# A Study on the Effect of Social Networking Marketing on the Purchase Intention in the Airline

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## Abstract

***Purpose* —**This study aims to determine how the characteristics of the airline's SNS marketing affects brand image, brand attitude according to perceived values, and to analyze the impact of SNS marketing factors. It was intended to provide theoretical and practical implications for airlines to refer to SNS marketing activities.

***Research design, data, and methodology* —**A questionnaire was formed based on previous studies, and then an online questionnaire was created to conduct a survey. Explained the purpose and asked to respond. From February 1 to 14, 2020, 333 responses with a valid number of samples were confirmed for the final analysis of the data. The questionnaire was composed of five areas: demographic characteristics, SNS factor, brand image, brand attitude, and perceived value.

***Result* —**Airline's SNS marketing, brand image, and brand attitude are affected by the gender, age, and SNS usage time of the user, and the perceived value of the user is shown to be controlled by the airline's SNS marketing's influence on brand image and brand attitude.

***Conclusion* —**When SNS is to be effectively used for airline marketing, it is necessary to pay attention to the demographic characteristics and the control effect of perceived value, and use it for airline management. The perceived value has been shown to affect SNS marketing's brand image and brand attitude.

**Keywords:** SNS Marketing, Perceived Value, Brand Image, Brand Attitude

**JEL Classification Code**: L15, M12, M31.

# 1. Introduction

According to the results of the 2019 Internet Usage Survey by the Ministry of Science and ICT (2020), 91.5% of Koreans aged 3 or older use the Internet in 2019, and the Internet usage rate of those aged 60 or older increased significantly to 88.8%. With this change in society, companies want to utilize SNS marketing using the Internet for brand-related knowledge and experience to consumers. The growth of SNS has made companies interested in the role of SNS not only in marketing, including communication with customers, but also in basic sales and services, and therefore, the number of companies that use it extensively in advertising is rapidly increasing.

In the past, information on customer needs was obtained through customer satisfaction surveys and focus group interviews, and the product was based on them. In addition, this set of corporate marketing activities, including information on products and promoting corporate activities, required huge financial and time-consuming costs. Today, however, more efficient marketing activities are possible, such as saving money through the use of SNS. Even similar products can be delivered to consumers in a completely different message depending on how they communicate in marketing. This means that the value of the product is recognized differently depending on the marketing communication (Park, 2020). The efficiency and importance of these marketing communications are emphasized, and the emergence of new SNS communication channels requires research on SNS marketing communications, unlike existing marketing communication studies.

Mobile SNS, which is available anytime, anywhere due to its faster delivery power and no time-to-time constraints than other marketing media, is already trying to manage brands and access in other industries. On the other hand, airlines also use SNS to provide various information about their services. By presenting a beautiful image of the destination of service, it not only stimulates consumers' potential desire for travel, but also provides information on the excellence of its aviation services. It also provides information on overall service during the flight, including in-flight screenings, and information on various event events during the month (Byun, 2018). The aviation industry is a representative industry of the service industry, and unlike the type of product, the service industry's characteristics of intangible products have a complex purchasing decision-making process for consumers. As a result, the domestic and foreign aviation industries are rapidly communicating through various channels and increasing their competitiveness, especially in SNS marketing. SNS marketing has begun to draw attention as an effective cost-saving method, and it is used as an effective means of significantly reducing costs through the use of established platforms, and SNS is becoming an attractive enough factor for young people (Jang, 2020).

Companies do not simply stay in advertising products and services using SNS, but are communicating with customers, furthermore analyzing the characteristics of customers and using them in marketing strategies (Byun, 2018). Through this, the company does not just stay in public relations activities or information provision, but naturally builds up the intimacy and trust with customers to increase the intention of purchasing. In addition, compared to other advertising methods (Kim et al., 2015), SNS marketing can have a great effect at a relatively low cost, making it a very attractive marketing tool for companies (Bae et al, 2019).

Airline's marketing using SNS provides various information such as its service and destination of service. It not only stimulates consumers' potential needs by presenting images of beautiful destinations, but also provides information related to the excellence of overall aviation services during flights, including in-flight screenings. The marketing of airlines using SNS provides various information such as their services and destinations. It not only stimulates consumers' potential needs by presenting images of beautiful destinations, but also provides information related to the superiority of overall air service during flights, including in-flight screenings (Chen & Shang, 2018).

However, the study of airline marketing was mainly focused on the study of traditional marketing communication and the nature of SNS marketing, and the study of the impact relationships in real SNS marketing was very insufficient. This study aims to determine how interaction, convenience, and entertainment among the characteristics of the airline's SNS marketing affects brand image and brand attitude according to perceived values, and to substantially analyze the impact of SNS marketing factors. Through this, it was intended to provide theoretical and practical implications for airlines to refer to SNS marketing activities.

# 2. Literature Review

## 2.1. Social Commerce

Social commerce has been defined as relationship-based e-commerce, in which existing e-commerce combines with social media. In addition, the concept of the public in the E-commerce environment is referred to as collaborative

shopping network social commerce (Yang & Ahn, 2013). By translating social shopping into "public opinion purchases," it was defined as a means of forming a relationship in the process of sharing shopping information and making purchases according to the public opinion formed here. In addition, social commerce is defined as 'a generic term for the use of SNS for the purpose of promoting sales.'

Social commerce is a relationship-based e-commerce-type business model that combines existing e-commerce with social media. It is a relatively new concept, but like existing e-commerce, the form of selling by intermediary sellers with commission on the Internet or directly by producers is similar. However, consumers have the advantage of knowing information such as the value and price of the product in advance through SNS before buying the product (Lee, 2020). The main difference from the traditional form of commerce is that there is constant dialogue between sellers and consumers, replacing some of the roles that consumers sell. In other words, social commerce plays a role in spreading product information to other people through SNS (Kim & Park, 2017), which contributes more to the seller's publicity, as it uses SNS as its main medium, where open dialogue takes place, unlike traditional commerce sellers and consumers.

The main difference between social commerce and traditional forms of commerce is that it replaces some of the roles that consumers sell as ongoing dialogue takes place between sellers and consumers (Kim & Park, 2019). In other words, in social commerce, consumers are contributing more to the promotion that sellers should do by spreading product information to others through SNS, which is possible because they use SNS as their main medium, unlike traditional commerce sellers and consumers communication.

Currently, SNS is recognized as an indispensable channel for individuals and companies to express their identity beyond the trend. It has become a new social media communication tool and a rapidly spreading lifestyle culture (Lee et al, 2019), and is one of the most important marketing tools especially for businesses.

## 2.2. Brand Image

In a study by Becker and Lee (2019), a brand image is expressed as a consumer's feelings for a particular corporate brand, or belief in a brand, and the overall impression that consumers have about the brand, which is formed by a combination of brand-related associations.

Brand image can be seen as the overall impression of a brand by consumers, and is defined as the recognition of a brand expressed by associations in consumers' memories, combining various impressions related to the brand (Su & Choi, 2015).

According to Ha (2018), a brand image is a concept that represents an impression of an individual product, a company's service or a company itself, making vague assumptions about the product's brand and creating an abstract feeling. Thus, a brand image can be seen as an expression of consumers' fondness for the brand by expressing their feelings, which means evaluating the brand through their own perspective and providing symbolic value and image to the consumer through the evaluated brand.

Choi and Lee (2013) said that the brand image means the overall image that consumers have of a specific brand, and that such a brand image is a "combination of various associated associations with the brand." So, it was argued that how to build a consumer-based, loyal brand is very important to create a specific shape, or brand image, that could give the meaning within the brand (Kim, 2018).

A study by Kim and Shim (2018) found that brand image is an internal or external characteristic that determines the generalized type of brand that consumers have or the reactions associated with the brand. Hwang and Shin (2012) said, "Brand image is the mindset that consumers perceive the brand through direct and indirect experiences of consumers regarding the brand. It argued that such brand images are "awakened in the mind," or "imagination in the mind," and that companies should focus on the emotional aspects in order to form a successful brand image.

