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Social Influence, Impulse Buying and Virtual Product Purchasing Behavior among Indonesian Millennials and Generation Z in Mobile Legends: Bang Bang

Chairia Ananda Tandias*, Namira Citta Asmara
LSPR London School of Public Relations, Indonesia
Email: chairiaananda@gmail.com*

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social influence; impulse buying; purchasing behavior; millennials; generation z.

Abstract
This study aims to examine the determinants of purchasing behavior for virtual product shopping in Mobile Legends: Bang Bang among Indonesia Millennials and Generation Z, concentrating on the role of social influence as an independent variable, purchasing behavior as a dependent variable and impulsive buying as a mediator variable. Utilizing quantitative approach and positivism paradigm, 152 data was collected from respondents through an online survey and the data were then analyzed with SmartPLS 4.0 using PLS-SEM and Multi-Group Analysis (MGA). The findings demonstrate that purchasing behavior is significantly affected by social influence and mediated by impulse buying. While there are no significant differences between Millennials and Generation Z in terms of their purchasing behavior towards virtual in-game products, these findings highlight the importance of emotional and social factors on shaping customer purchasing behavior in virtual settings. Future research may extend this model of study by adding other contextual or psychological factors that may influence virtual product purchasing behavior.

INTRODUCTION

Online gaming is a worldwide phenomenon with players ranging in diverse segmentation. Since the COVID-19 pandemic, the number of people who switched to online games along with duration of gaming have risen as they improved well-being and mental health (Barr & Copeland-Stewart, 2021). Yamaguchi (2023) in his research among Japanese adolescents and adults demonstrated that playing mobile games produces a higher level of well-being if played for a maximum of 1.5 hours each day. This is in accordance with Li et al. (2023) who mentioned online games enhance academic performance, personal growth and social life of college students based on research in China. With the increasing number of digital communities, positive emotional bonding and social connectedness among players are prone to be developed based on research conducted among Pakistani respondents (Amin et al., 2025).

With an estimation of 3.32 billion of active gamers in 2025, it has become a lifestyle and a social ecosystem (Parashar, 2025). Statista Research Department (2025) discovered that over 82 percent of worldwide Internet users were gamers, focusing on participants being aged between 16 to 24 years old. Even though detrimental effects may occur due to excessive consumption, online gaming is positively significant in enhancing cognitive skills (Pasayat et al., 2025). Furthermore, not only do online games provide entertainment, but also business opportunities and careers, for example, virtual products sellers, streamers and eSports athletes.

In Indonesia, there was a 10% increase in the numbers of gamers in 2025, bringing the total to 185 million in approximation (Sutriyanto, 2025). Among popular online games in Indonesia, Mobile Legends: Bang Bang (MLBB) is the most favorable game with 48.99% of respondents (Mahadewi, 2025). It is a multiplayer battle online arena (MOBA) released in 2016 by a Chinese developer company named Moonton Technology Co.Ltd, (Novianty, 2024). The game is designed for mobile devices and is available for download via Play Store and Appstore. Moreover, it allows players to share voice chats, ping, auto-chat and manual chats as forms of virtual communications (Putra, 2023). Apart from the chat features, MLBB provides freemium gameplay where players can game with the available items freely or purchase in-game products to enhance their gaming experiences. These virtual products are offered for sale. For instance, by paying a certain amount of real-life currency to purchase Diamonds (game currency), players are able to own specific heroes, skins or exclusive items. The virtual products are divided into different tiers of rarity (Elite, Legend and Collector) that will only be obtained through certain spendings (Apriyanto et al., 2023). There are gacha or loot boxes as well, in which is a game of chance where players invest more time and money while relying on luck to get the offered virtual products (Wicaksono et al., 2024). It is a way to maximize a freemium company's profits (Karlsen, 2021). In addition, limited time offers and price discounts are occasionally offered.

Despite the additional premiums do not significantly affect the gameplay performance and it seems tricky to increase player's willingness to pay (Salehudin & Alpert, 2022), it was revealed that players spending on virtual gaming products was significant (Khasanov, 2025), especially in Indonesia, who contributed 69.2 million US dollars to the company solely through MLBB (Chen, 2023). Having that amount of spending for secondary needs is astonishing, considering Indonesia was disclosed as the fourth-highest country with largest poor populations in 2024 by the World Bank (Puspita, 2025).

