

# LIVE STREAMING EXPERIENCE AND OFFLINE PURCHASE INTENT: THE ROLE OF FLOW EXPERIENCE AND ENVIRONMENTAL DESIGN IN INDONESIA SKINCARE INDUSTRY WITHIN THE SOR FRAMEWORK

Diya Aldin Fadeyushka<sup>1</sup>, Adnan Kasofi<sup>2</sup>, Osly Usman<sup>3</sup>, Ryna Parlyna<sup>4</sup>

<sup>1,2,3,4</sup> Universitas Negeri Jakarta, Indonesia

Email: [aldindf13@gmail.com](mailto:aldindf13@gmail.com)<sup>1</sup>, [adnankasofi@unj.ac.id](mailto:adnankasofi@unj.ac.id)<sup>2</sup>, [oslyusman@unj.ac.id](mailto:oslyusman@unj.ac.id)<sup>3</sup>, [rynaparlyna@unj.ac.id](mailto:rynaparlyna@unj.ac.id)<sup>4</sup>

## Article Info

### Article history:

Received: 29 December 2025;

Accepted: 19 January 2025;

Published: 01 February 2025.

### Keyword:

Attitude toward product, Flow experience, Live streaming, Offline purchase intention, Scene design

## Abstract

This study examines the impact of In-store Live Streaming (SLS) on Offline Purchase Intention (OPI) within the Indonesian skincare industry, utilizing the Stimulus-Organism-Response (SOR) framework. The research specifically investigates the role of Scene-Product Congruence (SPC) and Wishful Identification (WI), as they influence Flow Experience (FE) and Attitude Toward Product (ATP), and ultimately affect OPI, with Consumer Informedness (CI) as a moderator. Analysing data from a self-reported online questionnaire using Structural Equation Modelling-Partial Least Squares (SEM-PLS), the study reveals that SPC significantly enhances FE, which subsequently fosters a positive ATP and leads to higher OPI. However, the effects of Visual Appeal and WI on FE were found to be weak. This indicates that skincare consumers prioritize visual relevance and product credibility over pure aesthetics and wishful identification in the in-store live streaming (SLS) context. Furthermore, CI's negative impact on OPI is not significant, suggesting that well-informed consumers can maintain a positive ATP despite a potential unwillingness to engage in offline sales interaction. This research offers practical insights, emphasizing the need for digital commerce strategies to prioritize the relevance and informational coherence of the live streaming scene to achieve a meaningful consumer experience and sustainable brand loyalty.

## 1. INTRODUCTION

Skincare market is poised for significant expansion, forecasting a revenue surge up to \$2,94 billion by 2025, underpinned by a projected compounding annual growth rate (CAGR) of 4,55% spanning the 2025-2030 period (Statista, 2024). This robust the financial trajectory underscores a compelling consumer demand for beauty product throughout Indonesia, thereby necessitating that market participants rigorously refine their marketing and distribution strategies to maintain a competitive edge.

To succeed in this competitive environment, one key strategy that businesses is to design marketing initiative based on consumer decision making process. Zhao et al. (2023) highlight that this process is often non-linear, as consumer may frequently shift their decision across three primary stages: information collection, option evaluation, and final purchase. This phenomenon pushes businesses to increase sales across offline and online channels by creating more interaction points. This allows consumer to utilize multiple channels during a single transaction. This behaviour is termed webrooming, where consumers gather the product information online but complete the purchase in a physical store. Conversely, showrooming occurs when consumers gather the product information offline but complete the purchase in an online store.

Furthermore, Generation-Z (Gen-Z), the dominant group in the Indonesia skincare market, shows a strong preference for live streaming (LS) content due its perceived higher authenticity and interactivity popularity of live

streaming commerce has become increasingly popular in Indonesia and is often utilized as a brand strategy to build an emotional connection through real-time interaction with consumers (Mäkelä, 2024). Zhang et al. (2023) state that in-store live streaming (SLS) can influence offline purchase intention (OPI) by representing a more personalized experience through product informativeness and customer inspiration. This inspiration is cultivated through the influencer's experience, which triggers the effect of wishful identification (WI) and forms a para-social relationship (PSR).

Previous research has primarily focus on communication and interactivity that affect attitudes towards product (ATP) and the influencers hosting the LS. However, LS has evolved significantly, influenced by social media trends. Consequently, the interaction and communication from the host can no longer be the sole factor considered designer effective LS. Z. Li et al. (2025) in their study assert that visual element factor significantly influence the purchase intention (PI), which is moderated by flow experience (FE). Nevertheless, the findings in this study were limited to the sports sector and PI in e-commerce. Another study by Gozali et al. (2024) indicates that classical visual aesthetics (CVA) positively affect PI, which is mediated by ATP, further mediated through attitude towards advertisement (ATA).

Meanwhile, in the context of SLS, besides the role as a host, influencers can also play the role of sales person. A study by Arthur et al. (2020) states that sales person mostly motivates consumers to make impulse purchases. However, consumer informedness (CI) can significant negatively affect the offline sales interaction between the host and consumers, this phenomenon can lead to lower sales conversion (Y. Li et al., 2023).

This research aims to bridge these gaps by examining how the overall visual design elements and the role of the WI through influencers in SLS can influence OPI, which is mediated by ATP and FE, and moderated by CI within the Stimulus-Organism-Response (SOR) Framework. Therefore, this study is expected to provide both theoretical and practical contribution to the development of digital-based marketing strategies.

## **2. LITERATURE REVIEW**

### **2.1 Research gap and contribution**

Research by Zhang et al. (2023) suggest that SLS can affect OPI, mediated by ATP. This effect achieved by delivering a more personalized experience through product informativeness and customer inspiration. This inspiration cultivated through the influencer's experience, which subsequently triggers the effect of WI and establishes a PSR. However, this study only identified the aspect of interactivity and the emotional impact of influencer on the audience, and it not determined the impact of scene design and the influencer's visual aspects on OPI. This limitation is particularly critical in the skincare SLS context, where visual cues such as product display, application demonstration, and environmental aesthetics play a central role in shaping consumer' ATP and offline purchase intention. Therefore, the omission of scene design and visual influencer attributes leaves an important gap in understanding how visual-rich SLS environments influence skincare purchasing decisions.

Furthermore, a study by Schouten et al. (2020) states that endorsement marketing strategies through endorsers have a significant positive effect on PI, mediated by WI. Nevertheless, that research only identified the impact of endorser type (celebrity vs pure influencer) on PI within the context of advertisement, and did not determine the impact of endorsement marketing withing the SLS. This study assume that endorsement marketing that triggers WI that influences PI are likely to differ substantially from traditional advertising, particularly for skincare products that require trust and perceived expertise

Meanwhile, study by Gozali et al. (2024) states that classical visual aesthetics and expert endorser type have a significant positive effect on PI, mediated by ATP, which is further mediated by ATA. This study was limited to identifying the impact of visual elements and the influencer on advertisements within the context of vegan food products. Separately, study by Zhang et al. (2023) confirms that WI has a significant positive effect on PI, mediated by ATP. Both studies did not determine the impact of visual elements and the influencer on FE within the context of SLS for skincare products. This gap is important because skincare consumption often involves experiential evaluation, where flow experience during SLS may enhance perceived diagnosticity of product information and reduce uncertainty prior to offline purchase.

