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Managing Negative Comments in Live Streaming Commerce: How Streamer Responses Shape Audience Behavior

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Summary

INTRODUCTION

This thesis explores the phenomenon of live streaming shopping, an emerging sales format born in 2016 in China. The live streaming commerce merges the characteristics of television shopping, such as visual product demonstration, with features of traditional e-commerce, and the live interaction, typical of offline shopping experience, thanks to the implementation of live streaming technology. In live streaming shopping the streamer showcases the products while audience interacts with him and with each other through a live chat. Due to its high levels of dynamism and engagement, live streaming shopping has gained worldwide popularity among brands and companies, since it is considered a solution to satisfy the need for an immersive and unique online shopping experience.

The key features of live streaming shopping format are real-time user-generated comments shared on the live chat and the presence of a streamer. As in the other digital commerce context, such as e-commerce, user-generated comments can be a critical aspect in live streaming shopping. Real-time user-generated comments can carry an emotional charge, both positive and negative, and can be interiorized by readers. Consequently, the comments, particularly those negative, can shape the attitudes and purchasing behaviors of connected audience.

As in other digital contexts, negative comments cannot be avoided, and streamer is the one in charge of dealing with negative comments to minimize their negative effect by recurring to response management. However, while response management has been mainly explored in digital context like e-commerce, it remains not deeply explored in live streaming commerce. Specifically, the main objective of this thesis is to investigate the effects of streamer's response with accommodative or defensive communication style on audience attitudes. The thesis is divided into four chapters.

The first chapter contains a paragraph focusing on defining the live streaming shopping and on providing visibility regarding the dimensions of this market. It also examines the role of

user-generated comments, their emotional valence, and their potential impact on other individuals through emotional contagion theory.

In chapter two the attention shifts to the role of streamer and of streamer's interactivity in live streaming shopping model.

While the third chapter concentrates on the conducted experimental study. This chapter can be subdivided into three sections: identification of research gap, description of the adopted methodology and results of the analysis via SPSS. The study specifically examines the effects of accommodative versus defensive communication styles in streamer response to negative comments on audience attitudes, considering as mediators: perceived professionalism and perceived honesty.

The last chapter, entitled "General discussion", reflects on the results gained and indicates theoretical contributions, that enrich the literature, managerial contributions, useful for brands and managers with the will to recur to live streaming commerce format, and the limitation and future research gap.

CHAPTER 1

1.1 INTRODUCTION TO THE PHENOMENON OF LIVE STREAMING COMMERCE

A phenomenon considered precursor of Live streaming commerce is TV shopping (Wang et al., 2021). In this selling model, hosts used to present a live television program to demonstrate and introduce products while answering consumers' questions and inquiries via telephone (Stephens et. al., 1996). The aim of these programs and TV shopping channels was to sell products and not entertain. According to some past studies, the main reasons why consumers used to watch TV shopping were shopping convenience (Lim & Kim, 2011), satisfaction of entertainment requirements (Cortese and Rubin, 2010), and reduction of loneliness thanks to the establishment of a parasocial interaction between host-consumer (Kang & Ridgway, 1996). However, with technological evolution and the rise of e-commerce this selling model has lost popularity.

Indeed, e-commerce has fundamentally transformed consumer shopping habits due to its unique advantages, such as convenience, unrestricted purchasing (24 hours on 7 days), time saving (anywhere and at any time), broader products selection, and greater accessibility (Merritt & Zhao, 2022). Recent studies (Mehta et al., 2020) suggest that consumer behavior is once again evolving, with shoppers seeking a more engaging and immersive online experience.

This growing demand for a novel shopping journey led Alibaba, the Chinese e-retailer giant, to figure out a way to integrate the e-commerce model with live streaming, a digital medium experimenting in that period with multiple improvements thanks to new technologies. In 2016 Alibaba gave rise to the phenomenon of live streaming commerce through the launch of the first live streaming shopping platform ever (McKinsey & Company, 2021). After the creation of Taobao Live, live streaming commerce model was soon replicated in the Chinese market by Alibaba's main competitors, such as WeChat, ByteDance, and Douyin.

