



Analysis on generation Z's imaginary companions, gadget ownership, and their impact on consumer behavior

Komang Widhya Sedana Putra^{a*}

^a Faculty of Economics and Business, Universitas Pendidikan Nasional, Denpasar, Indonesia;
widhyasedana@undiknas.ac.id*

ARTICLE INFO

Article History:

Received 02-10-2025

Revised 05-24-2025

Accepted 09-16-2025

Kata Kunci:

Perilaku konsumen, inner child, teman imajinasi, kepemilikan gadget, pengaruh media sosial

Keywords:

Consumer behavior, inner child, imaginary companions, gadget ownership, social media influence

ABSTRAK

Penelitian ini mengeksplorasi faktor-faktor pendorong perilaku konsumsi Generasi Z dalam hal kepemilikan gadget, teman imajinasi, dan inner child dalam konteks pengaruh media sosial di masyarakat yang semakin digital. Lokasi penelitian dipilih di Bali karena perubahan gaya hidup yang signifikan akibat pariwisata, sehingga menjadi konteks unik untuk mengkaji fenomena ini. Dalam penelitian ini, pendekatan kuantitatif diterapkan melalui kuesioner survei kepada 200 responden di Denpasar, Bali, dengan teknik purposive sampling. Analisis data dilakukan menggunakan PLS-SEM untuk meneliti hubungan antara faktor psikologis yang telah diidentifikasi, perilaku konsumen, dan kepemilikan gadget sebagai variabel mediasi. Studi ini memiliki keterbatasan geografis yang dapat memengaruhi generalisasi, namun tetap bernilai dalam menyajikan determinan emosional dan digital terhadap pola konsumsi Generasi Z. Penelitian ini berkontribusi dalam memahami pengaruh emosional dan media sosial terhadap perilaku konsumen di era digital dengan menjembatani teori psikologi dan tren konsumsi digital.

ABSTRACT

This research explores the driving forces of Generation Z's consumption behavior in terms of gadget ownership, imaginary companions, and the inner child in the context of social media influences in an increasingly digital society. The study location was chosen as Bali because of the significant lifestyle changes driven by tourism, making it a unique context for examining these phenomena. In this study, the quantitative approach was applied through survey questionnaires among 200 respondents in Denpasar, Bali, using a purposive sampling technique. Data analysis was performed with PLS-SEM to investigate the relationships among the identified psychological factors, consumer behavior, and gadget ownership as a mediating variable. This is a geographically limited study that might affect generalization, but it is of great value to present the emotional and

*Corresponding Author

digital determinants of Generation Z's consumption patterns. The following research contributes to understanding the emotional and social media influences of consumer behavior in the digital era by bridging gaps between psychological theories and digital consumption trends.

INTRODUCTION

Generation Z was born between 1997 and 2012 (Dreyer & Stojanová, 2022), a period when socio-economic and technological changes were both rapid and far-reaching. These changes have been felt particularly strongly in Bali. While infrastructure in Bali was still underdeveloped at the beginning of the 2000s, as mentioned by Teuku et al. (2023), it has now changed and brought economic growth and improved the quality of life. Such a shift has enabled Gen Z in Bali to access material goods that were previously unreachable. This shift can be examined through materialism, psychological well-being, and consumer behavior (Tyng et al., 2017). These material goods, especially gadgets, have become status symbols and emotional satisfiers. Materialistic value orientation (MVO) has been linked to poorer well-being, with individuals seeking emotional satisfaction through possessions, which provide temporary fulfilment without contributing to long-term happiness (Dittmar & Isham, 2022). This phenomenon has been influenced by Bali's changing infrastructure, which has shaped consumption patterns and social behaviors among the youth, especially with the increasing integration of smart technologies (Yan et al., 2022). This digitalization has fostered a rise in online shopping and digital payments, further transforming how Gen Z engages with consumption (Sharma et al., 2018).

Compared to the other major Indonesian cities, such as Jakarta and Surabaya, Bali's digital transformation is unique due to its heavy dependence on tourism. While Jakarta has experienced strong e-commerce growth driven by financial technology penetration, Bali's digital consumption pattern is highly responsive to tourist behavior and seasonally influenced economic fluctuations (Sudrajat, 2024). Similarly, compared to other tourism-driven economies such as Phuket (Thailand) and Boracay (Philippines), Bali has a more integrated cultural marketing approach, where local traditions shape the digital shopping experiences of young consumers (Widodo & Pancabudi, 2023). These differences highlight the need to explore Generation Z's digital consumer behavior within Bali's socio-economic context. As stated by the Su et al. (2023), Indonesian Generation Z is a key driver of digital payment adoption, with 68% using digital payment apps for daily transactions. These statistics demonstrate how digital transformation, particularly within tourism, significantly impacts the consumption behavior of Bali's younger generation.

In the context of childhood economic constraints, some children developed imaginary companions as a psychological response to unmet emotional needs caused by economic pressure. These companions provide emotional support, helping children

cope with stress, loneliness, and difficult emotions, especially in environments with limited support. Imaginary companions are also linked to enhanced cognitive and social skills, as children engaging in imaginative play often show better creativity, narrative skills, and social competence. Imaginary companions play a crucial role in a child's psychological development, providing a mechanism for emotional coping and fulfillment (Damuri, 2017). Research has shown that these companions are created based on the influences of a child's environment and experiences, mirroring his thoughts and emotional states (Davis et al., 2019). In adulthood, childhood experiences, including interactions with imaginary companions, shape the development of the inner child, the emotional aspect of the personality rooted in early life. Engaging with imaginary companions allows children to explore various emotional scenarios and practice empathy. Studies show that children with imaginary companions often have a better understanding of emotional nuances and can express their feelings more effectively (Panah et al., 2023). Additionally, these interactions lead to cognitive benefits, such as enhanced reasoning, problem-solving skills, and creativity (Fernyhough et al., 2019). Imaginary companions also foster resilience by encouraging imaginative problem-solving and emotional regulation, helping children navigate challenges independently (Coplan, 2009). Moreover, they contribute to emotional growth by providing comfort during stressful times, promoting better emotional regulation skills (Aguiar et al., 2017).

Larsen (2019) highlights that individuals with childhood trauma tend to adopt a utilitarian approach in moral decision-making, unlike populations such as those with PTSD, where trauma often leads to more conservative decision-making. An inner child shaped by past deprivation often drives individuals to "compensate" for unmet needs, such as the desire to own specific items, including gadgets, which now serve as symbols of status and emotional fulfillment. The inner child represents the emotional and psychological remnants of childhood experiences, both positive and negative, encapsulating feelings of joy, vulnerability, and unmet needs that can resurface in adulthood. This phenomenon is often linked to childhood trauma, neglect, or emotional deprivation, which can manifest as emotional distress in adult relationships and behaviors (Sjöblom et al., 2016). Individuals who experienced emotional neglect or trauma as children may carry unresolved feelings into adulthood. These unmet needs can lead them to seek validation or affection in ways that are not always healthy or constructive (Downey & Crummy 2022). This notion is in line with the theories of developmental psychology, which purport that positive emotional experiences during childhood, when nurtured appropriately, boost intellectual functioning, emotional resilience, and problem-solving capabilities (Lee, 2017).

The role of imaginary companions (ICs) is evident in imaginative play, a practice common across cultures. Through interactions with ICs, children can mirror real-life social dynamics, fostering essential social skills. This play allows them to practice communication and emotional regulation in a safe environment (Bredikyte &

Brandisauskiene, 2023). Engaging with imaginary companions enables children to explore new ideas and develop skills in a familiar context (Adams, 2023). ICs also facilitate a deeper understanding of social roles and enhance divergent thinking (Armah & Landers-Potts, 2021). Studies show that ICs are more common in Western cultures compared to Eastern cultures, with Western children often creating invisible friends, while Japanese children tend to personify objects as companions (Moriguchi & Todo, 2019).