In addition, study by Y. Li et al. (2023) indicates that CI has a significant negative effect on offline sales interaction, mediated by prevention focus and need for control, and moderated by the type of information provided by sales person. This study only determined the impact of CI on offline sales interaction within the context of advertisement, and did not determine the impact within the context of SLS, or the impact of CI on OPI. In the skincare domain, highly informed consumers may use SLS as a confirmation tool rather than a primary information source, suggesting that CI may function differently by reshaping expectations toward offline retail encounters rather than diminishing purchase intention altogether.

This research expected to provide a clearer direction on how the impact of scene design in SLS can affect consumer's OPI. Furthermore, it can also be used as a reference for future research in the fields of Digital Marketing, Consumer Behaviour, and Visual Design. By integrating scene design, WI, FE, ATP, and CI within a single SOR-

based framework, this study contributes by offering a more context-sensitive explanation of how skincare SLS influences offline purchase intention, moving beyond platform-agnostic or advertisement-centric perspectives.

## **2.2 Theoretical and Conceptual Background**

### **2.2.1 Stimulus-organism-response (SOR)**

The theory concerning the impact of physical and social stimuli from the environment which directly affects an individual's emotional state and subsequently affects their behaviour was first introduced by Mehrabian & Russell (1976). Stimulus refers to the comprehensive range of aspects that can affect the Organism, such as: brand image, design, crowding, atmosphere, colour, scent, and music. Meanwhile, Organism refers to the complete set of emotional, physiological condition, and cognitive processes that are induced by the Stimulus factors. This will ultimately result in either approach or avoidance behavioural outcomes towards the environment. In the field of Consumer Behaviour, this resultant behaviour is often measured by the duration of time a consumer spends in a store and the corresponding sales level generated under those condition (Nagano et al., 2023).

Referring the phenomenon under investigation in this research, the SOR Theory is employed as a model to examine the impact of scene design in SLS. This design acts consequently leading to either approach or avoidance behaviour in response to the conducted SLS event. In the context of skincare SLS, SOR is particularly relevant because consumers rely heavily on environmental stimuli to evaluate product safety, suitability, and authenticity before deciding to purchase offline, making emotional and cognitive organismic responses a critical mechanism linking SLS exposure to OPI.

### **2.2.2 Scene design**

The external feature and the overall purchasing atmosphere of an online store are vital factors in influencing the depth of consumer understanding, thereby shaping PI. Specifically, visual design, authenticity, and visibility are identified as aspects that can have a direct positive impact on consumer's rational purchase desire. The visual components within LS encompass creativity, visual demand, and entertainment value. Upon entering the LS, consumers are immediately affected by the visual situation, including the visual appearance, design layout, and color coordination. Through sophisticated visual development, the depth of consumer understanding and interest in the brand or product can be significantly enhance (Cao, 2025). For skincare products, scene design functions not only as an aesthetic stimulus but also as a credibility signal that influences perceived product efficacy and hygiene, which are crucial considerations in offline skincare purchases.

Furthermore, Z. Li et al. (2025) states that scene design has become a pivotal element in the retail and LS industry, underpinned by four key fundamental values: emotional, marketing, social, and communication. These values are structured into tangible elements, such as: equipment, spatial layout, and goods display, and intangible elements, such as: music, lighting, and the application technology utilized.

Moving beyond, visual appeal (VA) is defined as visual accessibility. Given the limited screen interface in LS, the background must be capable of creating an intuitive and attractive product visual experience for the consumer. This is considered in generating a positive impact on consumer emotions and perceptions. Additionally, in the context of website interface design, an appealing visual presentation can effectively increase online impulse purchase (Z. Li et al., 2025).

VA is operationally defined as a degree of an audience satisfaction with the visual elements presented in SLS, such as: image, fonts, colours, and shapes (Feng & Zhao, 2024). From these displayed visual elements, the audience can process the communicated message and draw a conclusion (Ramish et al., 2023). Satisfaction with VA is expected to induce a FE in the audience. In skincare SLS, high VA is expected to facilitate FE by enabling consumers to better visualize product application and results, which supports informed offline purchase decisions.

Subsequently, scene-product congruence (SPC) is defined as the visual consistency between the background of the LS and the product being sold. This congruence has been proven exert a significant positive impact on both customer identification and PI. This is due to the state of harmonization, which creates a clearer shopping environment, thus encouraging the audience to spend more time searching for the required product information. Moreover, this alignment can also enhance the sense of identification and experience with the product. In a marketing context, the higher the level of congruence achieved, the greater the impact of the executed marketing campaign (Z. Li et al., 2025). For skincare products, SPC helps reduce perceived risk by aligning visual cues with product claims, thereby reinforcing trust and approach behaviour toward offline purchase.

### **2.2.3 Wishful identification**

WI stands for a psychological attachment where an individual has the desire to be the "same" as another person who is regarded as a role model, in this context, an influencer. This state leads the individual to imagine themselves becoming that influencer, even undertaking efforts to emulate them (İskender, 2023; Tolbert & Drogos, 2019). In skincare SLS, WI is especially relevant because consumers often associate influencers' physical appearance and skin condition with product effectiveness, making identification a powerful driver of credibility and purchase intention. In this process, an individual may adopt the influencer's perspectives, habits, character traits, or behaviours, integrating these aspects into their self-concept. Consequently, they may make decision based on what that influencer

might do in a given situation (Staggs et al., 2020). This identification extends to the stage of accepting or rejecting specific habits or goals (Hoffner & Buchanan, 2005).

Furthermore, other research indicates that WI can serve as a parameter to measure whether an influencer in LS is successful in cultivating viewer loyalty and establishing a PSR (Kowert & Daniel, 2021). WI is a component of the broader concept of identification with endorser, defined as the condition where the audience experiences perceived similarity and a desire to be “like” the other person, namely the influencer. This phenomenon is often more pronounced with characters who share the same gender, race, and perceived similarity (Hoffner & Buchanan, 2005; Schouten et al., 2020).

In addition, studies concerning body shape narratives in video games show that audiences tend to identify with game characters have body similar to their own. This correlation significantly affects the level of engagement in active video games, due to an increase in sense of immersion, leading to higher WI (Alon et al., 2021).

WI is operationally defined as the level of the audience’s desire to become the “same” as the influencer hosting the SLS, without sacrificing their own identity (Zhang et al., 2023). This implies that the influencer can lead the audience toward desired interest, values, or characteristics (Schouten et al., 2020).

#### **2.2.4 Flow experience**

The theory of FE was initially proposed by Csikszentmihalyi & Csikszentmihalyi (1975). FE described as a state where an individual is motivated to dedicate time to seeking “unusual” experience, the one that is uncommon or difficult to attain in daily life. Generally, this activity provides consumers with a sense of security, protect them from feelings of boredom and anxiety regarding events that may or may not occur. This state evokes an intrinsic response in consumers that effectively “mask” the extrinsic responses, such as reward or punishment, pressure, demands, or external stimuli. Consequently, in this specific situation, consumers are expected to utilized all necessary effort to achieve a clear response form the actions they undertake. This theory can be considered analogous to the Peak Performance Theory, within Maslow’s Hierarchy of Needs. However, FE differs in that consumers reach a stage of losing awareness of what are they doing, entering a rational cause and effect system. In this state, all interactive actions lead to realistic and predictable outcomes for the party receiving the stimulus (Z. Li et al., 2025).