As such, brand image is a concept of brand image through a comprehensive meaning that includes very subjective feelings, associations, and ideal judgment of consumers formed by services, products and various attributes associated with the brand (Yoo & Cho, 2019).

This study defined the brand image as a combination of the overall impression that consumers have in mind regarding a particular brand or various associations related to that brand based on prior studies such as Choi et al (2017).

## 2.3. Brand Attitude

Brand attitude is a comprehensive evaluation factor that consumers feel about a brand, and it is a very important criterion that affects the buying behavior of consumers choosing and purchasing a particular brand. Research on these

brand attitudes has been active since the 1980s. Many prior studies related to brand attitudes have found that brand attitudes are an important factor that affects consumer behavior, or purchasing behavior.

First of all, if you look at the preceding studies on brand attitudes related to consumer behavior, the impact of brand attitudes on consumers' behavior is revealed through many empirical studies.

According to Kang et al. (2019) a very easily acceptable brand attitude is likely to be activated naturally as soon as it is exposed to a particular brand, leading to the brand selection that follows. Attitude can be considered to have a much more appreciative nature than attributes. This evaluation property makes abstract associations more memorable and easier to remember. That is, brand attitudes can be stored and recalled separately from information about the attributes that form the basis.

A study by Kim and Yoo (2018) found that since attitudes are shaped by judgments based on memory, decorative cues affect brand attitudes rather than trust, and the attraction of decorative cues leads to a favorable attitude toward brands. Brand communication through visual factors is an effective way to bring positive brand attitudes.

In the case of air transport services, the characteristics of the service's intangible and simultaneous nature before consumers experience it in the field make it difficult to convey the typeality and overall evaluation of the brand in the purchasing decision-making process. Consumers can see that they are promised a predictable experience from the airline through a positive brand attitude that they do not know before they experience the service firsthand, and the airline is able to induce customers to purchase with confidence in the quality of the airline. A positive brand attitude can reduce the risk of choice arising from intangible trust (Yoo & Cho, 2019).

In other words, the aviation industry has the characteristics of intangible and simultaneous nature of the service industry, and unlike other general companies, efforts must be made to impress consumers through various marketing activities to improve airline brand recognition and value.

## 2.4. Perceived Value

Intention to purchase is defined as a willingness or intention to act on a purchase, a decisive factor that directly to purchase in addition to product or service quality and satisfaction.

Value is a word that expresses many and few words about the usefulness or cost of a good or service, and is defined as value in use, utility value, or subjective value, with the value determined by the size of the user's satisfaction (Cho, 2019).

As a definition of value from an economic and management perspective, Kim (2016) defined value as the ratio or offset between the benefits typically received in return for the overall sacrifice, and Lee (2013) states that the significant buying motive seen in modern consumers is value.

The value of an overall assessment of the utility of any product or consumer (Shin et al., 2015) under the recognition that "what can be obtained instead of what I give" is an offset between the quasi-factor and the received element. Not only is it a standard factor in human behavior, but it also justifies individual behavior (Kim et al., 2012), which represents the goals and appropriate ways to motivate humans. For example, if customers tend to be value-oriented, the entity should first understand what their value is and then pay attention to it to gain an upper hand in the market (Kim, 2016).

Perceived values can be seen as limiting the above value concept to the customer's position, which is generally a perceived value that represents the customer's assessment of the overall capability of the product and service to meet the customer's needs, but that concept is subjective in terms of customer and time. A concept that has long been studied by a number of researchers, developed from an economic and psychological level of consumer behavior, is a factor that emphasizes importance from a marketing perspective as it relates to the choice, intention to purchase, or repurchase of a product (Cho, 2019). Perceived values have been used as variables for determining the relevance of consumers' intent to act and the nature of the goods or services themselves, and can be described as a personal subjective assessment of the choice of goods or services (Lee, 2013). Perceived values, according to Choi and Lee (2013), are the most basic and fundamental expressions of desire and goal that customers want to achieve, and the perceived value is very abstract, as described by Shin et al. (2015), which is an expression of what they want to obtain from prices and costs.

Kim and Park (2017)'s study defines perceived value as perceived benefits versus consumer benefits and sacrifices, and in the broadest sense is defined as perceived valuations that represent the trade-off between the sacrifices made and the benefits gained in relation to consumer behavior.

According to Kim (2016), the perceived value expected by using social commerce is expressed in economic, psychological, and temporal values. Economic value is the perception of low price or good quality relative to price (Lee, 2013), and psychological value refers to the psychological stability, comfort, joy, happiness, etc. of the customer's intention to purchase (Kim & Yoo, 2018).

The perceived value of SNS users of a company identified in the preceding study in this study is divided into three categories: economic, social and psychological value of the company's use of SNS.

Economic value refers to the value of financial savings from a company's use of SNS and the value of good quality relative to price, psychological value refers to the value of psychological benefits from a company's use of SNS, and social value refers to the value of social relationships that can be obtained from a company's use of SNS. Following this prior study, the survey was conducted by organizing three survey questions: economic value, social value, and psychological value.

# 3. Methodology

## 3.1. Research Model & Hypotheses

This study wanted to verify how the characteristics of airline's social commerce differ depending on the demographic characteristics of the users and how the perceived value of the users affects airline's brand image and Airline's brand attitude. For users who have experienced the airline's social commerce marketing activities, the company aims to identify the characteristics of social commerce, brand image, brand attitude, and perceived value. The relationship for hypothesis verification in this study is shown in Figure 1 and Figure 2.

Yang and Ahn (2013), Kim and Park (2017), Kim and Park (2019), Lee et al. (2019), Lee (2020) studied the relationship between the characteristics of the oral information of SNS on the brand attitude, brand image, and purchasing intention, and the characteristics of the oral information on SNS had a significant impact on the brand image, and the characteristics of the brand image were formed by the combination of information and emotion. Lee (2020) studied the airline's SNS marketing communications and brand management, and said that SNS characteristics have a positive influence on the brand image, and social ties between the characteristics of SNS and brand image and attitude play a positive role in controlling the brand.

Therefore, hypothesis 1 was established in this study to establish the relationship between the characteristics of airline SNS marketing (interaction, entertainment, convenience) and the impact of brand image based on prior research.
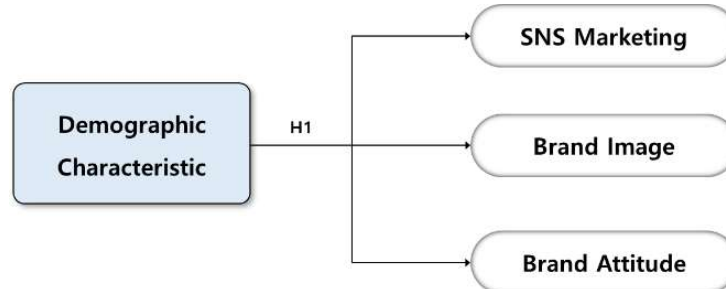


**Figure 1**: Research Model on Hypothesis 1

**Hypothesis 1:** Airline SNS marketing, brand image, brand attitude, and intention to purchase will vary significantly depending on demographic characteristics.
   **H1-1:** The interaction of airline SNS will vary significantly depending on demographic characteristics.
   **H1-2:** The entertainment of airline SNS will vary significantly depending on demographic characteristics.
   **H1-3:** The convenience of airline SNS will vary significantly depending on demographic characteristics.
   **H1-4:** Brand image of airline will vary significantly depending on demographic characteristics.
   **H1-5:** Brand attitude of airline will vary significantly depending on demographic characteristics
   **H1-6:** Purchase intention will vary significantly depending on demographic characteristics