While motives to purchase products differ in each person, it is crucial to understand the science behind the transformation of consumer behavior in the digital era. One of the factors that influence consumer purchasing behavior is social influence, in which personal beliefs and opinions can be affected through social interactions (Bhukya & Paul, 2023). In a country with collectivist culture like Indonesia where support and maintaining friendship matters (Athifah et al., 2024), people's perceptions are often to be influenced through social settings.

Aside from Generation Z, the majority of online players also come from Millennials (Clement, 2025). The comparison regarding the impact of social influence between both generations is still limited in research as previous studies analyzed gamers without generational differences (Amal & Kurniasari, 2025; Khotima et al., 2025). Additionally, although both generations share the same impulsive buying behavior when it comes to live shopping (Febriansyah et al., 2024), there has yet to be more research related to such behavior in the gaming industry where virtual products are intangible and socially symbolic. The prior findings also concentrated on various types of online games and were conducted outside of Indonesia (Equibal et al., 2025; Mulyawan & Martini, 2025).

The urgency of this research is underscored by the significant economic contribution of virtual product sales in Indonesia, where MLBB alone generated 69.2 million US dollars, and the growing concern about consumer welfare in the digital economy. Understanding the psychological and social mechanisms that drive virtual product purchases is essential for

developing responsible marketing practices that protect consumers from excessive spending. The novelty of this study lies in its comparative analysis of Millennials and Generation Z in the context of virtual product purchasing behavior within a single game (MLBB), which has not been extensively examined in previous research.

As the gaming industry keeps on evolving at the present time, it raises questions on the underlying motives that trigger consumer purchasing behavior towards virtual products in games, specifically in MLBB where Indonesia Millennials and Generation Z spend their gaming time nowadays. Therefore, this study addresses these gaps by examining whether or not there is a significant difference in the purchasing behavior towards MLBB's virtual products among Millennials and Generation Z in Indonesia. Utilizing impulse buying as a mediator, this study analyzes how social influence affects the purchasing behavior of Millennials and Generation Z. Furthermore, this study is expected to provide a better comprehension related to Millennials and Generation Z's purchasing behavior towards virtual products in the gaming industry, along with how purchasing behavior can be affected in virtual products shopping.

Social Influence

Social influence affects consumer purchase intentions, especially if word-of-mouth is being spread by trusted peers. It has a stronger impact compared to advertisements or salespeople as long as the sender of the message is either an essential user, influencer or gatekeeper who selects the product or services (Gunawan et al., 2023). The theory of social influence was initially introduced by Kelman in 1958 and has become a major foundation in consumer behavior research since then (Liang et al., 2024; Davlembayeva et al., 2024). From the previous findings, it was discovered that there are three processes of influence exposure:

1) Compliance: when an individual anticipates to gain rewards or approval and to avoid punishments or disapproval.
2) Identification: intends to establish or maintain relationships with a person or group.
3) Internalization: when an individual believes the ideas or actions are intrinsically rewarding.

Impulse Buying

Impulse buying refers to a spontaneous "unlisted" shopping activity consumers perform triggered by sudden desires without thinking about the long-term effects (Ratnaningsih & Halidy, 2022; Nyrhinen et al., 2024). Through their research, Qureshi et al. (2025) discovered that personality plays a major role in impulsive buying tendencies. The time pressure and sense of exclusivity of limited time offers and flash sales drive this behavior further (Pangaribuan et al., 2025). Impulsive buying behavior tends to strike Gen-Z more often as they are easily affected by external factors (Kurniawan, 2021). Moreover, it was confirmed by Djafarova & Bowes (2021) who discovered the proportion of impulse buyers among Gen X, Millennials and Gen-Z are 32%, 34% and 41% consecutively.

Consumer Purchasing Behavior

According to Khawaja et al. (2023), consumer behavior relates to what product or service consumers buy, the reason they buy it along with when, where and how. The behavior is influenced by certain factors including personal (demographic), psychological (motivation, perception, beliefs), social (family, status, groups) and cultural (culture, subculture, social

class). Research conducted by Roy & Sachdeva (2024) portrays that social factors are the most dominant factor on shaping purchase intentions thus, contributing the largest influence towards consumer behavior. Gender-wise, Shejwal et al. (2023) stated that women are more subjective while men are more objective regarding how they make purchasing decisions.