The potential behind live streaming commerce was globally recognized by brands, companies and retailers only during the Covid-19 pandemic, as it allowed to overcome, in a dynamic and engaging manner, the inability to shop in physical stores, unlike traditional e-commerce.

Since live streaming commerce merges electronic commerce with live streaming, it's essential to clarify what live streaming technology is.

Live streaming combines real-time video content with chat interaction through Internet or social media platforms, such as Twitch, enabling individuals to broadcast and view other users live-content, while synchronously interacting with social functions such as chatting, following, and subscribing (Merritt & Zhao, 2022). As a result, live streaming technology permits to obtain an increased interactivity between people who are not in the same location for many activities in daily life, including entertainment, gaming, education, and further social activities (Zhicong et al., 2018).

As for live streaming, live streaming commerce lacks a standard and universal definition. According to Cai and Wohn (2019), live streaming commerce is definable as a form of digital commerce with the attributes of social commerce, that integrates real-time social interaction into e-commerce.

Since potential shoppers engage in live streaming commerce on their mobile phone or computer (Picot-Coupey et al., 2023), live streaming commerce presents itself through four major channels:

1) Electronic commerce platforms and mobile apps integrating live streaming commerce features, such as Amazon and Taobao.
2) Brand-owned electronic commerce websites and apps integrating live commerce sections, such as UNIQLO ITALY.
3) Live streaming platform and apps incorporating commercial activities such as Douyin and Live.me.
4) Social media and social networking sites that add live streaming functions to favor sales such as TikTok, Facebook, and Instagram (Luo et al., 2023).

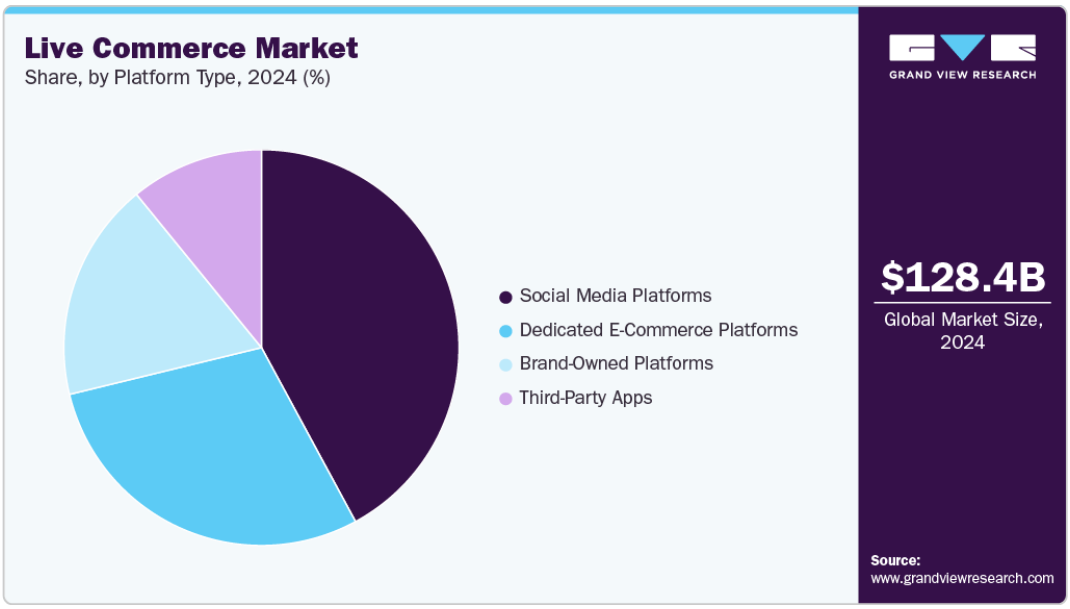


Figure 1: Live Commerce Market, focus on channels (Live Commerce Market Size & Share | Industry Report, 2033, s.d.)