Children create imaginary companions, either invisible or objects like dolls, to foster creativity and enhance storytelling and cognitive skills, allowing them to explore different emotions and scenarios (Adams et al., 2022). This ability to anthropomorphize non-human objects supports social, emotional, and relational development (Severson & Woodard, 2018). During adolescence, this concept evolves into the idea of the imaginary audience, the belief that one is constantly being observed, prompting teens to explore new experiences and become more self-aware of others' perceptions of them (Stsiampkouskaya et al., 2021). Further research is needed regarding the ways imaginary companions affect financial behaviors, especially stress management and burnout (Yamaguchi & Moriguchi, 2022).

In Bali, the socio-economic shifts driven by tourism and digitalization create opportunities for sustainable, transformative tourism models. By integrating local cultural practices, tourism can enhance visitor experiences and support community development (Vidickiene et al., 2020). Research by Godovykh (2024) also emphasizes designing experiences that foster personal growth and community benefits. Future studies may explore how specific activities, settings, and social interactions contribute to transformative experiences for travelers. These models inspire responsible, respectful, and culturally rewarding tourism, which mirrors Bali's unique journey from a conservative society to a modern and tourism-based economy (Magnusson et al., 2024). These changes create a balance between modernity and traditional practices, where younger generations, particularly Gen Z, are more exposed to global influences yet must navigate the complexities of their local culture.

Gadgets have become an integral part of daily life, serving not only as communication tools but also as status symbols and sources of information that reshape how individuals learn, interact, and form consumption behaviors (Haleem et al., 2022). Gadgets fulfill both practical and psychological needs, impacting overall consumer satisfaction (Suchánek & Sobota, 2023). Ownership of gadgets acts as a mediator between the inner child and imaginary companions, influencing consumer behavior. Studies show that technological innovations often emerge from unmet needs during crises, with gadgets designed to address both practical and emotional desires, enhancing personal experiences in challenging situations.

The influence of social media on the aspirations and consumptive behaviors of Gen Z in Bali has become ever more evident, especially given the dominance of

tourism and digital media sectors. Such social media platforms as Instagram, TikTok, and YouTube not only shape the cultural norms but also drive gadget consumption as a status symbol (Wahab et al., 2024). Continuous exposure to idealized images on social media may eventually evoke feelings of inadequacy and low self-esteem, as research has identified social comparison with consumption linked to following trends and aspirational lifestyles (Hasell & Chinn, 2023). Gadgets have evolved from mere communication tools to integral parts of social identity, enabling global connections and network expansion (Nauroth et al., 2015), while also supporting group interactions on social media and collaborative platforms, reinforcing group identity (Hu & Cheung, 2024).

The psychological motivations for gadget ownership are, thus, integral to the theory of consumer behavior. The desire to own gadgets is often influenced by emotional and psychological factors, including the need to feel “connected” or “recognized.” In Bali, gadgets not only reflect success in navigating the modern world but also serve as expressions of social and personal identity (Lou et al., 2022). Gadgets act as communication tools and identity symbols, helping individuals overcome loneliness through alternative connections and network expansion (Epley et al., 2008; Nakshine et al., 2022).

This research explores how the imaginary companions and inner child during childhood influence the consumption behavior and financial management of Generation Z in Bali, focusing on gadgets as status symbols and emotional fulfillers. It also examines the role of social media in shaping aspirations and consumption preferences, considering the economic and digital transformations in Bali. The study offers novelty by integrating developmental psychology, consumer behavior, and digitalization within Bali’s socio-cultural context. It highlights the link between childhood emotional needs and gadget ownership, filling a gap in literature regarding the psychological aspects of technology in consumer behavior. It also gives insight into the impact of social media and digital transformation on youth consumption patterns that add to marketing strategies with digital innovations in line with psychological and cultural dynamics.

Despite growing evidence of the psychological and social factors influencing Generation Z’s consumption patterns, there remains a significant gap in understanding how childhood emotional experiences—specifically imaginary companions and the inner child—directly affect gadget ownership and financial behavior in the unique socio-cultural context of Bali. Current studies largely overlook the interplay between developmental psychology and digital consumerism in tourism-dependent economies.

This research is urgent given the rapid pace of digital transformation in Bali, combined with the increasing psychological pressures on youth driven by social media and economic fluctuations. Understanding these dynamics is critical for developing effective consumer education, mental health interventions, and sustainable marketing

strategies that align with Bali's evolving cultural and economic landscape. This study contributes to the literature by integrating theories of developmental psychology, emotional consumption, and digital social transformation to provide a comprehensive analysis of Generation Z's consumer behavior in Bali. It offers novel insights into the psychological underpinnings of gadget ownership as status symbols and emotional coping mechanisms, while also highlighting the role of social media in shaping consumption aspirations. These findings have practical implications for policymakers, mental health professionals, and marketers aiming to foster healthier consumption habits and sustainable digital economies.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Emotional Consumption Theory

The underlying theories used in this study are those that explain psychological and social factors in influencing consumer behavior among Generation Z in Bali. Emotional Consumption Theory addresses how people consume not because of need but due to emotional motive (Cachón-Rodríguez et al., 2024). It provides a very clear distinction between emotions—a person's unconscious reactions—and feelings, a person's conscious interpretation. It provides a clearer basis for conceptualizing how a consumer can process his emotional experience concerning consumption (Bettiga et al., 2020). In Bali, gadgets are more than functional tools—they serve as emotional mediators, addressing unmet childhood needs linked to the inner child and imaginary companions. Additionally, Digital Social Transformation Theory examines how digital technologies, particularly social media, shape cultural norms, identity, and social cohesion (Roth, 2019). For Gen Z in Bali, gadgets symbolize social status and identity, with digitalization and social media playing a key role. These two theories collectively explain the role of emotional fulfillment and digital social interaction in affecting consumption behavior in Bali.

To operationalize these concepts, this study measured several key variables. Consumer behavior refers to purchasing patterns, brand engagement, and consumption habits, including brand loyalty, impulsive buying, and digital brand interactions. Gadget ownership captures possession and use of digital devices like smartphones and tablets, emphasizing their emotional and symbolic meanings as status symbols and social tools. The imaginary companion variable reflects childhood interactions with imaginary friends that influence emotional coping, creativity, and adult consumption preferences. The inner child represents latent emotional needs rooted in childhood experiences that drive emotional fulfillment through consumption, especially via gadget ownership. Finally, social media influence describes the impact of social media exposure, peer opinions, and influencer endorsements on consumer attitudes, which amplifies the symbolic and emotional value of gadgets. These operational definitions guided the formulation of nine hypotheses to explore the relationships among these

variables.

Hypothesis Development

The impact of Gadget Ownership on Consumer Behavior

Gadget ownership serves as both a status symbol and a source of emotional fulfillment, and this ownership significantly contributes to consumer brand engagement—where individuals develop emotional and cognitive attachments to brands they interact with digitally (Merdiaty & Aldrin, 2022; Rakib et al., 2022). Peer opinions, social trends, and digital factors such as social media interactions, online reviews, and personalized experiences further amplify this engagement (Dhawan & Garga, 2025; Kaur, 2023). Although constant digital connectedness can also be associated with impulsive purchase behaviors (Mardhiana, 2024), the primary behavioral focus in this study is on how gadget ownership fosters consumer brand engagement. Consequently, the following is the hypothesis:

H1: Gadget Ownership influences Consumer Behavior.

The impact of Imaginary Companion on Consumer Behavior

Interactions with ICs during childhood influence the development of preferences and consumption decisions as an adult (Armah & Landers-Potts, 2021; Qiyi et al., 2022). These companions encourage imaginative play, that develops cognitive flexibility, creativity, and problem-solving skills amongst children (Bredikyte & Brandisauskiene, 2023; Garaigordobil et al., 2022). According to, persons with ICs often adopt active coping, such as seeking support, rather than internalizing the problems (Davis et al., 2019). Consequently, the following is the hypothesis:

H2: Imaginary Companion influences Consumer Behavior.

