org/10.1108/ITP-03-2018-0132>
- Ha, H. Y., & Janda, S. (2014). The effect of customized information on online purchase intentions. *Internet Research*, 24(4), 496–519. <https://doi.org/10.1108/IntR-06-2013-0107>
- Hagstrom, D., & Kaldo, V. (2014). Escapism among players of MMORPGs-conceptual clarification, its relation to mental health factors, and development of a new measure. *Cyberpsychology, Behavior, and Social Networking*, 17(1), 19–25. <https://doi.org/10.1089/cyber.2012.0222>
- Hakim, M. L., & Indarwati, T. A. (2022). Pengaruh Influencer Marketing dan Nilai Emosional terhadap Niat Beli Produk Virtual Skin Pada Game Mobile Legends : Bang Bang. *Jurnal Ilmu Manajemen*, 10(1), 199–209.
- Hamari, J. (2015). Why do people buy virtual goods? Attitude toward virtual good purchases versus game enjoyment. *International Journal of Information Management*, 35(3), 299–308. <https://doi.org/10.1016/j.ijinfomgt.2015.01.007>
- Hamari, J., Alha, K., Järvelä, S., Kivikangas, J. M., Koivisto, J., & Paavilainen, J. (2017). Why do players buy in-game content? An empirical study on concrete purchase motivations. *Computers in Human Behavior*, 68, 538–546. <https://doi.org/10.1016/j.chb.2016.11.045>
- Hamari, J., Malik, A., Koski, J., & Johri, A. (2019). Uses and Gratifications of Pokémon Go: Why do People Play Mobile Location-Based Augmented Reality Games? *International Journal of Human-Computer Interaction*, 35(9), 804–819. <https://doi.org/10.1080/10447318.2018.1497115>
- Hamari, J., Shernoff, D. J., Rowe, E., Coller, B., Asbell-Clarke, J., & Edwards, T. (2016). Challenging games help students learn: An empirical study on engagement, flow and immersion in game-based learning. *Computers in Human Behavior*, 54, 170–179. <https://doi.org/10.1016/j.chb.2015.07.045>
- Haque, A., Anwar, N., Yasmin, F., Sarwar, A., Ibrahim, Z., & Momen, A. (2015). Purchase intention of foreign products: A study on Bangladeshi consumer perspective. *SAGE Open*, 5(2), 1–12. <https://doi.org/10.1177/2158244015592680>
- Hardina, A. F., & Irwansyah, I. (2021). Uses and Gratifications : Twitter Tetap Menjadi Primadona. *Jurnal Lensa Mutiara Komunikasi*, 5(2), 39–48. <https://doi.org/10.51544/jlmk.v5i2.1677>
- Hellstrom, C., Nilsson, K. W., Leppert, J., & Slund, C. (2012). Influences of motives to play and time spent gaming on the negative consequences of adolescent online computer gaming. *Computers in Human Behavior*, 28(4), 1379–1387. <https://doi.org/10.1016/j.chb.2012.02.023>
- Hsiao, K. L., & Chen, C. C. (2016). What drives in-app purchase intention for mobile games? An examination of perceived values and loyalty. *Electronic Commerce Research and Applications*, 16, 18–29. <https://doi.org/10.1016/j.elerap.2016.01.001>
- Hsieh, J. K., & Tseng, C. Y. (2018). Exploring social influence on hedonic buying of digital goods - Online games' virtual items. *Journal of Electronic Commerce Research*, 19(2), 164–185.
- Hsu, L. C. (2017). Investigating community members' purchase intention on Facebook fan page: From a dualistic perspective of trust relationships. *Industrial Management and Data Systems*, 117(5), 766–800. <https://doi.org/10.1108/IMDS-05-2016-0180>
- Humaizi, M. . (2018). Uses and Gratifications Theory. In M. . Dr. Humaizi (Ed.), *USU Press*.
