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Analysis Of Customer Engagement And Brand Intimacy In The Context Of Mobile Games

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Abstract

The development of the mobile game industry has increased the need for developers to build customer engagement and strong emotional connections with players. This study aims to analyze the influence of advice seeking, self-image expression, and game involvement on customer engagement, as well as the influence of customer engagement on brand intimacy with enjoyment as a moderating variable in Mobile Legends. The study used a quantitative approach with non-probability sampling through purposive sampling. The study population was Mobile Legends users in Indonesia with a sample of 150 respondents who played at least three times a day and had been using Mobile Legends for more than a year. Data were collected through a six-level Likert scale online questionnaire and analyzed using PLS-SEM with SmartPLS 4 through outer and inner model testing. The results showed that advice seeking and game involvement had a positive and significant effect on customer engagement, while self-image expression had no significant effect. Customer engagement had a positive and significant effect on brand intimacy, while creation did not have the strongest impact and enjoyment did not moderate the relationship. In conclusion, increasing active player engagement is a major factor in strengthening Mobile Legends' brand intimacy.

Keywords: Brand Intimacy, Customer Engagement, Game Involvement, Mobile Games, Online Gaming

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INTRODUCTION

In today's digital era, technological advancements have brought significant changes to the way individuals interact, work, and entertain themselves. Entering the Industrial Revolution 4.0, the increasingly widespread use of the internet and digital technology has had a significant impact on various sectors, including gaming. Digital transformation has made the game development process more innovative, efficient, and interactive. Games that were initially only playable offline can now be played online, allowing players to interact with each other in real time without being limited by distance and time. Cai et al. (2022) explain that the development of mobile technology is driving a shift in players from traditional platforms such as PCs and consoles to mobile gaming. Ease of access, flexibility of use, and the ability of mobile games to provide entertainment are factors driving this shift. Mobile games are games that can be played on mobile devices or tablets (Putra & Hawignyo, 2024). The biggest factor in the popularity of mobile games is their lowcost barrier, where games offer easy access, convenience, and portability (Bose & Yang, 2011). The mobile games market in Indonesia itself is quite large, according to App Annie data cited by the Mobile Marketing Association (2021), mobile games recorded a total 2 billion downloads, making Indonesia the 4th country in the world for the most mobile game downloads.

The increase in mobile game usage has also occurred since the policy of restricting outdoor activities during the pandemic. According to research by Sun et al. (2020), the level of heavy internet dependence increased sharply from 4.3% to 23% after the pandemic, and the overall level of dependence even jumped 20-fold from 3% to 60%. Increasingly easy and readily available internet access has led to a significant surge in gaming activity across various age groups (Fahrizal & Slamet Irmawan, 2023). In 'Mobile Gaming Through the Pandemic and Beyond in Southeast Asia 2021,' research conducted by InMobi showed that approximately 46% of respondents started playing mobile games for the first time. As a result, the number of mobile game players doubled, while application usage experienced a four-fold increase from January 2020 to January 2022 (Apidana & Kholifah, 2023). Amidst the competitive mobile games industry, Mobile Legends has managed to dominate the market as the most played online game in Indonesia. According to APJII (2025) data, 48.99% of online game players chose Mobile Legends, far surpassing Free Fire with 23.05% and PUBG Mobile with 11.05%. In 2023, Mobile Legends became the most downloaded free MOBA game in Indonesia, with a total of more than 27.6 million downloads on Google Play and the Apple Store, and earned around US$32 million in revenue, making it the highest-grossing MOBA game in

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Indonesia (Tila, 2024). This dominance indicates that Mobile Legends has built a large and loyal customer base in Indonesia, making it relevant for examining the relationship between customer engagement and brand intimacy.

With the advancement of digital technology, gaming activities are no longer limited to gaming experiences alone, but are also integrated with social media platforms. Social media has become a platform for players to build gaming communities, interact with each other, share content, and exchange gaming experiences. Social media, in general, is an internet-based application that allows users to create and share content, interact with each other, and access a variety of information (Xie, 2018). These platforms are also popular for meeting users' information needs through the rapid and widespread dissemination of information (Brodie et al., 2013). Social media's ability to provide a space for interaction and information exchange is one of the factors driving customer engagement. According to Wang & Lee (2020), factors driving customer engagement are divided into two: customer-based and context-based. Customer-based engagement is a voluntary drive or motivation that arises from within the customer through interactive experiences between the customer and a particular brand (Prentice et al., 2018), which includes advice-seeking and self-image expression. Meanwhile, context-based factors are factors derived from the context of interactions between customers and a brand (Hollebeek, 2011). In this study, this context is represented through game involvement, which is the level of involvement or commitment of an individual to the activity of playing games, characterized by the frequency of play and the immersion experience that causes the player to focus entirely on the game, thus ignoring their attention to the surrounding environment (Domahidi et al., 2014).