The impact of Imaginary Companion on Gadget Ownership

Imaginary companions drive the need for gadgets as tools to express creativity and meet emotional needs (Davis et al., 2019; Demiris et al., 2016). Role-playing with ICs allows children to practice social interactions and manage their emotions effectively (Gleason, 2017; Lahiya et al., 2022). This process provides a safe environment for experimenting with social roles and responses, fostering improved emotional regulation in real-life situations (Panah et al., 2023). Consequently, the following is the hypothesis:

H3: Imaginary Companion influences Gadget Ownership.

The impact of Inner Child on Consumer Behavior

Experiences in childhood that shape the inner child address the unsatisfied emotional needs of individuals, hence influencing consumer behavior (Sjöblom et al., 2016; Quiroz et al., 2023). At the age of eight years, children commence developing the ability and capability to make independent purchasing decisions (Zlatanova-Pazheva, 2024). As they grow older, their perception about the value of money and products changes significantly, which impacts their purchasing behavior in the future (Hota & Bartsch, 2019; Kwon & Noh, 2010). Consequently, the following is the hypothesis:

H4: Inner Child influences Consumer Behavior.

The impact of Inner Child on Gadget Ownership

The inner child, shaped by childhood deprivation, compels individuals to own gadgets as symbols of status and emotional comfort (Raniyah & Nasution, 2024; Sepahpour, 2015). Studies by Zhang & Wu (2022), show that those who have experienced adverse childhood events are more likely to develop smartphone addiction, since emotional neglect or instability may result in maladaptive coping mechanisms such as excessive gadget use. While gadgets serve as tools for connection, they can also create isolation (Wiederhold, 2025). Children may prefer learning from the smart devices, but they are more likely to trust human interactions over these devices (Wojcik et al., 2022). Consequently, the following is the hypothesis:

H5: Inner Child influences Gadget Ownership.

The impact of Social Media on Consumer Behavior

Social media content shapes aspirations and consumer behavior through the cultivation of trends and social comparisons (Dzreke & Dzreke, 2025). Many consumers tend to trust influencers more than they trust advertisements (Liu & Zheng, 2024). In one study, 73.9% of respondents trusted the recommendations of influencers on social media, showing a strong reliance on these endorsements when making purchasing decisions (Černikovaitė, 2019; Chavda & Chauhan, 2024). Authentic influencers build loyal followings who value their opinions; thus, their engagement rates are higher, and marketing outcomes for brands are better (Ünalmiş et al., 2024). Consequently, the following is the hypothesis:

H6: Social Media Influences Consumer Behavior.

Social Media Influence acts as a moderator in the impact of Gadget Ownership on Consumer Behavior

Social media amplifies the relationship between gadget ownership and consumer behavior by strengthening the symbolic value of gadgets (Goyal & Kaur, 2022; Pellegrino et al., 2022). Social media sites are important for consumers to express their identities and values through the gadgets they own (Wilska et al., 2023). The visibility of these gadgets on social media enhances their symbolic value, with consumers often associating them with status, lifestyle, and personal branding. This dynamic is particularly evident with luxury items or tech gadgets, where ownership can signal social standing or group affiliation (Efendioğlu, 2024). The credibility of the influencer holds great importance because when customers believe in the influencer, they tend to internalize the recommendations by the influencers and purchase a product by taking their recommendations into account (Wahab et al., 2024). Consequently, the following is the hypothesis:

H7: Social Media Influence acts as a moderator in the relationship between
Gadget Ownership and Consumer Behavior.

The impact of Imaginary Companion on Consumer Behavior through gadget ownership

Imaginary companions give comfort, offer emotional support during stressing moments, help manage fears and emotions of children (Panah et al., 2023). It thus forms preferences towards the product in resonance with feelings of imaginary companions and changes in consumer behavior and attitude toward products (Yamaguchi et al., 2023). Moreover, the attachment children develop with their imaginary companions can transfer to the gadgets they use, reinforcing brand loyalty and habitual consumption (Williams-Gant et al., 2024). These psychological bonds create symbolic meanings in products, making gadgets more than functional tools but also emotional anchors. As a result, consumer behavior is shaped not only by rational utility but also by the emotional narratives constructed through the presence of imaginary companions (Godefroit-Winkel et al., 2019; Wang et al., 2025). Consequently, the following is the hypothesis:

H8: The Imaginary Companion influences Consumer Behavior through gadget Ownership.

The impact of Inner Child on Consumer Behavior through gadget ownership

The inner child influences consumer behavior by driving gadget ownership as a form of emotional compensation. Children often seek to influence their parents, especially when it comes to desired items like gadgets (Williams & Willick, 2023).

Their purchasing behaviors are shaped by a need for authenticity and connection with influencers, often rooted in deeper psychological needs for validation and belonging (Handranata & Kalila, 2025). This inner child dynamic extends into adulthood, where consumers unconsciously make gadget purchases to satisfy unmet childhood desires (Sjöblom et al., 2016). Gadgets thus become symbolic objects that fulfill emotional gaps, reinforcing patterns of nostalgic consumption (Song et al., 2024). Consumer behavior is not only a reflection of present needs but also a manifestation of unresolved inner child motivations that continue to shape purchasing decisions (Xiao et al., 2022). Consequently, the following is the hypothesis:

H9: Inner Child influences Consumer Behavior through gadget ownership.

Based on the literature review and hypotheses development, the following conceptual model illustrates the proposed relationships among the variables examined in this study.

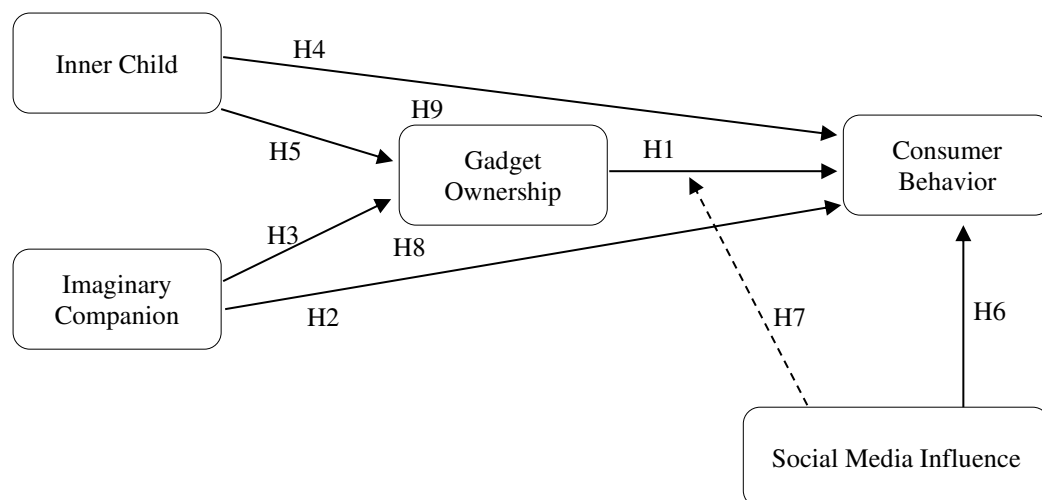


Figure 1
Conceptual Model

These hypotheses explore how emotional fulfillment, gadget ownership, and psychosocial factors like the inner child, imaginary companions, and social media influence the consumer behaviors of Generation Z in Bali, as shown in Figure 1, which depicts the conceptual model of the study.

