Effects of Verbal and Nonverbal Communication Subfactors on Purchase Intention through Empathy and Product Reliability

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Abstract

In this study, the effects of show host's verbal communication subfactors, such as paralanguage, friendliness, and professionalism, as well as nonverbal communication subfactors, such as demonstration attitude, appearance, and attractiveness, on purchase intention were examined by evaluating customer empathy and product reliability. Data was collected from 20s–50s females. SPSS 23.0 and AMOS 23.0 were used for data analysis. The results revealed that professionalism and friendliness had a positive impact on customer empathy; however, friendliness had a negative impact on product reliability. Moreover, nonverbal communication subfactors had a positive impact on empathy, and appearance had a positive impact on product reliability. In contrast, attractiveness had a negative impact on product reliability, whereas empathy and product reliability had a positive impact on purchase intention. Thus, ensuring appropriate verbal and nonverbal communication is essential for customer empathy and product reliability. Given that a show host's friendliness, professional verbal communication, demonstration attitude, appearance, and attractiveness have a positive impact on customer empathy, these factors should be considered critical qualities of show hosts.

Key words: Show host, Verbal communication subfactors, Nonverbal communication subfactors, Empathy, Product reliability

I. Introduction

As non-store distribution channels have diversified in recent years, it is difficult to interact directly with consumers and there is the issue that products cannot be seen or used directly. Seller communication thus gains importance in increasing consumer satisfaction and purchase intention. In particular, the importance of show host communication of TV home shopping, which has a large market size and the role of sellers among non-store channels, cannot be overlooked (Korea Television Homeshopping Association, n.d.).

A show host enables consumers to have an indirect experience with a product by physically using or experiencing it on their behalf. By utilizing the product on behalf of the consumer and successfully conveying the experience of using it, the show host may trigger the consumer's purchase intention. Several studies on show host persuasion suggest that the show host's message influences purchase intention (Hwang, 2022; Lee & Park, 2021; Park, 2021). The product description, indirect experience, and purchase recommendation provided by the show host play a vital role in customers' purchasing decisions (Jeong & Kim, 2018; Kim & An, 2015). In terms of the show host's effect, it was reported that 77.4 percent of purchases were made as a result of a host's explanation and suggestion, whereas 20.0 percent were made on an impulse while watch-
ing the broadcast without a purchasing plan in place (Kwon et al., 2011; Park, 2021). In some cases, impulsive and unplanned purchase intentions are often made after hearing information about show host’s scarcity message that limits sales time and quantity (Park, 2020). Show hosts boost sales through TV home shopping (Park, 2021).

Show host communication is verbal and nonverbal, and each has its own subfactors. The former includes content language, paralanguage, professional explanation, professionalism, vocabulary explanation, argument persuasion, and empathy; the latter includes physical behavior, spatial and pseudo language, and physical appearance and contact (Choi et al., 2016; Chung & Jung, 2013; Kim, 2020). This communication factors show a difference in the influence on consumers' reactions and purchase intentions (Chung & Jung, 2013; Lee, 2021). However, studies have either focused on verbal communication alone or have revealed the differences between verbal and nonverbal communication (Jeong & Kim, 2022; Kwon et al., 2011; Yu, 2007). No study has examined the influence of any of the subfactors on consumers. It is necessary to study how each subfactor of show hosts' communication specifically affects purchase intention.

Wu et al. (2022) showed the influence of show host reliability on customer purchase intention, while Joo et al. (2008) demonstrated that the closer the relationship between show hosts and consumers, the greater the purchase intention. In other words, the type of communication of show hosts not only directly affects purchase intention, but also indirectly affects purchase intention through the mediators perceived by consumers. It is to clarify how consumers react emotionally according to each subfactor of communication and how they react to the reliability of the product, and to find out how this emotional response and product reliability affect purchase intention.

Among other forms, sales through TV home shopping broadcasting amounted to 31,407 billion won in 2018, 31,462 billion won in 2019, 30,903 billion won in 2020, and 31,115 billion won in 2021 (Korea Television Homeshopping Association, n.d.). However, as newer distribution channels for home shopping have emerged in recent times, it is time for new-communication strategy for TV home shopping (Jang, 2022). Therefore, this study examines how messages of specific subfactors of show host communication in home shopping react to purchase intention through consumer empathy and reliability. If the difference in the influence of each communication subfactor on consumer purchase intention is revealed, it will be possible to establish a specific communication strategy for show hosts. Based on the literature, the communication subfactors of show hosts in this study comprised paralanguage, friendliness, and professionalism, and nonverbal communication factors comprised subfactors of demonstration attitude, and appearance reliability and attractiveness. A model of the show host communication process of this study was established based on the communication process model (Lasswell, 1948, as cited in Ko et al., 2012). Show host's scarcity message is also affecting consumers' purchases, so additionally the sensitivity of consumers to quantity limiting factors and time-critical factors is verified, and purchase status of TV homes hopping is revealed. The results of this study can be used for the new specific marketing mix of show hosts.