This situation of losing awareness can be termed the unconscious mind or a trance state, which affect the broader nervous system in human body, affects factors such as thought, emotion, and action. A trance can control internal mental processes, enabling individuals to perceive a better and more profound experience (Zausner, 2022).

Furthermore, a study by Goodman & Maheshwari (2023) highlights several factors that can trigger and enhance the potential for flow to occur. These included: an individual’s capacity for self-regulation, curiosity, deep concentration, clear goals, immediate feedback, a balance between skill and challenge, creativity, and a sense of control.

FE is operationally defined as the depth of the audience’s immersion while watching the SLS. This immersion is intended to create a feeling of shopping directly in a physical store, and concentrated attention toward the authentic use of the product (Z. Li et al., 2025). When the audience enter the FE state, that tend to feel higher levels of motivation, curiosity, and cognitive benefit (Guerra-Tamez, 2023). Within skincare SLS, FE is critical because deep immersion allows consumers to cognitively simulate in-store testing experiences, thereby narrowing the gap between online exposure and offline purchase behaviour.

#### **2.2.5 Attitude toward product**

Perception toward product design plays a crucial role in the field of Consumer Behaviour. The establishment of a positive perception toward a product is necessary to enhance positive believes, which subsequently leads to interest in a specific product, brand, or certain behaviour (Gozali et al., 2024).

ATP is operationally defined as the degree of the audience’s interest in the product, which subsequently increases the potential for PI among the audience (Gozali et al., 2024). In this process, the audience performs a cognitive evaluation of the perceived strength and the weakness of the product, associated with a specific situation (Van Hoang & Tung, 2024). In the skincare context, ATP acts as a key evaluative filter through which visual and experiential cues from SLS are translated into offline purchase intention.

#### **2.2.6 Consumer Informedness**

Y. Li et al. (2023) proposed that highly informed consumers, who acquire extensive and in-depth information from various online media sources, tend to over-rely on this product knowledge. Although the information gathered from these wide-ranging online sources is broad and detailed, it does not guarantee a precise purchase decision. This behaviour effectively reduces, or even eliminates the efficacy of the information provided by the sales person in the physical store. Furthermore, these consumers become more difficult to influence through ongoing marketing campaign. Previous research has indicated that high consumer informedness has a significant negative effect on offline sales interaction, but it has not yet determined whether this informedness will consequently affect PI. Therefore, this study aims to address and close this specific research gap.

CI is operationally defined as the level of consumer knowledge regarding the product being sold. This factor affects audience expectations when visiting an offline store, necessitating that the consistency between the

information received by the consumer and the actual product reality must be improved (Y. Li et al., 2023). Rather than merely weakening persuasion, CI in skincare SLS may recalibrate consumer expectations, making consistency between online demonstration and offline product experience essential for sustaining OPI.

### **2.2.7 Purchase intention**

According to Gozali et al. (2024) and Zhang et al. (2023), in order to successfully generate demand for products being sold, it is first necessary to develop PI. This is because PI represents the initial step and serves as a primary determinant in the formation of purchase behaviour. Furthermore, the scale of PI can also be used as a benchmark for evaluating the success of a marketing campaign. Prior research has consistently found that PI is affected immediately by endorsement marketing through influencers combined with visual design.

PI is operationally defined as the degree of the consumer's desire to purchase a product to fulfil their needs. This serves as a crucial determinant of individual choice and behavioural intent (Gozali et al., 2024). In the context of skincare products, PI is utilized as the individual's assessment of purchasing skincare products offline after watching the SLS (Shang et al., 2024). In this study, PI reflects a hybrid decision process where consumers integrate experiential SLS cues with offline risk assessment, making it a particularly suitable outcome variable for skincare research.

### **2.3 Empirical Review and Hypothesis**

Based on studies reviewed above, can be concluded that SLS particularly through the interactivity and WI fostered by the influencer, has a significant positive effect on OPI (Zhang et al., 2023). Furthermore, the role of an endorser of either the pure influencer or expert type is known to have a significant positive effect on ATP and PI (Gozali et al., 2024). It is also stated that scene design and elements of classical visual aesthetics significant positively affect PI, mediated by both ATP and FE (Gozali et al., 2024; Z. Li et al., 2025). Finally, study by Y. Li et al. (2023) stated that CI has a significant negative effect on offline sales interaction. In this study, the impact of CI on offline sales interaction is assumed to be similar to the impact of CI on OPI. Therefore, the researcher proposes the following hypothesis:

**H1a:** the intuitive and attractive visual displayed in SLS has a significant positive and direct impact on the audience's flow experience.

**H1b:** the intuitive and attractive visual displayed in SLS has a significant positive and indirect impact on the audience's offline purchase intention.

**H2a:** the consistency between the SLS background and the product has a significant positive and direct impact on the audience's flow experience.

**H2b:** the consistency between the SLS background and the product has a significant positive and indirect impact on the audience's offline purchase intention.

**H3a:** the audience's desire to become the "same" as the influencer hosting SLS has a significant positive and direct impact on the audience's flow experience.

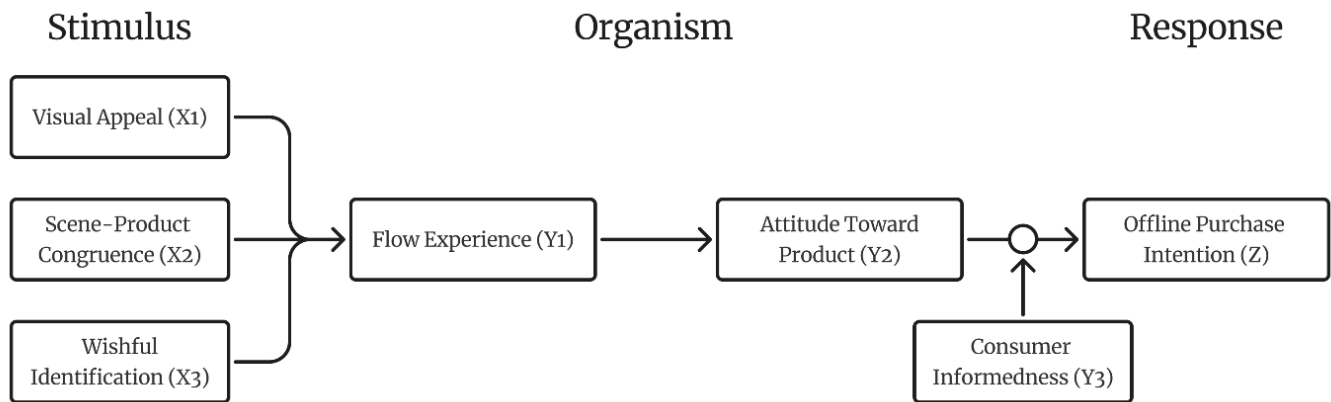
**H3a:** the audience's desire to become the "same" as the influencer hosting SLS has a significant positive and indirect impact on the audience's offline purchase intention.

**H4a:** the audience's flow experience has a significant positive and direct impact on the audience's attitude towards product.

**H4b:** the audience's flow experience has a significant positive and indirect impact on the audience's offline purchase intention.

**H5:** the attitude towards product has a significant positive and direct impact on the audience's offline purchase intention.

