

From Simulation to Possession: Psychological Ownership and Impulse Buying in IP-Based Experiential Retail

Yitong Li ¹, Chai Ching Tan ^{2*}

^{1,2} International College of National Institute of Development Administration, 148 Serithai Road, Klong-Chan, Bangkok, Bangkok Thailand, 10240

* Correspondence Author: chai_ching.tan@nida.ac.th

Abstract

This paper analyzes the role of IP-based experiential retail settings in shaping impulse-buying intention, with psychological ownership as an important explanatory variable. Although previous studies have shown the significance of exposure to stimuli and attachment as factors in the consumption of popular products, little effort has been made to examine the psychological processes that translate these inputs into purchasing behavior. Based on the psychological ownership theory, this paper argues that IP-based experiential simulation, including narrative-symbolic immersion, sensory-aesthetic involvement, and interactive involvement, enhances the development of ownership feelings before acquisition. Quantitative research based on purposive sampling of the consumers who visited the POP MART store at ICONSIAM in Bangkok. Four hundred and fifty questionnaires were sent out, and 412 valid responses were obtained to be analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings indicate that IP-based experiential simulation in the retail environment significantly increases psychological ownership, which, in turn, influences the intention to make impulsive purchases. Psychological ownership is considered a partial moderator of this relation. Moreover, flow experience enhances the impact of experiential simulation on psychological ownership and, consequently, on purchase intention. These results indicate that impulse buying in IP-based retail is not merely a stimulus-response but, critically, a behavioral expression of ownership. The study contributes to the literature by extending the psychological ownership theory to prepossession-experience contexts and by providing useful insights for designing immersive retail environments.

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1. Introduction

Over the last few years, fashionable consumer goods based on intellectual property (IP) have emerged as a distinct form of consumption in contemporary retail environments, including designer toys, blind boxes, and other character-centered products [1]. They do not primarily value such products for their practical value, but for their symbolic meaning, emotional appeal, and ability to express identity [1,2]. The rapid advancement of IP-based retail structures, such as those adopted by brands like POP MART, indicates a broader shift toward product-centric, experience-based consumption systems with significant implications. Under such conditions, customers no longer purchase products; instead,

they experience immersive environments that introduce narrative, aesthetics, and engagement into the consumption process [2,3].

One major aspect of popular IP products is that they are associated with emotional attachment and symbolic association even before purchase. Unlike traditional products, whose value is usually determined by functional features or post-consumption satisfaction, IP-based products evoke desire through storytelling, beauty, and scarcity-driven anticipation [4]. Empirical studies suggest that blind box consumption depends on perceived scarcity, uncertainty, and exclusivity, which increase emotional involvement and urgency [4]. The engagement between consumers and intellectual property products is closely linked to the psychological characteristics and emotional investment, but not rational evaluation [1]. These statistics suggest that traditional consumer behavior theories may not adequately explain the buying process in such situations.

One theoretical framework for understanding this phenomenon is psychological ownership theory. Psychological ownership is the state in which people feel they possess a target object, regardless of legal ownership [5]. Past research indicates that psychological ownership can be developed from profound knowledge, a sense of control, and an investment in a person, which can have a major impact on consumer attitudes, involvement, and behavioral intentions [5,6]. Recent studies show that psychological ownership can be elicited by environmental stimuli and design features before actual acquisition. [7] demonstrate that transparent packaging increases product choice by boosting customers' sense of proximity, attention, and perceived accessibility, thereby strengthening psychological ownership. On the same note, [8] portrays that the relationship between symbolic self-representation and purchase intention is intersected by psychological ownership in consumption situations that are highly topical to identity.

Regardless of such developments, studies have largely concentrated on psychological ownership following purchase or in simplified interaction settings [5,7]. It has not been well understood in terms of its creation in immersive, IP-based retail, where narrative, aesthetics, and interactivity coexist. The way these aspects recreate pre-purchase circumstances that develop a sense of ownership is especially vague.

This paper introduces IP-based experiential simulation, demonstrating how immersive retail experiences can recreate the psychological state of ownership across three dimensions: narrative-symbolic immersion, sensory-aesthetic engagement, and interactive participation. These experiences enable psychological ownership among consumers through self-association with the product, familiarity, and cognitive and emotional involvement. Psychological ownership, therefore, emerges not as a consequence of ownership but as a pre-purchase motivation-enhancing condition.

This paper considers flow experience as an important factor influencing psychological ownership. As an experience of deep immersion and pleasure, flow promotes involvement with stimuli and the internalization of external objects [3]. Another effect of flow on psychological ownership may be greater in an immersive IP retail setting and more impactful on impulse-buy intention.

Based on this argument, the research develops and empirically tests a moderated mediation model in the context of POP MART ICONSIAM in Bangkok. The purpose of the study is to examine (1) the development of psychological ownership by IP-based experiential simulation, (2) the effect of psychological ownership on impulse buying intention, and (3) the mediating role of flow experience between psychological ownership and impulse buying intention.

This study has several contributions. The research expands on the psychological ownership theory by demonstrating how a sense of ownership can be deliberately cultivated in immersive intellectual property retail settings through experiential simulation, thereby extending the theory to non-traditional possession- and interaction-based contexts [7,8].

Secondly, it introduces IP-based experiential simulation as a new concept for understanding how story, aesthetics, and involvement in consumer psychology affect the purchase of fashionable products. Third, it offers empirical data on the processes underlying impulse buying in the fast-growing IP-based collectibles business, with both theoretical and practical implications for the design of experience retail.

2. Literature Review

2.1 Underpinning Theory: Psychological Ownership Theory

The main theoretical framework for this investigation is psychological ownership theory. Psychological ownership is a cognitive-affective state in which people feel that a target object is theirs [7-9]. This feeling appears regardless of the legal ownership or formal possession [5]. It is a psychological process that connects the ego to external objects and helps them be internalized as part of the extended self [5-8].

Past research identifies three major directions of psychological ownership development, including (1) intimate knowledge, (2) perceived control, and (3) self-investment [5,6]. Intimate knowledge is formed when people become familiar with an object through frequent exposure and reflection [7,10]. Perceived control refers to the extent to which people think that they can affect or achieve the object [11]. Self-investment refers to the time, attention, and effort devoted to something for a particular purpose, thereby strengthening the psychological bond between the person and the object [8]. All these processes explain why the feeling of ownership may occur without ownership.

Recent studies extend the psychology ownership theory to consumer and experiential realms. [5] show that psychological ownership can trigger behavioral engagement in online brand communities. This is even felt by inactive members who do not participate. Likewise, Lee et al. (2025) found that psychological ownership is vital for value co-creation in experiential service contexts. It influences people's willingness to participate and contribute. These results show that psychological ownership is highly relevant when consumers engage with symbolic and experiential stimuli.

Recent research shows that psychological ownership can be induced prior to purchase by contextual and design stimuli. As shown by [7], transparent packaging improves consumers' perceptions of ease of access, attention, and proximity to the product. This promotes psychological ownership and raises preference towards the products. [8] shows that the relationship between symbolic self-representation and purchase intention is moderated by psychological ownership in an identity-relevant context. Taken together, these studies indicate that ownership is not limited to mere possession. It may be built up by pre-purchase experiences.