II. Theoretical Background

1. Communication of the Show Host

1) Types and Roles of Communication

Communication is a human behavior that connects people and builds relationships. Various methods such as gestures and language are used. According to the communication process theory, when a communicator encodes and delivers what he or she wants to convey, the receiver decodes the encoded content and responds, and this response is fed back to the sender (Lasswell, 1948, as cited in Ko et al., 2012), that is, communication is the exchange of information through messages to accomplish a specified objective, such as the purchase or sale of products or services. It is a set of processes that causes the communicators' behaviors and
attitudes to change (Chung & Jung, 2015; Lee & Park, 2021). The communication process is shown in Fig. 1. It is essential for a supplier of products or services to accurately recognize communication skills such as efficient communication planning and selection and effective usage of proper verbal elements (Kim, 2007). In particular, TV home shopping's show host evokes purchase intention or favorable attitude toward the product through explanation and direct demonstration using information related to the product as a communicator (Kim, 2020). In a study by Shon et al. (2021) and Park (2021), it was also said that the communication of live commerce show hosts has a significant effect on consumer purchases.

Communication, the most basic form of interaction between product providers and consumers, can be verbal and nonverbal, such as attitude, expression, and morality (Hwang, 2022). Verbal communication serves as a tool for exchanging opinions and information between providers and consumers. It can facilitate mutual understanding and improve clarity (Gabbott & Hogg, 2000). Thus, it has the benefit of clearly and rapidly conveying an idea through the use of language in the interactions between consumers and vendors, and receiving an immediate response (Lee & Park, 2017). From this perspective, studies on the provision of services have shown that verbal communication has a substantial impact on consumer reliability, loyalty, and satisfaction (Chung & Jung, 2015; Park et al., 2013). Nonverbal communication includes both appearance and behavior, which consumers observe; it is a significant element in how they evaluate service quality (Sundaram & Webster, 2000). Although nonverbal communication is characterized differently by studies, most studies have suggested that it is a more effective technique than verbal communication in expressing emotions and representing personality or attitudes (Lee & Park, 2021). Nonverbal communication is critical as it delivers the meaning more simply and precisely, based on the context (Argyle, 1994). Nonverbal communication has a favorable influence on consumer's attitudes such as satisfaction, orientation, and long-term relationships, in a service context (Kim & Lee, 2009). In home shopping, consumers' reactions can be shaped based on the show host's message, and judgment, emotion, reliability, and loyalty to the product can be formed. There may be a response to purchase intention or behavior. Therefore, this study attempts to identify a structural model for the effect of specific subfactors of verbal and nonverbal communication on purchase intention.

2) Verbal Communication

Language serves as a primary means of communication, the mechanism for transmitting and expressing meaning, and the core of human communication (Park, 2021). It involves transmitting a message through symbols that represent the key content, ideas, events, and objects (Chung & Jung, 2013). Language is a set of phonetic signs and has a system. Choe (2009) argued
that language should be capable of influencing audiences through the acquisition and use of many words and appropriate tones. Humans express themselves and communicate and interact with each other through verbal communication, which is also significant for marketing. With increased competition, verbal communication becomes more vital in persuading customers (Yang & Kim, 2020; Yoon, 2017). It is a necessary part of product sales. Verbal communication in product sales shapes consumers' psychological and behavioral reactions. According to Choe (2009), vendors can elicit positive sentiments and reactions from consumers by welcoming and interacting with them from the moment they enter the store until they leave, delivering an easy-to-understand and straightforward explanation of the products and services available, and expressing empathy for the consumer. He argued that such communication can have a positive effect on the company. As the purpose of the show host's language in TV home shopping is to enhance a consumer's purchasing behavior, the host's language should encourage purchase desire while also providing information (Kim & An, 2015; Park & Kim, 2018; Tak & Shi, 2013; Yang & Kim, 2016). Consumers can empathize with their problems or effects through the show host's product explanation and demonstration, and gain faith and reliability in the product. If consumers believe that the show host provides accurate product information and high-quality items, it may result in increased product reliability (Kang & Jin, 2018). Kim and Heo (2021) found that when the show host demonstrates expertise, the customer's purchase intention increased. A consumer's belief in a product is based on the professional explanation provided by the show host.

Verbal communication subfactors include professionalism and veracity (Choi, 2011), linguistic competence, the explanatory and persuasive power of vocabulary, and empathy (Chung & Jung, 2013). Kim (2017) classified verbal communication as a factor of professionalism, reliability, and attractiveness. The key factors affecting verbal communication include the use of appropriate language, delivery of an organized message in the product description, professionalism and reliability of the product description, and ability to communicate in an attractive and empathetic manner.

The tempo and intonation of speech, pronunciation, professional information delivery on products, and the capacity to communicate verbally in a manner that elicits empathy or intimacy were all considered components of verbal communication in this study. After the analysis of the factors of verbal communication and confirming specific subfactors, the effects of these subfactors on empathy or product reliability and purchase intention were identified as the research hypothesis.

3) Nonverbal Communication
Nonverbal communication is involves the transmission of meaning and emotion through facial expressions, gestures, postures, gaze, behavior, and variations in voice tone and body forms. Verbal messages are conveyed along with nonverbal messages. Sometimes, nonverbal communication may convey a greater degree of meaning than verbal communication. The host's nonverbal communication is used to persuade and marketing is employed to elicit product purchase intentions and induce product purchase behavior (Chung & Jung, 2013). Nonverbal communication contributes toward the formation of intimacy and empathy between a show host and consumers, which precedes the formation of purchase intentions. Birdwhistell (1970) defined nonverbal communication as the exchange of information through nonverbal signs, arguing that action language accounted for 65% of communication situations and spoken language accounted for 35%.

Studies have defined nonverbal communication as all forms of communication other than verbal ones. It may express various messages and feelings directly or indirectly. Nonverbal communication factors have a significant role to play in persuasion. A speaker's appearance and voice, instead of the quality of the message, have an effect on persuasion. Studies on the influence of nonverbal communication on audiences have been conducted based on such evidence. It plays a critical role in enhancing purchase intentions and be-
haviors (Kim & An, 2015; Lee, 2021).