**H6:** the level of consumer knowledge regarding the product has a significant negative impact on offline purchase intention through the sequential mediation of flow experience and attitude towards product.



**Figure 1.** Conceptual Framework  
**Source:** Authors (2026)

### 3. RESEARCH METHODOLOGY

#### 3.1 Development of survey instruments

A self-administered online questionnaire was developed for this study. To make the instruments suitable to the in-store live streaming context and the effect on offline purchase intention, all the measurement items were adapted and modified from the previous studies to help address the aim of this study. Figure 1. Shows the conceptual model of this study. This adaptation process ensured that each item retained its original theoretical meaning while being contextually aligned with skincare-related SLS and offline purchasing behaviour, thereby strengthening construct validity.

In order to make sure effectiveness of the samples collected. In this study, those who have the experience of watching live streaming and doing an online purchase were selected as the survey target. This criterion was applied to ensure that respondents possessed sufficient experiential familiarity with SLS environments, enabling them to meaningfully evaluate visual, experiential, and influencer-related stimuli relevant to skincare products. A link to the questionnaire was sent to relatives, friends, classmates, etc., through social media, using a snowball sampling method. This criterion was applied to ensure that respondents possessed sufficient experiential familiarity with SLS environments, enabling them to meaningfully evaluate visual, experiential, and influencer-related stimuli relevant to skincare products. The data collection period was December 2025, and a total of 120 valid responses were obtained. Nevertheless, the potential risk of respondent homogeneity and self-selection bias inherent in snowball sampling was acknowledged, and analytical techniques such as construct validity assessment and common method bias testing were applied to mitigate these concerns.

The questionnaire includes seven constructs with 21 self-report items, which are shown in Table 1. The data collection conducted in Indonesia, the English items were first translated into Indonesian. All the measured items were taken on Likert's four-points scale (1= "Strongly disagree", 4 = "Strongly Agree"). To ensure semantic equivalence, the translation process emphasized conceptual consistency rather than literal wording, particularly for constructs such as flow experience and wishful identification that involve subjective psychological states. The use of a four-point scale was intended to reduce central tendency bias and encourage respondents to express a more decisive evaluative stance toward skincare SLS experiences.

**Table 1.** Constructs indicator items

| Constructs               | Kode | Indicator                                                                                                              | Reference                               |
|--------------------------|------|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| Visual Appeal            | VA1  | The visual presentation of the skincare brand's live streaming is aesthetically appealing.                             | (Feng & Zhao, 2024; Z. Li et al., 2025) |
|                          | VA2  | The visual presentation of the skincare brand's live streaming helps me experience the virtual environment more easily |                                         |
|                          | VA3  | The visual presentation of the skincare brand's live streaming provides me with visual satisfaction.                   |                                         |
| Scene-product Congruence | SPC1 | The visual presentation in the skincare brand's live streaming aligns well with the product.                           | (Z. Li et al., 2025)                    |
|                          | SPC2 | The alignment between the live streaming visuals and the product feels natural.                                        |                                         |
|                          | SPC3 | The visual presentation in the skincare brand's live streaming is highly compatible with the product.                  |                                         |

|                         |      |                                                                                                    |                                           |
|-------------------------|------|----------------------------------------------------------------------------------------------------|-------------------------------------------|
| Wishful identification  | WI1  | The influencer hosting the live streaming is someone I aspire to emulate.                          | (Z. Li et al., 2025b; Zhang et al., 2023) |
|                         | WI2  | I wish to become more like the influencer who hosts the live streaming.                            |                                           |
|                         | WI3  | I consider myself a strong admirer of the influencer hosting the live streaming.                   |                                           |
| Flow experience         | FE1  | I feel that time passes more quickly when watching the live streaming.                             | (Guerra-Tamez, 2023; Z. Li et al., 2025)  |
|                         | FE2  | I feel highly focused and tend to ignore other things around me while watching the live streaming. |                                           |
|                         | FE3  | I am able to enjoy the live streaming content.                                                     |                                           |
| Attitude toward product | ATP1 | I have a positive view of the products recommended by the host.                                    | (Zhang et al., 2023)                      |
|                         | ATP2 | I believe the products recommended by the host are appealing.                                      |                                           |
|                         | ATP3 | I believe the products recommended by the host can satisfy me.                                     |                                           |
| Consumer Informedness   | CI1  | I conduct information searches about the product before visiting the offline store.                | (Y. Li et al., 2023)                      |
|                         | CI2  | I have obtained sufficient information about the product's position in the market.                 |                                           |
|                         | CI3  | I consider myself a well-informed audience member.                                                 |                                           |
| Purchase intention      | PI1  | I feel that the products recommended during the live streaming are worth purchasing offline.       | (Ma et al., 2022; Zhang et al., 2023b)    |
|                         | PI2  | I want to try the products recommended during the live streaming directly at the offline store.    |                                           |
|                         | PI3  | I intend to purchase the products recommended in the live streaming I watch.                       |                                           |

### 3.1 Analytical approach

This study used both of exploratory and confirmatory analysis. Under exploratory factor analysis (EFA), the author tested for normality, sample adequacy, common method bias, and the identity of model's correlation matrix. These preliminary tests were conducted to ensure that the dataset met both statistical and conceptual requirements for subsequent structural modelling. Structural Equation Model (SEM) was adopted for data analysis. The conceptual model was tested using Smart-PLS (v.4), this method used in order to analyse complex model using the small sizes of sample. PLS-SEM was selected due to its suitability for prediction-oriented research and its robustness in handling complex models with multiple mediating variables in relatively small samples, which aligns with the exploratory objectives of this study.

The author used SPSS (v.25) for EFA. During the measurement model evaluation, indicators with low outer loadings were carefully assessed not only based on statistical thresholds but also on their theoretical relevance to the constructs. Indicators that were removed were those that demonstrated weak conceptual alignment with the skincare SLS context, ensuring that the refinement process reflected construct clarity rather than mere technical data cleaning.

## 4. RESULT AND DISCUSSION

### 4.1 Result

#### 4.1.1 Reliability and validity

The important measurement model metrics for SEM-PLS are reliability, convergent validity, and discriminant validity (Hair et al., 2017). The reliability by measuring Cronbach's alpha provides a simple way to measure whether a score of the constructs is reliable, this method assumes that there are multiple items measuring the same underlying constructs, and the value  $> 0.7$  is considered as acceptable (Shrestha, 2021). In this study, the range of Cronbach's alpha is from 0.503 – 0.815, indicating that the most of the constructs have a high reliability. There are a few constructs that has a low value of Cronbach's alpha, this is happens because Cronbach's alpha assumes that all indicators are equally reliable, meanwhile the SEM-PLS prioritize the indicators according to their individual reliability. Due to this limitation, this study applies more appropriate way to measure reliability by using Composite reliability (CR). A value of CR between 0.70-0.90 is regarded as satisfactory, the range value of CR in this study is 0.800-0.896, which indicate that the constructs is reliable.

According to Hair et al. (2017), the evaluation of convergent validity can be conducted by considering outer loadings (OL) and the average variance extracted (AVE), with the acceptable value of OL is  $>0.70$  and AVE is  $>0.50$ . This study has found several indicators that have OL value below 0.70 (VA1, WI3, FE1, FE2), and decided to deleted these constructs from the model because the deletion increase the value of CR. Beyond statistical improvement, the removal of these indicators was conceptually justified because they were less representative of skincare-related SLS experiences, particularly in capturing diagnostic product information and immersive consumption cues, which are

critical in high-involvement product categories. Furthermore, the AVE value on these constructs is between 0.585-0.812, indicates that on average, the constructs explain more than half of the variance of its indicators.

