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ANTECEDENTS OF SATISFACTION AND LOYALTY TOWARDS IN-APP PURCHASE INTENTION FOR INDONESIAN GENSHIN IMPACT PLAYERS

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A R T I C L E I N F O

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Perceived Value
Purchase Intention

ABSTRACT

The mobile game market has been increasing rapidly in the last five years. One of the most mobile game nowadays is Genshin Impact which has been awarded as the Best Mobile Game in 2021 by The Game Award. For games such as Genshin Impact, its source of income comes from in-app purchases and there are various factors that affecting the in-app purchase intention of the players such as satisfaction and loyalty that also can be affected by perceived value. A total of 271 Genshin Impact players from across Indonesia as samples were collected using the purposive sampling technique that involved online questionnaires with 5-point likert scale questions given to Genshin Impact players as its data collecting method. The data were analyzed using the statistical techniques known as structural equation modelling (SEM). The results of this study shows that Economic, Emotional, Hedonic, Utilitarian Values positively influence Satisfaction; Economic, Emotional, Hedonic, Utilitarian Values positively influence Loyalty; Satisfaction positively influence Loyalty; Loyalty positively influence Purchase Intention; Satisfaction does not positively influence Purchase Intention.

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1. Introduction

Mobile internet and mobile technology have a huge influence on our daily lives. Many activities can be done using mobile devices such as smartphones, tablets, and e-book readers. From 2017 to 2023, the development of online games is predicted to increase by 50%, which is IDR 11.3 trillion rupiah (statista.com, 2021). The gaming business grew 50 percent in just five years, and this statistic does not include supporting sectors such as electronics. The modest size of mobile devices and limited visual effects make this a less than ideal gaming platform. Because of their mobility, convenience, and low cost, mobile games have become popular (Bose and Yang 2011). Sensor Tower estimates that global revenue from sales will increase by 23.4 percent year-on-year in the first half of 2020. Most games, which are typically free to download and play, are subsidized by in-app advertising. However according to Zins (2018), based on statistics, only 2.2% of players offer to transact in-game and this issue is becoming serious for game developers to make a profit. Therefore, this research was conducted to determine the factors that can encourage game players to make transactions.

Many studies have examined mobile games from various perspectives. However, there is still little research in terms of the perceived value of player satisfaction and loyalty that has an impact on in-game purchases (Hsiao and Chen, 2016), especially for the Genshin Impact game which is still a new game. Therefore, the researcher will examine the relationship between perceived value, gamer loyalty,

gamer satisfaction, and in-app purchase intention by modifying the conceptual model of Chuang (2020) and Hsiao and Chen (2016).

2. Literature Review

Mobile Game and In-app Purchase

According to Hsiao and Chen (2016), mobile games are video games that can be played on mobile devices such as smartphones or tablets; games that cannot be played on mobile devices, such as portable game consoles, are not considered mobile games. Mobile games are gaining popularity on smartphones and tablets because they are portable and connected to the internet, allowing players to play anywhere and anytime. Mobile game gamers can now download various mobile games from online app stores (Feijoo et al., 2012; Hsiao and Chen, 2016).

Mobile games have evolved, and the three main types of mobile games today are the buy download model, the subscription model, and the freemium. The freemium model, which includes in-app and/or virtual item purchases, is sometimes known as free-to-play (F2P). Many mobile games have integrated this idea into their designs in recent years. Users are persuaded to pay for certain games or products that will help them develop when they reach a certain level of engagement and progress in the game (Koeder and Tanaka, 2017). They also state that "Gacha" is a major source of money for free-to-play mobile games. At first glance, it is easy to confuse Gacha with the virtual goods buying model, as there are very few differences between the two. Mobile gamers, on the other hand, have a completely different perspective. Gacha, true to its name, is not a physical commodity that can be purchased, but rather a "lottery ticket" that allows consumers to win items of varying rarity. This can be achieved by making payments in real or virtual currencies; these transactions are known as In-App Purchases (Radoff, 2011; Hsiao and Chen, 2016).