Consumer’s interest in products increases as consumer sympathizes with the effectiveness or reliability in products through the appearance of show hosts or the changed appearance of models (Jeong & Kim, 2018). Empathy for the message that the show host wants to deliver in TV home shopping is the factor that has the greatest influence on the purchase intention of the product. Kim and An (2015) said that show hosts have a direct influence on purchase intention by evoking emotional reactions. Lee (2021) empirically analyzed that a show host’s nonverbal communication has a positive effect on purchase intention as it conveys the emotions of the person who wants to deliver the message. Chung and Jung (2013) also revealed that physical behavior, which is a non-verbal communication of show hosts, affects purchase intention. Show host is to stimulate consumers’ purchases by inducing emotional engagement through non-verbal communication.

Previous studies on subfactors of nonverbal communication have shown that Previous studies on subfactors of nonverbal communication were classified by Lee and Park (2017) as physical behavior, similar language, and physical appearance, while Cho and Kim (2016) defined elements according to empirical ability, communication ability, and rapid response. In the study of Hwang (2022), it was classified into body language and appearance language. The factors were revised and supplemented for this study based on previous research, with an emphasis on the reliability and attractiveness that customers perceive via the demonstration attitude and the appearance and impression of the show host such as appearance reliability, appearance attractiveness. After verifying the subfactors of nonverbal communication through factor analysis, the influence of these factors on empathy, product reliability, and purchase intention was developed as the research hypothesis.

2. Empathy and Product Reliability

1) Empathy and Purchase Intention

Emotions in the consumption process are reactions that occur immediately when encountering the elements constituting the purchase environment (Lee, 2021). Show hosts’ emotional ties in the course of interacting with consumers while explaining products and advising on purchases lead to satisfaction with products and purchase intentions. Empathy has positive effects (Ferguson et al., 2021).

Emotions occur immediately after encountering the elements constituting the purchase environment (Lee, 2021). According to Kim and An (2015), empathy for show hosts in TV home shopping was found to be a factor that had the greatest influence on purchase intention. Empathy is an important variable in attitude change, and in TV home shopping, it can be seen that the change is sympathized with the change through the explanation of the show host or the changed appearance of the demonstration model, and interest in the product increases. Positive empathy through a show host’s experience with product use or the changed appearance of the demonstration model increases product satisfaction (Jeong & Kim, 2018).

Based on one’s level of empathy, it may have a positive effect in encouraging purchase (Jeong, 2016; Jeong & Kim, 2018; Lee & Kang, 2012). A show host’s explanation or changed appearance of the demonstration model sympathizes, and it can be seen that interest in the product also increases (Jeong & Kim, 2018; Lee & Joo, 2011). Through the message of the home shopping host, consumers see, feel, and empathize with the experience of the protagonist in the advertisement.

Emotions elicited by a home shopping host may be transferred to other stimuli (Mitchell & Olson, 1981). Consumers who experience empathy become interested in the products, which eventually results in a purchase. Consumers who give meaning to a product recognize the relationship between the brand and product and themselves as if it were a human relationship and develop empathy (Lim et al., 2015). If this takes place repeatedly, it can evolve into purchase behavior. The greater one’s emotional involvement in a beauty show via TV home shopping, the greater one relies on broadcasters and items (Park, 2017). This implies that positive empathy fosters trust, and that the stronger the
emotional response and the more favorable the sentiment, the more consumers develop trust in the product. These feelings and product reliability will lead to more purchases. Therefore, the effect of empathy on product reliability and purchase intention was set as a research hypothesis.

2) **Product Reliability and Purchase Intention**

Reliability refers to the degree to which customers trust a company’s products and services. Trust is important in interpersonal interactions and manifests between buyers and sellers in product sales situations (Gefen, 2000). Reliability is constantly established and is significant in creating loyalty and sustaining long-term relationships. In a transaction, trust-related responses function as antecedents for satisfaction, transaction intention, or purchase behavior (Chun & Park, 2012). Park (2022) identified that trust-based loyalty has a considerable influence on the intention to revisit. Bae (2006) also found that the formation of emotional and cognitive trust in service providers had a significant effect on purchase intention. Reliability is a necessary emotion for the establishment of relationships between people or objects, and is widely considered the most critical component of marketing (Kim, 2016). Communication plays an important role in building this trust (Lee, 2021).

A product comprises numerous attributes. Intrinsic essential attributes pertain to the physical aspects of a product that affect its quality (Lee, 2009), whereas extrinsic secondary attributes refer to information on the product, such as its price and design. Kim and Koh (2010) demonstrated that when consumers lack exact information on intrinsic product features, they evaluate products based on external clues, that is, consumers with little product knowledge rely heavily on extrinsic attributes as they are unfamiliar with intrinsic ones. Given that consumers cannot examine a product directly in the case of a purchase through TV home shopping, product reliability is critical as it serves as an important medium to resolve anxiety. Product reliability has a positive effect on the purchase intention of a product or service (H. J. Lee, 2019). When a consumer trusts the information provider, product reliability emerges. It leads to considerations for purchase. In the case of TV home shopping, trust in the product is very important because you cannot see the product in person. In addition, show hosts play an important role in relieving consumers’ anxiety by using products on behalf of consumers and communicating their experiences. Thus, the effect of the sub-elements of communication on purchase intention through empathy and product reliability was set as a research hypothesis.