Despite such developments, research has not effectively examined the development of psychological ownership in complex, immersive retail settings. It is especially true in settings involving trendy IP-based products. These environments combine narrative, aesthetics, and interactivity. These variables can also simultaneously trigger psychological pathways related to ownership. This gap indicates a need to explore the role of experiential design in fostering psychological ownership before acquisition.

2.2 IP-Based Experiential Simulation and Impulse Buying Intention

IP-based experiential simulation may directly influence impulse-buying intentions. In experiential retail environments, clients frequently experience immersive environmental stimuli [12]. These stimuli intensify emotional arousal, enhance attentional focus, and elicit situational desire [13,14]. Consequently, impulsive buying behavior is more probable. Previous studies have demonstrated that emotionally evocative and symbolically significant consumption settings can elicit rapid behavioral responses. This effect is particularly evident when the products are hedonic, identity-relevant, and driven by scarcity [3,4].

In the realm of fashionable IP-based items, experiential simulation particularly stimulates impulse purchasing. It transcends mere product presentation for assessment. Rather, it engenders intense experiences that amplify desire. Narrative-symbolic immersion enhances consumers' identification with the intellectual property realm. Engagement of sensory aesthetics enhances attraction and emotional arousal. Engagement through interaction enhances immersion in the retail setting. Collectively, these experiential components can diminish deliberative thinking and prompt quick purchase intention, even before stronger ownership sentiments fully form. This reasoning aligns with previous evidence. Scarcity, novelty, and emotionally stimulating consuming environments enhance impulse-buying behaviors in blind-box and intellectual property-related product contexts [1, 4]. This perspective is consistent with extensive consumer studies. Immersive and emotionally charged brand environments can directly influence behavioral intention by enhancing excitement, attraction, and readiness to act [3]. Consequently, in addition to its indirect influence through psychological ownership, IP-based experiential simulation is expected to directly enhance impulse-buying intention.

H1. IP-based experiential simulation positively influences impulse buying intention.

2.3 IP-Based Experiential Simulation as a Pre-Possession Mechanism

The IP-based fashionable products are an exclusive category of symbolic consumption goods embedded within narrative-rich intellectual property structures [2]. These products derive their value not from functional attributes but from their association with characters, stories, and aesthetic worlds. These elements appeal to consumers' identities and feelings. Empirical evidence shows that consumer engagement with intellectual property goods is largely determined by emotional attachment and psychological investment, and not utilitarian considerations [1]. Mechanisms such as scarcity, uncertainty, and exclusivity, especially in blind-box formats, increase customer desire and impulse buying [4].

Store environments in such situations serve functions beyond product presentation. They also construct immersive experiencing environments. Such environments allow consumers to experience the narrative and aesthetics of intellectual property, simulating ownership-related experiences before purchase. This paper introduces the idea of IP-based experiential simulation. This concept explains why retail environments reproduce the pre-possession contexts that facilitate psychological ownership.

This paper characterizes experiential simulation in three dimensions. The first one is narrative-symbolic simulation. It demonstrates how engaged customers are with the narrative world and how symbolic the intellectual property is. The thematic design and character presentation help the buyers to view the product as an extension of their identity. This increases emotional attachment and deep knowledge [5].

Secondly, the sensory-aesthetic simulation refers to the visual, spatial, and material aspects of the retail space. These reduce the distance between the consumer and the product. According to [7], proximity and familiarity increase with sensory accessibility and attentiveness. These factors lead to the emergence of psychological ownership.

Third, interactive-participatory simulation measures the level of consumer interaction with the retailing environment. This includes exploration, choice, and interaction. This communication fosters self-investment, a key antecedent of psychological ownership [6]

Together, these three items recreate the psychological states that give rise to ownership. Simulated connection, familiarity, and involvement enable consumers to develop a sense of ownership, yet without actual possession.

H2. IP-based experiential simulation positively influences psychological ownership.

2.4 Psychological Ownership and Impulse Buying Intention

Impulse buying refers to impulsive, unreflective buying driven by emotional and situational factors. Impulse buying is particularly prominent for trendy IP-based items due to their emotional coloring, symbolic importance, and scarcity dynamics [4]. However, little is known about the psychological processes that translate experience involvement into impulse purchasing.

This can be explained by psychological ownership. As customers perceive an item as theirs, they develop a sense of ownership, right, and attachment that leads to acquisition behavior. The sense of ownership may increase the likelihood of impulse buying by making the desire to buy the object more immediate and emotionally meaningful. [8] shows that psychological ownership mediates the relationship between symbolic self-representation and purchase intention, suggesting that feelings of transform abstract intentions into concrete behavioral intentions. Similarly, [7] depicts that product choice is boosted by perceptions of ownership, which increase perceived proximity and individual importance.

Psychological ownership can become even more central in IP-based consumption contexts, where objects are closely connected to identity and emotional expression. Once customers integrate the thing into their extended self, the desire to purchase it intensifies, making the purchase an immediate effect of ownership feelings rather than a deliberate decision. In that regard, one may understand impulse buying as a behavior driven by preexisting feelings of ownership.

H3. Psychological ownership positively influences the intention to engage in impulse buying.

2.5 The Moderating Role of Flow Experience

Flow experience is a state of intense absorption and enjoyment while doing something. Experiential consumption implies focused attention, a lack of self-awareness, and emotional involvement [3]. These features make flow an important aspect in immersive shopping.

Flow can further promote psychological ownership by increasing consumers' engagement with stimuli. The more people are deeply involved in the environment, the more likely they are to develop familiarity, emotional attachment, and personal investment, which create psychological ownership [5,6]. As a result, higher levels of flow are expected to enhance the experiential simulation's role in fostering ownership.

In addition, the effect of psychological ownership on impulse-buying intention may be reinforced by flow. In high-flow situations, consumers are more inclined to react to their immediate feelings due to reduced cognitive processing and greater emotional engagement [3]. Therefore, the feeling of ownership is more likely to develop into purchase-related impulses.

H4. Flow experience positively moderates the relationship between IP-based experiential simulation and psychological ownership.

H5. Flow experience positively moderates the relationship between psychological ownership and impulse buying intention.

2.6 The Mediating Role of Psychological Ownership

Psychological ownership directly affects behavioral intention and shapes the association between sensory cues and consumer behavior. According to previous studies, feelings of ownership can help internalize external stimuli by binding them to the self, thereby making experiential interactions personally meaningful [5,6].

Consumers are often exposed to numerous sensory and narrative stimuli in contexts of experiential and symbolic consumption. These inputs, however, do not necessarily result in a purchase unless they are psychologically assimilated. This process is aided by psychological ownership, which converts external experiences into a sense of personal ownership. As shown by [8], psychological ownership mediates the relationship between symbolic self-representation and purchase intention, whereas [7] shows that ownership sentiments are amplified through design-induced proximity, thereby shaping product preference.

In IP-based experiential retail environments, consumers are exposed to narrative, aesthetic, and interactive stimuli. These are simulated experiences that first foster psychological ownership by making the experience personally relevant. This increased feeling of ownership is a mediating process that transforms the effect of the experiential simulation into the desire to make an impulse purchase. As a result, the element of impulse purchasing does not exist only as a result of external impulses, but through internalizing and expressing itself in the form of psychological property.

H6. Psychological ownership mediates the relationship between IP-based experiential simulation and impulse buying intention.