Millennials and Generation Z

People born between 1981 and 1996 are considered Millennials while Gen-Z are people who were born between 1997-2012 (Kaur & Soni, 2024). Both generations share similar exposure to digital technology and are subject to hedonistic behavior. Nonetheless, Millennials emphasize on rational decisions whereas Generation Z hunts for enjoyment, learning and exploration (Agrawal, 2022). Another difference is that Millennials are attentive to product research, value sustainability and highlight trust while Generation Z emphasizes on visual, convenience and social media-driven products (Syamsudin et al., 2025). Adding to that information, it was discovered that Indonesian Millennials and Generation Z are significantly influenced by the availability of e-payment options (Simamora & Islami, 2023).

Relationship Between Social Influence and Consumer Purchasing Behavior

Research by Mkedder et al. (2024) discovered that virtual product purchase was significantly influenced by player satisfaction with emotional value being the most superior factor. Other than that, social influence significantly affects consumer purchasing behavior, especially through face-to-face friendships, live-streaming and e-WOM (Liang et al., 2024). This is in line with Bhukya & Paul (2023) who stated social environment interactivity strongly shapes purchase and consumption behaviors. Players purchase more virtual products when they play together with friends (Jiao et al., 2022). It was also found that social interactions are prioritized more by younger players compared to older players, influencing their purchasing behavior (Shi et al., 2024). Based on this explanation, the following hypotheses are proposed.

H1a: Social influence has a positive and significant impact on Generation Z's purchasing behavior.

H1b: Social influence has a positive and significant impact on Millennials' purchasing behavior.

Relationship Between Impulse Buying and Consumer Purchasing Behavior

Among other factors, impulse buying can be affected through hedonic shopping and lifestyle (Humairoh et al., 2023). Visual appeal and marketing tactics combined with materialism affects impulse buying in Generation Z, especially in digital settings (Kasuma et al., 2024). Research discovered that purchase that comes from impulsivity tends to trigger customers feeling doubtful about the purchase afterwards (Charles & Immanuel, 2025). Nonetheless, Putratama & Retnowardhani (2025) mentioned that Generation Z players tend to be affected when there are sales promotions or if the virtual products cultivate their game performances. Based on this explanation, the following hypotheses are proposed.

H2a: Impulse buying has a positive and significant impact on Generation Z's purchasing behavior.

H2b: Impulse buying has a positive and significant impact on Millennials' purchasing behavior.

Relationship Between Social Influence and Consumer Purchasing Behavior with Impulse Buying as Mediator

Millennials and Generation Z enjoy buying online things. According to Helmi et al. (2025), social media is a dominant factor on why these groups of customers purchase and

indulge in it impulsively. Even though motives of purchase intention diverge, subjective factors including personal habit, duration of play and economic level along with objective factors (competitive environment) contribute to decision-making (Huo et al., 2024). Social factors like fear of missing out (FoMO) impacts consumer behavior as well (Alfina et al., 2023). It particularly influences Generation Z into impulsive buying (Rinonce & Jannah, 2025). This is in accordance with Habib & Almamy (2025) who stated that FoMO can be triggered more powerfully with social media marketing, especially for lifestyle products. Low self-control in online environments allow consumers to be persuaded easier into impulse buying (Nyrhinen et al., 2024). When customers conduct an online-based transaction, emotive judgements are stronger in influence than cognitive judgements (You et al., 2022). In addition, positive review presence combined with negative review absence would increase the chance of impulse buying, shaping purchasing behavior in the process (Redine et al., 2022). Based on the framework, hypothesizes of this study are developed:

H3a: Impulse buying mediates the effect of social influence on Generation Z's purchasing behavior.

H3b: Impulse buying mediates the effect of social influence on Generation Z and Millennials' purchasing behavior.

To correlate these elements, Stimulus-Organism-Response (S-O-R) Theory is utilized. It was developed by Mehrabian and Russel in 1974 and has contributed to numerous recent research and various industries (Sumardi et al., 2025). External factors that might trigger a person's cognitive and affective state refers to stimulus. Organism refers to personal internal state and once both aspects have been stimulated, certain behavior will be shown as a response that shapes consumer's final purchase decisions (Nisrina et al., 2025).