**Table 2.** Construct reliability and convergent validity

| Constructs | Cronbach's Alpha | Composite Reliability | AVE   |
|------------|------------------|-----------------------|-------|
| ATP        | 0.763            | 0.861                 | 0.675 |
| CI         | 0.643            | 0.808                 | 0.585 |
| FE         | 0.815            | 0.889                 | 0.728 |
| OPI        | 0.698            | 0.823                 | 0.609 |
| SPC        | 0.503            | 0.800                 | 0.667 |
| VA         | 0.780            | 0.896                 | 0.812 |
| WI         | 0.763            | 0.861                 | 0.675 |

**Table 3.** Outer-loadings matrix

| Constructs | ATP   | CI    | FE    | OPI   | SPC   | VA    | WI    | CI x ATP |
|------------|-------|-------|-------|-------|-------|-------|-------|----------|
| ATP        | 0.766 |       |       |       |       |       |       |          |
| ATP        | 0.846 |       |       |       |       |       |       |          |
| ATP        | 0.849 |       |       |       |       |       |       |          |
| CI         |       | 0.720 |       |       |       |       |       |          |
| CI         |       | 0.831 |       |       |       |       |       |          |
| CI         |       | 0.739 |       |       |       |       |       |          |
| FE         |       |       | 1.000 |       |       |       |       |          |
| OPI        |       |       |       | 0.824 |       |       |       |          |
| OPI        |       |       |       | 0.863 |       |       |       |          |
| OPI        |       |       |       | 0.873 |       |       |       |          |
| SPC        |       |       |       |       | 0.791 |       |       |          |
| SPC        |       |       |       |       | 0.719 |       |       |          |
| SPC        |       |       |       |       | 0.828 |       |       |          |
| VA         |       |       |       |       |       | 0.842 |       |          |
| VA         |       |       |       |       |       | 0.791 |       |          |
| WI         |       |       |       |       |       |       | 0.854 |          |
| WI         |       |       |       |       |       |       | 0.946 |          |
| CI x ATP   |       |       |       |       |       |       |       | 1.000    |

According to Hair et al. (2017), the Fornell-Lacker Criterion is an alternative method to determine whether the AVE value of constructs is larger than squared correlation with any other constructs. The measurement result, as shown in Table 4, indicates that all the constructs share more variance with its indicators. This result confirms that each construct captures a distinct conceptual domain relevant to SLS-based skincare evaluation, supporting the theoretical separation between visual stimuli, experiential states, attitudinal responses, and behavioural intentions.

**Table 4.** Fornell-Lacker Criterion

| Constructs | ATP   | CI    | FE    | OPI   | SPC   | VA    | WI    |
|------------|-------|-------|-------|-------|-------|-------|-------|
| ATP        | 0.821 |       |       |       |       |       |       |
| CI         | 0.240 | 0.765 |       |       |       |       |       |
| FE         | 0.387 | 0.150 | 1.000 |       |       |       |       |
| OPI        | 0.383 | 0.423 | 0.309 | 0.853 |       |       |       |
| SPC        | 0.441 | 0.238 | 0.449 | 0.287 | 0.781 |       |       |
| VA         | 0.220 | 0.296 | 0.225 | 0.253 | 0.383 | 0.817 |       |
| WI         | 0.237 | 0.340 | 0.246 | 0.289 | 0.299 | 0.382 | 0.901 |

According to Hair et al. (2017), there is a problem with cross loadings and Fornell-Lecker Criterion method in determining discriminant validity, therefore the Heterotrait-Monotrait Ratio (HTMT) measurement is proposed to be conducted. HTMT is the ratio of the between trait-correlation to the within trait-correlation. The lower HTMT value of the constructs, indicates that the path model is conceptually more distinct. All of these constructs have HTMT values >0.85 as shown in Table 5, which indicates that all of the constructs are distinct. This discriminant validity further strengthens the interpretation that psychological immersion, identification, attitude formation, and informedness represent independent mechanisms within skincare SLS consumption.

**Table 5.** Heterotrait-Monotrait Ratio of correlation

| Constructs | ATP   | CI    | FE | OPI | SPC | VA | WI |
|------------|-------|-------|----|-----|-----|----|----|
| ATP        |       |       |    |     |     |    |    |
| CI         | 0.331 |       |    |     |     |    |    |
| FE         | 0.438 | 0.186 |    |     |     |    |    |

|            |       |       |       |       |       |       |
|------------|-------|-------|-------|-------|-------|-------|
| <b>OPI</b> | 0.457 | 0.577 | 0.337 |       |       |       |
| <b>SPC</b> | 0.581 | 0.358 | 0.492 | 0.363 |       |       |
| <b>VA</b>  | 0.355 | 0.526 | 0.316 | 0.399 | 0.614 |       |
| <b>WI</b>  | 0.295 | 0.467 | 0.265 | 0.349 | 0.426 | 0.611 |

According to Shrestha (2021), sample size and strength of the relationship among the items have to be considered to determine the suitability of the dataset. Kaiser-Meyer-Olkin Measure (KMO) of Sampling Adequacy is used to measure sampling adequacy for each variable in the model and for the complete model. The KMO values in this study is 0.697, as shown in Table 6. This indicates that this sampling is adequate in moderate level. This level of adequacy is considered acceptable for exploratory SEM-PLS analysis, particularly in emerging research contexts such as skincare-focused SLS, where population parameters are not yet well established.

**Table 6.** KMO and Bartlett's test

|                                                        |                    |         |
|--------------------------------------------------------|--------------------|---------|
| <b>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</b> |                    | 0.697   |
| Bartlett's Test of Sphericity                          | Approx. Chi-Square | 839.419 |
|                                                        | df                 | 210     |
|                                                        | Sig.               | .000    |

#### 4.2.1 Importance-Performance Map Analysis

According to Hair et al. (2017), Importance-Performance Map Analysis (IPMA) is the model that extends the standard Structural Equation Model Partial Least Squares (SEM-PLS) results by contrasts structural model total effects on a specific target construct. Total effect represents the independent constructs importance in shaping the target constructs, while the average latent variable scores represent the performance. The constructs in this study shows a great level of performance, while there are several levels of importance, as shown in Table 7 and. The CI and ATP have a high importance to the target construct, indicating that these constructs have a high significance in affecting OPI. Therefore, FE have a moderate importance, indicates that this construct has a significant effect on OPI but not as great as CI and ATP. Meanwhile VA, SPC, and WI have a low importance, this indicates that these constructs have a low significance on affecting OPI. This pattern suggests that skincare consumers prioritize cognitive evaluation and attitudinal certainty over purely aesthetic or symbolic cues when forming offline purchase intentions, reflecting a more rational and information-oriented decision-making process.