Integrating hypotheses H1-H6 yields the conceptual model shown in Figure 1. This conceptual model proposes that IP-based experiential simulation, shaped by narrative, sensory, and interactive dimensions, influences impulse buying intention both directly and indirectly through psychological ownership. Additionally, flow experience serves as a moderating condition that strengthens the effects of experiential simulation and psychological ownership on consumer purchase behavior.

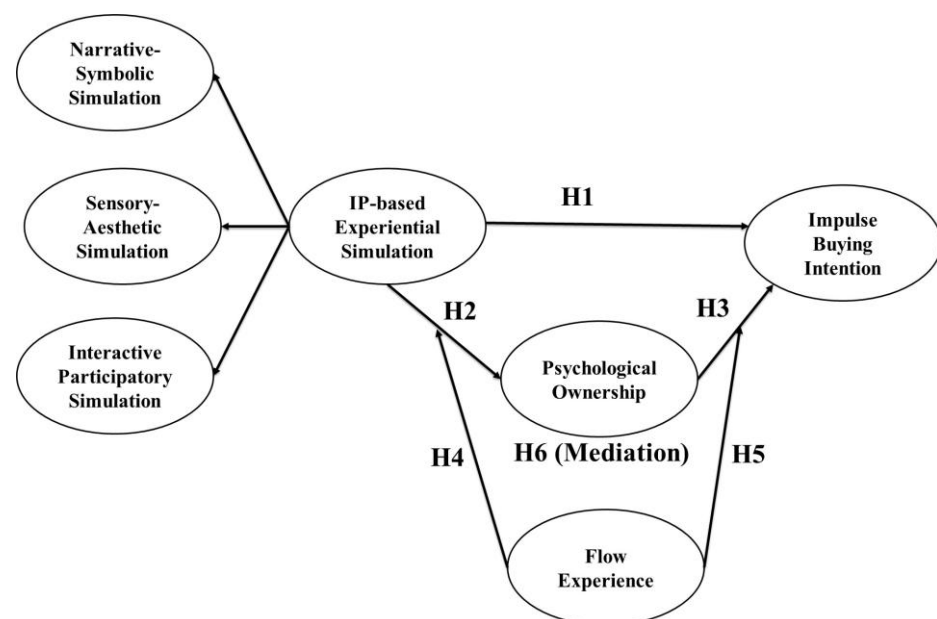


Figure 1. Conceptual model

3. Methods

3.1 Research Design and Context

The present study employs a quantitative research design to examine the proposed relationships among IP-based experiential simulation, psychological ownership, flow experience, and impulse-buying intention. The practical case is POP MART ICON-SIAM in Bangkok, Thailand, an illustrative example of IP-based experiential retail. POP MART stores are designed as immersive environments that combine character-based intellectual property (IP) with aesthetic displays and interactive product engagement, making them well-suited for studying how psychological ownership forms when consuming trendy products.

The consumer segments targeted by this research include those who have been to or interacted with the POP MART shop at ICONSIAM and are familiar with its IP-based products, namely blind boxes and designer collectibles. These consumers are considered the right respondents because they have firsthand experience with the experiential retail setting under study.

3.2 Sampling and Data Collection

This study employed purposive sampling to select respondents who had direct experience and familiarity with IP-based experiential retail environments at the POP MART ICONSIAM shop in Bangkok. Such sampling ensured respondents possessed traits relevant to the research aims and theoretical framework. The study focused on consumers who had physically visited and engaged with immersive IP-based retail settings, as psychological ownership, flow experience, and impulse-buying intention are posited to be significantly associated only in these individuals. Therefore, participants were deliberately selected for their prior familiarity with POP MART stores and intellectual property-related items, such as blind boxes and designer toys. This approach ensured data reflected genuine experiential insights, not theoretical assessments or general consumer sentiment.

Following the careful selection of respondents, data were collected using a standardized questionnaire distributed via both online and on-site methods. The on-site survey was conducted by engaging respondents near the POP MART shopping area at ICONSIAM and soliciting their voluntary participation. To complement this, the questionnaire was disseminated online via social media platforms and consumer communities associated with POP MART consumers and IP-product aficionados, thereby enhancing access to relevant respondents with prior retail experience.

Before proceeding with the questionnaire, participants received a brief overview of the study and were asked to recall their most recent experience at the POP MART store. This preparatory step ensured that replies accurately represented genuine experiential interactions and current cognitive-emotional assessments, rather than abstract fantasy or hypothetical evaluations. After data collection, to ensure quality and integrity, completed questionnaires were examined for missing values, straight-lining, and inconsistent responses prior to analysis.

3.3 Measurement Development

The overall measurement items of the constructs are shown in Table 1. IP-based experiential simulation comprises three dimensions: narrative-symbolic, sensory-aesthetic, and interactive-participatory. The construct reflects how immersive retail environments recreate symbolic, sensory, and participatory experiences that psychologically simulate product possession prior to purchase [15,16]. It captures consumers' cognitive and emotional immersion in IP-based consumption settings through narrative engagement, aesthetic stimulation, and interactive involvement. The measurement items were adapted from prior studies on experiential consumption, sensory marketing [15], and store atmospherics [16],

and further contextualized for IP-based experiential retail settings, particularly POP MART-style immersive environments, while preserving the original conceptual meanings of the constructs.

Narrative-symbolic simulation is the extent to which consumers immerse themselves in the symbolic world and attribute meanings to the intellectual property environment. It includes narrative immersion, symbolic identification, and emotional connection with the IP universe. The measurement items assess consumers' perceptions of thematic immersion, symbolic uniqueness, and emotional connection to the IP story and its characters.

Sensory-aesthetic simulation captures the sensory and atmospheric immersion generated through visual aesthetics, spatial design, lighting, music, and environmental presentation. This dimension reflects how aesthetic and multisensory stimuli reduce psychological distance between consumers and products while enhancing experiential absorption and emotional arousal [3,17]. The measurement items assessed consumers' perceptions of the store environment as visually attractive, atmospherically pleasant, and sensorially immersive.

Interactive-participatory simulation refers to the extent to which consumers engage with the retail environment through exploration and participation. Active participation increases self-investment and involvement, strengthening attachment to products and environments. The measurement items assess consumers' exploration, interaction with products and activities, and their personal involvement in the immersive environment.

Psychological ownership means consumers feel that a target object or environment belongs to them, even if they don't legally own it. It includes feelings of possession, perceived control, and emotional self-investment toward the consumption target [1,2]. The measurement items were adapted to assess feelings of ownership in immersive IP-based retail environments while preserving their conceptual meaning as described in [1,2].

Flow experience is a state of deep absorption, attention, and enjoyment during consumption activities. In immersive retail settings, flow means full involvement in the shopping experience, characterized by concentration, time loss, and immersion. The measurement items are adapted from earlier flow studies [13,14] and adjusted to fit immersive IP retail experiences.

Impulse buying intention refers to consumers' spontaneous and immediate desire to purchase products without extensive deliberation [13,14]. In the context of IP-based experiential retail, impulse buying intention reflects emotionally driven purchasing tendencies stimulated by immersive experiences, symbolic appeal, and situational engagement. The measurement items were adapted from prior impulse-buying literature [13,14] and contextualized to capture tendencies toward immediate purchase in immersive IP-based consumption environments.

All measurement items used a five-point Likert scale from 1 ("strongly disagree") to 5 ("strongly agree"). Before data collection, experts in marketing and consumer behavior reviewed the questionnaire for content validity, context, and clarity. A pilot test was done to refine wording and improve reliability.