**III. Methodology**

Confirmatory factor analysis (CFA) was used to determine the verbal and nonverbal communication subfactors. The structural equation model (SEM) was verified by concretizing the research hypotheses.

1. **Measurement Tool and Data Collection**

One of the products with a high sales rate on TV home Shopping was beauty products (Jeon, 2021). Therefore, this study examines message effects of specific subfactors of show host communication among beauty products in home shopping. This study measured the verbal and nonverbal communication factors of TV home shopping show hosts, empathy, product reliability, and purchase intentions using questionnaires. Questionnaires from Choi (2011), Chung and Jung (2013), and Kim (2017) were relied on for items on verbal communication. Questions on nonverbal communication were modified and adjusted versions of those from Cho and Kim (2016), Chung (2013), and Lee (2007). A total of 13 questions were drafted to assess empathy, including modified and new items developed by our research team in a previous study (Jeong & Kim, 2018). The questionnaire items in Kim and Kim (2011) were referred to as measures of product reliability, and in Choi (2016) and Chung (2013) as measures of purchase intention.

Following a preliminary survey, questions were re-
vised and updated to create the final questionnaire. SPSS 23.0 and AMOS 23.0 were used for data analysis. Exploratory factor analysis, Cronbach’s α, CFA, and structural equation modeling were conducted.

2. Research Hypothesis and Model

In this study, the hypotheses centered on the verbal and nonverbal communication subfactors of home shopping show hosts, product reliability, and the empathy and purchase intention of consumers. A research model was drawn up (Fig. 2). The verbal communication subfactors, determined through CFA, were para-language, friendliness, and professionalism (Cho & Kim, 2016; Choi, 2011; Chung, 2013; Lee, 2007; Tak & Shi 2013). The nonverbal communication subfactors were demonstration attitude, and appearance reliability and attractiveness (Chung, 2013; Kim & An, 2015). The theoretical background of each of the following research hypotheses is not described again here due to the limitation of the number of pages, but it was established based on the previous theoretical background. The hypotheses are as follows:

H1: The show host's verbal communication subfactors have a positive (+) effect on empathy and product reliability.

H1-1: Paralanguage has a positive (+) effect on empathy.
H1-2: Paralanguage has a positive (+) effect on product reliability.
H1-3: Friendliness has a positive (+) effect on empathy.
H1-4: Friendliness has a positive (+) effect on product reliability.
H1-5: Professionalism has a positive (+) effect on empathy.
H1-6: Professionalism has a positive (+) effect on product reliability.

H2: The show host nonverbal communication subfactors have a positive (+) effect on empathy and product reliability.

H2-1: Demonstration attitude has a positive (+) effect on empathy.
H2-2: Demonstration attitude has a positive (+) effect on product reliability.
H2-3: Appearance reliability has a positive (+) effect on empathy.
H2-4: Appearance reliability has a positive (+) effect on product reliability.
H2-5: Appearance attractiveness has a positive (+) effect on empathy.
H2-6: Appearance attractiveness has a positive (+) effect on product reliability.

H3: Empathy has a positive (+) effect on purchase intention.

H4: Empathy has a positive (+) effect on product reliability.

H5: Product reliability has a positive (+) effect on purchase intention.

H6: The show host’s verbal communication subfactor has a positive (+) effect on purchase intention through empathy and product reliability.

H6-1: Paralanguage has a positive (+) effect on purchase intention through empathy and product reliability.
H6-2: Friendliness has a positive (+) effect on purchase intention through empathy and product reliability.
H6-3: Professionalism has a positive (+) effect on purchase intention through empathy and product reliability.
H6-4: The show host’s verbal communication subfactor has a positive (+) effect on product reliability through empathy.

H7: The show host’s nonverbal communication subfactor has a positive (+) effect on purchase intention through empathy and product reliability.

H7-1: Demonstration attitude has a positive (+) effect on purchase intention through empathy and product reliability.
H7-2: Appearance reliability has a positive (+) effect on purchase intention through empathy and product reliability.
H7-3: Appearance attractiveness has a positive (+) effect on purchase intention through empathy and product reliability.

H7-4: The show host’s nonverbal communication subfactor has a positive (+) effect on product reliability through empathy.


As a result of verifying the sensitivity of home shopping consumers to quantity limiting factor and time-critical factor (paired t-test, \( p < .001 \)), the time-critical factor (\( m = 3.34 \)) was higher than the quantity limiting factor (\( m = 3.22 \)). It can be seen that consumers are more sensitive to time-critical factor.

The current state of TV home shopping purchase is as follows. First, automatic order telephone (33.7%), mobile apps (31.6%), internet shopping malls (16.1%), caller connection auto-order phone (15.1%), and others (3.5%) were used to purchase beauty products. Consumers purchased products, followed by 43.8% in the middle of the broadcast (within 15 minutes to 45 minutes), 31.0% in the second half of the broadcast (within 45 minutes to 5 minutes before the show), 10.3% in the first half (within 5 minutes of the show), and 37% immediately after the show. Of the total, 69.2% viewers watched TV home shopping accidentally, whereas 16.1%, 13.8%, and 1.0% viewed it to purchase products, obtain product information, and for other reasons, respectively.