Perceived Value

Perceived Value can be defined as a consumer's objective evaluation of the usefulness of a product or service, as determined by the consumer's perception of what is obtained and offered. Increasing the value of a product or service can be achieved either by increasing its benefits or by reducing the costs of its purchase and use (Boksberger and Melsen, 2011). Perceived Value has been identified in previous studies as one of the most important ideas for achieving customer thinking (Ha and Jang, 2010; Jensen, 1996). A multidimensional factor, perceived value is also considered (Ha and Jang, 2010). As a result of this study, perceived value is divided into four dimensions: Hedonic Value, Utilitarian Value, Economic Value and Emotional Value (Ray et al., 2012; Ha and Jang, 2010; Lu and Hsiao 2010).

Hedonic Value

The customer's detailed evaluation of profit and loss, such as entertainment and escape, is referred to as Hedonic Value (Overby and Lee, 2006). “Hedonic perception” refers to the distinctiveness, marked meaning, and emotional arousal of an object or experience (Ha and Jang, 2010; Spangenberg et al., 1997). In contrast to utilitarian values, hedonic values are more experiential (Henry et al, 2004).

Previous research found that Hedonic Value has a significant impact on satisfaction (Avcilar and Ozsoy, 2015; Hanzaee & Rezaeyeh, 2013). Customers will be happier if they get better value based on their good experience (Chunmei and Weijun, 2017). Jones et al. (2006) found that Hedonic Value has a positive effect on loyalty in previous studies. As a result, the following hypotheses are proposed in this study:

H1. Hedonic Value has a positive effect on satisfaction.

H2. Hedonic Value has a positive effect on Loyalty.

Utilitarian Value

The utilitarian dimension of a product or service is related to efficiency, goal orientation, and a specific task perspective (Ha and Jang, 2010). Utilitarian Value is defined as a comprehensive assessment of functional satisfaction and disappointment (Overby and Lee, 2006). The consumption process is the focus of Utilitarian Value, which emphasizes information (Henry et al, 2004).

According to a recent study by Evelina et al. (2020), Utilitarian Value is a direct driver of satisfaction, which means that having a good view of Utilitarian Value is very important to increase satisfaction. Jones et al. (2006) have shown that Utilitarian Value has a beneficial impact on loyalty because it leads to favorable attitudes and thoughts towards events that provide psychological and physical pleasure (Chuang, 2020). So from the previous explanation, the following hypothesis is proposed in this study:

H3. Utilitarian Value has a positive effect on satisfaction.

H4. Utilitarian Value has a positive effect on Loyalty.

Economic Value

Economic Value is the emphasis on the perceived directness of the value of a product or service to the level of quality and complexity of the features provided (Ray et al., 2012; Verhoef, 2003; Sweeney and Soutar, 2001). When people calculate the Economic Value (such as low price, good quality, and better benefits) of a product (or service), they will choose the original over competitors (Ray et al., 2012). Price has traditionally been considered important for consumer value judgments, particularly in informal interactions, but with the expansion of value perspectives and the associated multidimensional scale, the importance of Economic Value has decreased (Sweeney and Soutar, 2001; Alford and Biswas, 2002).

According to previous research, Economic Value is a significant factor on purchase intention in online games in the freemium model, (Chou and Kimsuwan, 2013; Lehdonvirta, 2009; Liu and Shiue, 2014) and according to recent research from Chuang et al. (2020) Economic Value has a positive influence on satisfaction and loyalty. Therefore, the following hypotheses can be proposed:

H5. Economic Value has a positive effect on satisfaction.

H6. Economic Value has a positive effect on Loyalty.

Emotional Value

Consumers who are promoters and practitioners of rational consumption are now starting to lean towards perceptual consumption to fulfill their psychological needs. Similarly, positive emotions play an important role in consumer buying activities (Peng, 2013). Emotional Value refers to the utility obtained from the level of feeling or affection using a product or service (Lu and Hsiao, 2010; Sweeney and Soutar, 2001). Dodds et al. (1991) argues that Emotional Value has a positive impact on purchase intention, this opinion has been supported by several studies such as (Hsiao and Chen, 2016). Based on the understanding of Emotional Value, it can be concluded as the psychological side of consumers whose level of satisfaction is obtained from positive feelings or affection after evaluating the use of products or services.

According to previous research, Emotional Value has a positive influence on satisfaction and loyalty which can affect in-game purchase intentions (Hsiao and Chen, 2016; Hsu and Lin, 2015). Therefore, the following hypothesis can be proposed:

H7. Emotional Value has a positive effect on satisfaction.

H8. Emotional Value has a positive effect on Loyalty.