Table 1. Measurement Items of Constructs

Construct	Code	Measurement Items
NSS	NSS1	The store's design and theme immerse me in the world of the IP characters.
	NSS2	The products and displays make me feel emotionally connected to the IP story and characters.
	NSS3	This experience feels distinct from that of ordinary retail stores.

Construct	Code	Measurement Items
SAS	SAS1	The lighting, colors, and visuals make me feel immersed.
	SAS2	The background music and spatial design create a pleasant atmosphere
	SAS3	The visual design of displays and arrangements is highly attractive.
IPS	IPS1	I actively explored different parts of the store experience
	IPS2	I enjoyed interacting with the products and experiential activities.
	IPS3	The experience made me feel personally involved in the environment.
PO	PO1	I feel that this space belongs to me.
	PO2	I feel a sense of control over my experience here
	PO3	I have invested my personal emotions here.
FE	FE1	I am fully focused on the activity when experiencing the store.
	FE2	I lose track of time during the experience.
	FE3	The experience makes me feel completely absorbed.
IBI	IBI1	The experience makes me more likely to purchase immediately.
	IBI2	I feel a strong desire to buy after the experience.
	IBI3	I often make impulse purchases during such immersive experiences.

Note: NSS = Narrative-Symbolic Simulation; SAS = Sensory-Aesthetic Simulation; IPS = Interactive-Participatory Simulation; PO = Psychological Ownership; FE = Flow Experience; IBI = Impulse Buying Intention.

3.4 Data Analysis Technique

The study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS software to test the proposed research model. PLS-SEM was appropriate because the model includes several latent constructs and a higher-order construct (IP-based experiential simulation), both of which can be measured using this method. Additionally, the approach allows the examination of direct, mediating, and moderating relationships in parallel, which is well-suited to complex predictive models. PLS-SEM is also well-suited to exploratory and predictive research in nascent contexts, such as IP-based experiential stores. Following this, a two-stage approach was used, comprising analyses of the measurement and structural models. Measuring model's indicator reliability, internal consistency reliability, convergent validity, and discriminant validity were evaluated. Outer loadings were used to assess the indicators' reliability, and Cronbach's alpha and composite reliability (CR) were used to assess internal consistency. The average variance extracted (AVE) was used to test for convergent validity. The heterotrait-monotrait ratio (HTMT) criterion was used to assess the discriminant validity. Furthermore, collinearity was assessed using variance inflation factors (VIFs). Common method bias was evaluated with Harman's single-factor test and full collinearity diagnostics. Path coefficients, significance levels, explained variance (R^2), effect size (f^2), model fit indices (e.g., SRMR, NFI), and other indices were used to assess the structural model. Next, to assess the statistical significance of the proposed hypotheses, bootstrapping techniques (5,000 resamples) were used. Indirect effect analysis and variance accounted for (VAF) were used to assess the mediating effect. Finally, a multi-group analysis (MGA) compared responses between

Thai and non-Thai participants. Henseler's MGA and permutation testing were applied to determine significant differences in structural correlations between cultural groups.

3.5 Ethical Considerations

The study was voluntary, and participants were informed of the research's purpose before completing the questionnaire. Any responses obtained were anonymous, and no personal information was recorded. The research was conducted in accordance with the outlined research ethics of human subjects.

4. Results

A total of 450 questionnaires were sent during August, 2025, yielding 412 valid responses, for an effective response rate of 91.6%. The sample comprises all respondents who visited the POP MART immersive flagship store at ICONSIAM in Bangkok, thereby representing consumers with firsthand experience of IP-based experiential retail settings. The demographic profile is given in Table 2. Regarding gender balance, the sample is comparably balanced, with females constituting the majority (49.8%), followed by males (43.9%) and a smaller group reporting non-binary identity (6.3%). Such a distribution implies a more intense involvement of female customers in IP-based experiential retail, without excluding the diversity of gender identities. In terms of nationality, most respondents are Thai (71.8%), with the remaining 28.2% non-Thai. This work justifies the topicality of the research at the regional level and provides a significant cross-cultural comparison, particularly through a multigroup analysis of Thai and international customers. Generationally, the sample consists of younger generations. Generation Y (1981–1996) constitutes the largest group (44.7%), followed closely by Generation Z (1997–2012) at 40.5%, while Generation X (1965–1980) accounts for a smaller share (14.8%). This shows that IP-based experience retailing is most appealing to younger, more experience-seeking consumers who are more sensitive to the experiential and symbolic milieu of consumption.

Table 2. Demographic Profile

Demographic Profile	Variable	n	%
Gender	Male	181	43.9%
	Female	205	49.8%
	Bi-sexual	26	6.3%
Nationality	Thai	296	71.8%
	Non-Thai	116	28.2%
Age Group	X (1965-1980)	61	14.8%
	Y (1981-1996)	184	44.7%
	Z (1997-2012)	167	40.5%

4.1 Measurement Model Assessment

The measurement model was systematically tested for indicator reliability, internal consistency reliability, convergent and divergent validity, and higher-order concept validity. Results for these analyses are outlined in Tables 3-5. Specifically, Table 3 shows that the loadings for all indicators were above the recommended threshold of 0.70, ranging from 0.812 to 0.950, indicating adequate indicator dependability. Internal consistency reliability was assessed using Cronbach's alpha and composite reliability (CR). Cronbach's alpha ranged from 0.821 to 0.879, and CR ranged from 0.890 to 0.927, which is greater than the

suggested value of 0.70 (Hair et al., 2021). These scores reflect good internal consistency reliability for all the constructs. Following the reliability assessment, the average variance extracted (AVE) was used to determine the convergent validity. Furthermore, Table 3 shows that the AVE values ranged from 0.729 to 0.810, exceeding the 0.50 threshold, thus supporting adequate convergent validity (Hair et al., 2021). Overall, these data suggest that the measurement items are suitable to represent their intended latent constructs.

In addition to convergent validity, the heterotrait-monotrait ratio (HTMT) criterion was used to assess discriminant validity, as shown in Table 4. Most HTMT values were below the strict 0.85 cut-off, indicating good discriminant validity for the constructs. All were below the more liberal 0.90 cutoff frequently used in PLS-SEM studies (Hair et al., 2021) and were considered acceptable. To assess higher-order concept validity, the IP-based experiential simulation was then tested using a reflective-reflective two-stage model, also to validate the structural model. The results depicted in Table 5 show that CR, loadings, and AVE met the convergent validity requirement (Hair et al., 2021).

The results for the higher-order concept in Table 5 showed that the composite reliability (CR) was 0.91 and the average variance extracted (AVE) was 0.77, indicating that the higher-order concept is highly reliable and convergent. These results confirm the validity and reliability of the higher-order conceptualization of IP-based experiential simulation.

Table 3. Measurement Model Results

Construct	Mean	SD	Loading Range	Cronbach's α	CR	AVE
NSS	4.21	0.63	0.812–0.904	0.836	0.901	0.753
SAS	4.08	0.68	0.844–0.871	0.879	0.894	0.737
IPS	4.19	0.59	0.858–0.888	0.821	0.890	0.729
PO	4.05	0.66	0.864–0.901	0.867	0.914	0.781
FE	4.17	0.64	0.819–0.884	0.853	0.906	0.762
IBI	4.12	0.71	0.871–0.950	0.879	0.927	0.810

Note: NSS = Narrative-Symbolic Simulation; SAS = Sensory-Aesthetic Simulation; IPS = Interactive Participatory Simulation; PO = Psychological Ownership; FE = Flow Experience; IBI = Impulsive Buying Intention.