Live streaming commerce is considered a new and dynamic format of e-commerce suitable for many product and services categories, from clothes and fresh foods to holiday packages and insurances.

This format is mainly used by companies to reach consumers directly and to realize sales through live interactive shopping sessions directed by one or more broadcasters.

To adopt the live streaming commerce format, companies hire broadcasters, such as key opinion leaders or average people, to play the role of salesperson (Hu & Chaudhry, 2020; Chen & Zhang, 2023).

Broadcasters' work consists of offering flash discounts (Lu & Chen, 2021), presenting products from different perspectives, and demonstrating their usage (Wongkitrungrueng & Assarut, 2020) to allow consumers to see products in action before making a purchase decision.

As a result, the figure of the broadcaster helps consumers gain dynamic and real product information and virtually "touch" the product, reducing the perceived risk associated with online transactions.

For example, past research in fashion showed that live streaming allowed connected users to see how clothes really looked when worn by the streamer, increasing online audience confidence in the promoted items (Cui et al., 2023).
In contrast, in traditional e-commerce consumers can learn about products only through pre-designed textual content, pre-edited static images, and pre-recorded promotional videos (Xu et al., 2020).

Live streaming commerce is often described as an advanced version of social commerce (Doong, 2021), i.e. a model based on direct and complete integration of the purchase process within a social platform (without being redirected from social media to a company website). Both in live streaming commerce and in social commerce, consumers can interact with their commerce, peers' interaction relies on information created, published, and shared by users and online shoppers on social media, such as reviews, feedback, and number of likes, which may influence purchasing decisions.
While in live streaming commerce, peers' interactions take place on a well-designed live-chat interface (Doong, 2021) used during streaming sessions by users to comment freely and voice their own opinion in real-time (Merritt & Zhao, 2022).
In addition, through live-chat, online shoppers can also ask streamer directly specific product-service-oriented questions and express concerns. The streamer may respond to users in real-time, generating vivid and customized information accessible to all those connected to the live session (Liu et al., 2023). This functionality brings live-streaming commerce closer to one of the main benefits of in-store shopping, i.e., asking directly questions to the seller before buying the products.

In conclusion, to sum up, live streaming e-commerce has emerged as an extension of TV shopping in the digital age. However, it results in a more complex model, since it merges the characteristics of television shopping, such as visual product demonstration, with the consumer's exploration of product information, typical of traditional e-commerce, and the live interaction, typical of offline shopping experience (Yun et al., 2023; Han, 2022), thanks to the implementation of live streaming technology.

According to a 2024 report by Grand View Research, the global live commerce market is a promising market. In 2024 it was valued at $128,42 billion and is projected to grow at a compound annual growth rate (CAGR) of 39,9% between 2025 and 2033, reaching an estimated value of $2469,06 billion (*Live Commerce Market Size & Share | Industry Report, 2033*, s.d.). This 2033 projected market size depends on the increasing demand for interactive and immersive shopping experiences, the proliferation of social media platforms, and mobile penetration (*Live Commerce Market Size & Share | Industry Report, 2033*, s.d.).

