The Relationship among Customer Perception, Environmental Atmosphere, Consumer Sentiment, Experience Value, and Willingness to Consume: A Case Study

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ABSTRACT: Looking ahead, domestic and international tourism is becoming more and more popular, and it is understood that the hotel industry is growing increasingly competitive. Consequently, the question of how businesses can continue to maintain or enhance occupancy rates and boost hotel performance remains an important topic for further srvey. This study explores travellers' lodging intentions through the main variables of customer perception, environmental atmosphere, consumer mood, and experience value.

The primary objective of this study is to validate the relationships among the various major constructs within the proposed model. Furthermore, this study employed snowball sampling to draw a sample from the guest population of three major chain hotels in Taipei City. Finally, a series of statistical analyses were conducted using the statistical software packages SPSS and M-plus. The empirical results indicated that all hypotheses of the proposed model were supported. The findings of this study can serve as a reference for businesses to continue attracting guests and ensuring the maintenance or improvement of occupancy rates, thereby enhancing the performance of the hotel industry.

KEY WORD: customer perception, environmental atmosphere, consumer sentiment, experience value, willingness to consume

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I. RESEARCH MOTIVATION AND OBJECTIVES

1.1 Research Motivation

From the 20th century to the 1970s, competition in product marketing among enterprises was incessant. Initially focused on product-centric strategies and creating differentiation through product quality, businesses shifted towards customer service orientation to increase customer satisfaction and loyalty. The interpretation of the same thing at the same time can vary among different people; similarly, the same person may draw different conclusions about the same thing at different times using different methods. Sensation and perception are in the initial stages of cognitive activities. Customer perception refers to the reactions customers have to various aspects of a product, such as its color, temperature, and smell, which are transmitted to and processed by the brain to form personal sensations (Lin, 2018).

Environmental psychology elucidates the scientific study of the interactions between human psychological behaviors and the physical retail environment. Many scholars in this field agree that the physical environment significantly impacts human behavior. In this era of rapid change and information overload, we are surrounded daily by various products and services, facing numerous choices. An advertisement, a promotional poster, or a slogan can capture our attention, but those alone are not sufficient to deeply resonate with us and drive purchasing behavior. In this fiercely competitive market, experiential marketing is gaining prominence, striving to break away from traditional shopping patterns and deliver a novel consumer experience.

1.2 Research Objectives

We live in an age of information overload, where our vision and hearing are bombarded daily with a plethora of advertisements and messages, leading to overwhelming fatigue. In such a context, experiential marketing emerges as a refreshing change. It moves beyond the monotony of merely selling products to offering consumers a new experience. This approach aims for consumers to feel the uniqueness of the brand during their engagement, thereby fostering an emotional connection.

Therefore, to enhance product value, we need to address both the emotional and rational aspects of consumer behavior. Emotionally, this refers to the consumer's intuitive feelings and emotional responses to the product. Rationally, it involves the consumer's objective evaluation of the product's value and performance.

"Experiential marketing" also enhances interaction and communication between brands and consumers. Through methods such as events, experiential camps, and social media, brands can gather consumer feedback and suggestions, further understanding their needs and expectations. This information serves as a foundation for improving products and services or developing new marketing strategies.

Given the foregoing, this study is conducted under the title "A Correlation Study on Customer Perception, Environmental Atmosphere, Consumer Sentiment, Experience Value, and Willingness to Consume: A Case Study Using Structural Equation Modelling (SEM)." It targets guests of three major chain hotels in Taipei City as its subjects, employing snowball sampling to sample the population. Lastly, the study utilizes the statistical software packages SPSS and M-plus to conduct a series of statistical analyses. The primary objective of this research is to validate the relationships among the various major constructs within the constructed model.

The key objectives of the study are summarized as follows:

The objectives of the study are outlined as follows:

- (1) To determine whether customer perception has a positive significant impact on willingness to consume.
- (2) To determine whether customer perception has a positive significant impact on consumer sentiment.
- (3) To determine whether environmental atmosphere has a positive significant impact on consumer sentiment.
- (4) To determine whether environmental atmosphere has a positive significant impact on willingness to consume.
- (5) To determine whether environmental atmosphere has a positive significant impact on experience value.
- (6) To determine whether consumer sentiment has a positive significant impact on willingness to consume.
- (7) To determine whether experience value has a positive significant impact on willingness to consume.
- (8) To determine whether environmental atmosphere has a multiple moderating effect within the constructed model of this study.
- (9) To determine whether there is a dual mediating effect between consumer sentiment and experience value within the constructed model of this study.

II. LITERATURE REVIEW AND PROPOSE HYPOTHESES

2.1 Customer Perception (CP)

2.1.1 Conceptual Definition of Customer Perception

The conceptual definition of customer perception is defined as "the feelings of customers about the comfort of the hotel accommodation environment and the atmosphere of the outdoor space while staying at a hotel." This definition has been developed by synthesizing the literature mentioned below and the perspectives derived from this study.

Perception value actually represents a multidimensional concept with a dynamic structure. According to Monr Chapman (1987), consumer preferences or choices are based on their assessment of the service quality or benefits derived from a product, rather than the costs implicit in the price. Research also suggests that perception value is generated from a trade-off between the quality and benefits of the product and the monetary cost paid by the customer. It can be defined as: Perception Value = Perceived Benefits / Perceived Sacrifices (Yu, 2019).