In the context of this study, the S-O-R model is adopted to explore from the lens of social/environment (e.g. family, friends and social media) as the stimulus (S), personal internal thoughts as organisms (O) and intention to purchase as response (R). To summarize, social influence acts as "stimulus", impulse buying represents "organism" and customer purchasing behavior denotes "response".

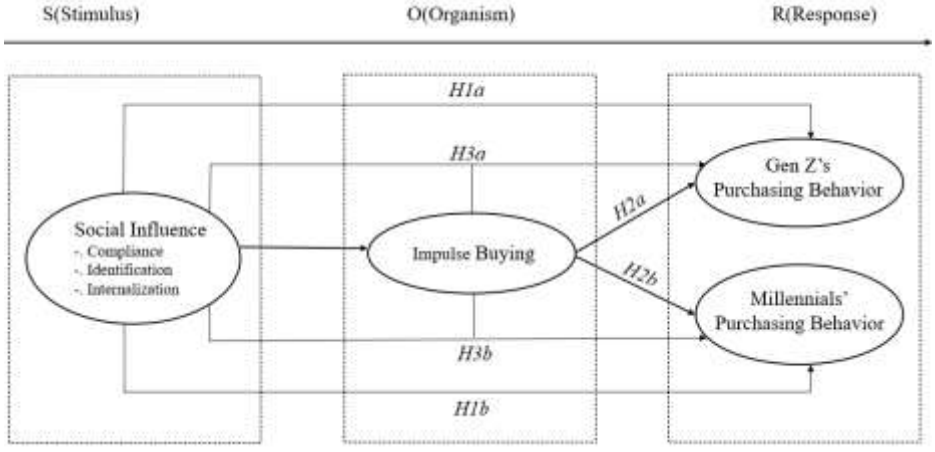

Figure 1. Conceptual Framework

RESEARCH METHOD

This study emphasized on the positivism paradigm to investigate the relationships between variables through systematic observation, measurement and statistical analysis.

Utilizing quantitative descriptive research design, this study collected data through surveys via Google Form questionnaires (Table 1) that was spread to participants through online gaming communities and player forums as primary data. As for the secondary data, journals related to the topic research were drawn on as well.

Population and Sample

The population was Indonesian Millennials and Gen Z MLBB players due to them being the majority of active players generation-wise. In addition, the samples were players among them who had purchased MLBB virtual products at least once. Referring to Creswell & Guetterman (2024) regarding probability and nonprobability sampling, this study conducted a combination of purposive and convenience sampling methods as participants were selected due to their willingness and availability to be studied regarding their purchasing behavior towards MLBB virtual products. The sample size in this study is 152 respondents and among them, 56.6% were male and 40.8% were female. Moreover, the respondents were 68.4% employed, 28.9% students and 2.7% not occupied. In terms of age cohorts, 62.5% of them were Millennials and 37.5% were from Generation Z.

Measurement

Social influence is the independent variable; impulse buying is the mediator variable and customer purchasing behavior (Millennials and Generation Z) is the dependent variable. The variables will be measured using a five-point Likert scale (‘strongly agree” to “strongly disagree”) adapted from Creswell (2024) to determine the equal interval among responses.

Table 1. Scales for Social Influence, Impulse Buying and Purchasing Behavior

Variable	Indicator	Item description	References
Social Influence (Compliance)	SI1	I purchase in-game items to avoid being left out of my group.	(Davlembayeva et al., 2024)
	SI2	I buy in-game items because my friends encourage me to.	
	SI3	I feel pressured to buy when my friends already own the items.	
	SI4	I buy in-game items because my gaming friends buy them too.	
Social Influence (Identification)	SI5	I purchase in-game items to feel like I’m a part of Mobile Legends community.	(Davlembayeva et al., 2024)
	SI6	Purchasing in-game items makes me feel more connected to other players.	
	SI7	I buy hero/skins because my favorite pro-players/influencers use them.	
	SI8	Buying hero/skins like my friends strengthen my sense of belonging.	
Social Influence (Internalization)	SI9	I buy Mobile Legends items because they enhance my gaming experience.	(Davlembayeva et al., 2024)
	SI10	I purchase in-game items to support Mobile Legends and its development.	
Social Influence (Internalization)	SI11	I purchase in-game items because they reflect my personal gaming style and identity.	(Davlembayeva et al., 2024)
	SI12	I buy in-game products because of my own self and enjoyment.	
Impulse Buying	IB1	I tend to buy in-game items without much consideration.	(Pangaribuan et al., 2025)
		I frequently purchase hero/skins as soon as they get released.	