- Hussain, R., & Ali, M. (2015). Effect of Store Atmosphere on Consumer Purchase Intention. *International Journal of Marketing Studies*, 7(2), 35–43. <https://doi.org/10.5539/ijms.v7n2p35>
- Jamil, R. A., & Hassan, S. R. ul. (2014). Influence of celebrity endorsement on consumer purchase intention for existing products: a comparative study. *Journal of Management Info*, 1(4), 1–8. <https://doi.org/10.31580/jmi.v4i1.18>

- Jang, M., Lee, R., & Yoo, B. (2021). Does fun or freebie increase in-app purchase?: Analyzing effects of enjoyment and item experience intention to purchase mobile game contents. *Information Systems and E-Business Management*, 19(2), 439–457. <https://doi.org/10.1007/s10257-019-00420-z>
- Jauk, E., Benedek, M., & Neubauer, A. C. (2014). The road to creative Achievement: A latent variable model of ability and personality predictors. *European Journal of Personality*, 28(1), 95–105. <https://doi.org/10.1002/per.1941>
- Jin, C. H. (2014). The role of users' motivations in generating social capital building and subjective well-being: The case of social network games. *Computers in Human Behavior*, 39, 29–38. <https://doi.org/10.1016/j.chb.2014.06.022>
- Jin, W., Sun, Y., Wang, N., & Zhang, X. (2017). *Why users purchase virtual products in MMORPG? An integrative perspective of social presence and user engagement*. <https://doi.org/http://dx.doi.org/10.1108/IntR-04-2016-0091>
- Joshi, S., Arindom, R., Dikshit, T., Anish, B., Deep, A. G., & Pallav, P. (2015). Conceptual paper on factors affecting the attitude of senior citizens towards purchase of smartphones. *Indian Journal of Science and Technology*, 8(12), 83–89. <https://doi.org/10.17485/ijst/2015/v8i>
- Kaczmarek, L. D., & Drazkowski, D. (2014). MMORPG escapism predicts decreased well-being: Examination of gaming time, game realism beliefs, and online social support for offline problems. *Cyberpsychology, Behavior, and Social Networking*, 17(5), 298–302. <https://doi.org/10.1089/cyber.2013.0595>
- Kaur, P., Dhir, A., Chen, S., Malibari, A., & Almotairi, M. (2020). Why do people purchase virtual goods? A uses and gratification (U&G) theory perspective. *Telematics and Informatics*, 53(January 2020), 101376. <https://doi.org/10.1016/j.tele.2020.101376>
- Kim, H. W., Gupta, S., & Koh, J. (2011). Investigating the Intention to purchase digital items in social networking communities: A customer value perspective. *Information and Management*, 48(6), 228–234. <https://doi.org/10.1016/j.im.2011.05.004>
- Kim, Y. Y., & Kim, M. H. (2017). The impact of social factors on excessive online game usage, moderated by online self-identity. *Cluster Computing*, 20(1), 569–582. <https://doi.org/10.1007/s10586-017-0747-1>
- Kokkinakis, A. V., Lin, J., Pavlas, D., & Wade, A. R. (2016). What's in a name? Ages and names predict the valence of social interactions in a massive online game. *Computers in Human Behavior*, 55, 605–613. <https://doi.org/10.1016/j.chb.2015.09.034>
- Latifah, U., & Kristiana, N. (2021). Analisis Visual Karakter Gatotkaca Dalam Game Mobile Legends Bang Bang. *Visualita Jurnal Online Desain Komunikasi Visual*, 9(2), 15. <https://doi.org/10.34010/visualita.v9i2.3449>
- Lee, J., Kim, J., & Choi, J. Y. (2019). The adoption of virtual reality devices: The technology acceptance model integrating enjoyment, social interaction, and strength of the social ties. *Telematics and Informatics*, 39, 37–48. <https://doi.org/10.1016/j.tele.2018.12.006>
- Lee, Y. C. (2017). Effects of branded e-stickers on purchase intentions: The perspective of social capital theory. *Telematics and Informatics*, 34(1), 397–411. <https://doi.org/10.1016/j.tele.2016.06.005>
- Leiner, D. J., Kobilke, L., Rueß, C., & Brosius, H. B. (2018). Functional domains of social media platforms: Structuring the uses of Facebook to better understand its gratifications. *Computers in Human Behavior*, 83, 194–203. <https://doi.org/10.1016/j.chb.2018.01.042>
- Lemmens, J. S., Valkenburg, P. M., & Gentile, D. A. (2015). The internet gaming disorder scale. *Psychological Assessment*, 27(2), 567–582. <https://doi.org/10.1037/pas0000062>
- Leviton-Reid, C., & Campbell, R. (2016). Volunteer roles and the benefits of volunteering: An examination of nonprofit housing cooperatives. *Community Development*, 47(4), 464–480. <https://doi.org/10.1080/15575330.2015.1134609>
- Li, H., Liu, Y., Xu, X., Heikkilä, J., & Van Der Heijden, H. (2015). Modeling hedonic is continuance through the uses and gratifications theory: An empirical study in online games. *Computers in Human Behavior*, 48, 261–272. <https://doi.org/10.1016/j.chb.2015.01.053>
- Lim, W. M. (2017). Untangling the relationships between consumer characteristics, shopping values, and behavioral Intention in online group buying. *Journal of Strategic Marketing*, 25(7),

- 547–566. <https://doi.org/10.1080/0965254X.2016.1148767>
- Lin, J. S., Chen, K. J., & Sung, Y. (2018). Understanding the Nature, Uses, and Gratifications of Social Television: Implications for Developing Viewer Engagement and Network Loyalty. *Journal of Broadcasting and Electronic Media*, 62(1), 1–20. <https://doi.org/10.1080/08838151.2017.1402904>
- Liu, H. J., & Shiue, Y. C. (2014). Influence of Facebook game players' behavior on flow and purchase intention. *Social Behavior and Personality*, 42(1), 125–133. <https://doi.org/10.2224/sbp.2014.42.1.125>
- Loureiro, S. M. C., Guerreiro, J., & Japutra, A. (2021). How escapism leads to behavioral Intention in a virtual reality store with background music? *Journal of Business Research*, 134(May), 288–300. <https://doi.org/10.1016/j.jbusres.2021.05.035>
- Luvana, F., Maureen, V., & Lesmana, F. (2019). Uses and Gratifications of Genta Magazines Among Petra Christian University'S Student. *Bricolage: Jurnal Magister Ilmu Komunikasi*, 5(01), 001. <https://doi.org/10.30813/bricolage.v5i01.1739>
- Ma, S. (2017). Fast or free shipping options in online and omni-channel retail? The mediating role of uncertainty on satisfaction and purchase intentions. *International Journal of Logistics Management*, Vol. 28(No. 4), 1099–1122.