Satisfaction

Satisfaction is defined as a feeling of satisfaction or pleasure. As a result, customers feel satisfied and enjoy the experience of consuming the product. In other words, satisfaction is the customer's perception that consumption has resulted in pleasure as opposed to dissatisfaction (Ameer, 2013). There is evidence that satisfaction is the main driver of loyalty (Wu and Liang, 2011) and purchase intention (Ha and Jang, 2010). The findings of past studies have shown that satisfaction has a positive impact on loyalty and behavioral intentions (Jones et al., 2006; Ha and Jang, 2010). Customer loyalty and purchase intention increase when a person has a positive experience with a product or service. Player loyalty and purchase intention are also formed when a player is satisfied with the game; consequently, gamers are highly likely to stick with it (Sirakaya-Turk et al., 2015). Therefore, the following hypotheses can be proposed:

H9. Satisfaction has a positive effect on loyalty.

H10. Satisfaction has a positive effect on Purchase Intention.

Loyalty

The relationship between an individual's mental state and their willingness to support a business is known as customer loyalty. According to this view, social standards and situational factors have an impact on a relationship. Psychology, feelings and conative pre-cursors of relative attitudes are recognized as unshakable contributions, along with persuasive, perceptual and social outcomes (Dick and Basu, 1994). They tend to stick to failure if they are emotionally attached. As a result, a sense of loyalty develops towards something. In most cases, it is defined as “a positive attitude towards a brand that leads to stable acquisitions over time” (Assael, 1992).

In the marketing literature, customer loyalty to the intention to buy a preferred product or service is continuously considered as a better indicator of purchase intention (Lu et al., 2015; Oliver, 2010). The concept of loyalty, according to Dick and Basu (1994), is a combination of patronage and attitude towards an entity (brand, service, store, or vendor). As Sohn and Lee (2005) note, in an online context, customer loyalty is an important precursor of intention to return to a website. When consumer loyalty is high, the likelihood of buying a product or service is also high, according to Chuang et al. (2016) Loyalty to vendors can be measured by customers who have preferences and strong emotional attachments to certain online shopping sites. It is also possible to attribute high purchase intention to gamers who have developed an emotional attachment to a particular mobile game title or application. Therefore, the following hypothesis can be proposed:

H11. Loyalty has a positive effect on Purchase Intention.

Purchase Intention

Purchase intention is a conscious consumer attitude to buy a certain product. According to Hsu and Lin (2015), purchase intention is defined as a user's willingness to buy paid applications (including mobile games), pay to remove ads, implement in-app purchases (virtual goods) or pay to get the following additional functionality or content acceptance of a decision begins.

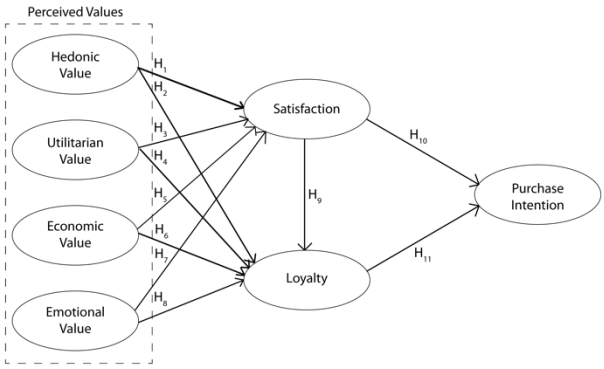

Figure. 1. Research Model

3. Methods

The population of this research is Genshin Impact mobile players in Indonesia. Therefore, the researchers used an online questionnaire with a 5-point Likert scale distributed through social media, the Genshin Impact Discord Community and connections as a data collection method to reach Genshin Impact mobile players throughout Indonesia. To conduct the study, the sample size was calculated using the general rule by Hair et al. (2017), which is at least five times the number of indicators. This study has a total of 33 indicators, where Hedonic Value has 6 indicators by Chuang (2020), Gan and Wang (2017), and Molinillo et al. (2020), Utilitarian Value has 4 indicators by Chuang (2020), Gan and Wang (2017), and Evelina et al. (2020), Economic Value has 4 indicators by Chuang (2020) and Hsiao and Chen (2016), Emotional Value has 4 indicators by Hsiao and Chen (2016) and Purnami and Agus (2020), Satisfaction has 4 indicators by Chuang (2020) and Alshibly (2014), Loyalty has 7 indicators by Chuang (2020) and Hsiao and Chen (2016), and lastly Purchase Intention has 4 indicators by Hsiao and Chen (2016) and Chuang (2020). There will be a minimum of 165 questionnaires. This study will use a quantitative approach and a causal study to examine the relationship between these six variables on the intention to make In-App Purchases: (1) Hedonic Value, (2) Utilitarian Value, (3) Economic Value, (4) Emotional Value, (5) Satisfaction, and (6) Loyalty. The data collected in this study will be calculated using a statistical technique known as Structural Equation Modeling (SEM) with a method called PLS-SEM. Researchers used statistical software called SmartPLS to run the data.