METHODS

Denpasar City in Bali is considered the most appropriate location for this research because of its socio-economic diversity, cultural heritage, and the impact of tourism. The city's blend of traditional values and modern influences is very informative in showing how gadget ownership, consumer behavior, imaginary

companions, the inner child, and social media are influential in financial attitudes and consumption. With widespread technological adoption, Denpasar provides the best environment for assessing just how Generation Z interacts with gadgets and online platforms. It focuses on the citizens categorized as Generation Z: between 13 and 27 years old, totaling 79,339, according to data obtained from the Denpasar City Data Center.

The specific criteria used for the purposive sampling in this study ensure relevant and reliable data. The respondents must be Generation Z living in Denpasar City, aged between 13 to 27 years, actively using gadgets and social media in their daily lives. Moreover, they had to be willing and able to complete the questionnaire accurately. The sample size was determined by multiplying the total number of indicators by 5 to 10, amounting to a sample size of 200 respondents (Hair et al., 2010). This number was considered sufficient to yield reliable and representative data for this study.

This questionnaire will measure the five key variables in this study, namely gadget ownership, consumer behavior, imaginary companions, inner child, and social media influence. The items that represent each variable used Likert-scale measures wherein the respondents indicated their agreement from strongly disagree to strongly agree. This method was appropriate as recommended by Claveria (2021) since it is one of the effective ways of measuring attitude and perception in economic and social contexts. The closed-ended questions were structured to standardize responses on Generation Z's financial behavior, gadget use, and social media engagement.

The data were analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) version 4.0, which is appropriate for the examination of complex relationships between interdependent variables. It enables the simultaneous testing of measurement and structural models. Focus was directed at how gadget ownership mediates the influences of imaginary companions and the inner child on consumer behavior, and how social media influence moderates the relationship between gadget ownership and consumer behavior. PLS-SEM is ideal for exploratory studies involving higher-order constructs and provides robust tools for analyzing the relationships among the five variables (Magno et al., 2024).

Complete Combined Model with 9 Hypotheses:

$$CB_i = \beta_1 GO_i + \beta_2 IC_i + \beta_3 ICd_i + \beta_4 SMI_i + \beta_5 (GO_i \times SMI_i) + \beta_6 (GO_i \times IC_i) + \beta_7 (GO_i \times ICd_i) + \beta_8 (IC_i \times GO_i) + \beta_9 (ICd_i \times GO_i) + \varepsilon_i \dots\dots\dots 1$$

Model Explanation:

CB_i = Consumer Behavior of the i_{th} respondents

GO_i = Gadget Ownership of the i_{th} respondents

IC_i = Imaginary Companion of the i_{th} respondents

ICd_i = Inner Child of the i_{th} respondents

SMI_i = Social Media Influence of the i_{th} respondents

β_1 through β_9 are the regression coefficients for each direct effect and interaction.
 ε_i is the error term of the i_{th} respondents.

RESULTS AND DISCUSSION

Descriptive Analysis

To provide an overview of the respondents' characteristics, the descriptive profile of the sample is presented in Table 1.

Table 1
Descriptive Profile of the Respondents

Characteristic	Category	Frequency (n)	Percentage (%)
Age	13-17 years	68	34%
	18-22 years	92	46%
	23-27 years	40	20%
Gender	Male	102	51%
	Female	98	49%

Descriptive statistics serve to describe the basic features of data in a study. They provide simple summaries about the sample and the measures (Guetterman, 2019). From Table 1, The descriptive profile of respondents shows that, quite predictably, representation has been reasonably even across age and gender categories. By considerable margin, the age groups fall in the categories of 18-22 years, comprising 46%, 13-17 years with 34%, and 23-27 years with 20%. The preponderance reflects a clear orientation towards Generation Z. There is near equal representation from male and female, respectively: 51% for the male group and 49% for females. This ensures good representation across gender. The structure of this demographic breakdown enables the capture of insights into Generation Z consumer behavior in Bali, comprehensively providing an overview of the psychological and social factors that influence purchasing decisions.

Reliability and Validity Test

To ensure the measurement instruments are both consistent and accurate, reliability and validity tests were conducted, as presented in Table 2.

Table 2
Construct Reliability and Validity

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Consumer Behavior	0.925	0.944	0.946	0.782
Gadget Ownership	0.786	0.849	0.853	0.552
Imaginary Companion	0.886	1.208	0.890	0.619
Inner Child	0.815	0.934	0.865	0.595
Social Media Influence	0.852	0.928	0.900	0.657

According to Mohajan (2017), reliability and validity are necessary to make research findings trustworthy. From Table 3, the reliability analysis of the variables in this study indicates that the internal consistencies are strong and valid. Consumer Behavior is very reliable, with a Cronbach's alpha of 0.925, composite reliability of 0.944, and an AVE of 0.782, hence showing its strong consistency. Gadget Ownership, although slightly lower in AVE (0.552), still falls within the minimum threshold and thus is acceptable. Imaginary Companion presents a very good reliability for the Cronbach's alpha with 0.886 and AVE of 0.619, though this high rho_a value needs further checking. Inner Child shows good consistency, as indicated by a Cronbach's alpha of 0.815 and AVE of 0.595. At the same time, Social Media Influence is also a strongly reliable construct, with a Cronbach's alpha of 0.852 and AVE of 0.657. Overall, all constructs have sufficient reliability and validity to support their use in further analysis.

Hypothesis Test

The results of the structural equation modeling are illustrated to show the relationships among the constructs and the overall model fit, as presented in Figure 2.

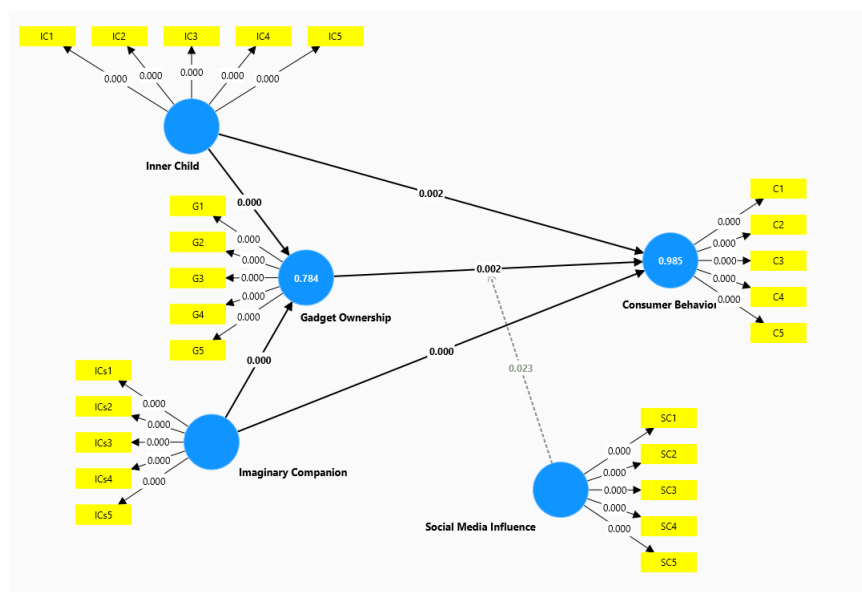


Figure 2
Structural Equation Model Testing

The path coefficients and significance levels obtained from the structural equation modeling are summarized in Table 3, providing insights into the strength and direction of the hypothesized relationships.