Choi and Lee (2013), Su and Choi (2015), Kim and Shim (2018) studied the relationship between shopping tendency, brand image and brand attitude, and found that brand attitude is the main factor and has an important impact. Therefore, Hypothesis 2 was established to investigate the impact of brand image and brand attitude based on the studies of Choi et al. (2017), Yoo and Cho (2019).
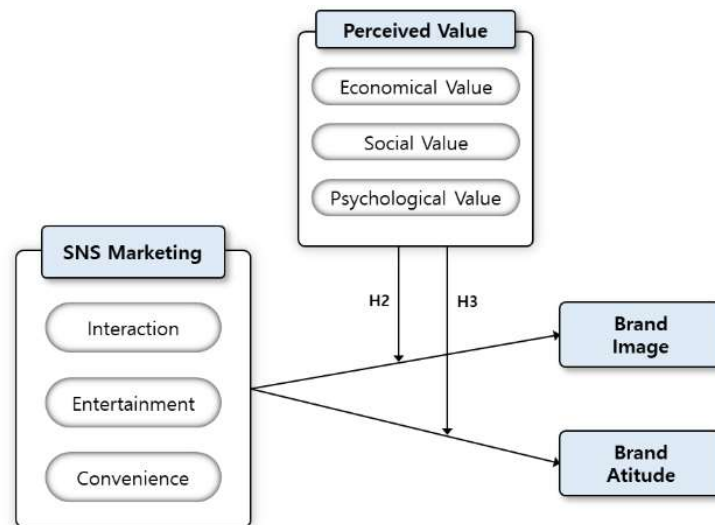
**Figure 2**: Research Model on H2, H3

**Hypothesis 2:** Perceived value in the relationship between airline SNS marketing and brand image will have a
controlling effect.
  **H2-1:** Economical value in the relationship between interaction and brand image will have a controlling effect.
  **H2-2:** Economical value in the relationship between entertainment and brand image will have a controlling
effect.
  **H2-3:** Economical value in the relationship between convenience and brand image will have a controlling
effect.
  **H2-4:** Social value in the relationship between interaction and brand image will have a controlling effect.
  **H2-5:** Social value in the relationship between entertainment and brand image will have a controlling effect.
  **H2-6:** Social value in the relationship between convenience and brand image will have a controlling effect.
  **H2-7:** Psychological value in the relationship between interaction and brand image will have a controlling
effect.
  **H2-8:** Psychological value in the relationship between entertainment and brand image will have a controlling
effect.
  **H2-9:** Psychological value in the relationship between convenience and brand image will have a controlling
effect.

Kim and Yoo (2018)'s study said that brand attitudes are the most important criterion for consumers to make choices and are a comprehensive assessment factor for consumers. They also said that positive products about advertising can lead to positive attitudes, which can lead to purchasing intentions. Kang et al. (2019) conducted a rare analysis of the impact on brand image and purchasing intentions, and it was found that brand image showed a significant impact on purchasing intentions. The results showed that consumers were more willing to buy if they thought it was a positive image of travel agencies.

Yoo and Cho (2019) found that the characteristics of SNS have a significant impact on the brand image, brand attitude and brand image have a significant impact on the brand's intention to purchase, and thus provided marketing strategies and implications centered on the brand image.

Therefore, Hypothesis 3 was established to establish the relationship between brand image and brand attitude based on the studies of Lee (2013), Kim (2016), Kim and Park (2017), and Cho (2019).

**Hypothesis 3:** Perceived value in the relationship between airline SNS marketing and brand image will have a
controlling effect.
  **H3-1:** Economical value in the relationship between interaction and brand attitude will have a controlling effect.
  **H3-2:** Economical value in the relationship between entertainment and brand attitude will have a controlling
effect.
  **H3-3:** Economical value in the relationship between convenience and brand attitude will have a controlling
effect.

**H3-4:** Social value in the relationship between interaction and brand attitude will have a controlling effect.
**H3-5:** Social value in the relationship between entertainment and brand attitude will have a controlling effect.
**H3-6:** Social value in the relationship between convenience and brand attitude will have a controlling effect.
**H3-7:** Psychological value in the relationship between interaction and brand attitude will have a controlling effect.
**H3-8:** Psychological value in the relationship between entertainment and brand attitude will have a controlling effect.
**H3-9:** Psychological value in the relationship between convenience and brand attitude will have a controlling effect.

## 4. Results

### 4.1. The Demographic Characteristics of Sample

The results of analyzing the demographic characteristics of the respondents were shown in Table 1. First of all, 157 men (47.1 percent), 176 women (52.9 percent), followed by 123 people in their 20s (36.9 percent), 114 people in their 40s (34.2 percent), and 96 people in their 30s (28.8 percent). In addition, the number of unmarried people (55.9%) and married 147 (44.1%). The jobs were 122 (36.6 percent), 54 professionals (16.2 percent), 50 service workers (15.0 percent), 35 students (10.5 percent), 32 self-employed workers (9.6 percent), 28 others (8.4 percent), and 12 civil servants (3.6 percent). Meanwhile, the average daily SNS usage time was 90 people (27.0%), 83 people under 1~2 hours (24.9%), 70 people under 2~3 hours (21.0%), 45 people under 3~4 hours (13.5%), and 45 people over 4 hours (13.5%) and 45 people over 4 hours (13.9%), 111 people under 1 time (33.3%), and 50 people over 6 times (15.0%) over the past year.

**Table 1:** Demographic Characteristics of Sample (n=333 include redundant markings)

| Item | | n | % | Item | | n | % |
|---|---|---|---|---|---|---|---|
| Gender | Male | 157 | 47.1 | | Student | 35 | 10.5 |
| | Female | 176 | 52.9 | | Officer | 122 | 36.6 |
| Age | 20' | 123 | 36.9 | | Public Officer | 12 | 3.6 |
| | 30' | 96 | 28.8 | Occupation | Self-employment | 32 | 9.6 |
| | 40 | 114 | 34.2 | | Service Position | 50 | 15.0 |
| | Over 50' | - | - | | Professional | 54 | 16.2 |
| Marriage Status | Single | 186 | 55.9 | | Others | 28 | 8.4 |
| | Married | 147 | 44.1 | | Under 1hour | 90 | 27.0 |
| Airline Service | Korean Air | 284 | 22.2 | SNS Usage Time | 1~2 hours | 83 | 24.9 |
| | Asiana Airline | 282 | 22.0 | | 2~3 hours | 70 | 21.0 |
| | Jeju Air | 228 | 17.8 | | 3~4 hours | 45 | 13.5 |
| | Jin Air | 162 | 12.6 | | Over 4 hours | 45 | 13.5 |
| | Air Busan | 36 | 2.8 | Number of Airline Flights | 1 time | 111 | 33.3 |
| | T-way | 158 | 12.3 | | 2~3 times | 133 | 39.9 |
| | Eastar Air | 143 | 11.2 | | 4~5 times | 39 | 11.7 |
| | Air Seoul | 24 | 1.9 | | Over 6 times | 50 | 15.0 |

In this study, t-test and ANOVA (one-to-one analysis of variance) were conducted to verify the differences in basic demographic characteristics, such as gender, age and SNS usage in terms of interaction, convenience, entertainment, brand image, brand attitude, and purchasing intention. First, the t-test results for each variable for gender are as shown in Table 2.

First, the average of interactivity was 3.234 for men and 3.251 for women, with women showing higher t=-.189, p=.850 there was no significant difference between groups of men and women in terms of interaction.

Second, the average for convenience was 3.548 for men and 3.419 for women, with men higher t=1.105, p=.270 that there was no significant difference between groups of men and women in terms of convenience.

Third, the average for entertainment was 3.584 for men and 3.493 for women. There was no significant difference between groups of men and women in terms of entertainment, with t=.878, p=.380.

Fourth, the average of brand images was 3.358 for men and 3.156 for women, with men higher t=2.130, p=.034 indicates significant differences between groups of men and women in brand image.