The Pre-Test study was carried out before the actual study was distributed to ensure that all variables and indicators used were reliable and suitable for use in the actual study. In the pre-test, there are several indicators that are issued because they have an outer loading value below 0.7, namely: EV5 (0.573), HV7 (0.505), HV8 (0.474), UV1 (0.271), UV2 (0.238), UV3 (0.676) , UV8 (0.689). There are also several indicators of Emotional Value that must be removed because they do not pass the discriminant validity test where the Emotional Value variable has a smaller value than the correlation with the Satisfaction variable, therefore the EV3, EV7, and EV8 indicators are removed because they can also represent the satisfaction variable. After the said indicators were taken out, the results of the test became valid and reliable, with the AVE all above 0.5 and CR all above 0.7. Thus the indicators and variables are acceptable for the actual test to be conducted.

4. Results and Discussion

Respondents' Demographic Profile

The results of the descriptive statistics of the respondents in this study indicate that the majority of respondents live on the island of Java with 232 people or 85.61% and 51.66% consisting of female players. The majority of the respondents in this study were aged 18-24 years which could be categorized as still a student. Most of the total respondents play Genshin Impact every day, it can be seen from the data that the respondents who play every day are 113 or 41.70%. The rest of the details can be seen in table 2, the demographic table.

Table 1.
Demographic Table

Variable	Category	Count	Percentage
Gender	Male	131	48.34%
	Female	140	51.66%
	Total	271	100.00%
Age	17 and below	24	8.86%
	18 – 24	232	85.61%
	25 – 34	14	5.17%
	35 – 44	1	0.37%
	Total	271	100.00%
Occupation	Students	236	87.08%
	Employee	13	4.80%
	Entrepreneur	4	1.48%
	Unemployed	7	2.58%
	Freelance	11	4.06%
	Total	271	100.00%
Playing Frequency	Every day	113	41.70%
	4 – 5 times a week	23	8.49%
	2 – 3 times a week	56	20.66%
	1 time a week	31	11.44%
	Rarely	48	17.71%
	Total	271	100.00%
Domicile	Java	232	85.61%
	Kalimantan	4	1.48%
	Nusa Tenggara	3	1.11%
	Sulawesi	10	3.69%
	Sumatera	22	8.12%
	Total	271	100.00%

Validity and Reliability Test

Within the structural equation model (SEM), there are two sub-models, namely: the inner model, which identifies the relationship between the independent and dependent variables; while the outer model identifies the relationship between variables and indicators. The purpose of the outer model is to check the validity and reliability of the measurement model used using PLS-SEM (Wong, 2013; Ghozali and Latan, 2015). The results of the validity and reliability of the actual test can be seen on table 2. As seen on the table, every variables are valid because all of them has composite reliability above 0.7 and AVE above 0.5, and every indicators included are all reliable because all have the outer loading value above 0,7. Thus all the variables and indicators have fulfilled the criteria to proceed the study.