- Maxentia, R., & Rahmandani, A. (2022). Hubungan Antara Escapism Dengan Kecenderungan Kecanduan Game Online Pada Anggota Komunitas Esport X Semarang. *Jurnal EMPATI*, 10(5), 334–339. <https://doi.org/10.14710/empati.2021.32935>
- Melodia, F., Canale, N., & Griffiths, M. D. (2020). The Role of Avoidance Coping and Escape Motives in Problematic Online Gaming: A Systematic Literature Review. *International Journal of Mental Health and Addiction*, 20(2), 996–1022. <https://doi.org/10.1007/s11469-020-00422-w>
- Merhi, M. I. (2016). Towards a framework for online game adoption. *Computers in Human Behavior*, 60, 253–263. <https://doi.org/10.1016/j.chb.2016.02.072>
- Mirabi, V., Akbariyeh, H., & Tahmasebifard, H. (2015). A Study of Factors Affecting on Customers Purchase Intention Case Study : the Agencies of Bono Brand Tile in Tehran. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*, 2(1), 267–273.
- Noor, N. A. M., & Muhammad, A. (2019). The influences of attitude, social influence and price consciousness in promoting consumers' Intention to purchase counterfeit products. *International Journal of Supply Chain Management*, 8(1), 683–689.
- Palar, F. F. (2019). *HARGA, PRODUK FITUR, KEUNGGULAN RELATIF, LINGKUNGAN SOSIAL, NAMA MEREK, KENYAMANAN, KETERGANTUNGAN DAN KOMPATIBILITAS KONSUMEN MUDA TERHADAP NIAT BELI SMARTPHONE IPHONE DI SURABAYA*. 8(1), 711–719.
- Putri, D. W., & Utama, L. (2021). Pengaruh Persepsi Kualitas, Pengaruh Sosial, Dan Kebutuhan Akan Keunikan Terhadap Minat Pembelian Konsumen Luxury Brand Pada Generasi Y. *Jurnal Manajerial Dan Kewirausahaan*, 3(1), 176. <https://doi.org/10.24912/jmk.v3i1.11302>
- Quinn, K. (2016). Why We Share: A Uses and Gratifications Approach to Privacy Regulation in Social Media Use. *Journal of Broadcasting and Electronic Media*, 60(1), 61–86. <https://doi.org/10.1080/08838151.2015.1127245>
- Rahman, B. (2017). Peran Teknologi Game Berthema Simulasi Pembangunan Kota Terhadap Persepsi Pembentukan Penataan Pola Ruang Kota. *Seminar Nasional Smart City*, 1(1), 123–134.
- Rasoolimanesh, S. M., Jaafar, M., Kock, N., & Ahmad, A. G. (2017). The effects of community factors on residents' perceptions toward World Heritage Site inscription and sustainable tourism development. *Journal of Sustainable Tourism*, 25(2), 198–216. <https://doi.org/10.1080/09669582.2016.1195836>
- Santosa, N. A., & Sundari, L. P. ratna. (2018). Hubungan antara durasi bermain game online dengan gangguan tajam penglihatan pada anak sekolah menengah pertama (SMP) di kota Denpasar. *E--Jurnal Medika*, 7(8), 1–12. <https://ojs.unud.ac.id>
- Saputra, A. (2019). Survei Penggunaan Media Sosial Di Kalangan Mahasiswa Kota Padang Menggunakan Teori Uses and Gratifications. *Baca: Jurnal Dokumentasi Dan Informasi*, 40(2),

207. <https://doi.org/10.14203/j.baca.v40i2.476>
- Sari, I. P., & Nurwahyuni. (2022). *Jurnal Cakrawala Pendas DAMPAK GAME ONLINE MOBILE LEGENDS TERHADAP*. 8(4), 1038–1046.