	IB2	Sometimes I feel an uncontrollable urge to purchase in-game items.	
	IB3	I often buy in-game items immediately after I see their attractiveness.	
	IB4	Gacha/limited time offers make me purchase in-game items when I initially did not plan to.	
	IB5	My overall purchase in Mobile Legends is often unplanned.	
	IB6		
Consumer Purchasing Behavior (Millennials and Generation Z)	PB1	I often buy in-game items in Mobile Legends.	(Huo et al., 2024)
	PB2	I consider in-game purchases a way to enjoy my game more.	
	PB3	To elevate my Mobile Legends account, I am willing to spend money.	
	PB4	I frequently spend more money on Mobile Legends than I originally planned.	
	PB5	I have repeatedly purchased in-game items to enhance my gaming experience.	
	PB6	I often purchase skins to keep up with the current trend.	
	PB7	Limited time offers encourage me to buy in-game items.	
	PB8	I buy in-game items based on pro-player/influencers' recommendations.	

Source: Processed data (2025)

Data Analysis Technique

Utilizing SmartPLS 4.0 software, the data was converted and analyzed using partial least squares structural equation modeling (PLS-SEM) and Multi-Group Analysis (MGA) to discover the cause-effect relationship between the variables of this study, ensure the validity and reliability and identify differences across groups using path coefficient values.

Outer Model Analysis

According to Hair et al., (2019), loadings value is ideally above .708 level. After excluding the indicators with values below the default threshold, it can be seen that all outer loading factor values were greater than 0.70, describing acceptable convergent validity.

Table 2. Loading Factor

Indicator	Loading Factor
SI1	0,819
SI2	0,834
SI3	0,825
SI4	0,779
SI5	0,812
SI6	0,776
SI8	0,799
IB1	0,843
IB2	0,815
IB3	0,820
IB5	0,774
PB1	0,754
PB3	0,752
PB4	0,762

PB6	0,759
PB7	0,776
PB8	0,767

Source: Processed data (2025)

Table 3. Cronbach's Alpha, Composite Reliability and AVE

Variable	Cronbach's Alpha	Composite Reliability	AVE
Social Influence	0,911	0,929	0,651
Impulse Buying	0,829	0,886	0,662
Purchasing Behavior	0,856	0,892	0,580

Source: Processed data (2025)

The minimum threshold of Cronbach's Alpha and composite reliability is 0.7 while the Average Variance Extracted (AVE) is recommended to be higher than 0.50 (Hair et al., 2019). As shown on Table 3, the value of Cronbach's Alpha between multiple variables ranged from 0.829 and 0.913 whereas the value of composite reliability ranged from 0.886 and 0.929, showing the indicators of each construct are consistent and relevant. Furthermore, the AVE of each construct is above the minimum threshold, indicating strong reliability and validity.

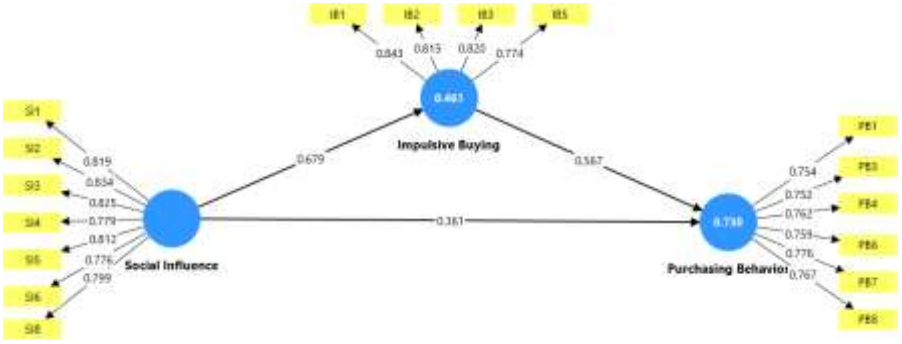

Figure 2. Pls Algorithm

Inner Model Analysis

The analysis of the inner model is conducted through the coefficient of determination (R^2) and predictive relevance (Q^2). The coefficient of determination was used to predict the actual and predicted values of the dependent variable.