IV. Results

1. Model's Goodness-of-fit and CFA

CFA was conducted using the AMOS 23.0 software to assess the validity of the measurement variables. The following subfactor structure was found. Verbal communication comprised paralanguage, friendliness, and professionalism, and nonverbal communication comprised appearance reliability and attractiveness, and demonstration attitude. Product reliability and purchase intention had an independent factor structure.
The model's goodness-of-fit was \( \chi^2 = 3096.600 \) (df = 674), RMR = .042, GFI = .768, IFI = .886, CFI = .886, and RMSEA = .081, all of which satisfied requisite conditions. Four subfactors appeared for empathy, but to reduce the complexity of the model, they were integrated and applied as one because the complexity of the model increased when many items were used as observation variables in the SEM (Yu, 2012). To assess the convergent validity of each factor, factor loadings, significance, AVE, and construct reliability were assessed. At the \( p < .000 \) level, all factor loadings were above .500, all CR values were above 1.965, the AVE values were above the accepted level of .500, and the construct reliability was above the accepted level of .700. Thus, it was confirmed that each construct had convergent validity (Table 1).

Table 1. Result of confirmatory factor analysis

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item</th>
<th>Factor loading</th>
<th>S.E.</th>
<th>CR</th>
<th>Standardized factor loading</th>
<th>AVE</th>
<th>Construct reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal communication</td>
<td>The pronunciation of the home shopping host is accurate.</td>
<td>.962</td>
<td>.038</td>
<td>25.273</td>
<td>.854</td>
<td>.717</td>
<td>.884</td>
</tr>
<tr>
<td></td>
<td>The home shopping host is good at explaining things clearly.</td>
<td>.912</td>
<td>.041</td>
<td>22.078</td>
<td>.785</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The speech tempo of the home shopping host is appropriate.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friendliness</td>
<td>The home shopping host appears to be speaking directly to me for the explanation.</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
<td>.898</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The explanation given by the home shopping host is as if given by an acquaintance or friend.</td>
<td>.962</td>
<td>.038</td>
<td>25.273</td>
<td>.854</td>
<td>.655</td>
<td>.850</td>
</tr>
<tr>
<td></td>
<td>The home shopping host's explanation is appealing.</td>
<td>.819</td>
<td>.046</td>
<td>17.739</td>
<td>.736</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professionalism</td>
<td>The home shopping host is skilled at presenting the characteristics of beauty products.</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
<td>.774</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The home shopping host provides clear explanations of the most recent information on beauty products.</td>
<td>.962</td>
<td>.038</td>
<td>25.273</td>
<td>.854</td>
<td>.675</td>
<td>.861</td>
</tr>
<tr>
<td></td>
<td>The home shopping host's description of beauty products is professional.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-verbal communication</td>
<td>The home shopping host manages eye-contact appropriately depending on the circumstance.</td>
<td>.955</td>
<td>.042</td>
<td>22.716</td>
<td>.804</td>
<td>.738</td>
<td>.894</td>
</tr>
<tr>
<td>Demonstration attitude</td>
<td>The home shopping host is skilled at demonstrating.</td>
<td>.970</td>
<td>.035</td>
<td>27.323</td>
<td>.900</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***\( p < .001 \)
### Table 1. Continued I

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item</th>
<th>Factor loading</th>
<th>S.E.</th>
<th>CR</th>
<th>Standardized factor loading</th>
<th>AVE</th>
<th>Construct reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Non-verbal communication</strong></td>
<td>The appearance of the home shopping host is attractive.</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The appearance of the home shopping host attract the attention.</td>
<td>0.993</td>
<td>0.027</td>
<td>36.476</td>
<td>0.930</td>
<td>0.759</td>
<td>0.934</td>
</tr>
<tr>
<td></td>
<td>The home shopping host has a charming face and physical attractiveness.</td>
<td>0.907</td>
<td>0.030</td>
<td>29.794</td>
<td>0.861</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Home shopping host is good-looking.</td>
<td>0.917</td>
<td>0.035</td>
<td>26.571</td>
<td>0.819</td>
<td>0.748</td>
<td>0.899</td>
</tr>
<tr>
<td><strong>Empathy for the effect of product usage</strong></td>
<td>I sometimes empathize with the altered look of the home shopping model.</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>When describing the product, the effect that occurs with the home shopping model seems to be occurring with me as well.</td>
<td>1.093</td>
<td>0.042</td>
<td>25.854</td>
<td>0.897</td>
<td>0.760</td>
<td>0.905</td>
</tr>
<tr>
<td></td>
<td>I have felt that the effect of product usage demonstrated in home shopping would happen to me.</td>
<td>0.947</td>
<td>0.040</td>
<td>23.975</td>
<td>0.854</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Empathy for model problem</strong></td>
<td>The problem with the model demonstrating home shopping products seems to be the same as mine.</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
<td></td>
<td>0.738</td>
<td>0.918</td>
</tr>
<tr>
<td></td>
<td>I feel that the situation for the usage of the product described in home shopping is the same as my situation.</td>
<td>0.948</td>
<td>0.037</td>
<td>25.552</td>
<td>0.837</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>When I watch home shopping, I feel like I am one of the home shopping models.</td>
<td>1.089</td>
<td>0.038</td>
<td>28.971</td>
<td>0.892</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p<.001

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- 1170 -
### Table 1. Continued II