**Table 7.** IPMA testing

| Constructs | Importance | LV Performance | Description                            |
|------------|------------|----------------|----------------------------------------|
| <b>CI</b>  | 0.342      | 75.274         | High Importance – High Performance     |
| <b>ATP</b> | 0.304      | 76.752         | High Importance – High Performance     |
| <b>FE</b>  | 0.118      | 78.056         | Moderate Importance – High Performance |
| <b>SPC</b> | 0.048      | 75.979         | Low Importance – High Performance      |
| <b>WI</b>  | 0.013      | 74.747         | Low Importance – High Performance      |
| <b>VA</b>  | 0.003      | 80.945         | Low Importance – High Performance      |

#### 4.3.1 Hypothesis Analysis

According to Hair et al. (2017), path represent the hypothesized relationship between the constructs, have the standardized value between -1 and 1. The test result as shown as  $\beta$  in table 8 and 9, indicates that the relationship between SPC-FE, FE-ATP, ATP-OPI and FE-ATP-OPI is positively strong, while VA-FE, WI-FE, VA-FE-ATP-OPI, SPC-FE-ATP-OPI, and WI-FE-ATP-OPI is positively weak. Furthermore, the CI x ATP – OPI is negatively weak. This study used 10% of significance level and two-tailed test to assess the significance level of the model, the result of  $t$ -values and  $p$ -values of this model, as shown in table 8 and 9, indicates that the relationship between SPC-FE, FE-ATP, ATP-OPI and FE-ATP-OPI is strongly significant.

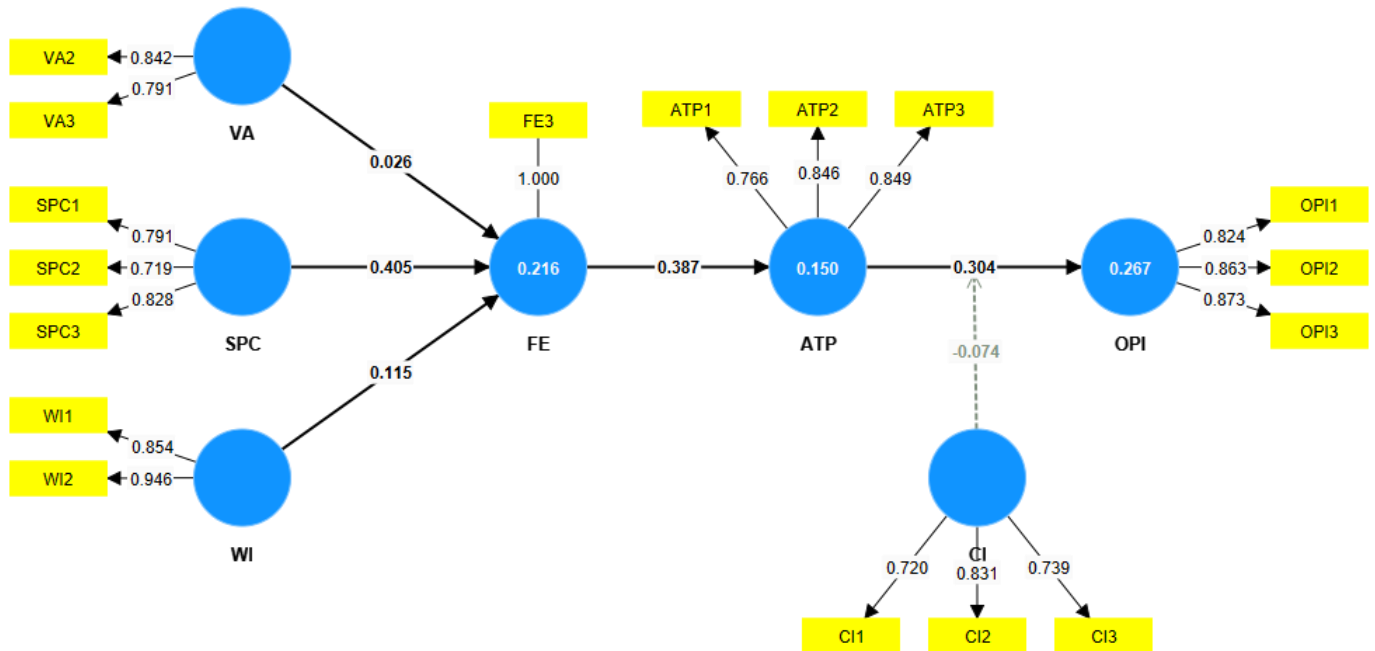
**Table 8.** Hypothesis path coefficient testing

| Hypothesis | Relationship   | $\beta$ | T Statistics | P values | 2.5% CI | 97% CI | VIF   | $f^2$ | $R^2$       | $Q^2$       |
|------------|----------------|---------|--------------|----------|---------|--------|-------|-------|-------------|-------------|
| <b>H1a</b> | VA → FE        | 0.026   | 0.245        | 0.807    | -0.141  | 0.276  | 1.290 | 0.001 | FE = 0.216  | FE = 0.141  |
| <b>H2a</b> | SPC → FE       | 0.405   | 4.356        | 0.000    | 0.223   | 0.591  | 1.210 | 0.173 | ATP = 0.150 | ATP = 0.092 |
| <b>H3a</b> | WI → FE        | 0.115   | 1.343        | 0.179    | -0.067  | 0.265  | 1.210 | 0.014 | OPI = 0.267 | OPI = 0.172 |
| <b>H4a</b> | FE → ATP       | 0.387   | 4.016        | 0.000    | 0.199   | 0.575  | 1.000 | 0.176 |             |             |
| <b>H5</b>  | ATP → OPI      | 0.304   | 3.061        | 0.002    | 0.130   | 0.517  | 1.066 | 0.118 |             |             |
| <b>H6</b>  | CI x ATP → OPI | -0.074  | 0.657        | 0.511    | -0.302  | 0.142  | 1.021 | 0.006 |             |             |

**Table 9.** Hypothesis mediation testing

| Hypothesis | Relationship | $\beta$ | T Statistics | P values | 2.5% CI | 97% CI |
|------------|--------------|---------|--------------|----------|---------|--------|
|------------|--------------|---------|--------------|----------|---------|--------|

|            |                      |       |       |       |        |       |
|------------|----------------------|-------|-------|-------|--------|-------|
| <b>H1b</b> | VA → FE → ATP → OPI  | 0.003 | 0.208 | 0.835 | -0.018 | 0.042 |
| <b>H2b</b> | SPC → FE → ATP → OPI | 0.048 | 1.726 | 0.084 | 0.013  | 0.120 |
| <b>H3b</b> | WI → FE → ATP → OPI  | 0.013 | 1.053 | 0.292 | -0.008 | 0.043 |
| <b>H4b</b> | FE → ATP → OPI       | 0.118 | 2.261 | 0.024 | 0.041  | 0.245 |



**Figure 2.** Path diagram

Source: Authors (2026)

## 4.2 Discussion

This study produced 3 key findings. First, the H2a and H2b is accepted, aligning with the previous research by Z. Li et al. (2025), the SPC stimulus give the positive significant effect on FE, this finding confirms that the relevance between the skincare products and the SLS scene as a whole, is more likely to enhance consumer's experience and sense of immersion, enjoyment, and concentration. This condition facilitating smoother and more attractive experience by absorbing consumer's cognitive aspect. Conceptually, this finding highlights that skincare consumers are highly sensitive to contextual credibility cues, where visual congruence functions as a heuristic for product authenticity, safety, and applicability in real-life usage. While the effect VA and WI are very weak, this indicates that attractive visual and a willingness to be "someone" may capture an initial attention but not play a dominant effect in forming a psychological involvement. In other words, the skincare product consumers prioritized a visual relevance that may formed a product credibility over an aesthetic cue. In the skincare context, this weak effect may reflect a more rational and high-involvement consumer mindset, where aesthetic appeal and aspirational identification are secondary to perceived product effectiveness, ingredient transparency, and usage realism. This also suggests that skincare consumers rely less on symbolic self-enhancement and more on functional evaluation when transitioning from SLS exposure to offline purchase decisions.