Customer Perception Value refers to the basis for purchasing decisions made during the consumer behavior process. Customers purchase products they perceive as valuable, which may be due to being reasonably priced, having quality that meets their personal standards, or holding special significance for them (Lin, 2018).

Monroe & Krishnan (1985) stated that customer perception value influenced consumers' willingness to purchase products. This perception value was determined by the customer's perceived quality of the product and perceived sacrifices. When consumers perceived higher quality in a product and lower sacrifices required for it, the customer's perception value was significantly higher, representing the overall utility value of the product to the consumer. The likelihood of changes in customer perception value increased with the accumulation of knowledge.

2.1.2 Sub-dimensions of Customer Perception

Building on the above, this study identifies the sub-dimensions of customer perception as "perceived value, customer satisfaction, and service quality."

2.2 Environment Atmosphere (EA)

2.2.1 Conceptual Definition of Environmental Atmosphere

The conceptual definition of environmental atmosphere is "the ambiance of the customer's accommodation environment, including the intangible characteristics such as visual, auditory, olfactory, and tactile elements in the environment, all of which significantly influence the customer's feelings and behavior." This definition has been developed by synthesizing the literature mentioned below and the perspectives derived from this study.

Kotler was the first to define the concept of environmental atmosphere, noting that it involved controlling and designing the purchasing environment with the aim of manipulating consumer emotions to induce purchasing behavior. He explained that the environmental atmosphere included the visual, auditory, olfactory, and tactile elements present in the environment (Cheng, 2019).

Mari & Poggesi (2013) proposed that there were two main categories of physical space factors in stores that could optimize the interaction between on-site service personnel and customers. The first category involved the spatial configuration and functionality of the service environment. The second category was implicit, such as temperature, lighting, music, scent, color, and other intangible characteristics, all of which significantly affected customers' feelings and behavior.

2.2.2 Sub-dimensions of Environmental Atmosphere

Baker (1986) developed a classification that divides environmental atmosphere into three dimensions, as follows: (1) Ambient factors: These are non-visual background conditions, including temperature, lighting, music, and scent; (2) Design factors: These refer to the elements of the environment, which inherently have more visual impact than ambient factors, including layout, comfort, color, and style; (3) Social factors: These pertain to the people within the environment, including the number and behavior of other customers or sales personnel.

Additionally, Baker (1986) identified the dimensions of environmental atmosphere as typically including: (1) Ambient factors; (2) Design factors; (3) Social factors. This study will adopt these three dimensions as the sub-dimensions of environmental atmosphere.

2.3 Consumer Sentiment (CS)

2.3.1 Conceptual Definition of Consumer Sentiment

The conceptual definition of consumer sentiment is "the sentiment of guests staying at a hotel, which typically varies with the positive impacts of the guests' good sentiment, thereby influencing their willingness to return."

Under normal circumstances, sentiment is a very stable emotional state and is not easily subjected to drastic changes or triggered by specific actions (Fowler, 2012).

Consumer sentiment is primarily divided into two types: positive sentiment, such as pleasure and joy, and negative sentiment, such as disgust and depression, which have a profound impact on consumer satisfaction (Singh, 1990). Singh (1990) indicated that positive and negative sentiments had significantly different impacts on consumer satisfaction, with positive sentiment increasing satisfaction and negative sentiment decreasing it.

Ozer & Gultekin (2015) indicated that the sentiment of consumers before shopping would affect their intentions for impulsive buying behavior. As consumer sentiment became more positive, the intention for impulsive buying behavior increased, whereas a negative sentiment led to a decrease in the desire for impulsive buying behavior.

2.3.2 Sub-dimensions of Consumer Sentiment

Russell (1980) suggested categorizing all sentiments according to two main axes, "pleasurable and displeasurable" and "strong and weak," dividing them into four aspects: strong and pleasurable, weak and pleasurable, strong and displeasurable, and weak and displeasurable. Strong and pleasurable sentiments included: happiness, pleasure, and intense feelings of joy and surprise; weak and pleasurable sentiments included: relaxed, satisfied, quiet, and calm; strong and displeasurable sentiments included: frustration, anger, sadness, and fear; weak and displeasurable sentiments included: sorrowful, depressed, bored, and exhausted.

Jang & Namkung (2009) noted that sentiments were aptly described as romantic, comfortable, relaxed, restful, and likable, effectively capturing people's emotional experiences.

Furthermore, the dimensions of consumer sentiment, as Russell (1980) categorized all sentiments according to "pleasurable and displeasurable" and "strong and weak," were divided into four aspects: strong and pleasurable, weak and pleasurable, strong and displeasurable, and weak and displeasurable. This study will adopt these four dimensions as the sub-dimensions of consumer sentiment.

2.4 Experience Value (EV)

2.4.1 Conceptual Definition of Experience Value

The conceptual definition of customer experience in this study is: "Research on customer experience differentiates various experiences and dimensions. To examine the role of new technologies in value creation, it is crucial to distinguish three dimensions of useful customer experience value: (1) cognitive value; (2) sensory/emotional value; and (3) social value. Cognitive value refers to the experience value consumers gain during information processing and decision-making processes. Sensory/emotional value includes the value consumers derive from sensory stimuli and emotional attachments. Finally, social value encompasses the value consumers obtain by connecting with the surrounding social world through AI-supported behaviors and relationships." This definition is synthesized from the literature and the perspectives derived from this study.