The next issue relates to how customer engagement can develop into a deeper emotional connection with the brand. Customer engagement in an online community shifts power and production value from the company to the customer (Wang & Lee, 2020). Customers no longer merely act as users of products or services but also play an active role in the value creation process for the company (Cambra-Fierro et al., 2019). In the context of mobile games, this engagement can be realized through consumption, contribution, and creation. Consumption is the customer's activity in accessing and consuming brand-related content; contribution indicates engagement through interactions such as liking, commenting, or sharing content; while creation is the highest level of engagement when customers create brand-related content (Mutinga et al., 2011). Although customer engagement plays a crucial role in building relationships with brands, the level of customer engagement does not always produce the same emotional

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closeness in each individual. This difference is thought to be influenced by the positive experiences customers experience when interacting with the brand, one of which is enjoyment. Enjoyment is the level of pleasure an individual experiences when engaging in an activity because it provides intrinsic satisfaction, regardless of the outcome (Davis et al., 1992). In the context of mobile games, enjoyment is a key motivator for players to continue engaging with games because a pleasurable gaming experience can enhance emotional satisfaction (Ryan et al., 2006).

This issue is increasingly important because ongoing interactions between customers and brands can form deep emotional relationships called brand intimacy. Brand intimacy reflects the closeness or emotional attachment between customers and brands that develops through ongoing experiences (Yim et al., 2008). Customers who have a strong emotional attachment to a brand actively participate in the company's well-being and are driven to contribute to its success. Brand campaigning activities by uploading, forwarding, and sharing their experiences on social media accounts indicate the comfort or emotional attachment customers feel when using a particular brand. In their study, Bazi et al. (2023) revealed that some of their respondents felt less happy if they did not own or engage with a particular brand. However, previous research examining the effect of customer engagement on brand intimacy focused on the fashion industry. The differences in characteristics between the fashion and mobile games industries indicate issues that require further study. The fashion industry is product-oriented, while the mobile games industry is a digital service that involves continuous interaction between players, communities, and game developers through gameplay, content updates, and social media. These characteristics allow for the formation of different patterns of customer engagement and brand intimacy.

Based on these problems, this study aims to determine the effect of advice seeking on customer engagement, the effect of self-image expression on customer engagement, the effect of game involvement on customer engagement, and the effect of game customer engagement on brand intimacy. This study also aims to determine the impact of the creation dimension in customer engagement on brand intimacy and to determine the effect of enjoyment in strengthening customer engagement on brand intimacy. The urgency of this study lies in the need to understand the differences in customer motives and dimensions of customer involvement in shaping customer intimacy towards a game, especially in the context of the mobile games industry in Indonesia. This study is expected to add insight regarding the relationship between different customer motives on customer engagement and brand intimacy, the differences

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in the influence of each dimension of effects on customer engagement, and serve as a reference for further research related to brand intimacy. The novelty of this study lies in the application of customer engagement and brand intimacy studies in the context of the mobile games industry in Indonesia, with Mobile Legends as the research object, as well as testing advice seeking, self-image expression, game involvement, creation, and enjoyment in the relationship. Mobile Legends was chosen because it is the most downloaded mobile game in Indonesia.

RESEARCH METHODS

This study used a quantitative approach to determine and analyze the influence of customer engagement on brand intimacy in the context of mobile games. The quantitative approach utilizes statistical data as a tool for data processing and focuses on objective results. Data were obtained through questionnaires distributed to respondents, followed by validity and reliability tests to determine the relationships between variables and answer the research problem formulation and hypotheses (Sahir, 2022). The study was conducted throughout Indonesia without any specific location characteristics because Indonesians are mobile game users.

The research instrument was a questionnaire compiled based on the variables of advice seeking, self-image expression, game involvement, customer engagement, enjoyment, and brand intimacy. The instrument was distributed online using Google Forms to respondents who were Mobile Legends users. Measurement of each variable used a six-level Likert scale, namely 1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Somewhat Agree, 5 = Agree, and 6 = Strongly Agree (Sugiyono, 2019). The questionnaire consisted of customer-based, context-based, customer engagement sections covering consumption, contribution, and creation, enjoyment, and brand intimacy. Before being used on the research sample, the instrument was first pilot-tested on 30 respondents using SPSS to test the instrument's feasibility.

Data analysis techniques were carried out through descriptive analysis and statistical analysis using Structural Equation Modelling (SEM). This study used the Partial Least Square Structural Equation Modelling (PLS-SEM) method with the help of SmartPLS 4 software. PLS-SEM was used to analyze the relationship between variables in the research model. The analysis was carried out in two stages, namely the outer model and the inner model. The outer model was used to test the validity and reliability of the instrument through convergent validity, discriminant validity, Cronbach's Alpha, and Composite Reliability. Furthermore, the inner model was used to evaluate the

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relationship between variables through R-Square, Q-Square, and hypothesis testing based on the path coefficient, P-Value, and T-Value. Hypothesis testing used a significance level of 5%, with the hypothesis criteria being accepted if P-Value <0.05 and T-Value> 1.96.

The research population was all Indonesians who use the Mobile Legends application. The population is the entire object of the research and has certain characteristics that can be used as a basis for drawing conclusions (Abdullah, 2015). The sample is a portion or representative of the population being studied, selected with the hope of reflecting the population's characteristics (Ngatno, 2015; Abdullah, 2015). Sampling was conducted using a non-probability sampling technique with a purposive sampling method. This method was used based on predetermined criteria to ensure that respondents align with the research objectives (Sugiyono, 2019).

The respondent criteria in this study were Mobile Legends users, playing Mobile Legends at least three times a day, and having played Mobile Legends for more than a year. The sample size was determined based on Ghozali and Latan (2015), who stated that PLS-SEM analysis does not require a large sample size, with a minimum sample size of 30 to 100. Based on these considerations, this study selected 150 respondents as the research sample.