Table 2.
Measurement of Validity and Reliability

Constructs & Item	Outer Loadings
Hedonic Value (HV) (CR = 0,907 / AVE = 0,620)	
[HV1] While playing Genshin Impact, I enjoy being in the in-game environment	0,828
[HV2] While playing Genshin Impact, I find it exciting	0,776
[HV3] While playing Genshin Impact, I feel like an adventure	0,790
[HV4] Playing Genshin Impact, gives me pleasure	0,763
[HV5] I find Genshin Impact visually appealing	0,780
[HV6] I'm attracted by the visual appeal of Genshin Impact	0,786
Utilitarian Value (UV) (CR = 0,864 / AVE = 0,614)	
[UV4] Learning how to play Genshin Impact was easy for me	0,768
[UV5] My interaction with Genshin Impact mobile is clear	0,778
[UV6] Genshin Impact mobile allows to play anytime	0,797
[UV7] Genshin Impact mobile makes it possible to play anywhere	0,791
Economic Value (ECV) (CR = 0,910 / AVE = 0,718)	
[ECV1] Genshin Impact mobile In-App Purchase Items are reasonably priced.	0,865
[ECV2] Genshin Impact mobile offers value for money.	0,884
[ECV3] Genshin Impact mobile has good paid items for the price.	0,845
[ECV4] Genshin Impact mobile is quite economical.	0,790
Emotional Value (EV) (CR = 0,878 / AVE = 0,644)	
[EV1] I play Genshin Impact mobile because I think the game is interesting	0,843
[EV2] Genshin Impact mobile usually provides new exciting events to play	0,820
[EV4] Genshin Impact mobile design caught my attention	0,813
[EV6] Playing Genshin Impact mobile makes me relax	0,728
Satisfaction (SAT) (CR = 0,934 / AVE = 0,779)	
[SAT1] I am satisfied with Genshin Impact mobile	0,895
[SAT2] I feel fulfilled with Genshin Impact mobile	0,887
[SAT3] I'm happy with Genshin Impact mobile	0,885
[SAT4] The overall feeling when I play Genshin Impact mobile puts me in a good mood	0,864
Loyalty (LOY) (CR = 0,933 / AVE = 0,668)	
[LOY1] I consider myself very loyal to Genshin Impact mobile	0,763
[LOY2] When I want to play mobile games, Genshin Impact mobile is the first thing I think about mobile games	0,838
[LOY3] I believe that Genshin Impact mobile is my favorite mobile game	0,867
[LOY4] I am willing to say positive things about Genshin Impact mobile to others	0,773
[LOY5] I will continue to play Genshin Impact mobile	0,807
[LOY6] If others want to play mobile games, I will recommend Genshin Impact mobile	0,832
[LOY7] I will encourage friends and relatives to play Genshin Impact mobile	0,834
Purchase Intention (PI) (CR = 0,918 / AVE = 0,737)	
[PI1] I intend to pay for items in the Paimon Shop on Genshin Impact mobile in the future	0,902
[PI2] I predict that I will pay for the items in the Paimon Shop on Genshin Impact mobile in the future	0,884
[PI3] I hope to buy items in Paimon Shop in Genshin Impact mobile soon	0,867
[PI4] I will recommend others to buy game items in Paimon Shop	0,775

Notes: CR= Composite Reliability; AVE= average variance extracted.

The purpose of discriminant validity is to evaluate and ensure that the construct variables have

the best relationship with their respective indicators in the PLS model (Hair et al., 2017). The Fornell-Larcker method compares the square root of the AVE value with the correlation of other variables, and it is expected that the square root value of the AVE of each variable has a greater value than the correlation between variables in the research model (Hair et al., 2017; Ghozali and Latan, 2015). Table 3 shows that the results of the discriminant validity test of the variables from this study are valid and feasible because the square root value of the AVE of each variable is greater than the correlation of other variables. From the results of the discriminant validity test all variables have fulfilled the criteria to proceed the study.

Table 3.
Discriminant Validity Test

	ECV	EV	HV	LOY	PI	SAT	UV
ECV	**0,847**						
EV	0,328	**0,802**					
HV	0,293	0,773	**0,787**				
LOY	0,396	0,602	0,547	**0,817**			
PI	0,524	0,392	0,320	0,648	**0,859**		
SAT	0,359	0,778	0,701	0,673	0,433	**0,882**	
UV	0,202	0,557	0,545	0,520	0,354	0,538	**0,783**

Multicollinearity test uses VIF (Variance Inflation Factor) to evaluate the level of collinearity. If the VIF value is five or more, it is recommended to remove one of the indicators from the variables involved (Hair et al., 2017). However, in this study, it can be seen in table 4 that there is no multicollinearity between variables. Thus, this study is clear from multicollinearity and able to proceed to the next step.