The value perceived by customers after an experience was referred to as 'Experiential Value': This view, proposed by Mathwick, Malhotra, and Rigdon (2001), suggested that the perception of experiential value originated from the direct utility of a product or service or from the appreciation obtained through certain distanced activities. Essentially, the perception of the product's characteristics or the effectiveness of a service and the corresponding preferences constituted the experiential value.

Yang (2022) believed that experiential value referred to the overall experience felt by consumers when engaging in various consumption behaviors or activities, and it was assessed through their subjective perceptions of service quality via interactions with e-commerce vendors.

Huang (2023) pointed out that it was a strategy capable of engaging consumer emotions by creating unique consumption scenarios that provided consumers with a pleasurable shopping experience.

Su (2023) defined the feelings consumers experience before and after purchasing a product or service as the sensations brought about by the product or service.

2.4.2 Sub-dimensions of Experience Value

Holbrook (1996) categorized customer value into three distinct directions, including Extrinsic versus Intrinsic Value; Active versus Reactive Value; and Self-oriented versus Other-oriented Value.

In 2001, Mathwick, Malhotra and Rigdon utilized the Experiential Value Scale (EVS) to digitize the analysis of experiential value, measuring its four dimensions: intrinsic, extrinsic, active, and passive value developments. These dimensions included consumer return on investment, fun value, service excellence, and aesthetic value.

Research by Klaus, & Maklan (2013) showed that customer experience, loyalty intentions, customer satisfaction, and word-of-mouth behavior are four interrelated latent variables.

Furthermore, in discussing the dimensions of customer experience, Hoyer et al (2020) note that it typically includes: (1) the customer journey; and (2) experiential dimensions. This study will adopt these two aspects as sub-dimensions of customer experience.

2.5 Willingness to Consume (WC)

2.5.1 Conceptual Definition of Willingness to Consume

The conceptual definition of willingness to consume "usually varies with the traveler's perception and a good accommodation environment, which enhances the traveler's sentiment and experience value, thereby increasing their willingness to revisit the hotel. " This definition is synthesized from the literature and the perspectives derived from this study.

Lin (2010) suggested in his research that consumer perception was primarily reflected in perceived price, which was a crucial factor in determining the price consumers were willing to pay. It involved comparing externally marked reference prices with the reference prices perceived by consumers.

Hsiao (2014) noted that purchase intention could be seen as a decision-making process in consumer behavior, involving pre-purchase information evaluation and ultimately determining the likelihood of making a purchase.

Li, Lan, and Wang, (2016) defined purchase intention as generally referring to a customer's interest in or need for a product. If consumers have a need, they are likely to purchase; if the quality and price are reasonable, they are also inclined to buy. Superior quality at a lower price further enhances the willingness to purchase and may even lead them to recommend the product to others.

Shen, Li, Sun & Wang (2021) defined willingness to consume as the tendency of consumers to seamlessly switch between different channels and utilize Omni channel services. This tendency was influenced by the quality of channel integration, perceptual fluency, and internal usage experiences.

2.5.2 Sub-dimensions of Willingness to Consume

Based on the above, this study identifies the sub-dimensions of willingness to consume as five factors: "price, transportation convenience, safety, hygiene safety, and service attitude."

2.6 Hypothesis Inference

2.6.1 Customer Perception and Willingness to Consume

Feng (2021) pointed out that the experiential values of escapism and social interaction may mediate the positive impact of spatial design perception on the willingness to re-consume.

Based on the above, this study proposes the following hypotheses:

Hypothesis 1 (H₁): Customer Perception has a positive significant impact on Willingness to Consume

2.6.2 Customer Perception and Consumer Sentiment

Regarding domestic and international literature on customer perception and consumer sentiment, to date, this study has not found any relevant research. Therefore, this study proposes the following hypothesis, guided by the principle of 'hypothesize boldly, verify cautiously':

Hypothesis 2 (H₂): Customer Perception has a positive significant impact on Consumer Sentiment.

2.6.3 Environmental Atmosphere and Consumer Sentiment

The research by Wu (2022) showed that environmental atmosphere had a positive significant relationship with customer satisfaction and a positive significant relationship with consumer sentiment.

The research by Lu (2023) showed that environmental atmosphere positively and significantly influenced tourists' emotions and satisfaction; tourists' emotions positively and significantly influenced satisfaction; and satisfaction positively and significantly influenced behavioral intentions.

Based on the above, this study proposes the following hypothesis:

Hypothesis 3 (H₃): Environmental Atmosphere has a positive significant impact on Consumer Sentiment.

2.6.4 Environmental Atmosphere and Willingness to Consume

Regarding domestic and international literature on environmental atmosphere and willingness to consume, to date, this study has not found any relevant research. Therefore, this study proposes the following hypothesis, guided by the principle of "hypothesize boldly, verify cautiously":

Hypothesis 4 (H₄): Environmental Atmosphere has a positive significant impact on Willingness to Consume.