Table 4. Coefficient of Determination

Variable	R^2	Adjusted R^2
Impulse Buying	0,461	0,457
Purchasing Behavior	0,730	0,726

Source: Processed data (2025)

Due to the decreased amount of adjusted R^2, it reflects the inclusion of non-significant predictors in the regression model. Based on Table 4, it can be seen that the independent variable (social influence) accounts for 46% of the variance in impulse buying. On the other hand, the R^2 value of purchasing behavior suggests that the independent variable explains a moderate proportion (73%) of its variance. Concurrently, the rest is affected by other variables that are not researched in this study.

Table 5. Predictive Relevance

Variable	Q^2	MAE
Impulse Buying	0,446	0.551
Purchasing Behavior	0,543	0.496

Source: Processed data (2025)

Hair et al. (2019) explained that Q^2 that valued less than zero signifies a lack of predictive relevance. Based on Table 5, the Q^2 value of impulse buying and purchasing behavior is 0.446 and 0.543 respectively, indicating strong predictive relevance. The MAE values signify acceptable prediction accuracy with purchasing behavior showcasing slightly lower prediction error compared to impulse buying.

Table 6. Standardized Root Mean Square Residual (SRMR)

	Model
SRMR	0,072

Source: Processed data (2025)

The value of SRMR signifies a good fit (0.072). Hair et al., (2019) suggested that if the value is over .1, there is a problem with fit with conditions applied.

RESULTS AND DISCUSSION

Hypothesis testing was conducted with SmartPLS 4.0 and through bootstrapping, Original Sample, T-statistics and P Values were assessed to obtain significance of path coefficients and indirect effects. Statistically significant relationship is indicated when the t-value is >1.96 and p-value is <0.05. A 95% confidence level defined by the 2.5% and 97.5% percentiles implies that our estimated parameter values fall within the bootstrapped lower and upper bounds.

Table 7. Bootstrapping Calculation

Code	Hypothesis	Generation	Original Sample (β)	T-Statistics (t)	P Values (p)	Conclusion
H1	Social Influence -> Purchasing Behavior	Millennials	0,482	3,383	0,001	Supported
		Generation Z	0,332	2,740	0,006	Supported
H2	Impulse Buying -> Purchasing Behavior	Millennials	0,429	2,693	0,007	Supported
		Generation Z	0,604	4,887	0,000	Supported
H3	Social Influence -> Impulse Buying -> Purchasing Behavior	Millennials	0,287	2,824	0,005	Supported
		Generation Z	0,419	5,183	0,000	Supported

Source: Processed data (2025)

The first hypothesis (H1) examines the direct impact of social influence towards purchasing behavior. With an original sample of 0.482, Statistics of 3.383 and a p-value less than 0.05, social influence has a slightly stronger effect on purchasing behavior on Millennials compared to Generation Z. It aligns with Huda & Salehudin (2024) that mentioned social interaction, family, friends and escapism play affects in-game purchase intention, shaping purchasing behavior. Thus, H1a and H1b are supported for both generations.

Analyzing the second hypothesis from the data, impulse buying has a positive and significant impact on Millennials, indicated by the p-value less than 0.05 and T-statistics of 2.693. There is a similar effect on Generation Z although the impact is slightly stronger compared to Millennials, looking from the higher value of original sample (0.604) and T-statistics (4.887). As a result, H2a and H2b are accepted. This supports the findings of Zhulal et al. (2023) who stated that in this digital economy, Generation Z are more prone to shopping than previous generations due to their preferences of using mobile devices during purchase transactions.

The third hypothesis (H3) investigates the impact of social influence towards purchasing behavior with impulse buying as a mediator. The findings confirm that impulse buying partially mediates the relationship between social influence and purchasing behavior in Millennials and Generation Z. These findings correlated with Juliandhani & Tjahjawati (2025) who revealed that Generation Z tends to get more influenced through social settings like FoMO (fear of missing out). Therefore, H3a and H3b are accepted. In addition, with an original sample of 0.419 and T-Statistics of 5.183, the impact is slightly stronger for Generation Z compared to Millennials.