Second, the H3a dan H3b is declined due the low significance result, this indicates that WI cannot considered as the forming factor of FE. This confirms that consumer's willingness to be "someone" is not automatically driving an emotional and cognitive immersion, the consumers may watch the SLS a little bit longer but because the lack of depth, personalization, and meaningful feedback, the impact on enhancing FE is became limited. This finding implies that in skincare SLS, immersive experience is driven more by informational richness and contextual relevance than by influencer-centric identification alone, reinforcing the utilitarian orientation of skincare consumption.

Furthermore, the low negative significant level of H6 indicates that even though CI has been proven to have negative significant effect on offline sales interaction, as stated in study by Y. Li et al. (2023), it does not give the same negative significant effect on OPI. This result suggests that highly informed consumers may prioritize efficiency and autonomy in decision making rather than social interaction, using SLS as a confirmation mechanism rather than a persuasion tool. This suggest that the consumers still have the ability to process information and maintaining a positive ATP beside the unwillingness to do offline social interaction with the sales person. Such behaviour may indicate a form of consumer overconfidence, where extensive prior knowledge increases perceived competence and

reduces reliance on in-store assistance, without necessarily diminishing purchase intention. This may occur because the consumer's want to enhance the perceived convenience and efficiency of purchasing process, due the overestimation of their knowledge of the products. Consequently, CI functions as a double-edged construct: it weakens interpersonal interaction while simultaneously reinforcing attitudinal certainty toward the product.

Despite the findings, the use of self-reported data may create response bias, which could affect the accuracy of the measured constructs. This limitation should be considered when interpreting this study result. The findings in this study contribute to the current understanding in LS context by confirming the role of SPC, FE, and ATP in SLS that formed OPI in the context of skincare products. Furthermore, this study extends the existing views and prior research by confirming that OPI can be formed by increasing ATP through FE, which predominantly determined separately in prior studies. By positioning skincare SLS as an information-intensive and experience-driven environment, this study provides a more nuanced explanation of how offline purchase intention is shaped beyond mere visual attraction or influencer appeal.

Future research may extend this study by further determining what factors shaped FE besides scene design that confirmed by this study and Z. Li et al. (2025). Additional variables such as perceived diagnosticity, trust in product claims, and perceived risk reduction may offer valuable directions for future investigation.

## **5. CONCLUSION**

### **5.1 Hypothesis result**

The results of this study demonstrate that several working hypotheses were either supported or rejected. Hypotheses H2a and H2b are proved, as the findings confirm that SPC exerts a positive and statistically significant effect on FE in the context of skincare SLS. This outcome is consistent with prior research by Z. Li et al. (2025) and indicates that higher relevance between skincare products and the overall live streaming scene enhances consumers' sense of immersion, enjoyment, and concentration. From a theoretical perspective, this result extends the application of the Stimulus–Organism–Response (SOR) framework by demonstrating that scene-product congruence functions as a salient stimulus that influences organismic flow experience, which subsequently shapes offline purchase intention rather than online purchasing behaviour alone.

Conversely, the effects of VA and WI on FE are found to be weak, suggesting that these variables do not play a dominant role in shaping psychological involvement. Furthermore, hypotheses H3a and H3b are not proved, as WI does not significantly contribute to the formation of FE. This indicates that consumers' willingness to be "someone" does not automatically translate into deeper emotional or cognitive immersion during SLS sessions. This finding suggests a boundary condition of the SOR framework in skincare SLS contexts, where symbolic and aspirational cues are fewer effective stimuli compared to functional and informational congruence, particularly when the behavioural outcome is offline purchase intention.

In addition, hypothesis H6 reveals a weak negative significant effect, indicating that although CI negatively affects offline sales interaction as reported by Y. Li et al. (2023), it does not produce the same significant negative impact on OPI in the skincare SLS context.

### **5.2 Assessment of research results**

This study offers several contributions to the existing literature on live streaming commerce. First, it reinforces the central role of SPC as a key determinant of flow experience, highlighting that relevance and coherence between the product and the live streaming scene are more influential than purely aesthetic cues. By positioning SPC as a dominant environmental stimulus, this study advances SOR-based research by empirically validating its explanatory power in SLS settings oriented toward offline consumption behavior. Second, this research contributes novel insights by demonstrating that willingness to be "someone" does not significantly shape flow experience in skincare SLS, aligning findings in prior studies that emphasize interactivity as a core driver of immersive experience. This finding suggests that interaction without depth, personalization, or meaningful feedback has limited explanatory power in forming FE. This contribution refines existing influencer-based SLS models by indicating that psychological identification alone is insufficient to trigger organismic immersion when consumers engage in high-involvement product evaluation such as skincare.

Third, the study extends existing models by empirically confirming that OPI can be indirectly formed through the enhancement of ATP via FE. This pathway has often been examined separately in previous studies. By integrating SPC, FE, ATP, and OPI within a single model, this research advances theoretical understanding of consumer behavior in skincare live streaming environments. More importantly, this integration extends the traditional SOR framework by explicitly shifting the response outcome from online purchase intention to offline purchase intention, addressing a gap in prior SLS literature that predominantly focuses on immediate online transactional outcomes.

### **5.3 Implications of the Research Results**

The findings provide valuable implications for digital commerce development and marketing policy in skincare industry. Businesses and platforms should prioritize improving SPC by ensuring that live streaming scenes, narratives, and product demonstrations are highly relevant and informative, rather than focusing solely on visual aesthetics. This research highlights the need for a strategic shift in live streaming commerce practices from emphasizing visual spectacle to fostering meaningful, credible, and information-rich consumer experiences that support a strong cognitive attachment. This improvement may increase the business sustainability through income stability due to brand loyalty that caused by the cognitive attachment.

From an academic standpoint, these implications reinforce the importance of aligning environmental stimuli with consumers' cognitive evaluation processes when applying SOR-based models to hybrid online–offline purchase journeys. Despite these contributions, several limitations should be acknowledged. First, the use of snowball sampling may limit the generalizability of the findings due to potential self-selection bias and respondent homogeneity. Second, reliance on self-reported data introduces the risk of common method bias and subjective evaluation, which may influence the accuracy of psychological and behavioural measures. Future research is encouraged to employ probabilistic sampling techniques, multi-source data, or experimental designs to further validate and extend the findings of this study.