2.6.5 Environmental Atmosphere and Experience Value

Regarding domestic and international literature on environmental atmosphere and experience value, to date, this study has not found any relevant research. Therefore, this study proposes the following hypothesis, guided by the principle of "hypothesize boldly, verify cautiously":

Hypothesis 5 (H₅): Environmental Atmosphere has a positive significant impact on Experience Value.

2.6.6 Consumer Sentiment and Willingness to Consume

Cheng (2019) pointed out in his research that consumer sentiment had a significant impact on consumption behavior intentions.

Based on the above, this study proposes the following hypothesis:

Hypothesis 6 (H₆): Consumer Sentiment has a positive significant impact on Willingness to Consume.

2.6.7 Experience Value and Willingness to Consume

Kao (2021) found in her research that different demographic variables had significant differences in the experience value of wine tasting events. Additionally, there were significant correlations and positive impacts among the three variables: experience value, customer satisfaction, and willingness to re-consume.

Feng (2021) pointed out in her research that experience value mediated the positive impact of bar image on the willingness to re-consume.

Shie (2022) found in his research that trust and restaurant image had a significant mediating effect on the relationship between experiential value in green restaurants and willingness to consume.

Based on the above, this study proposes the following hypothesis:

Hypothesis 7 (H₇): Experience Value has a positive significant impact on Willingness to Consume.

III. RESEARCH METHODS

Based on the above research motivations and objectives, literature review, and hypothesis development, the following research framework was constructed, as shown in Figure 3-1.

3.1 Research Framework

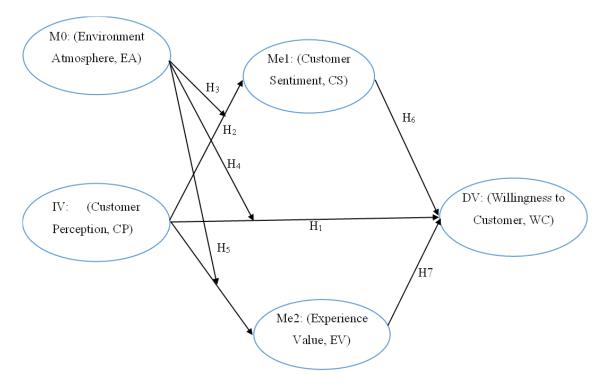


Figure 3-1 Research framework

3.2 Questionnaire Design

The design of this study's questionnaire was based on the research questionnaires of Cheng (2019) and Wu (2022), with modifications made to address the five key dimensions: customer perception, environmental atmosphere, consumer sentiment, experience value, and willingness to consume. The questionnaire employs a seven-point Likert scale, where respondents rate their level of agreement or disagreement, with scores ranging from 7 to 1. A score of 7 represents strong agreement, while a score of 1 represents strong disagreement; the higher the agreement, the higher the score, and vice versa.

3.3 Sampling Method and Statistical Software

Due to the limitations of research resources, this study focused on the guests staying at three large chain hotels in Taipei City as the subjects. Snowball sampling was employed to sample the population. A total of 15 expert questionnaires were distributed for the pilot test, and modifications were made based on the improvement suggestions provided by the scholars and experts. Following these adjustments, a post-test was conducted to ensure that the key dimensions of the constructed model met the standards for reliability and expert validity. Furthermore, 450 formal questionnaires were distributed, yielding 303 valid samples, resulting in a valid sample recovery rate of 67.33%.

3.4 Questionnaire Data and Measurement System

To validate the research framework proposed in this study, Linear Structure Equation Modeling (SEM) was employed to conduct Confirmatory Factor Analysis (CFA) on the research model structure. The questionnaire was divided into five latent variables, with each latent variable further divided into observable/explicit variables. Each observable/explicit variable was associated with several survey questions. The compiled and structured valid questionnaire data were then analyzed using the statistical software packages SPSS and M-plus to perform a series of statistical operations. Finally, the main results and analysis reports were compiled and are presented in the following section.

3.5 Linear Structural Equation modelling (SEM)

Confirmatory Factor Analysis (CFA) is an analytical method relative to Exploratory Factor Analysis (EFA). In this study, CFA was conducted among the five latent variables: "Customer Perception", "Environmental Atmosphere", "Consumer Sentiment", "Experience Value" and "Willingness to Consume". Structural Equation Modeling (SEM), which includes the Structural Model and the Measurement Model,

effectively addresses the causal relationships between unobservable variables (implicit variables) or latent variables.

3.6 Analyzing fit of Measurement Model

The factor loadings of latent/implicit variables and manifest/explicit variables primarily measure the strength of the linear correlation between explicit and implicit variables. The closer the factor loading is to 1, the better the manifest variable can measure the latent variable (reliability). Additionally, the Average Variance Extracted (AVE) calculates the ability of latent (implicit) variables to explain the variance of each manifest variable. A higher AVE value indicates higher reliability and convergent validity of the latent variable (i.e., unobservable variable). Typically, the AVE value must be greater than 0.5 (Diamantopoulos & Siguaw, 2000).

IV. RESULTS AND ANALYSIS

The results of this study showed that the factor loadings of the observable variables ranged between 0.8 and 0.9, indicating good reliability. Additionally, the AVE values in this study were all greater than 0.5, which suggested that the explicit variables had high reliability and convergent validity (Table 4-1).