Table 3
Regression Weight Structural Equational Model

Paths	β	Standard deviation	T statistics	P values
Gadget Ownership \rightarrow Consumer Behavior	-0.084	0.027	3.160	0.002
Imaginary Companion \rightarrow Consumer Behavior	-0.072	0.015	4.888	0.000
Imaginary Companion \rightarrow Gadget Ownership	0.218	0.059	3.695	0.000
Inner Child \rightarrow Consumer Behavior	0.069	0.023	3.035	0.002
Inner Child \rightarrow Gadget Ownership	0.750	0.037	20.200	0.000
Social Media Influence \rightarrow Consumer Behavior	1.031	0.012	85.267	0.000
Social Media Influence x Gadget Ownership \rightarrow Consumer Behavior	0.017	0.008	2.273	0.023

The results of the path analysis from table 3 reveal a number of significant relationships among the variables under investigation in this study. Gadget ownership is inversely related to consumer behavior with a small effect size that is statistically significant: $\beta = -0.084$, $T = 3.160$, $p = 0.002$. Thus, the higher the gadget ownership, the lower the consumer behavior. Imaginary companions also demonstrate a negative effect on consumer behavior: $\beta = -0.072$, $T = 4.888$, $p = 0.000$, which means a high attachment to an imaginary companion may reduce consumer activity. However, imaginary companions positively affect gadget ownership: $\beta = 0.218$, $T = 3.695$, $p = 0.000$, which shows that the more the emotional attachment to imaginary companions, the higher the tendency to own gadgets probably for emotional support.

The inner child is an important factor in both consumer behavior and gadget ownership. The analysis revealed that the inner child significantly positively influenced gadget ownership, $\beta = 0.750$, $T = 20.200$, $p = 0.000$, thus suggesting that individuals with a highly developed inner child are more likely to own gadgets, possibly as tools for emotional fulfillment. The inner child also has a positive influence on consumer behavior, though weaker than its influence on gadget ownership, as evidenced by the β value of 0.069, $T = 3.035$, $p = 0.002$. Social media influence, on the other hand, presents itself as the strongest determinant of consumer behavior with a very high positive relationship, $\beta = 1.031$, $T = 85.267$, $p = 0.000$, hence meaning that social media greatly drives purchasing decisions. Additionally, the interaction of social media influence and gadget ownership is $\beta = 0.017$, $T = 2.273$, $p = 0.023$, which increases the effect of social media on consumer behavior, especially among gadget owners.

To further examine the mediating effects in the model, the total indirect effects were analyzed as presented in Table 4.

Table 4
Total Indirect Effect

Paths	β	Standard deviation	T statistics	P values
Imaginary Companion → Gadget Ownership → Consumer Behavior	-0.018	0.007	2.690	0.007
Inner Child → Gadget Ownership → Consumer Behavior	-0.063	0.021	3.049	0.002

From Table 4, the results imply that both imaginative companionship and inner child indirectly impact consumer behavior with the inclusion of gadget ownership. Particularly, the pathway from imaginative companion to gadget ownership to consumer behavior has shown a negligible negative effect $\beta = -0.018$, $T = 2.690$, $p = 0.007$ which indicates even though imaginative companions indirectly influences consumer behavior by gadget ownership, the direction is opposite. Similarly, the path from inner child to gadget ownership and then to consumer behavior reveals a negative indirect effect of $\beta = -0.063$, $T = 3.049$, and $p = 0.002$, which implies that the influence of the inner child on gadget ownership suppresses consumer behavior to a large extent. Both these effects are statistically significant, demonstrating the importance of gadget ownership as a mediator in such relationships.

Discussion

The analysis of the data through mediation and the evaluating of the data through hypothesis testing validated all nine of the proposed hypotheses, being able to shed light on the emotional and psychosocial components of consumer behavior of the Generation Z population in Bali. It was revealed that gadget ownership, imaginary companions, the inner child, and social media all contribute to consumer engagement, brand loyalty, and consumption patterns. These findings are practical as well as theoretical in nature due to the extensions made to the Emotional Consumption Theory (Cachón-Rodríguez et al., 2024) and the Digital Social Transformation Theory (Roth, 2019) evidenced in the findings.

First, H1 confirmed gadget ownership as having an impact on consumer behavior. Thus, affirmed the hypothesis. This finding supports the works of Merdiaty & Aldrin (2022) and Rakib et al. (2022) that noted the multifaceted role of gadgets as functional devices and symbolic commodities in the context of digital consumer engagement. In Bali, gadgets are also associated with social identity and status, further exacerbating the phenomena of digital consumerism.

Secondly, the acceptance of H2 and H3 suggested the importance of imaginary companions in influencing consumer behavior and gadget ownership. Garaigordobil et al. (2022) and Bredikyte & Brandisauskiene (2023) noted that children with imaginary companions tend to be more creative, better able to cope, and emotionally more regulated. These traits then translate into consumer behavior and attachment to gadgets. These findings highlight the impact of psychological

experiences in early life on developing consumer behavior in the later stages of life. It's a blend of developmental psychology and marketing behavior.

Thirdly, the findings substantiated H4 and H5, demonstrating that the inner child exerts more impact than previously thought on consumer behavior and gadget ownership. In adult consumption patterns, childhood experiences, more so the emotional deficits, tend to dominate (Quiroz et al., 2023; Sjöblom et al., 2016). Gadget ownership arises as a compensatory tool that fulfills the need to connect with others and serves a status symbol (Wiederhold, 2025; Zhang & Wu, 2022). This supports the Emotional Consumption Theory that posits emotional deficits drive gadget consumption, and extends previous studies in the area by showing that the effect carries over to adulthood.

Fourth, H6 showed how social media is able to shift consumer behavior. For example, Gen Z demonstrates reliance on digital influencers as well as on peers (Liu & Zheng, 2024; Ünalımsı et al., 2024). In Bali, where identity and community are paramount, online influencers and communities strengthen the symbolic and emotional associations with digital devices. This supports the claim that social media not only facilitates but enhances trends in consumption (Černikovaitė, 2019; Chavda & Chauhan, 2024).

Fifth, the confirmation of H7 showed that social media strongly moderates the relationship between ownership of gadgets and consumer behavior. In other words, the tendency to display ownership of gadgets online increases their symbolic value. This is consistent with other research (Goyal & Kaur, 2022; Wilska et al., 2023) that emphasizes the performative consumption aspect in the digital environment. For example, Gen Z in Bali, where the engagement with digital platforms is heavily globalized, links the visibility of gadgets to personal branding and lifestyle marketing.

Lastly, H8 and H9 focus on ownership of the gadgets and their mediating role between imaginary companions and the inner child on the one side, and consumer behavior on the other side. Their role in consumption, however, is more nuanced than the general perception that gadgets enhance consumption. For the persons whose inner child or imaginary companion is more active, gadgets may serve as emotional surrogates that satisfy certain emotional needs and do not necessarily expand the consumption of more tangible and traditional material goods. Such a finding contradicts the assumption that digital engagement increases consumerism in a more nuanced way. Gadgets may sometimes serve as substitutes to consumption rather than its amplifiers (Mardhiana, 2024).

These observations synthesize the role of gadgets as practical tools, emotional surrogates, and as symbolic items of value. The paradox of the ability to restrain consumption is highly relevant in the context of how complex the consumption of Gen Z is in Bali. Emotional Consumption Theory is validated in the context of

imaginary companions and the inner child showing how each of them serves to enhance consumption as a form of emotional regulation. On the other hand, the more complex Digital Social Transformation Theory is validated through social media that increases the use of gadgets for symbolic purposes but attenuates the overall level of materialism in the device requirement serves as an emotional need.

Considerable are the practical implications. It would be best if marketers focused on technological emotionalism while promoting nostalgic, genuine, and psychologically comforting. Simultaneously, brands must understand the performative characters of gadgets online and use influencer micro-creators and social power to enhance consumer engagement. For policymakers and teachers, these findings point to the importance of balancing gadget-mediated emotional gratification and the emotional overdependence and social isolation.