## REFERENCES

- Alon, D., Sousa, C. V., & Lu, A. S. (2021). What Type of Body Shape Moves Children? An Experimental Exploration of the Impact of Narrative Cartoon Character Body Shape on Children's Narrative Engagement, Wishful Identification, and Exercise Motivation. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.653626>
- Arthur, A., Owusu, I., & Boateng, E. D. (2020). Determinants of Consumer Impulsive Purchasing Behaviour in Medium-Large Shopping Malls in Ghana. *Open Journal of Business and Management*, 08(02), 379–395. <https://doi.org/10.4236/ojbm.2020.82024>
- Cao, J. (2025). Study on the Consumer Decision-Making Models of Scene Design in Live E-Commerce. *Proceedings of the 2nd Guangdong-Hong Kong-Macao Greater Bay Area International Conference on Digital Economy and Artificial Intelligence, DEAI 2025*, 796–801. <https://doi.org/10.1145/3745238.3745364>
- Csikszentmihalyi, Mihaly., & Csikszentmihalyi, Isabella. (1975). *Beyond boredom and anxiety; the experience of play in work and games [by] Mihaly Csikszentmihalyi; with contributions by Isabella Csikszentmihalyi [and others]*. Jossey-Bass.
- Feng, Y., & Zhao, L. (2024a). Emotional design for pro-environmental life: Visual appeal and user interactivity influence sustainable consumption intention with moderating effect of positive emotion. *Heliyon*, 10(19). <https://doi.org/10.1016/j.heliyon.2024.e38521>
- Goodman, D. H., & Maheshwari, A. K. (2023). Consciousness and Flow for Leadership Development. In *Palgrave Studies in Workplace Spirituality and Fulfillment: Vol. Part F4219* (pp. 47–62). Palgrave Macmillan. [https://doi.org/10.1007/978-3-031-05839-4\\_3](https://doi.org/10.1007/978-3-031-05839-4_3)
- Gozali, N. A., Mardhiyah, D., Futuwah, A. I., & Yusvianty, R. S. A. (2024). The effect of Visual Aesthetic and Endorser Type on Attitude Toward Advertising, Attitude Toward Product, and Purchase Intention Vegan Food. *Jurnal Manajemen Teori Dan Terapan| Journal of Theory and Applied Management*, 17(2), 282–298. <https://doi.org/10.20473/jmtt.v17i2.55063>
- Guerra-Tamez, C. R. (2023a). The Impact of Immersion through Virtual Reality in the Learning Experiences of Art and Design Students: The Mediating Effect of the Flow Experience. *Education Sciences*, 13(2). <https://doi.org/10.3390/educsci13020185>
- Hair, J. F. ., Hult, G. T. M. ., Ringle, C. M. ., & Sarstedt, Marko. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage.
- Hoffner, C., & Buchanan, M. (2005). Young Adults' Wishful Identification With Television Characters: The Role of Perceived Similarity and Character Attributes. *Media Psychology*, 7(4), 325–351. [https://doi.org/10.1207/S1532785XMEP0704\\_2](https://doi.org/10.1207/S1532785XMEP0704_2)
- ISKENDER, Ö. (2023). Identification with Game Characters: Theoretical Explanations, Predictors, and Psychological Outcomes. *Psikiyatride Güncel Yaklaşımlar*, 15(2), 203–219. <https://doi.org/10.18863/pgy.1104693>
- Kowert, R., & Daniel, E. (2021). The one-and-a-half sided parasocial relationship: The curious case of live streaming. *Computers in Human Behavior Reports*, 4. <https://doi.org/10.1016/j.chbr.2021.100150>

- Li, Y., Geng, L., Chang, Y., & Ning, P. (2023a). Research online and purchase offline: The disruptive impact of consumers' online information on offline sales interaction. *Psychology and Marketing*, 40(12), 2642–2652. <https://doi.org/10.1002/mar.21902>
- Li, Z., Wang, Y., Cianfrone, B. A., Guo, Z., Liu, B., Zhang, J., & Shi, C. (2025a). Impact of Scene Features of E-Commerce Live Streaming on Consumers' Flow and Purchase Intentions of Sporting Goods. *Behavioral Sciences*, 15(2). <https://doi.org/10.3390/bs15020238>
- Ma, L., Gao, S., & Zhang, X. (2022). How to Use Live Streaming to Improve Consumer Purchase Intentions: Evidence from China. *Sustainability (Switzerland)*, 14(2). <https://doi.org/10.3390/su14021045>
- Mäkelä, E. (2024). Live Streaming Marketing in the Cosmetic Industry: Strategies to Increase Customer Purchase Intentions. *Haaga-Helia University of Applied Sciences Bachelor of Business Administration Thesis*.
- Mehrabian, Albert., & Russell, J. A. . (1976). *An approach to environmental psychology*. M.I.T. Press.
- Nagano, M., Ijima, Y., & Hiroya, S. (2023). A stimulus-organism-response model of willingness to buy from advertising speech using voice quality. *Proceedings of the Annual Conference of the International Speech Communication Association, INTERSPEECH, 2023-August*, 5202–5206. <https://doi.org/10.21437/Interspeech.2023-1131>
- Ramish, M. S., Zia, M. Q., Saraih, U. N., Suanda, J., & Ansari, J. (2023). DOES VISUAL APPEAL MODERATES THE IMPACT OF ATTITUDE TOWARDS ADVERTISING ON BRAND ATTITUDE, ATTACHMENT AND LOYALTY? *Revista Brasileira de Marketing*, 22(3), 1250–1275. <https://doi.org/10.5585/remark.v22i3.22160>
- Schouten, A. P., Janssen, L., & Verspaget, M. (2020). Celebrity vs. Influencer endorsements in advertising: the role of identification, credibility, and Product-Endorser fit. *International Journal of Advertising*, 39(2), 258–281. <https://doi.org/10.1080/02650487.2019.1634898>
- Shang, W., Zhu, R., Liu, W., & Liu, Q. (2024). Understanding the Influences on Green Purchase Intention with Moderation by Sustainability Awareness. *Sustainability (Switzerland)*, 16(11). <https://doi.org/10.3390/su16114688>
- Shrestha, N. (2021). Factor Analysis as a Tool for Survey Analysis. *American Journal of Applied Mathematics and Statistics*, 9(1), 4–11. <https://doi.org/10.12691/ajams-9-1-2>
- Staggs, S., McMichael, S. L., & Kwan, V. S. Y. (2020). Wishing to be like the character on screen: Media exposure and perception of hacking behavior. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, 14(1). <https://doi.org/10.5817/CP2020-1-4>
- Statista. (2024, December). *Skin Care - Indonesia*.
- Tolbert, A. N., & Drogos, K. L. (2019). Tweens' Wishful Identification and Parasocial Relationships With YouTubers. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.02781>
- Van Hoang, D., & Tung, L. T. (2024). Effect of Environmental Concern, Green Perceived Value on Young Customers' Green Purchase Intention: The mediating Roles of Attitude toward Green Products and Perceived Behavior Control. *Scientific Papers of the University of Pardubice, Series D: Faculty of Economics and Administration*, 32(1). <https://doi.org/10.46585/sp32011920>
- Zausner, Tobi. (2022). *The creative trance : altered states of consciousness and the creative process*. Cambridge University Press.
- Zhang, P., Chao, C. W. (Fred), Chiong, R., Hasan, N., Aljaroodi, H. M., & Tian, F. (2023a). Effects of in-store live stream on consumers' offline purchase intention. *Journal of Retailing and Consumer Services*, 72. <https://doi.org/10.1016/j.jretconser.2023.103262>
- Zhao, Y., Zhao, X., & Liu, Y. (2023). Exploring the Impact of Online and Offline Channel Advantages on Brand Relationship Performance: The Mediating Role of Consumer Perceived Value. *Behavioral Sciences*, 13(1). <https://doi.org/10.3390/bs13010016>