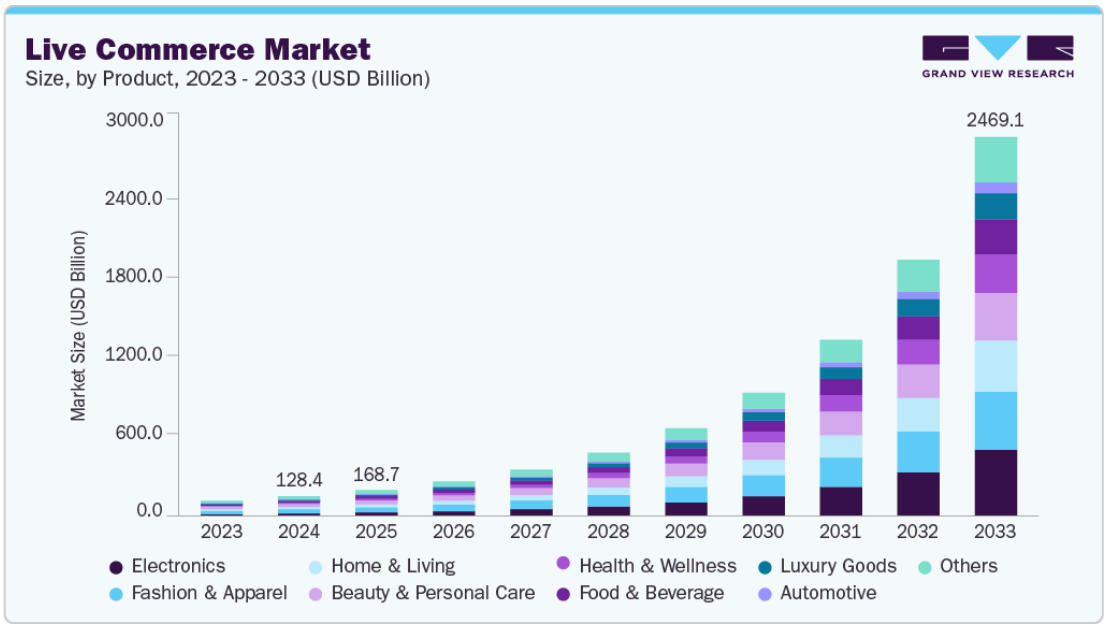


Figure 2: Live Commerce Market (Live Commerce Market Size & Share | Industry Report, 2033, s.d.)

However live streaming commerce format is still mainly and strongly consolidated in Asia-Pacific Market, specifically in its original market, i.e. the Chinese one, due to the region's mobile-first population, high social media engagement, and the widespread use of super apps that integrate shopping, payments, and streaming (*Live Commerce Market Size & Share | Industry Report, 2033*, s.d.).