Customer perception (CP) directly influenced environmental atmosphere (EA), while environmental atmosphere (EA) directly influenced willingness to consume (WC). Additionally, environmental atmosphere (EA) and customer perception (CP) interacted to impact Consumer Sentiment (CS). Specifically, EA * CP vs. BI-1 showed a significant multiplicative effect (Table 4-2 & Figure 4-1).

Customer perception (CP) directly influenced environmental atmosphere (EA), while environmental atmosphere (EA) directly influenced willingness to consume (WC). Furthermore, environmental atmosphere (EA) and customer perception (CP) interacted to impact Willingness to consume (WC). Specifically, EA * CP vs. BI-2 showed a significant multiplicative effect (Table 4-3 & Figure 4-2).

Customer perception (CP) directly influenced environmental atmosphere (EA), while environmental atmosphere (EA) directly influenced experience value (EV). Additionally, environmental atmosphere (EA) and customer perception (CP) interacted to impact Experience Value (EV). Specifically, EA * CP vs. BI-3 showed a significant multiplicative effect (Table 4-4 & Figure 4-3).

Tables 4-2 to 4-4 and Figures 4-1 to 4-3 showed that Environmental Atmosphere (EA) was the moderating variable in the constructed model of this study.

Moreover, as shown in Tables 4-5-1 and 4-5-2, consumer sentiment (CS) and experience value (EV) were both partial mediating variables in the constructed model of this study.

Finally, the sequential concepts from Figures 4-4, 4-5, and 4-6 can produce a mediated moderation effect, as shown in Figures 4-7-1, 4-7-2, and 4-7-3.

Table 4-1: Judgment Indicators of the Measurement System within the Model

| UnobservableVariables (Latent Variables) | ObservableVariables | Factor loading | Average Variance Extracted, AVE |
|--|----------------------------|----------------|---------------------------------|
| | Perception Value | .842 | .537 |
| Customer Perception | Customer Satisfaction | .833 | .521 |
| | Service Quality | .821 | .516 |
| | Ambient Factors | .832 | .520 |
| Environmental Atmosphere | Design Factors | .845 | .539 |
| | Social Factors | .817 | .513 |
| | Strong and Pleasurable | .839 | .524 |
| | Weak and Pleasurable | .818 | .515 |
| Consumer Sentiment | Strong and Displeasurable | .829 | .519 |
| | Weak and Displeasurable | .827 | .518 |
| | Customer Journey | .834 | .522 |
| Customer Experience | Experiential Dimensions | .829 | .519 |
| | Price | .839 | .524 |
| | Transportation Convenience | .841 | .536 |
| Willingness to Consume | Safety | .824 | .517 |
| | Hygiene Safety | .833 | .521 |

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| Service Attitude | .841 | .536 |
|------------------|------|------|
|------------------|------|------|

Source: This Study

Table 4-2 Model Results - Moderating Effect of Latent Variables

| | | | Estimate | S. E. | Est./S.E. | Two-Tailed P-Value |
|------|---------|------|----------|-------|-----------|-----------------------|
| EA | | BY | | | | |
| | EA 1 | | 0.811 | 0.106 | 7.651 | 0.000 |
| | EA 2 | | 0.832 | 0.103 | 8.078 | 0.000 |
| CP | | BY | | | | |
| | CP 1 | | 0.763 | 0.087 | 8.770 | 0.000 |
| | CP 2 | | 0.845 | 0.067 | 12.656 | 0.000 |
| BI-1 | | BY | | | | |
| | BI-1-1 | | 0.715 | 0.092 | 7.772 | 0.000 |
| | BI-1-2 | | 0.713 | 0.091 | 7.835 | 0.000 |
| BI-1 | | ON | | | | |
| | EA | | 0.816 | 0.261 | 3.126 | 0.000 |
| | CP | | 0.793 | 0.142 | 5.585 | 0.000 |
| | EA * CP | | 0.181 | 0.083 | 2.181 | 0.000 |
| CS | | WITH | | | | |
| | EA | | 0.817 | 0.082 | 9.963 | 0.000 |

Note: P<0.05 indicates the presence of an interaction effect

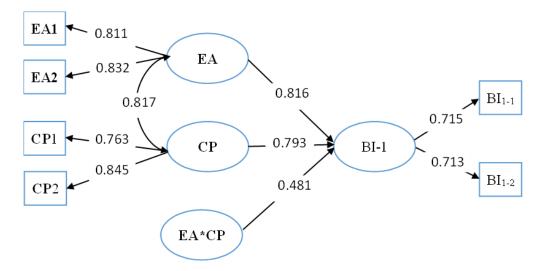


Figure 4-1 Model Results - Moderating Effect of Latent Variables

Table 4-3 Model Results – Moderating Effect of Latent Variables

| | | | Estimate | S. E. | Est./S.E. | Two-Tailed P-Value |
|------|---------|------|----------|-------|-----------|-----------------------|
| EA | | BY | | | | |
| | EA 1 | | 0.812 | 0.104 | 7.808 | 0.000 |
| | EA 2 | | 0.831 | 0.106 | 7.840 | 0.000 |
| CP | | BY | | | | |
| | CP 1 | | 0.861 | 0.088 | 9.784 | 0.000 |
| | CP 2 | | 0.847 | 0.063 | 13.444 | 0.000 |
| BI-2 | | BY | | | | |
| | BI-2-1 | | 0.713 | 0.093 | 7.667 | 0.000 |
| | BI-2-2 | | 0.717 | 0.092 | 7.793 | 0.000 |
| BI-2 | | ON | | | | |
| | EA | | 0.821 | 0.264 | 3.110 | 0.000 |
| | CP | | 0.843 | 0.151 | 5.583 | 0.000 |
| | EA * CP | | 0.683 | 0.073 | 9.356 | 0.000 |
| WC | | WITH | | | | |
| | EA | | 0.821 | 0.075 | 10.947 | 0.000 |