The research procedure begins with defining the problem based on the phenomenon of mobile game development and the importance of customer engagement and brand intimacy in building relationships between players and brands. Next, the research determines the variables used, namely advice seeking, self-image expression, game involvement, customer engagement, enjoyment, and brand intimacy. Each variable is then operationalized through indicators that have been used in previous studies. Advice seeking uses indicators from Wolny and Mueller (2013) and Chu and Kim (2011), self-image expression uses Wallace et al. (2014), game involvement uses Higie and Feick (1989), customer engagement uses Schivinski (2016), enjoyment uses Nambisan and Baron (2007), and brand intimacy uses Thorbjørnsen et al. (2002).

The next stage involved the preparation and distribution of an online questionnaire using Google Forms to respondents who met the research criteria. The collected data was then pilot-tested with 30 respondents to test the instrument's validity and reliability. After the instrument was declared feasible, the questionnaire was used to obtain data from 150 respondents. The data were then analyzed descriptively to describe the characteristics of the respondents and the research variables, then analyzed using PLS-SEM with SmartPLS 4. The analysis stage included testing the

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outer model to ensure the validity and reliability of the instrument, followed by testing the inner model to analyze the relationships between variables and test the research hypotheses.

RESULTS AND DISCUSSION

Descriptive Analysis

1. Descriptive Analysis of Respondent Characteristics

A. Respondent Characteristics Based on Gender

Table 1. Respondent Gender

Category	Amount	Percentage
Man	74	49.3%
Woman	76	50.7%
Total	150	100%

Source: primary data (2026)

Based on the table above, it can be seen that the majority of respondents were female, as many as 76 respondents with a percentage of 50.7% and male, as many as 74 respondents with a percentage of 49.3%.

B. Respondent Characteristics Based on Age

Table 2. Respondents' Age

Category	Amount	Percentage
<20 years	19	12.7%
21-25 years old	73	48.7%
26-30 years old	41	27.3%
31-35 years old	10	6.7%
36-40 years old	6	4%
>40 years	1	0.7%
Total	150	100%

Source: primary data (2026)

Based on the table above, it can be seen that the majority of respondents are aged 21-25 years, namely 73 respondents with a percentage of 48.7%, then aged 26-30 years as many as 41 respondents (27.3%), aged less than 20 years as many as 19 respondents (12.7%), aged 31-35 years as many as 10 respondents (6.7%), aged

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36-40 years as many as 6 respondents (4%), and finally respondents aged more than 40 years as many as 1 respondent with a percentage of 0.7%.

C. Respondent Characteristics Based on Profession

Table 3. Respondents' Professions

Category	Amount	Percentage
Students	77	51.3%
Private sector employee	46	30.7%
Civil Servants/TNI/POLRI	15	10%
Businessman	5	3.3%
Other	7	4.7%
Total	150	100%

Source: primary data (2026)

Based on the table above, it can be seen that the majority of respondents are students or university students, as many as 77 respondents with a percentage of 51.3%, then respondents are private employees as many as 46 respondents (30.7%), respondents with the profession of civil servants/military/police as many as 15 respondents (10%), respondents with other professions as many as 7 respondents (4.7%), and finally respondents with the profession of entrepreneurs as many as 5 respondents with a percentage of 3.3%.

D. Respondent Characteristics Based on Education

Table 4. Respondents' Education

Category	Amount	Percentage
Elementary school	0	0%
Junior High School/Islamic Junior High School	8	5.3%
High School/Vocational School/Equivalent	76	50.7%
Diploma	22	14.7%
Bachelor	44	29.3%
Total	150	100%

Source: primary data (2026)

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Based on the table above, it can be seen that the majority of respondents had a high school/vocational high school/equivalent education, as many as 76 respondents with a percentage of 50.7%, respondents with a bachelor's degree were 44 respondents (29.3%), respondents with a diploma education were 22 respondents (14.7%), and finally respondents with a junior high school/Islamic junior high school education were 8 respondents with a percentage of 5.3%.

E. Respondent Characteristics Based on Duration of Playing Mobile Legends

Table 5. Respondents' Duration of Playing Mobile Legends

Category	Amount	Percentage
<1 hour	1	0.7%
1-2 hours	38	25.3%
2-3 hours	70	46.7%
>3 hours	41	27.3%
Total	150	100%

Source: primary data (2026)

Based on the table above, it can be seen that the majority of respondents' Mobile Legends playing duration is 2-3 hours as many as 70 respondents (46.7%), playing duration of more than 3 hours as many as 41 respondents (27.3), playing duration of 1-2 hours as many as 38 respondents (25.3%), playing duration of 2-3 hours as many as 37 respondents (24.6%), and finally less than 1 hour as many as 1 respondent with a percentage of 0.7%.