CONCLUSIONS

The conclusions from this research offer useful information concerning the confluence of psychological factors and online consumer behavior for Generation Z in Bali. The outcomes indicate that imaginary companions and the inner child significantly impact gadget ownership, and it acts as a mediator for consumer behavior. These findings have implications for marketers, policymakers, and digital platform developers. Brands targeting Generation Z in Bali must incorporate emotionally grounded advertising campaigns that resonate with their childhood experiences and online interactions. Customized marketing strategies focusing on social identity and emotional fulfillment through gadgets can enhance engagement and brand loyalty. Due to the strong impact of social media on gadget usage, consumer education programs must focus on digital literacy and responsible spending habits among young consumers. Decision-makers might apply the results to formulate guidelines that incentivize ethical advertising strategies in order to ensure that marketing campaigns do not take advantage of emotional susceptibilities associated with childhood experiences.

This study has several limitations that should be acknowledged. First, the sample is limited to the Denpasar area in Bali, which may not fully represent the characteristics of Generation Z in other regions of Indonesia that have different socio-cultural and economic conditions. Second, the use of self-reported questionnaires may introduce response biases, such as social desirability bias and recall bias, which could affect the accuracy of the collected data. Third, the cross-sectional design of this study captures consumer behavior at a single point in time, making it difficult to draw direct causal conclusions between variables.

Nevertheless, these limitations were carefully considered during the research design and are consistent with the exploratory nature of this study. Therefore, the findings still offer meaningful insights into Generation Z's consumer behavior,

particularly in a localized context. Future research is encouraged to expand the sampling area, adopt longitudinal approaches, and integrate both qualitative and quantitative methods to deepen understanding and enhance the validity of findings.

In order to mitigate these constraints and enhance the understanding of Generation Z's consumer behavior, future studies can adopt different approaches. Expanding the sample to include respondents from different regions of Indonesia and cross-nation comparisons with other tourism-based economies such as Phuket (Thailand) and Boracay (Philippines) would provide a broader perspective. Supplementing qualitative methods, such as in-depth interviews and focus groups, might add more richer information on psychological motives behind gadget ownership and social media influence. Longitudinal designs would facilitate examination of the evolution of these psychological factors and how they affect consumer behavior in the long run. Experimental or quasi-experimental designs can, in the future, be used to ascertain causality of the variables, particularly the mediating effect of gadget ownership on consumer choice. Through resolution of these spaces, follow-up research has the potential to break through beyond the current research and offer more conclusive findings about Generation Z's psychological and virtual consumption habits.

REFERENCES

- Adams, K. (2023). 'Imaginary' friends: The roles of imaginary/invisible companions in the classroom. *Education 3-13*, 1–13. <https://doi.org/10.1080/03004279.2023.2290666>
- Adams, K., Stanford, E., & Singh, H. (2022). Reconceptualizing imaginary friends: Interdisciplinary approaches for understanding invisible companions. *Journal of Childhood Studies*, 47(2), 32–49. <https://doi.org/10.18357/jcs202220569>
- Aguiar, N. R., Mottweilier, C. M., Taylor, M., & Fisher, P. A. (2017). The imaginary companions created by children who have lived in foster care. *Imagination, Cognition and Personality*, 36(4), 340–355. <https://doi.org/10.1177/0276236617700590>
- Armah, A., & Landers-Potts, M. (2021). A review of imaginary companions and their implications for development. *Imagination, Cognition and Personality*, 41(1), 31–53. <https://doi.org/10.1177/0276236621999324>
- Bettiga, D., Bianchi, A. M., Lamberti, L., & Noci, G. (2020). Consumers Emotional Responses to Functional and Hedonic Products: A Neuroscience Research. *Frontiers in Psychology*, 11, 1–13. <https://doi.org/10.3389/fpsyg.2020.559779>
- Bredikyte, M., & Brandisauskiene, A. (2023). Pretend play as the space for development of self-regulation: Cultural-historical perspective. *Frontiers in Psychology*, 14, 1–11. <https://doi.org/10.3389/fpsyg.2023.1186512>

- Cachón-Rodríguez, G., Blanco-González, A., Prado-Román, C., & Fernández-Portillo, A. (2024). How compulsive and impulsive buying affect consumer emotional regulation. Is anxiety a differential element? *European Journal of Management and Business Economics*, 33(1), 1–19. <https://doi.org/10.1108/EJMBE-06-2023-0172>
- Černikováitė, M. (2019). The impact of Influencer marketing on consumer buying behavior in social networks. *Proceedings of 6th International Scientific Conference*, 14(2), 1–8. <https://doi.org/10.3846/cibmee.2019.082>
- Chavda, K., & Chauhan, R. (2024). Influencer marketing impact on consumer behavior: Trust, authenticity, and brand engagement in social media. *Journal of Advances in Accounting, Economics, and Management*, 1(3), 1–9. <https://doi.org/10.47134/aaem.v1i3.180>
- Claveria, O. (2021). Correction to: A new metric of consensus for Likert-type scale questionnaires: An application to consumer expectations. *Journal of Banking and Financial Technology*, 5, 87–88. <https://doi.org/10.1007/s42786-021-00029-2>
- Coplan, R. J. and W. M. (2009). Shy and soft-spoken: Shyness, pragmatic language, and socio-emotional adjustment in early childhood. *Infant and Child Development*, 18(3), 238–254. <https://doi.org/10.1002/icd.622>
- Damuri, Y. R. (2017, December). Infrastructure in Indonesian economic development: Potentials & issues. *Japan Spotlight, December*, 16–19.
- Davis, P. E., Webster, L. A. D., Fernyhough, C., Ralston, K., Kola-Palmer, S., & Stain, H. J. (2019). Adult report of childhood imaginary companions and adversity relates to concurrent prodromal psychosis symptoms. *Psychiatry Research*, 271, 150–152. <https://doi.org/10.1016/j.psychres.2018.11.046>
- Demiris, G., Thompson, H. J., Lazar, A., & Lin, S.-Y. (2016). Evaluation of a digital companion for older adults with mild cognitive impairment. *Annual Symposium Proceedings*. 496–503.
- Dhawan, H., & Garga, P. (2025). Factors influencing consumer behaviour: Electronic goods. *International Journal of Research in Management*, 7(1), 714–720. <https://doi.org/10.33545/26648792.2025.v7.i1h.339>
- Dittmar, H., & Isham, A. (2022). Materialistic value orientation and wellbeing. *Current Opinion in Psychology*, 46, 101337. <https://doi.org/10.1016/j.copsyc.2022.101337>
- Downey, C., & Crummy, A. (2022). The impact of childhood trauma on children's wellbeing and adult behavior. *European Journal of Trauma and Dissociation*, 6(1), 100237. <https://doi.org/10.1016/j.ejtd.2021.100237>
- Dreyer, C., & Stojanová, H. (2022). How entrepreneurial is German generation Z vs.