Note: P<0.05 indicates the presence of an interaction effect

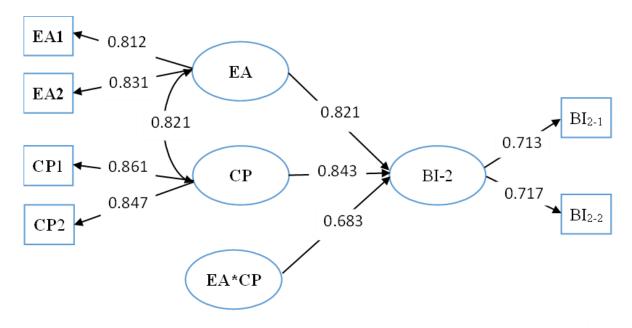


Figure 4-2 Model Results – Moderating Effect of Latent Variables

Table 4-4 Model Results – Moderating Effect of Latent Variables

| | | | Estimate | S. E. | Est./S.E. | Two-Tailed |
|------|---------|------|----------|-------|-----------|------------|
| | | | | | | P-Value |
| EA | | BY | | | | |
| | EA 1 | | 0.822 | 0.104 | 7.904 | 0.000 |
| | EA 2 | | 0.826 | 0.194 | 4.258 | 0.000 |
| CP | | BY | | | | |
| | CP 1 | | 0.813 | 0.083 | 9.795 | 0.000 |
| | CP 2 | | 0.842 | 0.069 | 12.203 | 0.000 |
| BI-3 | | BY | | | | |
| | BI-3-1 | | 0.751 | 0.081 | 9.272 | 0.000 |
| | BI-3-2 | | 0.756 | 0.088 | 8.591 | 0.000 |
| BI-3 | | ON | | | | |
| | EA | | 0.823 | 0.261 | 3.153 | 0.000 |
| | CP | | 0.827 | 0.142 | 5.824 | 0.000 |
| | EA * CP | | 0.683 | 0.083 | 8.229 | 0.000 |
| EV | | WITH | | | | |
| | EA | | 0.822 | 0.082 | 10.024 | 0.000 |

Note: P<0.05 indicates the presence of an interaction effect

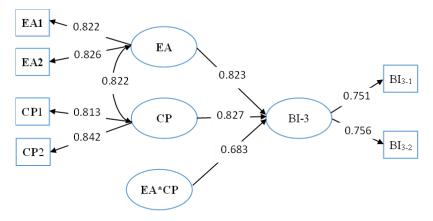


Figure 4-3 Model Results - Moderating Effect of Latent Variables

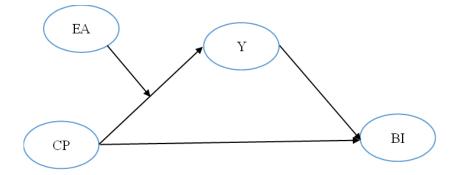


Figure 4-4 Mediated Moderation Effect of Observable Variables

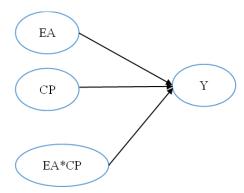


Figure 4-5 Mediated Moderation Effect of Observable Variables

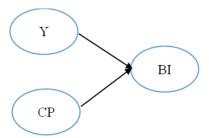


Figure 4-6 Mediated Moderation Effect of Observable Variables

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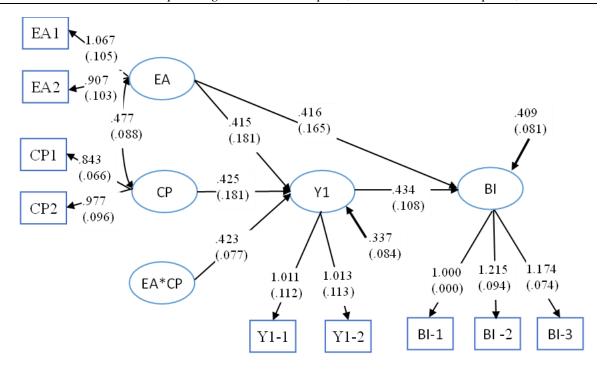