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item</th>
<th>Factor loading</th>
<th>S.E.</th>
<th>CR</th>
<th>Standardized factor loading</th>
<th>AVE</th>
<th>Construct reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Empathy</strong></td>
<td>It seems as if the host of the home shopping host delivers a wealth of information on the product.</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
<td>.823</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>When I watch the home shopping show, I feel that I should use the product.</td>
<td>1.157</td>
<td>.051</td>
<td>22.598</td>
<td>.862</td>
<td>.675</td>
<td>.862</td>
</tr>
<tr>
<td></td>
<td>I could sense the benefits of the product that the home shopping host was attempting to demonstrate.</td>
<td>.953</td>
<td>.048</td>
<td>19.728</td>
<td>.778</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Product reliability</strong></td>
<td>Beauty products from the home shopping channel are reliable.</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
<td>.925</td>
<td>.730</td>
<td>.915</td>
</tr>
<tr>
<td></td>
<td>Beauty products from the home shopping channel are trustworthy.</td>
<td>1.011</td>
<td>.029</td>
<td>35.234</td>
<td>.921</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beauty products from the home shopping channel do not disappoint me.</td>
<td>.920</td>
<td>.034</td>
<td>26.771</td>
<td>.822</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Beauty products from the home shopping channel are always satisfactory.</td>
<td>.862</td>
<td>.040</td>
<td>21.620</td>
<td>.736</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Purchase intention</strong></td>
<td>I’m considering repurchasing beauty products from home shopping.</td>
<td>1.000</td>
<td>-</td>
<td>-</td>
<td>.885</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I will tell other people the benefit of the beauty products that I purchased from the home shopping channel.</td>
<td>.986</td>
<td>.035</td>
<td>28.355</td>
<td>.873</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>I will recommend the beauty product I purchased from the home shopping channel to others.</td>
<td>1.017</td>
<td>.032</td>
<td>31.343</td>
<td>.914</td>
<td>.799</td>
<td>.941</td>
</tr>
<tr>
<td></td>
<td>I have a repurchase intention for the beauty products I bought from the TV home shopping channel.</td>
<td>1.105</td>
<td>.036</td>
<td>30.612</td>
<td>.904</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p<.001

2. Validity Test

To assess the discriminant validity of the measurement variable, the AVE value of the latent variable was compared to the squared value of the correlation coefficient between both variables. The square of the correlation coefficient among all variables was less than the AVE value, indicating that the discriminant validity between latent variables was confirmed (Table 2).

3. Testing the Hypotheses

The SEM was examined using the covariance matrix and maximum likelihood estimation (MLE). The model's goodness-of-fit was $\chi^2 = 2144.932$, (df = 429), GFI = .796, IFI = .893, CFI = .892, RMSEA = .088. After allowing a covariance between error terms in the model using the modification index, the model fit was improved to $\chi^2 = 1918.144$ (df = 425), GFI = .818, IFI = .907, CFI = .906, RMSEA = .083 (Fig. 3). Although it did not meet the GFI standard of .900 or more, it was considered good because it was close to .900 at .833 (C.-K. Lee, 2019).

H1-1 and H1-2 were rejected. H1-3 was supported with a path coefficient of .236 ($t = 3.488, p<.001$). H1-4 was rejected with a path coefficient of -.169 ($t = -2.380$, t = -2.380, ...
p > .05). H1-5 was supported with a path coefficient of .122 (t = 2.170, p > .05). H1-6 was rejected. The para-
language, such as the show host’s pronunciation and speech tempo had no significant effect on empathy or product reliability. If the show host explained the product in a friendly manner, consumers developed empathy for the product as if it were meant for them, resulting in purchase intention.

However, friendly explanations had a negative effect on the reliability of the product. A friendly de-
scription of a product did not lead to the product reliability. If the show host’s explaining skills were professional and effectively conveyed the most recent information, consumers empathized with them and accepted their explanation, which resulted in purchase intention. This empathy affects purchase intention (.259) and may lead to purchase in the future. These findings are consistent with those of Chung and Jung (2013) and Cho and Kim (2016), who demonstrated that the show host’s verbal communication skills had a significant influence on purchase intention. However, it did not appear to have a significant effect on product reliability. It was thus confirmed that it is difficult to obtain trust in the product with verbal communication factors alone. For nonverbal communication, the path coefficient of H2-1 was -.220 (t = -2.613, p > .01). It was rejected because it had a negative (−) effect. H2-2 was rejected, too. H2-3 was supported with the path coefficient of .276 (t = 4.624, p < .001). H2-4 was also supported. The path coefficient of this hypothesis was

### Table 2. Average variance extracted and squared correlation coefficient of variables

| Factor                      | Paralanguage | Friendliness | Professionalism | Demonstration attitude | Appearance reliability | Appearance in attractiveness | Empathy for the effect of product usage | Empathy for the model problem | Empathy for the problem | Product purchase empathy | Product reliability | Purchase intention |
|-----------------------------|--------------|--------------|-----------------|------------------------|------------------------|-------------------------------|---------------------------------------|---------------------------------|----------------------------|------------------------|----------------------|----------------------|----------------------|
| Paralanguage                | .717         |              |                 |                        |                        |                               |                                       |                                 |                            |                        |                      |                      |
| Friendliness                | .494         | .655         |                 |                        |                        |                               |                                       |                                 |                            |                        |                      |                      |
| Professionalism             | .612         | .607         | .675            |                        |                        |                               |                                       |                                 |                            |                        |                      |                      |
| Demonstration attitude      | .752         | .587         | .609            | .738                   |                        |                               |                                       |                                 |                            |                        |                      |                      |
| Appearance reliability      | .324         | .722         | .484            | .498                   | .830                   |                               |                                       |                                 |                            |                        |                      |                      |
| Appearance in attractiveness| .476         | .524         | .463            | .662                   | .608                   | .759                          |                                       |                                 |                            |                        |                      |                      |
| Empathy for the effect of product usage | .280       | .511         | .389            | .346                   | .564                   | .429                          | .748                                  |                                 |                            |                        |                      |                      |
| Empathy for the model problem | .231       | .547         | .485            | .473                   | .522                   | .633                          | .616                                  | .760                             |                            |                        |                      |                      |
| Empathy for the problem     | .403         | .598         | .354            | .329                   | .617                   | .488                          | .817                                  | .796                             | .738                        |                        |                      |                      |
| Product purchase empathy    | .496         | .474         | .515            | .506                   | .536                   | .616                          | .766                                  | .706                             | .728                        | .675                   |                      |                      |
| Product reliability         | .355         | .519         | .442            | .431                   | .675                   | .437                          | .634                                  | .491                             | .572                        | .580                   | .730                 |                      |
| Purchase intention          | .528         | .411         | .460            | .599                   | .430                   | .562                          | .578                                  | .531                             | .428                        | .656                   | .663                 | .799                 |