- generation Y? A literature review. *Procedia Computer Science*, 217, 155–164. <https://doi.org/10.1016/j.procs.2022.12.211>
- Dzreke, S. S., & Dzreke, S. (2025). Influence of social media on consumer behavior: Investigating how social media platforms shape consumer purchasing decisions and loyalty. *Open Journal of Business and Management*, 13(02), 1154–1175. <https://doi.org/10.4236/ojbm.2025.132061>
- Efendioğlu, İ. H. (2024). Digital consumer behavior: A systematic literature review. *Prizren Social Science Journal*, 8(1), 67–80. <https://doi.org/10.32936/pssj.v8i1.479>
- Emmett M. Larsen, L. H. O. (2019). Effects of childhood trauma on adult moral decision-making: Clinical correlates and insights from bipolar disorder. *Journal of Affective Disorders*, 244, 180–186. <https://doi.org/10.1016/j.jad.2018.10.002>
- Epley, N., Akalis, S., Waytz, A., & Cacioppo, J. T. (2008). Creating social connection through inferential reproduction: Loneliness and perceived agency in gadgets, gods, and hreyhounds: Research article. *Psychological Science*, 19(2), 114–120. <https://doi.org/10.1111/j.1467-9280.2008.02056.x>
- Fernyhough, C., Watson, A., Bernini, M., Moseley, P., & Alderson-Day, B. (2019). Imaginary companions, inner speech and auditory verbal hallucinations: What are the relations? *Frontiers in Psychology*, 10, 1–10. <https://doi.org/10.3389/fpsyg.2019.01665>
- Garaigordobil, M., Berrueco, L., & Celume, M.-P. (2022). Developing children's creativity and social-emotional competencies through play: Summary of twenty years of findings of the evidence-based interventions "game program." *Journal of Intelligence*, 10(4), 77. <https://doi.org/10.3390/jintelligence10040077>
- Gleason, T. R. (2017). The psychological significance of play with imaginary companions in early childhood. *Learning and Behavior*, 45(4), 432–440. <https://doi.org/10.3758/s13420-017-0284-z>
- Godefroit-Winkel, D., Schill, M., & Hogg, M. K. (2019). The interplay of emotions and consumption in the relational identity trajectories of grandmothers with their grandchildren. *European Journal of Marketing*, 53(2), 164–194. <https://doi.org/10.1108/EJM-11-2017-0811>
- Godovykh, M. (2024). Transformative experiences in tourism: Where, when, with whom, and how does tourists' transformation occur? *Frontiers in Sustainable Tourism*, 3, 1–5. <https://doi.org/10.3389/frsut.2024.1377844>
- Goyal, S., & Kaur, N. (2022). Unveiling the power of social media marketing: Exploring its influence on consumer buying behavior for electronic gadgets.

- International Journal of Early Childhood Special Education*, 14(07), 2859–2870. <https://doi.org/10.48047/INTJECSE/V14I7.410>
- Guetterman, T. C. (2019). Basics of statistics for primary care research. *Family Medicine and Community Health*, 7(2), 11–17. <https://doi.org/10.1136/fmch-2018-000067>
- Haena Lee, M. S. (2017). Are positive childhood experiences linked to better cognitive functioning in later life?: Examining the role of life course pathways. *Physiology & Behavior*, 176(1), 100–106. <https://doi.org/10.1177/0898264320972547>.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2018). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275–285. <https://doi.org/10.1016/j.susoc.2022.05.004>
- Handranata, Y. W., & Kalila, S. (2025). Attitude toward fashion influencers and its impact on purchase behavior: The roles of brand attitude and purchase intention. *Frontiers in Communication*, 10, 1–12. <https://doi.org/10.3389/fcomm.2025.1583602>
- Hasell, A., & Chinn, S. (2023). The political influence of lifestyle influencers? Examining the relationship between aspirational social media use and anti-expert attitudes and beliefs. *Social Media and Society*, 9(4), 1–13. <https://doi.org/10.1177/20563051231211945>
- Hota, M., & Bartsch, F. (2019). Consumer socialization in childhood and adolescence: Impact of psychological development and family structure. *Journal of Business Research*, 105, 11–20. <https://doi.org/10.1016/j.jbusres.2019.07.035>
- Hu, J., & Cheung, C. K. J. (2024). Social identity and social integration: A meta-analysis exploring the relationship between social identity and social integration. *Frontiers in Psychology*, 15, 1–13. <https://doi.org/10.3389/fpsyg.2024.1361163>
- Kaur, D. (2023). Factors affecting the buying behavior of smartphones and electronic gadgets in modern dynamic environment. *International Journal of Research in Marketing Management and Sales*, 5(2), 01–08. <https://doi.org/10.33545/26633329.2023.v5.i2a.125>
- Kwon, W., & Noh, M. (2010). The influence of prior experience and age on mature consumers' perceptions and intentions of internet apparel shopping. *Journal of Fashion Marketing and Management*, 14(3), 335–349. <https://doi.org/10.1108/13612021011061825>
- Lahiya, A., Hasini, L., Mamonto, T., Mamonto, M. F., & Mokodenseho, S. (2022).

- Improving early childhood social-emotional intelligence through role-playing methods in group B. *Bulletin of Early Childhood*, 1(2), 93. <https://doi.org/10.51278/bec.v1i2.643>
- Liu, X., & Zheng, X. (2024). The persuasive power of social media influencers in brand credibility and purchase intention. *Humanities and Social Sciences Communications*, 11(1), 15. <https://doi.org/10.1057/s41599-023-02512-1>
- Lou, J., Han, N., Wang, D., & Pei, X. (2022). Effects of mobile identity on smartphone symbolic use: An attachment theory perspective. *International Journal of Environmental Research and Public Health*, 19(21), 14036. <https://doi.org/10.3390/ijerph192114036>
- Magno, F., Cassia, F., & Ringle, C. M. (2024). A brief review of partial least squares structural equation modeling (PLS-SEM) use in quality management studies. *TQM Journal*, 36(5), 1242–1251. <https://doi.org/10.1108/TQM-06-2022-0197>
- Magnusson, T., Karabag, S. F., Wigger, K., & Andersson, G. (2024). Sustainability transitions in tourism: On the transformation of a fragmented sector. *Tourism Geographies*, 26(2), 157–172. <https://doi.org/10.1080/14616688.2023.2291700>
- Mardhiana, H. R. (2024). Gen Z'S impulse buying behavior of shopping through live-streaming social commerce platforms: Investigating the role of parasocial interaction and social commerce emotional motivation. *Journal of Social Sciences and Humanities*, 3, 29–50. <https://doi.org/10.56943/jssh.v3i3.588>
- Merdiaty, N., & Aldrin, N. (2022). Effect of brand experience on customer engagement through quality services of online sellers to students in Bekasi. *Frontiers in Psychology*, 12, 1–8. <https://doi.org/10.3389/fpsyg.2021.801439>
- Mohajan, H. K. (2017). Two criteria for good measurements in research: Validity and reliability. *Annals of Spiru Haret University. Economic Series*, 17(4), 59–82. <https://doi.org/10.26458/1746>
- Moriguchi, Y., & Todo, N. (2019). Prevalence of imaginary companions in Japanese children. *International Journal of Psychology*, 54(2), 269–276. <https://doi.org/10.1002/ijop.12446>
- Nakshine, V. S., Thute, P., Khatib, M. N., & Sarkar, B. (2022). Increased screen time as a cause of declining physical, psychological health, and sleep patterns: A literary review. *Cureus*, 14(10), 1–9. <https://doi.org/10.7759/cureus.30051>
- Nauroth, P., Gollwitzer, M., Bender, J., & Rothmund, T. (2015). Social identity threat motivates science- discrediting online comments. *PLoS ONE*, 10(2), 1–26. <https://doi.org/10.1371/journal.pone.0117476>
- Panah, Z. Y., Mahmoodabadi, H. Z., & Dehghani, F. (2023). The role of imaginary companion in the life of only children: A qualitative study. *BMC Psychiatry*,