Fifth, the average brand attitude was 3.604 for men and 3.359 for women, higher for men, t=2.399, p=.017 showed significant differences between groups of men and women in brand attitudes.

Sixth, the average purchase intention was 3.699 for men and 3.545 for women, with men higher t=1.619, p=.106, indicating that there was no difference between groups of men and women in customer confidence.

**Table 2:** Verification of Differences in Each Variable by Gender

| Item | Gender | n | Average | Std.d | t | p |
|---|---|---|---|---|---|---|
| Interaction | Male | 157 | 3.234 | .841 | -.189 | .850 |
| | Female | 176 | 3.251 | .833 | | |
| Convenience | Male | 157 | 3.548 | 1.051 | 1.105 | .270 |
| | Female | 176 | 3.419 | 1.070 | | |
| Entertainment | Male | 157 | 3.584 | .960 | .878 | .380 |
| | Female | 176 | 3.493 | .939 | | |
| Brand Image | Male | 157 | 3.358 | .869 | 2.130 | .034 |
| | Female | 176 | 3.156 | .859 | | |
| Brand Attitude | Male | 157 | 3.604 | .948 | 2.399 | .017 |
| | Female | 176 | 3.359 | .908 | | |
| Purchase Intention | Male | 157 | 3.699 | .894 | 1.619 | .106 |
| | Female | 176 | 3.545 | .840 | | |

The ANOVA analysis results, which verified the differences in each variable for age are shown in Table 3.

First, the mean of interactivity was shown in the order of 3.329 in their 20s, 3.270 in their 40s, 3.102 in their 30s, and F=2.105. p=.050, indicating that there was no age difference in their interaction.

Second, the average of convenience was 3.721 in the 40s, 3.476 in the 20s, and 3.198 in the 30s, with t=6.551. p=.002, indicating that convenience varies between age. convenience, meanwhile, was divided into two groups: the high group consisted of 40s and 20s, and the low group consisted of 30s.

Third, the average for entertainment was 3.656 in their 40s, 3.648 in their 20s and 3.250 in their 30s, with t=6.329. p=.002, indicating that entertainment varies between ages. Meanwhile, entertainment was divided into two groups: the high group consisted of 40s and 20s, and the low group consisted of 30s.

Fourth, the average of brand images was 3.496 in their 40s, 3.130 in their 30s, 3.120 in their 20s, and t=7.101. p=.001, indicating that brand images differ between ages. Meanwhile, brand images were divided into two groups, with those with high brand images in their 40s and those in their 30s and 20s.

Fifth, the average brand attitude was 3.757 in their 40s, 3.370 in their 20s and 3.273 in their 30s, with t=8.579 and p=.000, and the brand attitude differed between ages. Meanwhile, brand attitudes were divided into three groups, with high brand attitudes comprising those in their 40s and those in their 20s and 30s.

Finally, the average purchase intention was 3.809 in the 40s, 3.594 in the 20s, 3.423 in the 30s, and t=5.365. p=.005 indicates that the intent of purchase varies between ages. On the other hand, the intention of purchase was classified into three groups, with those in their 40s, 20s and 30s being the most willing to purchase.

**Table 3:** Validation of Differences in Each Variable by Age

| Item | 20' (n=123) | 30' (n=96) | 40' (n=114) | F | p |
|---|---|---|---|---|---|
| Interaction | 3.329 | 3.102 | 3.270 | 2.105 | .123 |
| Convenience | 3.476 (H) | 3.198 (L) | 3.721 (H) | 6.551 | .002 |

| | | | | | |
|---|---|---|---|---|---|
| Entertainment | 3.648 (H) | 3.250 (L) | 3.656 (H) | 6.329 | .002 |
| Brand Image | 3.120 (L) | 3.130 (L) | 3.496 (H) | 7.101 | .001 |
| Brand Attitude | 3.370 (L) | 3.273 (L) | 3.757 (H) | 8.579 | .000 |
| Purchase Intention | 3.594 (H, L) | 3.423 (L) | 3.809 (H) | 5.365 | .005 |
| H: high group / M: middle group / L: low group | | | | | |

The t-test results between groups of less than two hours and each variable for SNS hours classified as more than two hours are as shown in Table 4.

First, the mean of interactivity was 3.132 for less than two hours, 3.364 for more than two hours, t=-2.560, p=.011 indicates significant differences between groups of less than two hours and more than two hours for interactivity.

Second, the average for convenience was 3.246 for less than two hours, 3.733 for more than two hours, t=-4.292, p=.000, indicating significant differences between groups of less than two hours and more than two hours for convenience.

Third, the average for entertainment was 3.231 for less than two hours, 3.866 for more than two hours, t=-6.504, p=.000. There was a significant difference between groups of less than two hours and more than two hours of entertainment.

Fourth, the average of brand images was 3.032 for less than two hours, 3.489 for more than two hours, t=-4.968, p=.000. There is a significant difference between groups of less than two hours and more than two hours for brand image.

Fifth, the average brand attitude was 3.247 for less than two hours, 3.720 for more than two hours, t=-4.771, p=.000. There is a significant difference between groups of less than two hours and more than two hours of brand attitude.

Sixth, the average purchase intention was 3.353 for less than two hours, 3.720 for more than two hours, higher than t=-6.162, p=.000. There is a difference between groups of less than two hours and more than two hours of customer confidence.

**Table 4:** Verification of Differences in Each Variable according to SNS Usage Time

| Item | Usage Time | n | Average | Std. d | t | p |
|---|---|---|---|---|---|---|
| Interaction | Less than 2 hours | 173 | 3.132 | .794 | -2.560 | .011 |
| | More than 2 hours | 160 | 3.364 | .864 | | |
| Convenience | Less than 2 hours | 173 | 3.246 | 1.032 | -4.292 | .000 |
| | More than 2 hours | 160 | 3.733 | 1.038 | | |
| Entertainment | Less than 2 hours | 173 | 3.231 | .967 | -6.504 | .000 |
| | More than 2 hours | 160 | 3.866 | .811 | | |
| Brand Image | Less than 2 hours | 173 | 3.032 | .901 | -4.968 | .000 |
| | More than 2 hours | 160 | 3.489 | .767 | | |
| Brand Attitude | Less than 2 hours | 173 | 3.247 | .950 | -4.771 | .000 |
| | More than 2 hours | 160 | 3.720 | .852 | | |
| Purchase Intention | Less than 2 hours | 173 | 3.353 | .903 | -6.162 | .000 |
| | More than 2 hours | 160 | 3.905 | .729 | | |

## 4.2. Reliability and Feasibility of the Sample

Feasibility is an indicator of how accurately a concept or property to be measured can be measured using a tool developed for measurement, and in quantitative studies, it is generally divided into content validity and concept

validity. Content relevance refers to the extent to which the items that make up the measurement tool represent the concept to be measured. In other words, content validity means that the most representative of all the items that can measure the concept is selected as measurement tools. The operational definition of a proven variable, such as this study, and the consequent questionnaires are used to modify and supplement it, which can be judged to be sufficient in this case. In addition, the validity of the concept of constructions is a way of indicating how properly the measurement tool has measured abstract concepts or attributes, such as feelings that are difficult to explain their validity by content validity or criteria. In other words, by verifying how accurate the measurement method is conceptually and logically compared to other measurement methods, a method is taken to determine whether the theoretical relationship between the concepts to be measured is established based on the theoretical framework of the existing prior research and to assess the conjecture validity of the concept. The methods of assessment of construct validity are divided into concentrated validity, normative validity, and are evaluated using various methods such as exploratory and check factor analysis, correlation analysis, etc. In this study, both CFA (Certificate Factor Analysis) were conducted for measurement items and more accurate feasibility verification was conducted based on the results.