Effects of Verbal and Nonverbal Communication Subfactors on Purchase Intention through Empathy and Product Reliability

H2-5 was supported with the path coefficient of .396 ($t = 6.386, p > .001$). H2-6 was rejected with the path coefficient $-0.202$ ($t = -3.028, p > .01$). It was rejected because it had a negative (−) effect. The show host's demonstration attitude had no significant positive influence on empathy and product reliability because the effect of the show host's effective presentation skills were perceived as the effect of the demonstration skills rather than that of the product. The show host's appearance reliability had a substantial influence on empathy and product reliability, which resulted in purchase intention. If the show host seemed trustworthy, consumers empathized with the product's effects, and felt as though the show host was telling their own story, and gained confidence in the product. If the show host was attractive, consumers empathized with the show host's message, but this had a negative effect on product reliability. When a show host was appealing, consumers felt like the show host's appearance differed from their own, and believed that the physical beauty of the show host was attributable to the appearance attractiveness of the show host, rather than the effect of the product. Thus, it is presumed that this will have a negative impact on product reliability. Nonverbal communication subfactors such as a show host's appearance reliability and attractiveness had a greater effect on empathy than did verbal communication. The show host's nonverbal communication factors, such as appearance reliability and attractiveness are critical, as consumers cannot directly utilize beauty products and must evaluate them based on visual information. Consumers who felt empathy for the show host eventually developed purchase intentions (Jeong & Kim, 2018). This finding was similar to that of previous studies (Chung, 2013). H3 was supported with the path coefficient of .259 ($t = 4.830, p > .01$). H4 was supported with the path coefficient of .464 ($t = 8.385, p > .01$). Empathy had a direct effect on purchase intention and product reliability. This is consistent with the findings of Jeong and Kim (2018), who reported that potential customers empathize with the show host's description or model, which results in purchase. H5 was supported with a path coefficient of .458 ($t = 9.554, p > .01$). This finding is consistent with
those of Cho and Kim (2016) and Kang and Jin (2018), indicating that product reliability is a significant factor influencing purchase decisions.

4. Mediating Effect Test

Effect decomposition was conducted to analyze the mediating effect of the show host’s verbal communication and nonverbal communication on purchase intention through empathy and product reliability. Through this, indirect effects were confirmed, and statistical significance for indirect effects was analyzed (Table 3).

Subfactors of show host’s verbal communication did not have an indirect influence on purchase intention. However, appearance reliability, which is a subfactor of nonverbal communication, indirectly affected purchase intention through empathy and product reliability.

As a result of confirming the significance of the indirect effect, friendliness, a subfactor of verbal communication, was affecting product reliability through empathy, and indirect effects of appearance attractiveness and appearance reliability, subfactors of verbal communication, were also significant. Empathy indirectly affected purchase intention through product reliability. Thus, the mediating effect of empathy and product reliability was partially adopted. That is, when consumers feel familiar with the product explained by the show host and feel the same as those explained by the people around them, the product described by the show host feels like a product for them, and consumers feel empathy and this affects the reliability of the product. If consumers perceive that the problems of home shopping show hosts or models are similar to them, or sympathize with changes through the changed appearance of the demonstration model, they can also see an increase in interest in products (Jeong & Kim, 2018; Lee & Joo, 2011). This is similar to the results of a study by Jeong and Kim (2018) that potential consumers sympathize with the product through the explanation and model of the show host, leading to purchase.

The hypothesis of H6-1, H6-2, and H6-3, each subfactor of verbal communication, will have a positive (+) effect on purchase intention through empathy and product reliability were rejected. The hypothesis of H7-1 and H7-3, demonstration skill and appearance attractiveness of nonverbal communication, will have a positive (+) effect on purchase intention through empathy and product reliability were rejected. But on the other hand, appearance reliability will have a positive (+) effect on purchase intention through empathy and product reliability accepted. The hypothesis of H6-4, H7-4, friendliness, demonstration skill and appearance attractiveness, will have a positive (+) effect on product reliability through empathy were accepted. It can be inferred that the positive empathy formed on the consumer leads to reliability, and the higher the emotional response, the more product reliability the consumer forms, which can eventually lead to purchase.

<table>
<thead>
<tr>
<th>Table 3. Indirect effect analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variables</strong></td>
</tr>
<tr>
<td>Empathy</td>
</tr>
<tr>
<td>Product reliability</td>
</tr>
<tr>
<td>Purchase intention</td>
</tr>
</tbody>
</table>

*p<.05, **p<.01
Hypotheses H1-3, H1-5, H2-3, H2-4, H2-5, H3, H4, H5 were accepted, H1-1, H1-2, H1-4, H1-6, H2-1. H2-2, H2-6, H6-1, H6-2, H6-3, and H7-1, H7-3 were rejected. H6-4, H7-4 were partially accepted.