2. Descriptive Analysis of Research Variables

Table 6. Average Criteria of Likert Scale

Information	Average Range of Assessment Scores
Strongly Disagree (STS)	1.00 - 1.83
Disagree (TS)	1.84 - 2.67
Somewhat Disagree (ATS)	2.68 - 3.51
Somewhat Agree (US)	3.52 - 4.35
Agree (S)	4.36 - 5.19
Strongly Agree (SS)	5.20 - 6.00

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A. Advice Seeking Variable

Table 7. Descriptive Analysis of Advice Seeking Variables

Code	Item	Mean	Information
AS1	I hope to get tips/directions/hints in playing Mobile Legends from other people on social media.	4.35	Somewhat Agree
AS2	I hope to get advice from others on social media, which helps me make the decision to play Mobile Legends.	4.47	Agree
AS3	I am considering playing Mobile Legends, on the advice of my acquaintances on social media.	4.46	Agree
AS4	I feel more comfortable playing Mobile Legends on the advice of my acquaintances on social media.	4.67	Agree
Average		4.49	Agree

Source: processed primary data (2026)

Based on the table above, it can be seen that the average respondent for the customer-based advice-seeking variable is "Agree" with an average score of 4.49.

B. Self-Image Expression Variable

Table 8. Descriptive Analysis of Self Image Expression Variables

Code	Item	Mean	Information
SI1	Mobile Legends reflects my personality	4.53	Agree
SI2	Mobile Legends reflects my true self	4.54	Agree
SI3	Mobile Legends shapes my self-image	4.54	Agree
SI4	Other people think positively about me, when I play Mobile Legends	4.59	Agree
Average		4.55	Agree

Source: processed primary data (2026)

Based on the table above, it can be seen that the average respondent for the customer-based variable – self-image expression is “Agree” with an average score of 4.55.

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C. Game Involvement Variables

Table 9. Descriptive Analysis of Game Involvement Variables

Code	Item	Mean	Information
GI1	I am interested in Mobile Legends	4.66	Agree
GI2	I think Mobile Legends is fun	4.73	Agree
GI3	I think Mobile Legends is interesting	4.71	Agree
GI4	I think Mobile Legends is important	4.65	Agree
Average		4.69	Agree

Source: processed primary data (2026)

Based on the table above, it can be seen that the average respondent for the context-based - game involvement variable is "Agree" with an average score of 4.69.

D. Variables *Customer engagement*

Table 10. Descriptive Analysis of Variables *Customer engagement Consumption*

Code	Item	Mean	Information
CS1	I read posts related to Mobile Legends	4.48	Agree
CS2	I read fanpage about Mobile Legends	4.44	Agree
CS3	I saw an image related to Mobile Legends	4.55	Agree
CS4	I follow Mobile Legends social media accounts	4.51	Agree
Average		4.50	Agree

Source: processed primary data (2026)

Based on the table above, it can be seen that the average respondent variable *customer engagement* The consumption dimension is “Agree” with an average score of 4.50.

Table 11. Descriptive Analysis of Variables *Customer Engagement Contribution*

Code	Item	Mean	Information
CD1	I comment on videos related to Mobile Legends	4.50	Agree
CD2	I commented on a post related to Mobile	4.40	Agree

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	Legends		
CD3	I comment on images/graphics related to Mobile Legends	4.3	Somewhat Agree
CD4	I share posts related to Mobile Legends	4.42	Agree
CD5	I 'like' images/graphics related to Mobile Legends	4.41	Agree
Average		4.41	Agree

Source: processed primary data (2026)

Based on the table above, it can be seen that the average respondent variable *customer engagement* The contribution dimension is "Agree" with an average score of 4.41.

Table 12. Descriptive Analysis of Variables *Customer Engagement Creation*

Code	Item	Mean	Information
CR1	I made a post related to Mobile Legends on social media	3.98	Somewhat Agree
CR2	I upload photos/images about Mobile Legends on social media	4.07	Somewhat Agree
CR3	I uploaded a video about Mobile Legends on social media	4.24	Somewhat Agree
CR4	I made a post about Mobile Legends on an online forum.	4.77	Agree
CR5	I made a review about Mobile Legends	4.78	Agree
Average		4.37	Agree

Source: processed primary data (2026)

Based on the table above, it can be seen that the average respondent variable *customer engagement* The creation dimension is "Agree" with an average score of 4.37.

E. Enjoyment Variable

Table 13. Descriptive Analysis of Enjoyment Variables

Code	Item	Mean	Information
E1	*Mobile Legends*,gave me a pleasant and	4.60	Agree

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	relaxing experience		
E2	*Mobile Legends*give me entertainment and satisfaction	4.62	Agree
E3	*Mobile Legends*entertain and stimulate my mind	4.62	Agree
E4	Overall, playing Mobile Legends feels fun for me.	4.7	Agree
Average		4.64	Agree

Source: processed primary data (2026)

Based on the table above, it can be seen that the average respondent for the enjoyment variable is "Agree" with an average score of 4.64.

F. Brand Intimacy Variable

Table 14. Descriptive Analysis of Brand Intimacy Variables

Code	Item	Mean	Information
BI1	I feel like my feedback/opinion about Mobile Legends is being taken into account.	4.52	Agree
BI2	Mobile Legends really listens to what I say	4.42	Agree
BI3	I feel like I really understand Mobile Legends	4.53	Agree
BI4	I feel like Mobile Legends really understands me.	4.32	Somewhat Agree
Average		4.44	Agree

Source: processed primary data (2026)

Based on the table above, it can be seen that the average respondent for the brand intimacy variable is "Agree" with an average score of 4.44.