On the other hand, reliability is also described as stability, consistency, predictability, and accuracy, indicating how consistently the phenomena or objects to be measured were measured. Reliability is an indicator of how many identical results can be obtained when measuring a target repeatedly and can be determined by the variance of the measurement results obtained by repeated measurements. In this study, the Cronbach' s alpha coefficient value, which represents internal consistency for each concept of composition, was used to analyze the reliability of measurement tools. Reliability verification results are usually significant if they are greater than 0.6.

### 4.2.1. Analyze the Positive Factors for the Concept of a Configuration

In this study, a confirmed factor analysis was conducted to verify the concentration feasibility for the construction of a structural equation model. Maximum Likelihood was used for model estimation and the study model was evaluated through model fit.

In this work, we conducted $\chi^2$ validation, the most commonly used absolute conformance index, to evaluate model fit, but due to limitations in the exact computation of values depending on sample size and complexity, we also determined the compatibility of other models, such as normed-A, RMR, GFI, AGFI, RMSEA, and incremental conformance.

$\chi^2$/df is a number of A values divided by degrees of freedom (df), and is a model that is acceptable if the sample size is not more than 750 or if the model is very complex, and if it is less than 2, it is acceptable. Furthermore, GFI, which represents the model's descriptive power and indirectly looks at the size of the sample, NFI, and CFI, which look at the complexity and simplicity of the model, can be seen as a suitable model if the model's freedom is 0.85 or higher. Furthermore, RMR can be judged to be good below 0.05, and RMSA, which is least affected by the sample size, can be judged to be good below 0.08 and normal below 0.1. Therefore, the model fit is evaluated based on the key goodness-of-fit indices in this study.

The results of a positive factor analysis of the constructive concepts used in this study is shown in Table 5.

The $\chi^2$ value of 973.450 (df=491, p=.000). The fitted values of the structural equation model established for hypothesis verification in this study.000) was shown to be statistically significant. This fails to reject the null hypothesis that 'the input covariance matrix is the same as the estimated covariance matrix', and it can be judged that the research model is not suitable by adopting the alternative hypothesis that 'the input covariance matrix differs from the estimated covariance matrix'. However, as mentioned in the confirmed factor analysis, the model fit was determined by checking additional goodness-of-fit indices relatively free of sample count rather than conclusive conclusions, as the number of samples could increase together to reduce the model's fit.

Other fits for the structural equation model in this study, except for the A value, are $\chi^2$/df=1.983, RMR=.055, GFI=.853, AGFI=.822, NFI=.902, TLI=.935, CFI=.943, RMSEA=.054. The measurement model of this study can be judged to be appropriate, as the conformity indices of RMR, NFI, TLI, CFI and RMSEA, which are relatively free from sample counts, are shown to meet the criteria, although the GFI and AGFI values affected by sample size are somewhat lower.

In this work, the following criteria is applied to assess the concentration validity of measurement tools. First, it can be said that concentration feasibility is good if the load of standardized factors loaded on each constructive concept is 0.5 or higher and 0.95 or less, and if statistically significant, it is judged to be reasonable. Second, for more accurate verification, we calculate Average Variance Extraction (AVE) and Construction Composite Reliability (CCR) and determine that AVE is more than 0.5 and CCR is more than 0.7 to have a focused feasibility.

On the other hand, the factor loadings for the measurement items loaded on each factor were all found to be higher than 0.5 and statistically significant. Also, if you look at the AVE and CCR for each potential variable, the interaction AVE=.534, CCR=.820, convenience AVE=.672, CCR=.891, entertainment AVE=.652, CCR=.882, brand Image AVE=.579, CCR=.846, brand attitude AVE=.695, CCR=.901, purchase intention AVE=.605, CCR=.883, economic value AVE=.732, CCR=.891, social value AVE=.690, CCR=.869, psychological value AVE=.743, CCR=.897.

This indicates higher than the AVE threshold of 0.5 and CCR threshold of 0.7, which were described earlier, and thus the measurements in this study were evaluated to have focused validity. In addition, the reliability coefficient (Cronbach's α) for the items that make up the factors is inflight service α =.837, stability α =.732, booking and ticketing α =.881, flight service α =.786, price α =.806, mileage α =.899, enterprise image α =.891, attitude α =.891, subjective regulation α =.941, positive expectation α =.955, negative expectation α =.943, perceptual behavior control α =.857, aspiration B=.931, behavior intention α =.948.

Therefore, as shown in Table 5, the measurements in this study were assessed to be sufficient for reliability.

**Table 5:** Results of Focused Feasibility and Reliability Verification on the Concept of Composition

| Factor | Item | Std. C | S.E. | C.R. | p | AVE | CCR | Cronbach's(α) |
|---|---|---|---|---|---|---|---|---|
| Interaction | Interaction 1 | .649 | - | - | - | .534 | .820 | .772 |
| | Interaction 2 | .681 | .130 | 7.930 | *** | | | |
| | Interaction 3 | .808 | .157 | 9.490 | *** | | | |
| | Interaction 4 | .774 | .147 | 9.340 | *** | | | |
| Convenience | Convenience 1 | .832 | - | - | - | .672 | .891 | .888 |
| | Convenience 2 | .870 | .055 | 19.139 | .003 | | | |
| | Convenience 3 | .765 | .057 | 15.887 | .002 | | | |
| | Convenience 4 | .809 | .059 | 17.232 | .002 | | | |
| Entertainment | Entertainment 1 | .760 | - | - | - | .652 | .882 | .881 |
| | Entertainment 2 | .776 | .069 | 14.281 | *** | | | |
| | Entertainment 3 | .873 | .074 | 16.136 | *** | | | |
| | Entertainment 4 | .817 | .073 | 15.113 | *** | | | |
| Brand Image | Brand Image 1 | .710 | - | - | - | .579 | .846 | .842 |
| | Brand Image 2 | .729 | .088 | 12.335 | *** | | | |
| | Brand Image 3 | .793 | .080 | 13.349 | *** | | | |
| | Brand Image 4 | .808 | .084 | 13.567 | *** | | | |
| Brand Attitude | Brand Attitude 1 | .833 | - | - | - | .695 | .901 | .901 |
| | Brand Attitude 2 | .808 | .050 | 17.671 | *** | | | |
| | Brand Attitude3 | .836 | .053 | 18.629 | *** | | | |
| | Brand Attitude 4 | .858 | .050 | 19.409 | | | | |
| Purchase Intention | Purchase Intention 1 | .796 | - | - | - | .605 | .883 | .882 |
| | Purchase Intention 2 | .783 | .060 | 15.866 | | | | |
| | Purchase Intention 3 | .620 | .067 | 11.882 | *** | | | |
| | Purchase Intention 4 | .827 | .058 | 17.069 | | | | |
| | Purchase Intention 5 | .843 | .065 | 17.531 | *** | | | |
| Economic Value | Economic Value 1 | .799 | - | - | - | .732 | .891 | .888 |
| | Economic Value 2 | .895 | .062 | 18.912 | *** | | | |
| | Economic Value 34 | .869 | .062 | 18.201 | *** | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Social Value | Social Value 1 | .701 | - | - | - | .690 | .869 | .859 |
| | Social Value 2 | .898 | .089 | 15.068 | *** | | | |
| | Social Value 3 | .879 | .089 | 14.822 | *** | | | |
| Psychological Value | Psychological Value 1 | .855 | - | - | - | .743 | .897 | .896 |
| | Psychological Value 2 | .867 | .050 | 20.684 | *** | | | |
| | Psychological Value 3 | .864 | .051 | 20.553 | *** | | | |
| $\chi^2$=973.450(df=491, p=.000), $\chi^2$/df=1.983, RMR=.055, GFI=.853, AGFI=.822, NFI=.902, TLI=.935, CFI=.943, RMSEA=.054 | | | | | | | | |
| ***: p<.001 | | | | | | | | |