- Shelton, A. K. (2010). Defining the lines between virtual and real world purchases: Second Life sells, but who's buying? *Computers in Human Behavior*, 26(6), 1223–1227. <https://doi.org/10.1016/j.chb.2010.03.019>
- Shen, X. L., Li, Y. J., Sun, Y., Chen, Z., & Wang, F. (2019). Understanding the role of technology attractiveness in promoting social commerce engagement: Moderating effect of personal interest. *Information and Management*, 56(2), 294–305. <https://doi.org/10.1016/j.im.2018.09.006>
- Souza, L. L. F. de, & Freitas, A. A. F. de. (2017). Consumer behavior of electronic games' players: a study on the intentions to play and to pay. *Revista de Administração (São Paulo)*, 52(4), 419–430. <https://doi.org/https://doi.org/10.1016/j.rausp.2017.08.004>
- Sutrisno, F. R. (2020). Pengaruh Iklan, Lingkungan Sosial Dan Harga Terhadap Keputusan Pembelian Item Game Mobile Legends Pada Mahasiswa Stiesia Surabaya. *Jurnal Ilmu Dan Riset Manajemen*.
- Theodori, G. L., & Robinson, C. S. (2019). A note on religious participation and community involvement. *Community Development*, 50(4), 484–493. <https://doi.org/10.1080/15575330.2019.1642924>
- Tyran, J., & Chomatek, L. (2021). Influence of outliers in MOBA games winner prediction. *Procedia Computer Science*, 192(2019), 1973–1981. <https://doi.org/10.1016/j.procs.2021.08.203>
- Ullah, R., & Khan, P. D. A. U. (2017). Role of FM Radio in Education (A Case Study of FM Radio in Peshawar). *J. Soc. Sci*, 3(3), 9–16.
- Vahlo, J., & Karhulahti, V. M. (2020). Challenge types in gaming validation of video game challenge inventory (CHA). *International Journal of Human Computer Studies*, 143(June), 102473. <https://doi.org/10.1016/j.ijhcs.2020.102473>
- Wang, L., Yan, Q., & Chen, W. (2019). Drivers of purchase behavior and post-purchase evaluation in the Singles' Day promotion. *Journal of Consumer Marketing*, 36(6), 835–845. <https://doi.org/10.1108/JCM-08-2017-2335>
- Warouw, E. F. H. (2014). Analyzing the Consumer Purchasing Intention of Virtual Goods in Online Game. *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 2(3), 1162–1172.
- Wei, P. S., & Lu, H. P. (2014). Why do people play mobile social games? An examination of network externalities and of uses and gratifications. *Internet Research*, 24(3), 313–331. <https://doi.org/10.1108/IntR-04-2013-0082>
- Wijaya, C. V., & Paramita, S. (2019). Komunikasi Virtual dalam Game Online (Studi Kasus dalam Game Mobile Legends). *Koneksi*, 3(1), 261. <https://doi.org/10.24912/kn.v3i1.6222>
- Wu, J. H., Wang, S. C., & Tsai, H. H. (2010). Falling in love with online games: The uses and gratifications perspective. *Computers in Human Behavior*, 26(6), 1862–1871. <https://doi.org/10.1016/j.chb.2010.07.033>
- Yang, L., & Mao, M. (2014). Antecedents of online group buying behavior: From price leverage and crowd effect perspectives. *Proceedings - Pacific Asia Conference on Information Systems, PACIS 2014*.
- Younus, S., Rasheed, F., & Zia, A. (2015). Identifying the Factors Affecting Customer Purchase Intention. *Global Journal of Management and Business Research: Administration and Management*, 15(2), 1–6.
- Yulius, R. (2017). Analisis Perilaku Pengguna dalam Pembelian Item Virtual pada Game Online. *Journal of Animation & Games Studies*, 3(1), 1. <https://doi.org/10.24821/jags.v3i1.1582>
- Zhang, H., Zhang, K. Z. K., Lee, M. K. O., & Feng, F. (2015). Information Technology & People Brand loyalty in enterprise microblogs : influence of community commitment , IT habit , and participation Article information: To cite this document: About Emerald [www.emeraldinsight.com](http://www.emeraldinsight.com). *Information Technology & People*.

- Zhao, L., & Lu, Y. (2012). Enhancing perceived interactivity through network externalities: An empirical study on micro-blogging service satisfaction and continuance intention. *Decision Support Systems*, 53(4), 825–834. <https://doi.org/10.1016/j.dss.2012.05.019>
- Zhou, T. (2015). The effect of network externality on mobile social network site continuance. *Program*, 49(3), 289–304. <https://doi.org/10.1108/PROG-10-2014-0078>