Table 4.
Multicollinearity Test (VIF)

	ECV	EV	HV	LOY	PI	SAT	UV
ECV	-	-	-	1,157	-	1,126	-
EV	-	-	-	3,511	-	2,730	-
HV	-	-	-	2,739	-	2,623	-
LOY	-	-	-	-	1,828	-	-
PI	-	-	-	-	-	-	-
SAT	-	-	-	2,849	1,828	-	-
UV	-	-	-	1,560	-	1,522	-

According to Hair et al. (2017), r-square is determined as the squared variance between the real and expected values of certain endogenous constructs. The value of the coefficient is from 0 to 1 and the greater the r-square value, the better the estimation of the dependent variable when applied correctly (Hair et al., 2017; Moore et al., 2018). R-square adjusted is the r-square value that has been adjusted to the research model in this study. The value of the r-square is in table 5, where Loyalty has an adjusted r-square of 0.510, it is concluded that Loyalty has an ability value of 51.0% and the remaining 49.0% is influenced by other factors not investigated in this study. For the purchase

intention variable, which has an adjusted r-square of 0.416, the purchase intention has an ability value of 41.6% and the remaining 58.4% is influenced by other variables not examined in this study. The last one is satisfaction which has an adjusted r-square of 0.644 or 64.4%, and the remaining 35.6% is influenced by other factors not examined in this study.

Table 5.
R-Square Adjusted

	R Square Adjusted
LOY	0,510
PI	0,416
SAT	0,644

Hypothesis Testing

Hypothesis testing is analyzed using the original sample value and t-statistics. In this study, the minimum value of t-statistic is 1.968 with a significance level of 0.05. The following table shows the results of hypothesis testing in this study:

Table 6.
Hypothesis Testing

	Original Sample	T Statistics (>1,968)	Results	Conclusion
[H1] HV -> SAT	0,202	3,133	Significant	Accepted
[H2] UV -> SAT	0,115	2,220	Significant	Accepted
[H3] ECV -> SAT	0,105	2,156	Significant	Accepted
[H4] EV -> SAT	0,523	8,771	Significant	Accepted
[H5] HV -> LOY	0,028	0,373	Not Significant	Accepted
[H6] UV -> LOY	0,195	3,840	Significant	Accepted
[H7] ECV -> LOY	0,169	3,532	Significant	Accepted
[H8] EV -> LOY	0,093	1,144	Not Significant	Accepted
[H9] SAT -> LOY	0,416	5,112	Significant	Accepted
[H10] SAT -> PI	-0,006	0,089	Not Significant	Rejected
[H11] LOY -> PI	0,653	10,008	Significant	Accepted

Discussion

The first hypothesis states that Hedonic Value has a positive influence on satisfaction. This hypothesis has an original sample of 0.202 which shows a positive influence, the t-statistic of this hypothesis shows a value of 3.133 which means it is above the minimum limit of 1.968 which means that the positive effect of Hedonic Value on satisfaction is significant. These results are supported by previous studies by Chuang (2020), Evelina et al. (2020), and Gan and Wang (2017) who found that when consumers make a purchase, it can give a feeling of satisfaction or pleasure, the higher the Hedonic Value, the higher the consumer satisfaction.

The second hypothesis states that Utilitarian Value has a positive influence on Satisfaction. In this study, this hypothesis has an original sample of 0.115 and a t-statistic of 2.220, which means that this

hypothesis has a positive and significant effect, so this hypothesis can be accepted. This result is also supported by previous research by Chuang (2020) and Evelina et al. (2020) who found that positive utilitarian values can have a positive impact on satisfaction as well, because consumers will rely on their knowledge to evaluate a product before buying it, and knowledge of the advantages and disadvantages of a product is a fundamental necessity for consumers to make purchasing decisions. and this knowledge can complement consumer needs and satisfaction (Chunmei and Weijun, 2017; Sweeney and Soutar, 2001).

The third hypothesis states that Economic Value has a positive influence on satisfaction. This hypothesis has an original sample of 0.105 and a t-statistic of 2.156, which means that this hypothesis has a positive and significant effect, so this hypothesis can be accepted. The results of this study are supported by research from Chuang (2020).

The fourth hypothesis states that Emotional Value has a positive influence on satisfaction. This hypothesis has an original sample of 0.523 and a t-statistic of 8.771 which means that this hypothesis has a very positive and very significant effect because the number is quite high, so this hypothesis can be accepted. The results of this study are supported by research from Hsu and Lin (2015).

The fifth hypothesis states that Hedonic Value has a positive effect on Loyalty. This hypothesis has an original sample of 0.028 and a t-statistic of 0.373, which means that this hypothesis has a positive but not significant effect, so it can still be said that this hypothesis is accepted. The results of this study are supported by research from Chuang (2020) which also shows a positive relationship between Hedonic Value and Loyalty but is weak.