Table 4. HTMT

Construct	NSS	SAS	IPS	PO	FE	IPI
NSS	-					
SAS	0.868	-				
IPS	0.486	0.529	-			
PO	0.429	0.471	0.578	-		
FE	0.447	0.553	0.498	0.609	-	
IPI	0.521	0.567	0.547	0.633	0.582	-

Note: NSS = Narrative-Symbolic Simulation; SAS = Sensory-Aesthetic Simulation; IPS = Interactive Participatory Simulation; PO = Psychological Ownership; FE = Flow Experience; IBI = Impulsive Buying Intention.

Table 5. Second-Order Construct: IP-based

	Dimension	Loading
IP-based Experiential Simulation	NSS	0.842
	SAS	0.879
	IPS	0.817
Note 1: CR = 0.91, AVE = 0.77. Note 2: NSS = Narrative-Symbolic Simulation; SAS = Sensory-Aesthetic Simulation; IPS = Interactive Participatory Simulation;		

4.2 Structural Model Results

Table 6 provides the structural model estimates for hypotheses H1-H3, the path coefficients (β), and t-values, as well as the significance levels obtained via bootstrapping. All the hypothesized direct relationships are strongly supported by the results.

First, the impact of IP-based experiential simulation on impulse buying intention (H1) is positive and significant ($\beta = 0.286$, $t = 5.394$, $p = 0.001$). This implies that consumers are directly prompted to engage in impulse buying in immersive experiential settings. Though the scale is moderate, the result supports the view that experiential cues (narrative immersion, aesthetic appeal, and interactivity) can prompt immediate purchase intentions without further psychological processing. Second, the correlation between IP-based experiential simulation and psychological ownership (H2) is strong and highly significant ($\beta = 0.652$, $p < 0.001$). This is the most powerful direction in the model, implying that experiential simulation is a crucial step in building a sense of ownership before the actual purchase. The outcome emphasizes the usefulness of immersive retail design in triggering psychological processes of self-association, familiarity, and emotional attachment. Third, the influence of psychological ownership on impulse buying intention (H3) is also positive and significant ($\beta = 0.423$, $t = 8.775$, $p < 0.001$). This observation shows that when a consumer feels ownership of a product, they tend to make impulse purchases. This relationship is stronger than the direct effect of experiential simulation, supporting the idea that psychological ownership is a primary internal driver that converts experiential input into behavioral output.

The combined results in Table 6 can be used to support a dual-path mechanism: IP-based experiential simulation affects impulse buying intention both directly and indirectly via psychological ownership. More to the point, the larger coefficients for psychological ownership indicate that internalized ownership is a more potent predictor of behavior than external stimuli, placing it at the heart of the model.

Table 6. Structural Model Results (H1–H3)

Hypothesis	Path	β	t-value	p-value	Result
H1	IP-based Experiential Simulation → Impulse Buying Intention	0.286	5.394	***	Supported
H2	IP-based Experiential Simulation → Psychological Ownership	0.652	9.013	***	Supported
H3	Psychological Ownership → Impulse Buying Intention	0.423	8.775	***	Supported

4.3 Moderating Effects of Flow Experience

Table 7 presents the moderating effects of flow experience in the proposed model as interaction terms in the PLS-SEM analysis. The findings make it clear that flow is not a direct driver of outcomes, but a situational enhancer that reinforces important relationships in the model. Firstly, there is a positive, statistically significant interaction between flow experience and IP-based experiential simulation on psychological ownership (Flow $\times$ Simulation $\rightarrow$ Psychological Ownership) ($\beta = 0.094$, $p < 0.05$). It means that the greater the immersion and engagement (i.e., flow) consumers experience, the greater the effect of experiential simulation on the development of psychological ownership. That is, immersive retail environments are better at instilling a sense of ownership when the experience is highly engaging for consumers. Second, there is also a positive and significant interaction between flow experience and psychological ownership on impulse buying intention (Flow $\times$ Psychological Ownership $\rightarrow$ Impulse Buying Intention) ($\beta = 0.139$, $p < 0.01$). This implies that flow also contributes to the translation of ownership feelings to behavioral intention. Consumers tend to respond more to perceived ownership under high-flow conditions, leading to higher impulse purchasing.

In general, the findings indicate that flow experience is a multiplier in both phases of the psychological process: first, by magnifying the formation of ownership, and second, by hastening the transformation of ownership into action. This supports the perception that flow is not a causal parameter, but a contingent trigger that enhances the efficiency of experience and psychological processes in immersive retail settings.

Table 7. Moderation Results (H4–H5)

Hypothesis	Interaction Path	β	p-value	Result
H4	Flow $\times$ IP-based Experiential Simulation $\rightarrow$ Psychological Ownership	0.094	< 0.05	Supported
H5	Flow $\times$ Psychological Ownership $\rightarrow$ Impulse Buying Intention	0.139	< 0.01	Supported

4.4 Mediation Analysis

The mediating role of psychological ownership was evaluated using bootstrapping methods. The findings are displayed in Table 8. The indirect effect of experiential simulation on impulse buying intention through psychological ownership is significant ($\beta = 0.191$, $p = 0.000$), supporting H6. Given that the direct effect is significant ($\beta = 0.286$), psychological ownership is recognized as a partial mediator. The variance accounted for (VAF) is 40%, signifying that experiencing simulation affects impulse purchase both directly and indirectly via psychological ownership.

Table 8. Mediation Results (H6)

Path	Indirect Effect	Direct Effect	VAF	Interpretation
H6: IP-based Experiential Simulation $\rightarrow$ Ownership $\rightarrow$ Impulse Buying Intention	0.191	0.286	40%	Partial mediation

4.5 Model Explanatory and Predictive Power

The model exhibits significant explanatory capability. Experiential simulation accounts for 58.2% of the variance in psychological ownership, whereas the entire model explains 67.1% of the variance in impulse-buying intention. The results demonstrate that the proposed paradigm offers a robust predictive explanation of customer behavior in IP-based experiential retail environments, also evidenced by the model fit indexes, SRMR = $0.056 < 0.08$ (threshold), NFI = $0.912 > 0.90$ (threshold), and the effect size result in Table 9.

Table 9 reports the effect size (f^2) for each exogenous construct on the relevant endogenous variable, providing a more detailed picture of each predictor's substantive contribution and its statistical significance. Effect size f^2 (f-squared) is a measure used in PLS-SEM to assess the individual contribution of an exogenous construct to an endogenous construct's R^2 value. In simple terms, it tells how much a predictor actually matters in explaining the target variable, beyond just statistical significance. The values of 0.02 (small), 0.15 (medium), and 0.35 (large) are used to interpret the result.

The findings reveal that IP-based experiential simulation has a medium impact ($f^2 = 0.266$) on psychological ownership, indicating that experiential simulation is not only a statistically significant antecedent but also a substantively meaningful influence on ownership formation. This scale suggests that the immersive arrangement of narrative-symbolic, sensory-aesthetic, and interactive features significantly contributes to understanding the difference in psychological ownership. That is, when experiential simulation is eliminated from the model, the explanatory power of psychological ownership would significantly decrease, supporting the view that this mechanism is a basic mechanism in the establishment of pre-possession ownership.