23(1), 1–7. <https://doi.org/10.1186/s12888-023-05360-0>

- Pellegrino, A., Abe, M., & Shannon, R. (2022). The dark side of social media: Content effects on the relationship between materialism and consumption behaviors. *Frontiers in Psychology*, 13, 870614. <https://doi.org/10.3389/fpsyg.2022.870614>
- Qiyi, L., Ruiyi, Z., Yiwen, Z., & Nan, Z. (2022). Did Chinese children with imaginary companions attribute more agencies to non-human items: Evidences from behavioral cues and appearance characteristics. *Frontiers in Psychology*, 13, 899047. <https://doi.org/10.3389/fpsyg.2022.899047>
- Quiroz, J. M. A., Guzman, J. F. De, Eric, J., Villafuerte, D. G., & Baral, J. E. V. (2023). Revisiting the inner child : Experiences and emotions of growing up from a solo - parent environment. *International Journal of Science, Engineering and Management*, 10(9), 136–139.
- Rajiv, & Widodo, S. (2023). Impact analysis of local Balinese cultural values on consumer purchasing decisions in the global market of handicraft products. *Sinergi International Journal of Economics*, 1(3), 132–145. <https://doi.org/https://doi.org/10.61194/economics.v1i3.211>
- Rakib, M. R. H. K., Pramanik, S. A. K., Amran, M. Al, Islam, M. N., & Sarker, M. O. F. (2022). Factors affecting young customers' smartphone purchase intention during Covid-19 pandemic. *Heliyon*, 8(9), e10599. <https://doi.org/10.1016/j.heliyon.2022.e10599>
- Raniyah, Q., & Nasution, N. (2024). the inner child phenomenon: Parenting style as a predictor of the inner child. *Proceeding International Seminar on Islamic Studies*, 5(1), 769–774.
- Roth, S. (2019). Digital transformation of social theory. A research update. *Technological Forecasting and Social Change*, 146, 88–93. <https://doi.org/10.1016/j.techfore.2019.05.016>
- Sepahpour, G. (2015). The role of the inner child in process of decision making for product selection. *Proceedings of the International Conference on Engineering Design*, DS 80-09, 1–10.
- Severson, R. L., & Woodard, S. R. (2018). Imagining others' minds: The positive relation between children's role play and anthropomorphism. *Frontiers in Psychology*, 9, 1–16. <https://doi.org/10.3389/fpsyg.2018.02140>
- Sharma, R., Nguyen, T. T., & Grote, U. (2018). Changing consumption patterns-drivers and the environmental impact. *Sustainability*, 10(11), 4190. <https://doi.org/10.3390/su10114190>
- Sjöblom, M., Öhrling, K., Prellwitz, M., & Kostenius, C. (2016). Health throughout the lifespan: The phenomenon of the inner child reflected in events during

- childhood experienced by older persons. *International Journal of Qualitative Studies on Health and Well-Being*, 11, 1–10. <https://doi.org/10.3402/qhw.v11.31486>
- Song, S., Tian, M., Fan, Q., & Zhang, Y. (2024). Temporal landmarks and nostalgic consumption: The role of the need to belong. *Behavioral Sciences*, 14(2), 123. <https://doi.org/10.3390/bs14020123>
- Stsiampkouskaya, K., Joinson, A., Piwek, L., & Stevens, L. (2021). Imagined audiences, emotions, and feedback expectations in social media photo sharing. *Social Media and Society*, 7(3), 1–19. <https://doi.org/10.1177/20563051211035692>
- Su, Y.-Y., Paradis, K., & Kuo, Y.-K. (2023). Indonesian generation Z embrace digital payments for convenience and discounts. *Proceedings of the International Conference on Intellectuals' Global Responsibility (ICIGR 2022)*, 1, 671–683. https://doi.org/10.2991/978-2-38476-052-7_73
- Suchánek, P., & Sobota, R. (2023). Modelling customer satisfaction of smartphones in the Czech Republic. *Quality Innovation Prosperity*, 27(1), 119–141. <https://doi.org/10.12776/QIP.V27I1.1818>
- Sudrajat, A. (2024). Strategic digital integration: Unravelling the impact of social media, data analytics, and branding on sustainable marketing strategies and consumer engagement in the tourism industry in Bali province. *International Journal of Business, Law, and Education*, 5(1), 837–851. <https://doi.org/10.56442/ijble.v5i1.495>
- Teuku, V. A., Eri, R., Halim, H., Anbumozhi, A., Riefky, T., Hariyanto, E., & Alamsyah, H. (2023). *Innovative financing for strategic infrastructure development*. In *Infrastructure for Inclusive Economic Development Volume 1: Lessons Learnt from Indonesia* (Vol. 1, pp. 82–107). Economic Research Institute for ASEAN and East Asia.
- Tyng, C. M., Amin, H. U., Saad, M. N. M., & Malik, A. S. (2017). The influences of emotion on learning and memory. *Frontiers in Psychology*, 8, 1–22. <https://doi.org/10.3389/fpsyg.2017.01454>
- Ünalmiş, E., Dirsehan, T., & Erdoğan, İ. E. (2024). Consequences of influencer-created content on influencers' authenticity in the beauty and personal care industry. *Journal of Marketing Communications*, 30, 1–27. <https://doi.org/10.1080/13527266.2024.2371833>
- Vidickiene, D., Vilke, R., & Gedminaite-Raudone, Ž. (2020). Transformative tourism as an innovative tool for rural development. *European Countryside*, 12(3), 277–291. <https://doi.org/10.2478/euco-2020-0016>
- Wahab, H. K. A., Alam, F., & Lahuerta-Otero, E. (2024). Social media stars: How

- influencers shape consumer's behavior on Instagram. *Spanish Journal of Marketing - ESIC*, 29(2), 188–206. <https://doi.org/10.1108/SJME-09-2023-0257>
- Wang, S., Guo, Y., & Ding, H. (2025). The impact of emotion on consumer behavior. *Advances in Economics, Management and Political Sciences*, 196(1), 29–38. <https://doi.org/10.54254/2754-1169/2025.bj24755>
- Wiederhold, B. K. (2025). Alone together: The paradox of digital connection and social isolation. *Cyberpsychology, Behavior, and Social Networking*, 28(3), 144–146. <https://doi.org/10.1089/cyber.2025.0034>
- Williams-Gant, A. J., Harden, I., & Corriveau, K. H. (2024). The influence of entertainment and brand characters on children's object preferences and monetary judgments. *Frontiers in Developmental Psychology*, 2, 1–10. <https://doi.org/10.3389/fdpys.2024.1438391>
- Williams, D. E., & Willick, B. (2023). Co-shopping and E-commerce: Parent's strategies for children's purchase influence. *Electronic Commerce Research*, 25(1), 93–209. <https://doi.org/10.1007/s10660-023-09682-9>
- Wilska, T.-A., Holkkola, M., & Tuominen, J. (2023). The role of social media in the creation of young people's consumer identities. *Sage Open*, 13(2), 1–11. <https://doi.org/10.1177/21582440231177030>
- Wojcik, E. H., Prasad, A., Hutchinson, S. P., & Shen, K. (2022). Children prefer to learn from smart devices, but do not trust them more than humans. *International Journal of Child-Computer Interaction*, 32, 100406. <https://doi.org/10.1016/j.ijcci.2021.100406>
- Xiao, J., Gong, Y., Li, J., Tang, X., Javeed, S. A., & Deng, Y. (2022). A study on the relationship between consumer motivations and subjective well-being: A latent profile analysis. *Frontiers in Psychology*, 13, 1–14. <https://doi.org/10.3389/fpsyg.2022.938060>
- Yamaguchi, M., & Moriguchi, Y. (2022). Did children interact with their personified objects during the COVID-19 pandemic? *Imagination, Cognition and Personality*, 41(3), 354–367. <https://doi.org/10.1177/02762366211034402>
- Yamaguchi, M., Okanda, M., Moriguchi, Y., & Itakura, S. (2023). Young adults with imaginary companions: The role of anthropomorphism, loneliness, and perceived stress. *Personality and Individual Differences*, 207, 112159. <https://doi.org/10.1016/j.paid.2023.112159>
- Yan, G., Zou, L., Liu, Y., & Ji, R. (2022). How does new infrastructure impact the competitiveness of the tourism industry?-Evidence from China. *PLoS ONE*, 17, 1–16. <https://doi.org/10.1371/journal.pone.0278274>
- Zhang, M. X., & Wu, A. M. S. (2022). Effects of childhood adversity on smartphone

addiction: The multiple mediation of life history strategies and smartphone use motivations. *Computers in Human Behavior*, 134, 107298. <https://doi.org/10.1016/j.chb.2022.107298>

Zlatanova-Pazheva, E. (2024). Consumer behavior of children. *The International Journal of Engineering and Science*, 13(4), 34–38. <https://doi.org/10.9790/1813-13043438>