## 4.3. Hypothesis Test

### 4.3.1. Structural Equation Model Analysis Results

In this study, the proposed model was analyzed for the verification of the hypothesis and the research hypothesis was verified through path coefficient estimation. As a result of hypothesis verification based on the final model, the conformity results of the study model are as Figure 3.
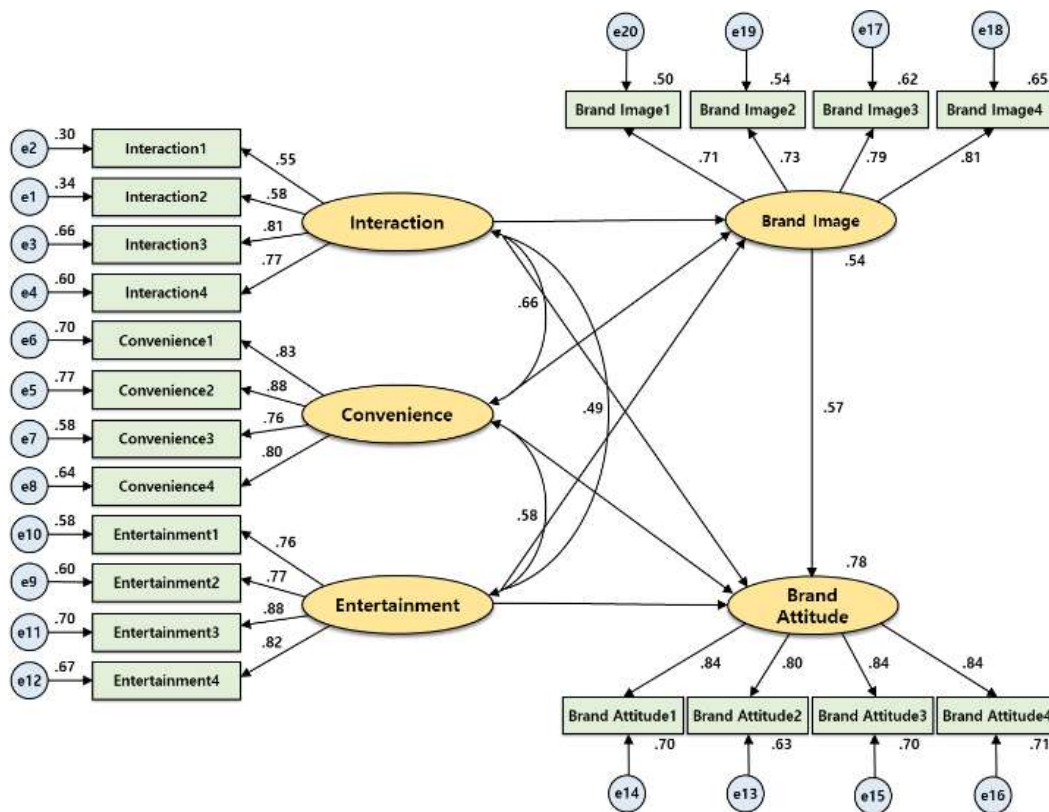


**Figure 3.** Structural Equation Model Analysis Results

The $\chi^2$ value of 616.335 (df=263, p=.000) among the fitted values of the structural equation model established for hypothesis verification in this study was shown to be statistically significant. This fails to reject the null hypothesis that the input covariance matrix is the same as the estimated covariance matrix', and it can be judged that the research model is not suitable by adopting the alternative hypothesis that 'the input covariance matrix differs from the estimated

covariance matrix'. However, as mentioned in the confirmed factor analysis, $\chi^2$ value was determined by additional identification of a relatively free goodness-of-fit index for the number of samples, rather than by definitive conclusions, as the number of samples could increase together to reduce the model's fit.

Other fits for the structural equation model in this study, except for the $\chi^2$ value, are $\chi^2/df=2.343$, RMR=.065, GFI=.867, AGFI=.835, NFI=.903, TLI=.926, CFI=.935, RMSEA=.The measurement model of this study can be judged to be appropriate, as it shows that the GFI and AGFI values affected by sample size were slightly lower, but the goodness-of-fit indices such as RMR, NFI, TLI, CFI, and RMSEA, which are relatively free of sample numbers, can meet the criteria.

### 4.3.2. Validation of Perceived Value Adjustment Effectiveness

In this study, for verification of the effectiveness of perceived value control on airline SNS marketing and brand image and brand attitude, the perceived sub-factors of value were divided into high and low groups based on the average of economic value, social value, and psychological value, and comparisons were made between those groups. To this end, we performed a comparison of changes in the $\chi^2$ value with changes in the degree of freedom of the non-constrained model and the constrained constraint model with respective paths, and the detailed results were as follows.

First, the results of the verification of the effectiveness of perceived value control in the relationship between airline SNS marketing and brand image is shown in Table 6.

The path coefficient for groups of high economic value in the effect of H2-1's verification on brand image is .326 (C.R.=1.889, p>.05) was shown and interactivity did not significantly affect the brand image. Also, the path coefficient for groups with low economic value is .142(C.R.=.279, p>.05) was shown and interactivity did not significantly affect the brand image. On the other hand, validating the differences in $\chi^2$ values between the non-constrained model and the constrained model of the interaction and the influence of the brand image shows that the $\chi^2$ value change is lower than 3.84 as the degree of freedom changes, making no significant difference between high and low economically valuable groups. Therefore, H2-1 was rejected.

The route coefficient for groups of high economic value in terms of the impact of H2-2 verification on brand image is 0.077 (C.R.=1.018, p>.05) and entertainment did not significantly affect the brand image. In addition, the path coefficient for groups with low economic value is .193 (C.R.=2.505, p<.05) and that entertainment has a significant impact on the brand image. On the other hand, validating the difference between the $\chi^2$ value of the non-constrained model and the constrained model of the brand image and the A value change is higher than 3.84 as the degree of freedom changes, showing significant differences in economic value between high and low groups. Therefore, H2-2 was adopted.

The path coefficient for groups of high economic value in terms of the impact of convenience on brand image as a result of the verification of H2-3 is 1.111 (C.R.=2.031, p<.05) and convenience was shown to have a significant impact on brand image. In addition, the path coefficient for groups with low economic value is .360 (C.R.=4.927, p<.001) and convenience has been shown to have a significant impact on brand image. On the other hand, validating the difference between $\chi^2$ values of the non-constrained model and the constrained model of the influence of convenience and brand image shows that the $\chi^2$ value change is lower than 3.84 as the degree of freedom changes, making no significant difference between high and low economic value groups. Therefore, H2-3 was rejected.

The path coefficient for groups of high social value in the effect of H2-4's verification on brand image is .285 (C.R.=1.619, p>.05) was shown and interactivity did not significantly affect the brand image. In addition, the path coefficient for groups with low social values is .220 (C.R.=2.135, p<.05) was shown and interactivity was shown to have a significant impact on brand image. On the other hand, we validate the difference between the $\chi^2$ value of the non-constrained model and the constrained model of the influence of the interaction and brand image, and the non-constrained model show that the $\chi^2$ value change is higher than 3.84 as the degree of freedom changes by 1. That is, there are significant differences between groups of high and low social values. Therefore, H2-4 was adopted.

The path coefficient for groups of high social value in terms of the impact of H2-5 verification on brand image is 0.081(C.R.=1.093, p>.05) and entertainment did not significantly affect the brand image. In addition, the path coefficient for groups with low social values is .093 (C.R.=1.270, p<.05) and entertainment did not have a significant impact on brand image of the brand. On the other hand, validating the difference in $\chi^2$ values between the non-restriction model and the constrained model of the brand image showed that the $\chi^2$ value change was lower than 3.84 as the degree of freedom changed, making no significant difference between the high and low social value groups. Therefore, H2-5 was rejected.