Conversely, psychological ownership has a large effect size ($f^2 = 0.332$) on impulse-buying intention and thus is the strongest predictor in the structural model. This finding is of theoretical importance, especially because it shows that the transformation of cognition-affect (ownership) into behavior (impulse buying) is not only statistically significant but also substantively predominant. The high level of effect supports the point that impulse buying in IP-based experiential retail is more of an ownership-based behavioral expression than a response to external stimuli. In this way, psychological ownership is a key conversion process that transforms experiential inputs into behavioral outputs.

At the same time, the direct impact of the IP-based experiential simulation on the intention to buy is of medium effect size ($f^2 = 0.149$). This implies that experiential simulation makes a significant contribution to impulse buying, in addition to its indirect effect via psychological ownership. Nonetheless, its influence is significantly less than that of psychological ownership, meaning that while immersive experiences may directly generate purchase impulses, a significant part of their effects is mediated by internalized ownership. This trend is consistent with the mediation findings and the dual-path mechanism, in which experiential stimuli have both direct (affective immediacy) and indirect (cognitive internalization) effects on behavior.

Lastly, the interaction effect of flow experience and psychological ownership on impulse buying intention has a small-to-medium effect size ($f^2 = 0.075$). This is a significant result, though comparatively weaker of the main effects, especially in moderation analysis, where effect sizes are generally smaller. It proposes that flow experience is an enhancing factor that reinforces the effect of psychological ownership on behavioral intention during deep immersion. This supports the conceptualization of flow as a situational amplifier rather than a major force that enhances the effectiveness of the ownership feelings into action.

The combined effect size results can be considered significant complementary evidence to the path coefficients, showing that psychological ownership is the most significant mechanism within the model, experiential simulation is a powerful upstream driver, and flow experience is a situational enhancer. This stratified composition of effect magnitudes further supports the study's main thesis that impulse buying in IP-based experiential retail

is formed through a hierarchical process of experiential stimulation, psychological internalization, and context-specific amplification.

Table 9. Effect Size

Path	f^2	Effect Size
IP-based experiential simulation → Psychological ownership	0.266	Medium
Psychological ownership → Impulse buying intention	0.332	Large
IP-based experiential simulation → Impulse buying intention	0.149	Medium
Flow experience X Psychological ownership → Impulse buying intention	0.075	Small-Medium

4.6 Multi-Groups Analysis

The outcome of the multi-group analysis (MGA) between Thai (Group 1) and non-Thai (Group 2) respondents is presented in Table 10. The analysis was conducted using not only the MGA developed by Henseler but also permutation tests to determine whether the structural relationships differ across the cultural groups. This discussion provides further insight into whether the suggested model is uniform or context-sensitive across consumer segments.

The findings show that the direct impact of IP-based experiential simulation (ESI) on impulse buying intention (ESI → IPI) is significant in both groups ($\Delta\beta = -0.143$, $p < 0.05$ in both the MGA and permutation tests). In particular, the correlation is higher for non-Thai respondents ($\beta = 0.341$) than for Thai respondents ($\beta = 0.198$). This suggests that non-Thai customers are more directly sensitive to experiential stimuli in the development of an impulse purchase intention and are therefore more susceptible to an immersive retail experience, without necessarily requiring greater incorporation of the experience into psychological memory. Thai consumers, conversely, do not seem to be as motivated by instantaneous experiential stimuli, suggesting a relatively more controlled or stratified decision-making process.

By comparison, the impact of IP-based experiential simulation on psychological ownership (ESI → PO) does not differ significantly between the two tests, although the MGA effect is significant ($p = 0.031$). The permutation test ($p = 0.317$) indicates non-significance, meaning the difference between Thai ($\beta = 0.412$) and non-Thai ($\beta = 0.285$) respondents is not statistically significant. Consequently, this trajectory could be viewed as comparatively stable across groups, suggesting that the mechanism by which experiential simulation produces psychological ownership is relatively universal and not particularly culturally dependent.

Another trend is the influence of psychological ownership on impulse buying intention (PO → IPI). Although Henseler MGA shows no significant difference, the permutation test indicates a significant group difference ($p = 0.044$). Non-Thai respondents have a slightly stronger path coefficient ($\beta = 0.602$) than Thai respondents ($\beta = 0.563$). The difference, though small, suggests that non-Thai consumers may be able to more easily transfer ownership feelings to behavioral intention. This indicates a slightly higher conversion rate from ownership to action among non-Thais.

As for the moderating effect, the interaction between flow experience and experiential simulation on psychological ownership (FE × ESI → PO) does not differ significantly across groups ($p > 0.05$ in both tests). This suggests that the flow effect in the formation of psychological ownership operates similarly among Thai and non-Thai consumers. Put

differently, ownership is formed through immersive engagement in a culturally congruent way.

Nonetheless, the interplay between flow experience and psychological ownership on impulse buying intention ($FE \times PO \rightarrow IPI$) shows a significant group difference (change of 0.126, $p < 0.05$ in both tests). The moderating effect is greater among Thai respondents ($\beta = 0.244$) than among non-Thai respondents ($\beta = 0.118$). This implies that flow is of paramount importance to Thai consumers in translating psychological ownership to actual purchase intention. Thai consumers are more prone to respond to ownership feelings in high-flow situations, suggesting that immersion is a primary activation mechanism in this population.

Taken together, the MGA outcomes depict a subtle yet significant cultural distinction in the behavioral mechanism. Although the development of psychological ownership seems to be rather global, the routes to impulse buying are varied. Experiential stimuli have a greater direct influence on non-Thai consumers, who exhibit stronger immediate responses, whereas Thai consumers use internalized ownership and immersive flow states to elicit purchasing behavior. This implies that the strategies of experiential retailing might need to be tuned differently: focusing on direct stimulation among international consumers and on deeper engagement and immersion among Thai consumers to elicit behavioral responses.

Table 10. Multi-Group Analysis of Thai and Non-Thai Groups

Construct	β of Group 1	β of Group 2	$\Delta\beta$	Henseler's MGA p	Permutation p	Significance
ESI $\rightarrow$ IPI	0.198	0.341	-0.143	0.014**	0.022*	**
ESI $\rightarrow$ PO	0.412	0.285	0.127	0.031*	0.317	n.s.
PO $\rightarrow$ IPI	0.563	0.602	-0.143	0.281	0.044*	*
FEXESI $\rightarrow$ PO	0.151	0.042	0.109	0.062	0.078	n.s.
FEXPO $\rightarrow$ IPI	0.244	0.118	0.126	0.028*	0.037*	*

Note: Group 1 = Thai respondents; Group 2 = non-Thai respondents.

ESI = IP-based experiential simulation; PO = Psychological ownership;

IPI = Impulse buying intention; FE = Flow experience of consumers.

$\Delta\beta$ = β of group 1 – β of group 2, * $p < 0.05$, ** $p < 0.01$, n.s. = non-significant.

Henseler's MGA and Permutation test are all based on 5,000 bootstraps

5. Discussion

5.1. General Discussion

This study explored how IP-based experiential simulation affects impulse buying intention through psychological ownership, with flow experience as a moderating factor, by surveying the consumers who visited the POP MART store at ICONSIAM in Bangkok. The results support research on the experience economy [18], sensory marketing [19], psychological ownership in a marketing context [20], and immersive consumption [21]. The findings further these areas by showing that immersive experiential retail works not through single experiences but through a blend of narrative-symbolic, sensory-aesthetic, and interactive-participatory simulations, which together build psychological ownership before purchase.