V. Conclusions

In this study, the subfactor effects of verbal communication and nonverbal communication deployed by home shopping show hosts on purchase intention as mediated by consumer empathy and product reliability were examined. Beauty products with high sales in home shopping were targeted. The results of the study are summarized as follows.

First, CFA was conducted to confirm that all factors were independent. The goodness-of-fit was significant, indicating that an appropriate association had been developed on logical grounds. The convergent and discriminant validity were also confirmed. The SEM was examined, which showed that purchase intention is enhanced through the development of empathy and increased product reliability through verbal and nonverbal communication. Among the subfactors of verbal communication, paralanguage did not affect empathy and product reliability. Friendliness had a positive effect on empathy, and a negative effect on product reliability. This is thought to be because consumers perceive that friendly explanations alone interfere with rational judgments about product trust. It was difficult to obtain product reliability with the subfactors of verbal communication alone. Among the subfactors of nonverbal communication, appearance reliability affected empathy and product reliability. Appearance attractiveness affected empathy positively. However, appearance attractiveness affected product reliability negatively, and if the show host's demonstration attitude was too skillful, it affected empathy negatively. It is interpreted that consumers perceive that the attractiveness or demonstration of a show host is due to the appearance and proficiency of the show host's demonstration rather than the effect of the product. Verbal communication subfactors did not affect purchase intention directly, though nonverbal communication subfactor did. The show host's appearance reliability indirectly affected purchase intention through empathy and product reliability. Verbal friendliness and nonverbal appearance reliability and attractiveness had an effect on product reliability through empathy.

Therefore, the show host may boost purchase intention by eliciting customer empathy for the effect of products or problems described through the use of verbal and nonverbal messages. Given that empathy and product reliability have an effect on purchase intentions, it is important to employ verbal and nonverbal communication to elicit empathy and product reliability from consumers. Given that the show host's friendly and professional verbal message, and appearance reliability and attractiveness have a positive influence on consumer empathy, these factors should be considered critical. A show host with a high level of appearance reliability would be ideal for goods that need high product reliability. If a show host is attractive or has a good appearance, and explains friendly, the reliability of the product would decrease. If product reliability is critical, a show host with an excessively attractive appearance would be inappropriate. Delivering the message with high friendliness increases empathy but decreases product reliability. The method of delivery is determined in accordance with the communication strategy and characteristics of the product.

Appearance reliability of the show host affected purchase intention through empathy and product reliability. Nonverbal factors did not show both the direct effect on purchase intention and the mediating effect of emphasis and product reliability. This is presumed to be because in the case of appearance-related products, if the effect is not visually seen, they are not purchased. Empathy affects product reliability, which affects purchase intention. Friendly explanation, appearance reliability and attractiveness affect product reliability through empathy as a medium. That is, empathy is a critical path for products that need a high degree of self-involvement, such as beauty or fashion products. To improve purchase intention, it is vital to elicit a consumer's positive empathy and reliability toward
products, leading them to make a purchase. Show hosts should acquire unexcessive friendly and professional explanatory skills for products, appropriate and reliable appearance, and demonstration skills and attitudes that do not look too skillful, deliver persuasive messages to consumers and elicit empathy. Therefore, show hosts should induce purchase motivation by making suitable demonstrations for the situation, natural expressions, images, etc. fit the product image.

This study supports the communication process theory. That is, based on the above results, applying the show host's communication process theory, the sender is a show host, and the encoded message is paralanguage, friendliness, professionalism, demonstration attitude, and appearance reliability, and appearance attractiveness. This message is transmitted through the TV. The recipient, namely the consumer, causes a purchase reaction by decoding empathy and product reliability. This reaction is fed back to the sender. The above show host's communication delivery model can be used as a strategic theoretical model for fashion related product sellers. In practice, it is expected that if an emotional interaction takes place between the show host and consumer, and the consumer's trust in the product increases via effective communication, friendly and professional description, demonstration attitude, and appearance reliability, and appearance attractiveness. It can increase their purchase intention. According to the results of the TV home shopping purchase status survey, most consumers ordered in the middle of the broadcast, and many watched the broadcast by accident. In addition, they reacted sensitively to scarcity messages such as quantity limiting factors and time-critical factors, and responded sensitively to time-critical messages more than quantity limiting messages. This is a similar result to the study of Kwon and Choi (2021). Therefore, home shopping consumers may engage in impulse or unplanned purchases, and even if they happen to see it, they can know that they purchase it after fully understanding the contents while watching the broadcast. In this regard, it was confirmed once again that the role of the show host is important.

This finding may be used to improve the communication subfactor strategy and enhance the education of the show host. In a follow-up study, we will reveal the difference in the models according to the age of consumers and the type of product. Future research should investigate the influence of live commerce's communication, which has recently emerged.

1. Acknowledgement
Not applicable

2. Ethics and consent
This research was conducted under the approval and supervision of Gachon University Institutional Review Board (IRB Approval No:1044396-202204-HR-011-01) regarding ethical issues including consent to participate.

3. Availability of data and materials
Not applicable

4. Conflicting interests
Not applicable

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6. Authors' contributions
HEJ and MYK conceived of the presented idea and developed the theory. HEJ performed the computations. HEJ and MYK verified the analytical methods. MYK supervised the findings of this work. All authors discussed the results and contributed to the final manuscript.

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