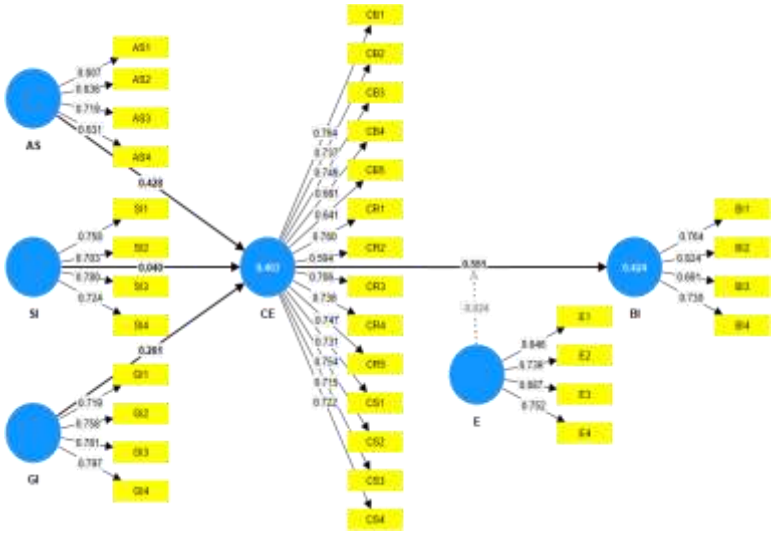
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Statistical Analysis

1. Measurement Model Testing (Outer Model)

A. Convergent Validity Test



Source: processed primary data (2026)

Figure 1. Convergent Validity Test Results

Based on the image above, the data from the convergent validity test can be described in the form of Outer Loadings in Table 15.

Table 15. Outer Loadings

	Advice Seeking	*Self-Image Expression*	*Game Involvement*	*Customer engagement*	*Enjoyment*	*Brand Intimacy*	*Enjoyment x CE*
AS1	0.807						
AS2	0.836						
AS3	0.719						
AS4	0.631						
SI1		0.758					
SI2		0.703					
SI3		0.78					
SI4		0.724					
GI1			0.719				
GI2			0.758				
GI3			0.781				

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GI4			0.797				
CS1				0.731			
CS2				0.754			
CS3				0.715			
CS4				0.722			
CB1				0.764			
CB2				0.737			
CB3				0.749			
CB4				0.681			
CB5				0.641			
CR1				0.76			
CR2				0.594			
CR3				0.706			
CR4				0.736			
CR5				0.747			
E1					0.646		
E2					0.739		
E3					0.687		
E4					0.752		
BI1						0.764	
BI2						0.824	
BI3						0.691	
BI4						0.73	
E x CE							1

Source: processed primary data (2026)

Based on the table above, it can be concluded that the variables that meet the minimum Outer Loadings value criteria 0.50 – 0.60 are declared valid. Furthermore, Table 16 shows the results of the Average Variance Extracted (AVE) measurement.

Table 16. Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)
Advice Seeking	0.566
Self-image Expression	0.550
Game Involvement	0.584

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Customer engagement	0.516
Enjoyment	0.500
Brand Intimacy	0.569

Source: processed primary data (2026)

Based on the table above, it can be concluded that all variables meet the minimum AVE value > 0.50 and are declared valid.

B. Discriminant Validity Test

Table 17. Fornell-Larcker Criterion

	Advice Seeking	*Self-Image Expression*	*Game Involvement*	*Customer Engagement*	*Enjoyment*	*Brand Intimacy*
AS	0.753					
SI	0.318	0.742				
GI	0.589	0.359	0.764			
CE	0.595	0.270	0.528	0.718		
E	0.420	0.468	0.354	0.610	0.707	
BI	0.570	0.348	0.609	0.644	0.468	0.754

Source: processed primary data (2026)

Based on testing *Fornell-Larcker Criterion*, the discriminant validity in this model is declared valid. The √AVE value for each variable is *advice seeking* (0.753), self-image expression (0.742), game involvement (0.764), *customer engagement* (0.718), enjoyment (0.707), and brand intimacy (0.754) are greater than their correlation values with other variables in the research model.

Table 18. Cross Loadings

	Advice Seeking	*Self-Image Expression*	*Game Involvement*	*Customer engagement*	*Enjoyment*	*Brand Intimacy*	*Enjoyment x CE*
AS1	0.807	0.24	0.423	0.513	0.359	0.471	-0.3
AS2	0.836	0.242	0.432	0.459	0.324	0.413	-0.274
AS3	0.719	0.264	0.495	0.414	0.332	0.444	-0.183
AS4	0.631	0.213	0.437	0.392	0.239	0.382	-0.299
SI1	0.291	0.758	0.302	0.202	0.147	0.311	-0.169
SI2	0.222	0.703	0.223	0.167	0.098	0.221	-0.136
SI3	0.255	0.78	0.304	0.229	0.243	0.289	-0.237