The sixth hypothesis states that Utilitarian Value has a positive influence on Loyalty. This hypothesis has an original sample of 0.195 and a t-statistic of 3.840, which means that this hypothesis has a positive and significant effect, so this hypothesis can be accepted. This research is supported by research from Chuang (2020).

The seventh hypothesis states that Economic Value has a positive influence on Loyalty. This hypothesis has an original sample of 0.169 and a t-statistic of 3.532, which means that this hypothesis has a positive and significant effect, so this hypothesis can be accepted. The results of this study are supported by research from Chuang (2020).

The eighth hypothesis states that Emotional Value has a positive influence on Loyalty. This hypothesis tends to have a low value with an original sample of 0.093 and a t-statistic of 1.144 which has a positive but not significant impact. So this hypothesis can also be accepted. Research from Hsiao and Chen (2016) supports the results of this study where it is stated that positive emotional values bring positive loyalty as well.

The ninth hypothesis states that satisfaction has a positive effect on loyalty. This hypothesis has an original sample of 0.416 and a t-statistic of 5.112, which means that this hypothesis has a positive and significant effect, so this hypothesis can be accepted. The results of this study are supported by previous research from Chuang (2020).

The tenth hypothesis states that satisfaction has a positive effect on purchase intention. This hypothesis has an original sample of -0.006 and a t-statistic of 0.089, which means that this hypothesis has no positive and insignificant effect, so this hypothesis is rejected. The results of this study are also supported by research from Chuang (2020) and Hsu and Lin (2014) which states that in-app purchases or digital purchases in applications (games) are additional expenses that are not required, so consumers (game players) do not need to rush to make digital purchases in games. In addition, the main market of Genshin Impact are players who are in their 18 – 24s and mostly students based on table 1, so there is a possibility that satisfaction is not a main driver to purchase intention because players of that age are yet to be financially independent and have other priorities to make expense on.

The eleventh hypothesis states that Loyalty has a positive influence on Purchase Intention. The results of this hypothesis test have an original sample of 0.653 and a t-statistic of 10.008, which means this hypothesis has a very positive and very significant effect because it has a very high value.

Outside of the proposed hypothesis, the researcher tested the significance of the mediating effect of the mediator variable. It was found that satisfaction did not mediate the relationship between Hedonic, Utilitarian, Economic, Emotional Value and Purchase Intention, the original sample of the four relationships has similar negative values and insignificant t-statistics. However, Loyalty can mediate the relationship between Hedonic, Utilitarian, Economic, Emotional Value and Purchase Intention, because it has a positive original sample value, but two of them are not significant because the t-statistics are below the minimum of 1,968.

5. Conclusion

Based on the results of this study, it can be concluded that it is true that there is a positive influence of Hedonic, Utilitarian, Economic, Emotional Values on Satisfaction and Loyalty, as for the positive influence of Satisfaction on Loyalty, and Loyalty on Purchase Intention, but no positive influence on Satisfaction on Purchase Intention for in-app purchases of the Genshin Impact game (in-app purchase) for Indonesian players.

The theoretical implication of this research is the addition of references and literature that discusses Perceived Values, Satisfaction, Loyalty, and in-app purchase intention in the world of gaming. While the managerial implications of this research can be aimed at game developers who can reap the results of this research which proves that in the world of gaming, satisfaction alone is not enough to trigger the purchase intention of players (gamers) to buy digital products or digital currency in games however they can maintain or improve the factors of players satisfaction because satisfaction improves loyalty and loyalty improves purchase intention , so in terms of perceived value other game developers can improve the consumer's playing experience so that they can become loyal players, because from the results of this study Loyalty has a very significant positive impact on players' Purchase Intentions. To improve players' loyalty to the game, developers can improve the game's graphics and visuals and gaming experience to increase its hedonic value; increase gameplay efficiency and ease its learning curve to increase utilitarian value; increase the purchasable items' value for its money, maybe introduce a special bundled items or discounted items for particular times to improve economic value; and improve the gaming innovations for new events or new gameplay mechanics to increase its emotional value.

This research also has its limitations in variations in variables that can affect purchase intention in the application and also limitations in the object of research which only focuses on one type of game, namely Genshin Impact, while there are many other types of games that may produce different results. For further researchers, it is possible to add aspects of other variables that were not included in this study, and another suggestion is to be able to examine other types of games with different genres from Genshin Impact.

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