Figure 4-7-1 Mediated Moderation Effect Diagram

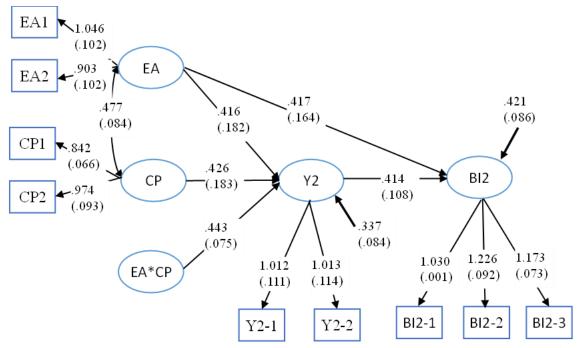


Figure 4-7-2 Mediated Moderation Effect Diagram

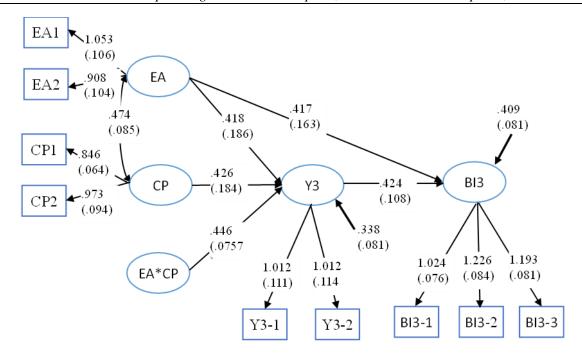


Figure 4-7-3 Mediated Moderation Effect Diagram

Note: Figures 4-7-1, 4-7-2, and 4-7-3 are developed from the concepts in Figures 4-4, 4-5, and 4-6.

4-5-1 Comparison of Dual Mediating Effects

Table 4-5-1 Comparison of Specific Indirect Effect Analysis

| | Tab | <u>ie 4-5-1 Co</u> | mparison oi | Specific in | airect Em | ect Anaiys | SIS | percentile | | | | | |
|-----------|-----------|--------------------|--|-------------|----------------|------------|-------|------------|--|--|--|--|--|
| | Point | | S.E. Est./S.E. P-Value Lower Upper Lower Upper INDIRECT EFFECTS .165 | | | | | | | | | | |
| | Estimate | | Coefficients | | Bias corrected | | pe | ercentile | | | | | |
| | Estillate | S.E. | Est./S.E. | P-Value | Lower | Upper | Lower | Upper | | | | | |
| | | | INDIR | ECT EFFECTS | 5 | | | | | | | | |
| CP | 0.416 | .165 | 2.521 | .000 | 2.356 | 2.686 | 2.156 | 2.886 | | | | | |
| CS | 0.415 | .181 | 2.293 | .000 | 2.112 | 2.474 | 1.912 | 2.674 | | | | | |
| WC | 0.425 | .181 | 2.348 | .000 | 2.167 | 2.529 | 1.967 | 2.729 | | | | | |
| TOTAL | 1.256 | .527 | 7.162 | .000 | 6.635 | 7.689 | 6.035 | 8.289 | | | | | |
| | | | CC | ONTRASTS | | | | | | | | | |
| CP vs. WC | 0.427 | .165 | 2.588 | .000 | 2.423 | 2.753 | 2.223 | 2.953 | | | | | |
| CP vs. CS | 0.426 | .181 | 2.354 | .000 | 2.173 | 2.535 | 1.973 | 2.735 | | | | | |
| CS vs. WC | 0.436 | .181 | 2.409 | .000 | 2.228 | 2.590 | 2.028 | 2.790 | | | | | |

Table 4-5-2 Comparison of Dual Mediating Effects

Comparison of Specific Indirect Effect Analysis Table

| | Point | | Product | of | BOOTSTRA | AP 1000 TIM | ES 95% CI | |
|-----------|----------|------|--------------|-------------|----------|-------------|-----------|-----------|
| | Estimate | | Coefficients | | Bias co | orrected | p | ercentile |
| | Estimate | S.E. | Est./S.E. | P-Value | Lower | Upper | Lower | Upper |
| | | | INDI | RECT EFFECT | TS . | | | |
| CP | 0.415 | .161 | 2.578 | .000 | 2.417 | 2.739 | 2.217 | 2.617 |
| EV | 0.342 | .123 | 2.780 | .000 | 2.657 | 2.903 | 2.457 | 2.857 |
| WC | 0.435 | .181 | 2.403 | .000 | 2.222 | 2.584 | 2.022 | 2.422 |
| TOTAL | 1.192 | .525 | 7.761 | .000 | 7.296 | 8.226 | 6.696 | 7.896 |
| | | | C | ONTRASTS | | | | |
| CP vs. WC | 0.515 | .161 | 3.199 | .000 | 3.038 | 3.360 | 2.838 | 3.670 |
| CP vs. EV | 0.442 | .123 | 3.593 | .000 | 3.470 | 3.716 | 3.270 | 2.975 |
| EV vs. WC | 0.535 | .181 | 2.956 | .000 | 2.775 | 3.137 | 2.575 | 3.670 |

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As shown in Tables 4-5-1 and 4-5-2, whether using bias-corrected or percentile methods, the confidence interval values do not include zero. Therefore, *CS* (*Consumer Sentiment*) and *EV* (*Experience Value*) are identified as "partial" dual mediating variables in the constructed model of this study.

Based on the analysis of the figures and tables above, this study arrived at the following hypotheses results:

- (1) Customer perception has a positive and significant impact on willingness to consume (Fully Supported).
- (2) Customer perception has a positive and significant impact on consumer sentiment (Fully Supported).
- (3) Environmental atmosphere has a positive and significant impact on consumer sentiment (Fully Supported).
- (4) Environmental atmosphere has a positive and significant impact on willingness to consume (Fully Supported).
- (5) Environmental atmosphere has a positive and significant impact on experience value (Fully Supported).
- (6) Consumer sentiment has a positive and significant impact on willingness to consume (Fully Supported).
- (7) Experience value has a positive and significant impact on willingness to consume (Fully Supported).