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SI4	0.172	0.724	0.227	0.196	0.167	0.204	-0.207
GI1	0.349	0.31	0.719	0.389	0.259	0.479	-0.255
GI2	0.425	0.192	0.758	0.362	0.199	0.371	-0.192
GI3	0.449	0.289	0.781	0.361	0.237	0.416	-0.256
GI4	0.555	0.299	0.797	0.48	0.361	0.567	-0.366
CS1	0.41	0.153	0.404	0.731	0.476	0.488	-0.525
CS2	0.499	0.082	0.418	0.754	0.346	0.531	-0.522
CS3	0.401	0.185	0.381	0.715	0.392	0.437	-0.508
CS4	0.591	0.215	0.447	0.722	0.393	0.522	-0.471
CB1	0.45	0.298	0.414	0.764	0.509	0.581	-0.564
CB2	0.282	0.136	0.318	0.737	0.404	0.483	-0.498
CB3	0.438	0.266	0.4	0.749	0.47	0.511	-0.555
CB4	0.369	0.285	0.286	0.681	0.496	0.396	-0.513
CB5	0.351	0.252	0.346	0.641	0.401	0.429	-0.471
CR1	0.517	0.243	0.42	0.76	0.426	0.449	-0.529
CR2	0.361	0.143	0.37	0.594	0.41	0.389	-0.411
CR3	0.404	0.19	0.299	0.706	0.412	0.395	-0.429
CR4	0.427	0.176	0.383	0.736	0.525	0.403	-0.519
CR5	0.387	0.071	0.365	0.747	0.503	0.389	-0.548
E1	0.313	0.242	0.253	0.525	0.646	0.274	-0.455
E2	0.288	0.19	0.209	0.453	0.739	0.291	-0.413
E3	0.255	0.165	0.315	0.375	0.687	0.332	-0.35
E4	0.331	0.084	0.228	0.405	0.752	0.403	-0.402
BI1	0.455	0.291	0.486	0.599	0.315	0.764	-0.406
BI2	0.485	0.278	0.517	0.509	0.373	0.824	-0.406
BI3	0.337	0.203	0.372	0.362	0.353	0.691	-0.279
BI4	0.422	0.263	0.443	0.427	0.388	0.73	-0.354
Ex CE	-0.352	-0.257	-0.358	-0.704	-0.567	-0.486	1

Source: processed primary data (2026)

Based on the table above, it can be concluded that the variables advice seeking, self-image expression, game involvement, *customer engagement,* and brand intimacy have a greater indicator loading value than other variable indicators. Meanwhile, the Enjoyment x CE column is a moderating variable resulting from

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enjoyment x *customer engagement,* All indicators show negative loading values. Because this variable is formed from the multiplication of two constructs that have undergone a mean-centering process, its correlation pattern differs from the reflective variable. This negative value is not a problem, because the main reference is that the loading value of each indicator on its own variable must be higher than the other variables. With no overlap between the indicators of other variables and the moderating variable enjoyment x CE, the discriminant validity in this study remains valid.

C. Reliability Test

Table 19. Cronbach's Alpha

	Cronbach's alpha
Advice Seeking	0.740
Self-Image Expression	0.728
Game Involvement	0.764
Customer engagement	0.927
Enjoyment	0.671
Brand Intimacy	0.749

Source: processed primary data (2026)

Table 20. Composite Reliability

	Composite reliability
Advice Seeking	0.754
Self-Image Expression	0.736
Game Involvement	0.773
Customer Engagement	0.931
Enjoyment	0.679
Brand Intimacy	0.763

Source: processed primary data (2026)

Based on the table above, it can be concluded that all variables meet the Composite Reliability value.≥ 0.60 and is said to be reliable.

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2. Structural Model Estimation (Inner Model)

A. Coefficient Determination Test (R-Square)

Table 21. R-Square

	R-Square	*R-Square* adjusted
Brand intimacy	0.424	0.413
Customer engagement	0.403	0.391

Source: primary data processed 2026)

Based on the table above, it can be concluded that the brand intimacy variable has an R-Square value of 0.424, which means that the brand intimacy variable has an influence of 42.4% of the brand intimacy variable. *customer engagement*. Whereas *customer engagement.* has an R-Square value of 0.403, which means that the variable *customer engagement* get 40.3% influence of the variable *Advice Seeking*, Self-image Expression, Game Involvement, and Enjoyment.

B. Goodness of Fit Test

Table 21. Q-Square

	SSO	SSE	Q^2 (=1-SSE/SSO)
Advice Seeking	600	600	0
Self-Image Expression	600	600	0
Game Involvement	600	600	0
Customer engagement	2100	1630.162	0.198
Enjoyment	600	600	0
Brand Intimacy	600	467.070	0.222

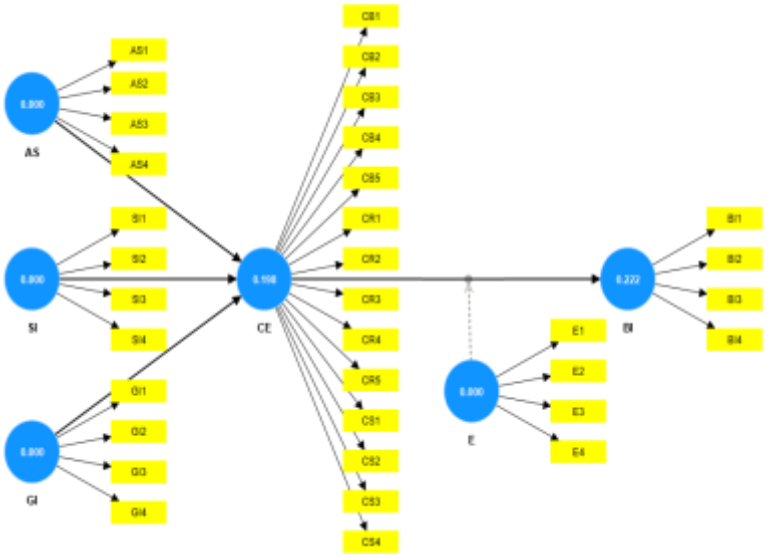
Source: processed primary data (2026)

Based on the table above, it can be concluded that the variables *Advice Seeking*, Self-image Expression, Game Involvement, and Enjoyment have a Q2 value of 0.000, which means the relationship between the variables independent with variables dependent variable is said to be close because it ranges between 0-1. The dependent variable *Customer engagement* has a Q2 of 0.198 and brand intimacy has a Q2 of 0.222, indicating a relationship between variables independent and the dependent is said to be close because it ranges between 0-1.