Building on these findings, the results corroborate and enhance current theories in the experience economy and sensory marketing domains [15-21]. Additionally, the current findings indicate that immersive experiential retail settings function through a more cohesive experiential architecture. The higher-order reflective-reflective structure demonstrates that narrative-symbolic simulation, sensory-aesthetic simulation, and interactive-participatory simulation are interdependent experiencing mechanisms rather

than independent or competing ones. Instead, they mutually enhance and mirror a broader phenomenon of simulation experience. This result is theoretically significant, as previous studies on sensory marketing and retail atmosphere often treat experiencing cues as isolated environmental stimuli, such as lighting, aroma, music, or aesthetics [15,16,22]. The current findings indicate that the effectiveness of immersive IP-based retail arises from experiencing coherence, in which symbolic meaning, sensory immersion, and interactive engagement coincide to foster deeper psychological internalization. This study addresses a significant conceptual deficiency by elucidating the multifaceted experience framework that underpins immersive retail simulation.

Expanding the discussion to psychological ownership, the significant impact of IP-based experiential simulation on psychological ownership ($\beta = 0.652$, $p < 0.001$) robustly corroborates psychological ownership theory [7,8,10,11] and broadens its application to immersive prepossession retail environments. Current research on psychological ownership has predominantly focused on ownership development in specific contexts, such as online communities, digital interactions, transparent packaging, or post-usage involvement [20,23]. The current findings indicate that immersive experience retail environments can concurrently stimulate the three fundamental precursors of psychological ownership—intimate knowledge, self-investment, and perceived control. Narrative-symbolic simulation allows consumers to gain cognitive and emotional familiarity with the symbolic realm of the intellectual property landscape [15,16]. Sensory-aesthetic simulation diminishes psychological distance and increases familiarity via environmental immersion [19]. Interactive, participatory simulation motivates consumers to invest time, attention, investigation, and emotional engagement in the retail experience, thereby enhancing self-investment and the internalization of ownership [18]. The findings suggest that psychological ownership in immersive retail environments is not solely a post-acquisition phenomenon but can arise prior to actual possession through experiential simulation.

Regarding impulse buying intention, the role of psychological ownership and flow experience-induced moderation becomes critical in the context of IP-immersive retail simulation. The results extend beyond impulsive buying intention induced by instantaneous reactions to emotional stimulation, contextual signals, or hedonistic triggers [13,14,21], pointing out that impulse purchases in immersive IP-based retail environments may operate through a more profound psychological mechanism of internalization. The substantial influence of psychological ownership on impulse-buying intention ($\beta = 0.423$, $p < 0.001$), along with the mediation results, suggests that consumers do not respond solely to outward-experiencing inputs. Instead, consumers may impulsively acquire objects as the immersive environment psychologically converts these items into symbolic extensions of the self. In this context, impulse purchasing in immersive symbolic retail environments seems to be less a mere stimulus-response reaction and more an enactment driven by the desire for psychological ownership. This view enhances the literature by shifting the understanding of impulse buying from external stimuli to internalized psychological ownership [21]. The role of psychological ownership is further reinforced by significant mediation, with an indirect path coefficient of 0.191 and a VAF of 40%.

Adding another layer to these results, the moderating role of flow experience significantly enriches the current literature. Prior research often regarded flow as a direct determinant of enjoyment, engagement, or behavioral effects [13,14] and consumer decision [24]. Nonetheless, the current data indicate a more complex role. The flow experience markedly enhances the correlation between experiential simulation and psychological ownership ($\beta = 0.094$, $p < 0.05$) and the association between psychological ownership and impulse-buying intention ($\beta = 0.139$, $p < 0.01$). These findings suggest that flow experience can serve as an intensifier of experience rather than an autonomous causal factor in behavior. In immersive retail environments, flow enhances cognitive engagement, emotional

involvement, and attentional concentration, thereby expediting the conversion of sensory simulation into internalized ownership and behavioral manifestation. Thus, flow can be more accurately understood as a boundary-enhancing condition that enhances the efficacy of experiential and psychological processes, rather than directly producing purchasing intention.

Bringing together the preceding insights, the study ultimately enhances the existing literature on symbolic consumption and intellectual property-based retailing. Current research on blind boxes, designer toys, and intellectual property consumption has predominantly focused on emotional attachment, scarcity, ambiguity, and identity expression, especially in the Chinese market [9]. This study provides further evidence from the IP-based experiential retail context in Thailand, introducing psychological ownership as a hitherto unexamined mechanism connecting immersive experiential simulation to impulse-buying intention. The findings indicate that the efficacy of IP-based experiential retail stems not merely from scarcity or emotional engagement, but from the intentional cultivation of psychological ownership prior to purchase. This insight enhances understanding of symbolic consumption by highlighting psychological internalization as a fundamental driver of immersive retail efficacy.

5.2 Theoretical Implications

This study makes numerous theoretical extensions. First, it advances the experience economy [18] and sensory marketing [19] literature by defining IP-based experiential simulation as a reflective-reflective higher-order construct comprising narrative-symbolic, sensory-aesthetic, and interactive-participatory simulations. Previous studies on experiential retail often analyzed sensory clues, atmospherics, or emotional triggers in isolation [5,6,15,16]. The current findings indicate that the effectiveness of immersive retail arises from the harmonious integration of symbolic, sensory, and participative experiential characteristics. The reflective-reflective structure is theoretically significant because it suggests that both dimensions mutually enhance and mirror a comprehensive simulation of experiencing, rather than operating as disjointed or conflicting experiential mechanisms. This transition shifts the literature from separate stimulus-based explanations to a more cohesive experience-architecture perspective, ultimately enhancing current understandings of immersive retail spaces.

Building on this, the study further extends psychological ownership theory into pre-possession experiential retail environments, moving beyond traditional contexts centered on usage, prolonged interaction, or direct attachment to an object or environment [1–4]. The findings suggest that IP-based experiential simulation within immersive retail settings, particularly when accompanied by heightened flow, facilitates the development of psychological ownership by fostering consumers' intimate knowledge, perceived control, and self-investment in IP products. Narrative-symbolic immersion enhances cognitive familiarity and facilitates symbolic identification [12,19]. Sensory-aesthetic immersion improves accessibility, closeness, and environmental engagement [5,6,19,21]. Interactive engagement fosters active participation and personal investment. These processes collectively foster psychological ownership before purchase [18]. Thus, the research broadens psychological ownership theory beyond post-possession scenarios to immersive pre-possession experiences, further amplified by flow experience. Flow amplifies cognitive absorption, emotional involvement, and attentional concentration. Rather than functioning as an independent causal driver, the findings suggest that flow experience serves as a contextual intensifier, enhancing the effectiveness of experiential and psychological processes in immersive retail environments, which offers a more nuanced understanding of flow within experiential consumer literature by positioning it as an amplifying condition that accelerates psychological internalization and behavioral enactment.

Finally, this study sharpens impulse buying literature by introducing an ownership-internalization rationale for impulsive purchasing in symbolic retail spaces. While prior work has mostly emphasized emotional arousal, hedonic stimulation, scarcity, and environmental triggers as primary influencers [4,13,14], our findings show that immersive symbolic environments foster impulse buying through psychological absorption.