Table 8. Bootstrapping MGA Calculation

Hypothesis	Difference (Millennials–Generation Z)	1-tailed	2-tailed
Social Influence -> Impulse Buying	-0,024	0,586	0,827
Impulse Buying -> Purchasing Behavior	-0,174	0,808	0,385
Social Influence -> Purchasing Behavior	0,150	0,212	0,423

Source: Processed data (2025)

While there are positive impacts among the independent, dependent and mediator variables, Multi-Group Analysis reveals that there is no statistically difference between Millennials and Generation Z regarding this relationship. Looking at social influence and impulse buying, the results suggest that both generations respond similarly in virtual product settings. The similar conclusion can be drawn from impulse buying and purchasing behavior aspects where spontaneous purchasing decisions are present yet, there is no significant difference between both generations. This confirms the prior findings of Febriansyah et al. (2024) who discovered the same results. In addition, the analysis of this study described that there are no significant generational differences regarding the direct and significant impact of social influence towards purchasing behavior. However, it is discovered that among social influence indicators, compliance shows a slightly stronger effect with players purchasing in-game items due to friends' encouragement. The writer suspects that peer influence along with squad culture enhance the needs of players to look "cool" and connect with more players in the game. It aligns with Subarkah et al. (2023) who emphasized the importance of social interaction on shaping interpersonal relationships and that is, by purchasing in-game features. Nevertheless, based on these findings, it can be suggested that other aspects not included in this study will generate different outcomes regarding the actions conducted by both generations.

Drawing on the S-O-R framework related to virtual in-game shopping, social influence (stimuli) and impulse buying (organism) shape purchasing behavior (response) on Indonesian Millennials and Generation Z. However, there are no significant generational differences

between both cohorts' purchasing behavior in Mobile Legends: Bang Bang (MLBB) as they display similar behavioral patterns. It can be further assumed that in online games like MLBB, behavior is influenced by community culture that one shares compared to age. Thus, as extracted from the results of this study, the S-O-R process in the gaming environment operates consistently across both generations. With the influence exposed in the social settings, players can be encouraged to purchase virtual products after being triggered emotionally and that state of mind can enhance the likelihood of impulsive buying. When the spontaneous desire turns to action, their purchasing behavior is also influenced.

CONCLUSION

This study explored the role of social influence on customer purchasing behavior of Millennials and Generation Z with impulse buying as a mediator. In the context of gaming industry specifically in Mobile Legends: Bang Bang, the results confirmed the proposed model and indicated the hypothesized mediating role is supported. Embedded in the Stimulus-Organism-Response (S-O-R) framework, it was discovered that social influence significantly impacts purchasing behavior both directly and indirectly through impulse buying, which functions as a complementary partial mediator. However, the Multi-Group Analysis indicates no significant differences between Millennials and Generation Z related to such behavior in the virtual product shopping context. This suggests that social influence and impulse buying shape purchasing behavior in similar ways across generations in virtual consumption settings. The findings of this study contribute to the growing literature by highlighting the importance of emotional and social processes to digital customer purchasing behavior. While impulse buying may work individually, social factors may influence the tendencies as well. In addition, the game developer should implement strategies ethically to prevent excessive consumer exploitation, all the while maintaining the engaging gaming products and contents of the game suitable for both generations. Additional features to discourage excessive impulsive behavior, for instance, adding pause features or purchase confirmations may be adjusted in the game purchasing systems. Despite having some implications that can be conducted, this study has several limitations that the author suggests should be addressed in future research. In this study, the number of valid questionnaires gathered as a sample was limited and based on Indonesian Millennials and Gen Z MLBB players solely. Monthly income of the samples was not explored as well. In addition, while purposive and convenience sampling are being utilized in this study due to limitation of time and access, it is recognized that this may reduce the representativeness of the findings. Further investigation is therefore needed to determine whether the same conclusions will occur when applied to larger populations, different locations and generations. Future research with other contextual or psychological factors are encouraged to discover the relationships further in virtual product purchasing behavior.

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