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C. Hypothesis Testing



Source: processed primary data (2026)

Figure 2. Path Coefficient Test Results

Table 22. Hypothesis Test Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Conclusion
Advice Seeking ->Customer engagement	0.428	0.422	0.069	6,247	0.000	H1 is supported and significant
Self-image Expression ->Customer engagement	0.040	0.061	0.064	0.624	0.533	H2 is not supported
Game Involvement ->Customer engagement	0.261	0.265	0.081	3,202	0.001	H3 supported and significant

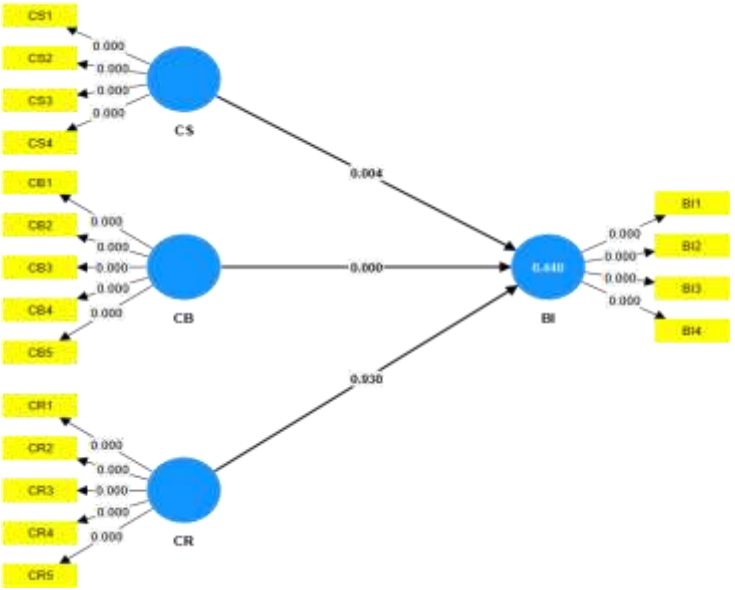
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Customer engagement-> Brand Intimacy	0.551	0.542	0.134	4.120	0.000	H4 is supported and significant
Enjoyment x Customer engagement-> Brand Intimacy	-0.024	-0.025	0.088	0.271	0.786	H6 is not supported

Source: processed primary data (2026)

Meanwhile, to analyze the influence of the three dimensions*customer engagement* on brand intimacy, based on research by Schivinski et al. (2016) using a simple PLS path model. Based on the research results, the results of the Path Coefficient test for hypothesis 5 (H5) are shown in Figure 3 below:



Source: processed primary data (2026)

Figure 3. Path Coefficient H5 Test Data

Based on Figure 3 above, the Path Coefficient test data can be described in Table 23 as follows:

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Table 23. Results of Hypothesis Test 5

	Original sample (O)	*Sample mean (M)*	*Standard deviation (STDEV)*	*T statistics (|O/STDEV|)*	*P values*	**Conclusion**
Contribution -> Brand Intimacy	0.377	0.379	0.106	3,553	0	H5 is not supported
Creation -> Brand Intimacy	0.008	0.013	0.088	0.088	0.93	
Consumption -> Brand Intimacy	0.323	0.321	0.112	2,881	0.004	

Source: processed primary data (2026)

Based on the two tables above, it can be concluded that all hypotheses that are directly related to each other are considered valid and significant. The results of the hypothesis test can be explained as follows:

a. The results of the hypothesis 1 (H1) test show that the Advice Seeking variable influences the variable *Customer engagement* positively and significantly. This is evident from the P-Value which is less than 0.05 (P-Value < 0.05), namely 0.00, and the T-Value which is more than 1.96 (T-Value > 1.96), namely 6.247. It can be concluded that hypothesis 1 (H1) is accepted.
b. The results of the hypothesis 2 (H2) test show that the Self-image Expression variable does not affect the variable *Customer engagement* positively and significantly. This is evident from the P-Value which is more than 0.05 (P-Value > 0.05), namely 0.533, and the T-Value which is less than 1.96 (T-Value < 1.96), namely 0.624. It can be concluded that hypothesis 2 (H2) is rejected.
c. The results of the hypothesis 3 (H3) test show that the Game Involvement variable influences the variable *Customer engagement* positively and significantly. This is evident from the P-Value of less than 0.05 (P-Value < 0.05), namely 0.0001, and the T-Value of more than 1.96 (T-Value > 1.96), namely 3.202. It can be concluded that hypothesis 3 (H3) is accepted.
d. The results of the hypothesis 4 (H4) test show that the variable *Customer engagement* positively and significantly influences the Brand Intimacy variable.