5.3 Practical Implications

The findings provide actionable implications for retailers, environmental designers, IP product developers, and consumers navigating immersive retail ecosystems. Results reveal that impulse buying in IP-based environments stems not solely from external cues or scarcity, but from nurtured psychological ownership via immersive simulation. Practitioners should shift from traditional display strategies to experiential architectures fostering symbolic immersion, sensory engagement, active participation, and deep psychological internalization.

Building on these general implications, the findings offer important insights for experiential retailers and retail operators. The significant effect of IP-based experiential simulation on psychological ownership suggests that retailers should strategically design retail environments that foster intimate knowledge, perceived control, and self-investment among consumers before purchase. Rather than focusing solely on product visibility or transactional efficiency, retailers should create immersive environments that allow consumers to psychologically experience symbolic ownership before purchase. This may involve integrating narrative storytelling, thematic world-building, and emotionally meaningful symbolic associations into the retail environment. Retailers should therefore view the store not merely as a purchasing space, but as a psychological environment that fosters a sense of ownership and transforms consumers from passive observers into emotionally involved participants.

In addition to implications for retailers, the findings offer practical guidance for retail store designers and immersive environment architects. The reflective-reflective structure of IP-based experiential simulation demonstrates that narrative-symbolic, sensory-aesthetic, and interactive-participatory dimensions function as interdependent experiential mechanisms that must operate coherently. Consequently, experiential effectiveness is unlikely to emerge from isolated atmospheric elements alone, such as lighting, music, or decorative aesthetics. Instead, store environments should be designed through integrated experiential coordination. Narrative-symbolic simulation may be enhanced through character storytelling, thematic spatial sequencing, and symbolic environmental consistency. Sensory-aesthetic simulation may be strengthened through immersive lighting systems, multisensory atmospheric design, visual aesthetics, spatial flow, sound design, and digital visual technologies [15,16]. Interactive, participatory simulation can be enhanced through exploratory pathways, product interaction zones, gamified engagement mechanisms, augmented reality interfaces, and participatory experiential activities. Importantly, the findings suggest that experiential coherence across these three dimensions is more critical than maximizing any single experiential cue independently.

Extending beyond environmental design, the findings provide important implications for IP-product developers and brand strategists. The strong role of psychological ownership suggests that successful IP-based products should not merely emphasize scarcity, collectability, or novelty, but should facilitate psychological internalization and symbolic self-association. IP developers should therefore design products, characters, and narratives that foster emotional familiarity, attachment to symbolic identity, and a sense of personal connection. Product ecosystems can be strategically designed to encourage consumers' self-investment behaviors, including completing collections, exploring characters, participating in communities, customizing, and engaging with narratives. These mechanisms help

transform products from external commodities into symbolic extensions of consumers' identities and emotional experiences.

Furthermore, in the context of experiential engagement management, the moderating role of flow experience has important implications. Since flow amplifies the transformation of experiential simulation into psychological ownership and behavioral intention, practitioners should deliberately design environments that facilitate deep cognitive absorption and emotional immersion. Retailers may accomplish this through immersive spatial sequencing, reduced environmental distraction, interactive digital technologies, experiential gamification, immersive audiovisual synchronization, and exploratory consumption pathways. Time-sensitive immersive events, limited thematic exhibitions, interactive installations, and augmented-reality experiences may further strengthen attentional concentration and emotional engagement. The findings imply that highly immersive flow states enhance the effectiveness of experiential simulation by accelerating psychological internalization.

Equally important are the study's implications for consumer well-being and consumption awareness. The findings indicate that immersive experiential retail environments can psychologically intensify feelings of ownership before actual possession, thereby increasing consumers' susceptibility to impulse buying. Consumers should therefore become more aware of how symbolic immersion, sensory stimulation, and participatory engagement may unconsciously influence emotional attachment and purchasing intention. Greater awareness of these psychological mechanisms may help consumers make more reflective purchasing decisions, especially in highly immersive symbolic consumption settings such as blind-box retail environments and IP-based collectible markets.

Finally, synthesizing these implications, the findings suggest broader strategic considerations for the future development of experiential retail industries. As retail competition increasingly shifts from product-centered to experience-centered, firms may achieve stronger differentiation by strategically cultivating psychological ownership rather than relying solely on price competition or scarcity-driven urgency. The results imply that the effectiveness of immersive experiential retail depends not merely on attracting attention but on creating environments in which consumers psychologically internalize products as meaningful extensions of the self before purchase.

5.4 Limitations and Future Research

Despite its merits, this work has shortcomings that offer avenues for future investigation. The study relies on data gathered from a single retail environment—POP MART ICON-SIAM in Bangkok—which may limit the generalizability of the results. Future research may investigate various IP brands, retail formats, or cultural contexts to validate the robustness and transferability of the proposed framework across broader symbolic consumption settings.

The use of cross-sectional survey data limits both robust causal inference and the ability to track the temporal progression of psychological ownership. This constraint is significant because psychological ownership is a developmental process characterized by familiarity, emotional attachment, and self-investment [25]. Thus, longitudinal studies, experimental designs, or process-based approaches could provide deep insights into how immersive sensory simulation gradually leads to internalization of ownership and its behavioral expression across repeated retail interactions.

Third, while this study identifies psychological ownership as the principal explanatory factor for impulse-buying intention in immersive IP-based retail environments, it is important to note that psychological ownership may also be influenced by supplementary psychological, relational, and social factors beyond the current model's purview. Therefore, subsequent research may explore significant antecedent and boundary factors related to its emergence. For example, factors such as identity congruence, consumer-brand attachment,

self-concept clarity, parasocial interactions with intellectual property characters, perceived authenticity, social belongingness, community engagement, and emotional nostalgia may enhance or diminish ownership internalization [26]. Additionally, subsequent research may investigate the interaction between psychological ownership and broader motivational and emotional mechanisms—such as escapism, symbolic self-expression, compulsive collecting tendencies, or fear of missing out (FOMO) [27]—especially within highly immersive contexts of symbolic consumption. Collectively, these additions would facilitate a deeper understanding of how retail environments psychologically convert symbolic items into perceptual extensions of the self.

Future research may investigate the function of digital and hybrid retail environments, in which experiential simulation occurs through virtual or augmented interfaces. As IP-based experiential consumption evolves from traditional to digitally mediated environments, future research may explore how virtual immersion, digital embodiment, avatar interaction, and AI-powered personalization [28] influence ownership internalization and impulse purchasing behavior. This research would expand the current paradigm to include new forms of digitally mediated experience consumption.

6. Conclusions

This study illustrates that impulse buying in IP-based experiential retail settings is not solely a spontaneous reaction to exterior stimuli, but rather a psychologically internalized process grounded in the establishment of ownership prior to purchase. Specifically, the findings indicate that immersive retail settings affect consumer behavior by integrating experiential simulation, psychological ownership, and flow experience through the cohesive interaction of narrative-symbolic, sensory-aesthetic, and interactive-participatory simulations. As a result, this finding underscores the growing strategic importance of creating retail settings that not only capture attention but also intentionally foster psychological ownership through immersive experience design. Given that experiential retail is increasingly emerging as a primary means of competitive differentiation, particularly in intellectual property-driven and symbolic consumption markets, the capacity to generate prepossession ownership experiences may become one of the most influential factors shaping future customer behavior.

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