The path coefficient for groups of high social value in terms of the impact of convenience on brand image as a result of the verification of H2-6 is .219(C.R.=2.677, p<. 01) and that convenience had a significant impact on brand image. In addition, the path coefficient for groups with low social values is .286 (C.R.=4.332, p<.001) and convenience has been shown to have a significant impact on brand image. On the other hand, we validate the difference between the $\chi^2$ value of the non-constrained model and the constrained model of the influence of convenience and brand image, and the non-constrained model show a change of $\chi^2$ value less than 3.84 as the degree of freedom changes by 1. That is, there is no significant difference between groups of high and low social values. Therefore, H2-6 was rejected.

The path coefficient for groups of high psychological value in the effect of H2-7's verification on brand image is .208 (C.R.=1.105, p>.05) was shown and interactivity did not significantly affect the brand image. Also, the path coefficient for groups with low psychological value is .1998 (C.R.=2.042, p<.05) was shown and interactivity was shown to have a significant impact on brand image. On the other hand, we validate the difference between the $\chi^2$ value of the non-constrained model and the constrained model of the influence of the interaction and brand image, and the non-constrained model show that the $\chi^2$ value change is higher than 3.84 as the degree of freedom changes by 1. It has been shown that there are significant differences between groups of high psychological value and low psychological value. Therefore, H2-7 was adopted.

The path coefficient for groups of high psychological value in terms of the impact of H2-8 verification on brand image is .187(C.R.=2.025, p<.05) and that entertainment has a significant impact on the brand image. In addition, the path coefficient for groups with low psychological value is .082 (C.R.=1.377, p>.05) and entertainment did not have a significant impact on brand image of the brand. On the other hand, we validate the difference between the $\chi^2$ value of the non-constrained model and the constrained model of the influence of the brand image and the non-constrained model showed that the $\chi^2$ value change is higher than 3.84 as the degree of freedom changes by 1. There are significant differences between groups of high psychological value and low psychological value. Therefore, H2-8 was adopted.

The path coefficient for groups of high psychological value in the effect of convenience on brand image as a result of H2-9's verification .243(C.R.=3.133, p<.01) and that convenience had a significant impact on brand image. In addition, the path coefficient for groups with low psychological value is .278(C.R.=4.320, p<.001) and convenience has been shown to have a significant impact on brand image. On the other hand, we validate the difference between the $\chi^2$ value of the non-constrained model and the constrained model of the influence of convenience and brand image, and the non-constrained model show a change of $\chi^2$ value less than 3.84 as the degree of freedom changes by 1. There was no significant difference between groups of high psychological value and those of low psychological value. Therefore, H2-9 was rejected.

**Table 6:** The Effect of Controlling Perceived Values in the Relationship between Airline's SNS Marketing and Brand Image

| Path | | | | Non Std.Coefficient | Std.error | C.R | $\Delta\chi^2$ (df) |
|---|---|---|---|---|---|---|---|
| Economic Value (high) | Interaction | | | .326 | .173 | 1.889 | 2.552(1) < 3.84 |
| Economic Value (low) | | | | .142 | .131 | .279 | |
| Economic Value (high) | Entertainment | $\rightarrow$ | Brand Image | .077 | .076 | 1.018 | 4.551(1) > 3.84 |
| Economic Value (low) | | | | .193 | .077 | 2.505* | |
| Economic Value (high) | Convenience | | | .111 | .055 | 2.031* | 2.248(1) < 3.84 |
| Economic Value (low) | | | | .360 | .073 | 4.927*** | |
| Social Value (high) | Interaction | $\rightarrow$ | Brand Image | .285 | .176 | 1.619 | 3.985(1) > 3.84 |
| Social Value(high) | | | | .220 | .103 | 2.135* | |
| Social Value (high) | Entertainment | | | .081 | .074 | 1.093 | 2.115(1) < 3.84 |

| | | | | Non Std.Coefficient | Std.error | C.R | Δχ² (df) |
|---|---|---|---|---|---|---|---|
| Social Value (low) | | | | .093 | .073 | 1.270 | |
| Social Value (high) | Convenience | | | .219 | .082 | 2.677** | 2.187(1) < 3.84 |
| Social Value (low) | | | | .286 | .066 | 4.332*** | |
| Psychological Value(high) | Interaction | | | .208 | .188 | 1.105 | 4.011(1) > 3.84 |
| Psychological Value(low) | | | | .198 | .097 | 2.042* | |
| Psychological Value(high) | Entertainment | → | Brand Image | .187 | .092 | 2.025* | 3.904(1) > 3.84 |
| Psychological Value(low) | | | | .082 | .060 | 1.377 | |
| Psychological Value(high) | Convenience | | | .243 | .077 | 3.133** | 2.211(1) < 3.84 |
| Psychological Value(low) | | | | .278 | .064 | 4.320*** | |
| *:p<.05, **:p<.01, ***:p<.001 | | | | | | | |

On the other hand, the results of the verification of the effectiveness of perceived value control in the relationship between airline SNS marketing and brand attitude are shown in Table 6.

**Table 6:** The Effect of Controlling Perceived Values in the Relationship between Airline's SNS Marketing and Brand Attitude

| Path | | | | Non Std.Coefficient | Std.error | C.R | Δχ² (df) |
|---|---|---|---|---|---|---|---|
| Economic Value (high) | Interaction | | | .027 | .191 | .140 | 4.112(1) > 3.84 |
| Economic Value (low) | | | | .370 | .121 | 3.064** | |
| Economic Value (high) | Entertainment | → | Brand Attitude | .334 | .102 | 3.272** | 3.988(1) > 3.84 |
| Economic Value (low) | | | | .099 | .064 | 1.561 | |
| Economic Value (high) | Convenience | | | .178 | .068 | 2.611** | 2.201(1) < 3.84 |
| Economic Value (low) | | | | .220 | .068 | 3.255** | |
| Social Value (high) | Interaction | | | .274 | .171 | 1.603 | 3.867(1) > 3.84 |
| Social Value (low) | | | | .198 | .101 | 1.960* | |
| Social Value (high) | Entertainment | → | Brand Attitude | .189 | .072 | 2.626** | 3.991(1) > 3.84 |
| Social Value (low) | | | | .149 | .089 | 1.683 | |
| Social Value (high) | Convenience | | | .337 | .083 | 4.049*** | 2.215(1) < 3.84 |
| Social Value (low) | | | | .261 | .071 | 3.684*** | |
| Psychological Value(high) | Interaction | → | Brand Attitude | .149 | .208 | .716 | 4.053(1) > 3.84 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Psychological Value(low) | | | | .255 | .096 | 2.665** | |
| Psychological Value(high) | Entertainment | | | .218 | .105 | 2.080* | 1.565(1) |
| Psychological Value(low) | | | | .126 | .057 | 2.221* | < 3.84 |
| Psychological Value(high) | Convenience | | | .215 | .089 | 2.423* | 2.215(1) |
| Psychological Value(low) | | | | .228 | .065 | 3.487*** | < 3.84 |
| *: p<.05, **: p<.01, ***: p<.001 | | | | | | | |

The path coefficient for groups of high economic value in the effect of H3-1 on brand attitudes is 0.027 (C.R.=.140, p>.05) was shown and interactivity was not significantly affected by brand attitudes. In addition, the path coefficient for groups with low economic value is .370(C.R.=3.064, p<.01 and showed that interactivity had a significant impact on brand attitudes of brands. On the other hand, we validate the difference between the $x^2$ value of the non-constrained model and the constrained model of the influence of interaction and brand attitude on that path, and the $x^2$ value change is higher than 3.84 as the degree of freedom changes by 1. Significant differences were found between groups of high economic value and those of low economic value. Therefore, H3-1 was adopted.

The path coefficient for groups of high economic value in the effect of entertainment on brand attitudes as a result of H3-2 verification is .334 (C.R.=3.272, p<.01) and entertainment was shown to have a significant impact on brand attitudes. In addition, the path coefficient for groups with low economic value is 0.099 (C.R.=1.561, p>.05) and entertainment did not have a significantly affect brand attitudes. On the other hand, we validate the difference between the $x^2$ value of the non-constrained model and the constrained model of the influence of entertainment and brand attitude on that path, and the $x^2$ value change is higher than 3.84 as the degree of freedom changes by 1. Significant differences were found between groups of high economic value and those of low economic value. Therefore, H3-2 was adopted.