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This is evident from the P-Value of less than 0.05 (P-Value < 0.05), namely 0, and the T-Value of more than 1.96 (T-Value > 1.96), namely 4.120. It can be concluded that hypothesis 4 (H4) is accepted.

e. The results of the hypothesis 5 (H5) test show that the variable *Customer engagement* Level creation does not have the strongest impact on Brand Intimacy. This is evident from the P-Value of 0.93, which is greater than 0.05 (P-Value > 0.05), and the T-Value of 0.088, which is less than 1.96 (T-Value < 1.96). It can be concluded that Hypothesis 5 (H5) is rejected.

f. The results of the hypothesis 6 (H6) test show that the Enjoyment variable does not strengthen the influence of the variable *Customer engagement* on Brand Intimacy positively and significantly. This is evident from the P-Value which is more than 0.05 (P-Value > 0.05), namely 0.786, and the T-Value which is less than 1.96 (T-Value < 1.96), namely 0.271. It can be concluded that hypothesis 6 (H6) is rejected.

DISCUSSION

1. The Influence of Advice Seeking on Customer Engagement

Based on research results, advice seeking has a positive effect on customer engagement. This finding is supported by Wang & Lee (2020), who showed that individuals with high motivation to seek advice tend to be more active participants in brand communities. Erkan (2016) also explained that seeking reviews and recommendations through social media can reduce uncertainty, increase interaction between community members, and encourage brand engagement. In the context of Mobile Legends, social media as a means of seeking advice, exchanging information, and discussing the game can increase customer interaction and engagement with the brand.

2. The Influence of Self-Image Expression on Customer Engagement

Based on the research results, self-image expression does not significantly influence customer engagement. This result differs from Wang & Lee (2020), who found that self-image expression, advice seeking, and fashion involvement influence customer engagement. This difference suggests that the influence of self-image expression can depend on the context and product studied. Furthermore, negative stigma within the gaming community is also suspected of influencing player engagement. Kowert et al. (2023) explain the existence of a gamer culture often associated with exclusive attitudes, while Mangara & Cindoswari (2023) show the presence of verbal violence in

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communication between Mobile Legends players. Fashion products are easier to use to openly express social identity, while virtual products such as skins and emotes are more personal and limited within the gaming environment, thus not strong enough to drive customer engagement.

3. The Influence of Game Involvement on Customer Engagement

Based on the research results, game involvement has a positive effect on customer engagement. These results align with Guitton (2011), who explained that a person's commitment to a virtual group, including a gaming community, strengthens with the intensity of play, game exploration, and social identity within the community. In this study, player engagement is demonstrated not only through playing activities, but also through following Mobile Legends social media, reading about the latest patches, watching tournaments like MPL or M Series, discussing strategies, creating content, and providing feedback to developers. These activities demonstrate that players participate in the Mobile Legends brand ecosystem.

4. The Influence of Customer Engagement on Brand Intimacy

Based on the research results, customer engagement has a positive effect on brand intimacy. This finding aligns with Brodie et al. (2013), who showed that customer engagement within a brand community is fundamental to building customer relationships with the brand, increasing brand intimacy, and strengthening brand commitment. In the context of Mobile Legends, engagement through fan communities, official and creator social media, events, discussions, and sharing experiences between players can create ongoing interactions that strengthen players' emotional connections with the brand.

5. Creation Has the Strongest Impact on Brand Intimacy

Based on the research results, the creation dimension in customer engagement does not have the strongest impact on brand intimacy. This finding aligns with Schivinski and Lukasik (2015), who found that the creation dimension scores lower than consumption and contribution. Mutinga et al. (2011) also explained that creating activities are less frequently performed because they require greater effort and involvement. These activities require time, creativity, and motivation, so not all customers are willing to undertake them.

6. Enjoyment Strengthens the Influence of Customer Engagement on Brand Intimacy

Based on the research results, enjoyment does not strengthen the influence of customer engagement on brand intimacy. This result is in line with Park et al. (2010), who explained that deep emotional relationships with brands are formed through

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psychological and emotional attachments that develop over time, not just through momentary pleasure. Brakus et al. (2009) also showed that pleasant experiences during interactions with brands do not necessarily build strong emotional attachments. These findings indicate that customer engagement has a strong influence in shaping customers' emotional attachments to brands, so enjoyment does not have a significant moderating effect.

CONCLUSION

This study shows that advice seeking and game involvement have a positive and significant effect on customer engagement, while self-image expression has no significant effect. Customer engagement is also proven to have a positive and significant effect on brand intimacy, indicating that active player involvement in the community, social media, game development, and various Mobile Legends activities can strengthen emotional closeness to the brand. Conversely, the creation dimension does not have the strongest impact on brand intimacy, while enjoyment is not proven to strengthen the influence of customer engagement on brand intimacy. These findings confirm that active customer involvement is a more important factor in building an emotional connection with Mobile Legends than perceived enjoyment or content creation activities.

This study has limitations because data collection was conducted online through a questionnaire, which could lead to differences in respondents' understanding of the questions. The study also did not differentiate player characteristics based on rank, casual or competitive status, and other characteristics that could potentially influence customer engagement and brand intimacy. Therefore, future research is recommended to expand the object of study to other mobile games, broaden the characteristics of respondents, and add variables such as brand trust, brand experience, customer satisfaction, and perceived value. Practically, the results of this study imply that Moonton needs to prioritize strategies to increase customer engagement through community forums, social media, events, tournaments, content updates, and activities that encourage player interaction, as such engagement has been shown to be directly related to strengthening brand intimacy.

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