From hypotheses one to five above, it can be seen that the *Environmental Atmosphere* has a "triple" moderating effect in the constructed model of this study (Tables 4-2 to 4-4 & Figures 4-1, 4-2, and 4-3).

Furthermore, Hypothesis Six (H_6) : Consumer Sentiment has a positive and significant impact on Willingness to Consume.

Hypothesis Seven (H₇): Experience Value has a positive and significant impact on Willingness to Consume (Fully Supported).

From Hypothesis One, Hypothesis Two, Hypothesis Six, and Hypothesis Seven, as well as Tables 4-5-1 and 4-8-2, it can be seen that in the constructed model of this study, *Consumer Sentiment* and *Experience Value* both exhibit a *dual partial" mediating effect*.

In summary, the above indicates that this model fits well. Figures 4-7-1, 4-7-2, and 4-7-3 illustrate the mediated moderation effect (Me-Mo model).

V. CONCLUSIONS AND SUGGESTIONS

5.1 Research Conclusions

Based on the above data analysis and results, the following specific conclusions and managerial implications can be drawn:

(1) Customer Perception has a positive and significant impact on Willingness to Consume.

The managerial implication is that good Customer Perception has a direct and significant impact on factors influencing Willingness to Consume, such as "price, transportation convenience, safety, hygiene safety, and service attitude." Therefore, hotel managers must fully understand the significant impact of Customer Perception on Willingness to Consume.

(2) Customer Perception has a positive and significant impact on Consumer Sentiment.

The managerial implication is that good Customer Perception (e.g., Perceived Value by guests, satisfaction after check-in, and the service quality of hotel staff) makes guests feel very pleasant. Therefore, hotel managers must also fully understand this implication to attract the favor of travelers.

(3) Environmental Atmosphere has a positive and significant impact on Consumer Sentiment.

The managerial implication is that a good accommodation environment will make hotel guests feel very pleasant. Therefore, hotel managers must create a good environmental atmosphere both inside and outside the hotel, which includes: (1) The background music in the hotel lobby should be pleasant; (2) The interior decoration and furnishings in the hotel should be attractive; (3) The lighting inside the hotel should be appropriate; (4) The hotel's traffic flow design should be convenient; (5) The layout and overall aesthetics of the hotel should be well-designed; (6) The process for handling room exchanges or returns should be appropriate and convenient; (7) Hotel staff should prioritize customer safety; (8) Various facilities in the hotel rooms should meet hygiene and safety standards; and (9) The view from rooms with scenic views should be appealing.

(4) Environmental Atmosphere has a positive and significant impact on Willingness to Consume.

The managerial implication is that within the constructed model, a good accommodation environment has a positively reinforcing effect on guests' willingness to stay. Therefore, hotel managers must also pay attention to this implication in order to attract travelers' favor and increase the hotel's occupancy rate.

(5) Environmental Atmosphere has a positive and significant impact on experience value.

The managerial implication is that a good environmental atmosphere in a hotel, which includes: (1) price factors; (2) transportation convenience; (3) a high-quality indoor space; (4) a relaxed and comfortable overall atmosphere; and (5) enthusiastic service from the staff, will enhance guests' experience value. Therefore, hotel managers must fully understand: (1) that the guest's experience is consistent with what

they imagined; (2) that guests choose to stay at the hotel because they like the surrounding environment and the service; (3) that in the guests' impressions, their past experiences at the hotel were pleasant; and (4) that even if there are any changes in price or the flavors of the cuisine offered at the attached restaurant, customers are still willing to come back for the necessary products or services.

(6) Consumer Sentiment has a positive and significant impact on Willingness to Consume.

The managerial implication is that improving the positive mood of guests during their stay will significantly enhance their willingness to stay. Therefore, hotel managers must fully understand: (1) how to create a strong sense of joy for guests upon check-in; (2) how to ensure that guests feel relaxed when entering the hotel; and (3) how to avoid creating a sense of boredom or other negative perceptions when guests enter the hotel.

(7) Experience Value has a positive and significant impact on willingness to consume.

The managerial implication is that enhancing the experience value of guests will have a positively reinforcing effect on their willingness to stay. Therefore, hotel managers should pay close attention to the positive and significant impact of experience value on Willingness to Consume.

Finally, this study also made an important discovery: In the constructed model of this study, "Environmental Atmosphere" exhibits a "triple" moderating effect. Therefore, hotel managers must particularly emphasize this implication to attract guests' favor and increase their willingness to stay. Additionally, in the constructed model of this study, "Consumer Sentiment" and "Experience Value" both exhibit a dual "partial" mediating effect. Therefore, hotel managers must also pay attention to this implication to attract guests' favor and increase the hotel's occupancy rate.

In summary, the above indicates that the model constructed in this study fits well.

5.2 Research Limitations and Suggestions for Future Research Directions

Due to the limitations of available research resources, this study focused on guests staying at three large chain hotels in Taipei City as the subjects. Given the difficulty in obtaining samples, snowball sampling was employed to sample the population. It is suggested that future researchers who are interested in this topic could expand the sample range, adopt different sampling methods, and use different statistical software packages to verify the findings.

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