The verification of H3-3 showed that the path coefficient for groups with high economic value was .178 (C.R.=2.611, p=.01) and that convenience had a significant impact on brand attitudes. In addition, the path coefficient for groups with low economic value is .220(C.R.=3.255, p<.01) and convenience was shown to have a significant impact on brand attitudes. On the other hand, we validate the difference between the $x^2$ value of the non-constrained model and the constrained model of the influence of convenience and brand attitude on that path, and the $x^2$ value change is lower than 3.84 as the degree of freedom changes by 1. There was no significant difference between groups of high and low economic value. Therefore, H3-3 was rejected.

The path coefficient for groups of high social value in the effect of H3-4's interaction on brand attitudes is .274 (C.R.=1.603, p>.05) was shown and interactivity was not significantly affected by brand attitudes. In addition, the path coefficient for groups with low social values is 1.198 (C.R.=1.960, p<.05) and interaction was shown to have a significant impact on brand attitudes. On the other hand, we validate the difference between the $x^2$ value of the non-constrained model and the constrained model of the influence of interaction and brand attitude on that path, and the $x^2$ value change is higher than 3.84 as the degree of freedom changes by 1. There are significant differences between groups of high social value and those of low social value. Therefore, H3-4 was adopted.

The path coefficient for groups of high social value in the effect of entertainment on brand attitudes as a result of H3-5 verification is .189(C.R.=2.626, p<.01) and entertainment was shown to have a significant impact on brand attitudes. In addition, the path coefficient for groups with low social values is 1.149 (C.R.=1.683, p>.05) and entertainment did not have a significantly affect brand attitudes. On the other hand, we validate the difference between the $x^2$ values of the non-constrained model and the constrained model of the influence of entertainment and brand attitude on that path, and the $x^2$ value change is higher than 3.84 as the degree of freedom changes by 1. That there are significant differences between groups of high social value and those of low social value. Therefore, H3-5 was adopted.

The path coefficient for groups of high social value in the effect of convenience on brand attitudes as a result of the verification of H3-6 is .337(C.R.=4.049, p<.001) and convenience was shown to have a significant impact on brand attitudes. In addition, the path coefficient for groups with low social values is .261 (C.R.=3.684, p<.001) and convenience has been shown to have a significant impact on brand attitudes. On the other hand, we validate the difference between the $x^2$ value of the non-constrained model and the constrained model of the influence of

convenience and brand attitude on that path, and the $x^2$ value change is lower than 3.84 as the degree of freedom changes by 1. There was no significant difference between groups of high and low social values. Therefore, H3-6 was rejected.

The path coefficient for groups of high psychological value in the effect of interaction on brand attitudes as a result of the verification of H3-7 (C.R.=.716, p>.05) was shown and interactivity was not significantly affected by brand attitudes. In addition, the path coefficient for groups with low psychological value is .255 (C.R.=2.665, p<.01) and showed that interactivity had a significant impact on brand attitudes of brands. On the other hand, we validate the difference between the $x^2$ values of the non-constrained model and the constrained model of the influence of interaction and brand attitude on that path, and the $x^2$ value change is higher than 3.84 as the degree of freedom changes by 1. That there are significant differences between groups of high psychological value and low psychological value. Therefore, H3-7 was adopted.

The path coefficient for groups of high psychological value in the effect of entertainment on brand attitudes as a result of H3-8 verification is .218(C.R.=2.080, p<.05) and entertainment was shown to have a significant impact on brand attitudes. In addition, the path coefficient for groups with low psychological value is .126(C.R.=2.221, p<.05) and entertainment was shown to have a significant impact on brand attitudes. On the other hand, we validate the difference between the $x^2$ values of the non-constrained model and the constrained model of the influence of entertainment and brand attitude on that path, and the $x^2$ value change is lower than 3.84 as the degree of freedom changes by 1. There was no significant difference between groups of high psychological value and those of low psychological value. Therefore, H3-8 was rejected.

The path coefficient for groups of high psychological value in the effect of convenience on brand attitudes as a result of H3-9, p<.215(C.R.=2.423, C.R.05) and convenience was shown to have a significant impact on brand attitudes. In addition, the path coefficient for groups with low psychological value is .228(C.R.=3.487, p<.001) and convenience has been shown to have a significant impact on brand attitudes. On the other hand, we validate the difference between the $x^2$ value of the non-constrained model and the constrained model of the influence of convenience and brand attitude on that path, and the $x^2$ value change is lower than 3.84 as the degree of freedom changes by 1. There was no significant difference between groups of high psychological value and those of low psychological value. Therefore, H3-9 was rejected.

## 5. Conclusions

The summary of the results of this study is as follows.

First, hypothesis 1 is 'According to demographic characteristics, airline SNS marketing will show differences in the airline's brand image and airline attitude', and according to gender, age, and SNS usage time, airline SNS marketing characteristics such as interactivity, entertainment, thee three factors of convenience showed differences, and were adopted as they showed significant differences in both the brand image and brand attitude.

Second, hypothesis 2 is 'Airline SNS marketing will affect the airline's brand attitude according to the perceived value of customers', and three factors such as interactivity, entertainment, and convenience, which are the characteristics of airline SNS marketing, were introduced. All of the factors were adopted because they showed significant moderating effects with both brand attitude.

Third, hypothesis 3 is 'Airline SNS marketing will affect the airline's brand image according to the value perceived by customers', and three factors such as interactivity, entertainment, and convenience, which are the characteristics of airline SNS marketing, were introduced. Both of the factors were adopted because they showed significant control effects with both brand image.

The differences in SNS marketing factors, brand image, and brand attitude according to gender, age, and SNS usage time can be utilized according to the target market.

In addition, since the value perceived by customers is affected by the brand image and brand attitude, meaningful implications for differentiating and utilizing the perceived value of customers according to airlines were presented.

The results of this study were to derive the main factors necessary for airlines in a fiercely competitive environment to use SNS marketing and to prove the relationship between the factors, their moderating effect, and causal relationship.

Among the characteristics of airline SNS marketing, factors of interaction, entertainment and convenience have been shown to have a significant impact on airline brand image and airline brand attitude. Based on these results, airline marketers will need to pay attention to, research, and utilize these characteristics in SNS marketing activities.

This can be used as basic data for effective marketing of the adjustment effect of the perceived value and the value of SNS of airlines, and is expected to provide implications to the aviation industry. In addition, the perceived value of users has been shown to affect SNS marketing's brand image and brand attitude. It suggests that more efficient SNS marketing can be achieved if the perceived value of the users is utilized.

This study is meaningful in presenting the direction and necessity of SNS marketing, which has recently emerged as a major marketing tool for airlines, and in verifying its effectiveness empirically. However, this work also has certain limitations, and we would like to present these limitations, which should be supplemented in future studies, and also provide directions for the study. First, based on prior studies, this study presented three factors of SNS marketing characteristics, interaction, entertainment, and convenience of airlines, and designed a research model based on them. However, these three characteristics alone do not fully identify the airline's SNS characteristics. Therefore, further research on SNS characteristics is needed in addition to these characteristics in future studies. Second, in this study, full service carrier (FSC) and low-cost carrier (LCC) airlines were analyzed without distinction, but as the LCC aviation market was expanded, the comparison of airlines by FSC and LCC could be expanded. Third, in this study, only Koreans collected data, but the results of the study may vary depending on Koreans and foreigners. It is difficult for airlines to generalize their research results because the utilization rate of not only Koreans but also foreigners is high. Therefore, future research will need to be analyzed for foreigners who have experienced SNS marketing of airlines.

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