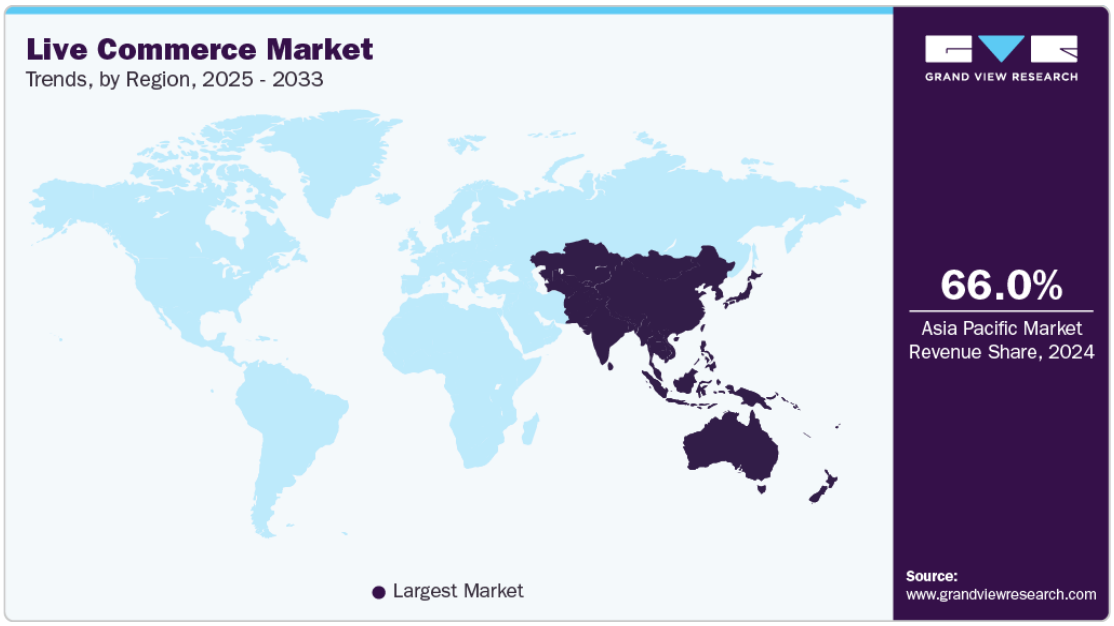


Figure 3: Live Commerce Market focus on Asia Pacific Market (Live Commerce Market Size & Share | Industry Report, 2033, s.d.)

Indeed, according to McKinsey Research conducted in 2022, 57% of the Chinese surveyed have used live streaming commerce for more than three years, compared with just 5 to 7% of live shopping users in the EU, Latin America, and the US.

In addition, 87% of Chinese surveyed individuals used to attend live-commerce events at least one per month, compared with 52% for the EU, 64% for Latin America, and 43% for the US (Becdach et al., 2023).

The strong and main live streaming commerce consolidation in China and in Asia is observable also through the fact that most previous scientific studies on this topic were conducted in Asiatic markets. As a result, the findings generated by them cannot be automatically extended to other markets, such as European ones, due to the cultural, social, economic, and political differences.

Since 2024 the European live-streaming commerce market has been living an exploratory phase since:

- Brands like Zara and Sephora have begun experimenting with live shopping events on Instagram and their apps (Pavic, 2025).

- Amazon and TikTok have introduced live streaming commerce features in selected European countries. For example, in March 2025 TikTok Shop was launched in Italy.

In particular, the following thesis will explore the live streaming commerce phenomenon in the Italian market, where there is an emerging interest towards live streaming shopping.

As pointed out by the research "Live shopping: la rivoluzione dell'e-commerce" run on a sample of 2060 Italian online buyers between 18-44 years old by the first live social commerce app in Europe, Bazr, in collaboration with Nielsen, 58% of participants know the live streaming shopping, and one in two is likely to use it in the future. Specifically, the features mainly appreciated by the study's sample were the opportunities: to see dynamically the products promoted, to catch the level of streamer sincerity, and to execute purchases in a practical and immediate manner on a unique platform without visiting and being redirected to multiple pages.

1.2 THE IMPACT OF USERS' COMMENTS IN ONLINE CONTEXT: AS LIVE STREAMING SHOPPING

In the 2000's, the web entered its second evolutionary stage. From Web 1.0 characterized by one-to-many asynchronous communication, it evolved into Web 2.0, based on many-to-many communication through computer-mediated platforms such as social networks and blogs (Hsueh et al., 2015).

This evolution allowed internet users to pass from a passive role, as online content readers, to a more dynamic one, as online content creators, able to publish user-generated information (Walther & Jang, 2012).

Studies on user generated information in online contexts have highlighted two consistent findings.

First, users tend to seek the opinions of others to develop their own personal view. Second, users' comments, such as the one placed under websites, can influence the expression and attitudes of subsequent readers.

Considering the core phenomenon studied in this thesis, i.e., live streaming commerce, it's essential to narrow down and to examine research related to user-generated content in online contexts associated indirectly or directly with the pursuit of an economic activity such as e-commerce.

E-commerce can be considered an online marketplace typically characterized by a substantial volume of consumer generated information, including online reviews, online transaction ratings, and scores on other different criteria (Zheng et al., 2013) such as delivery.
For instance, Chen (2011) categorizes consumer generated information on e-commerce according to their valence and their focus (e.g., services, product and price, self-display, and after-sale action), demonstrating that the volume and the content of e-consumers' comments significantly influence consumer trust towards both the platforms and the products.
Indeed, in e-commerce user commentaries can be generally conceptualized as eWOM, "electronic word-of-mouth" (Cheung & Thadani, 2012).
Online user-generated content is considered more objective and credible compared to online marketer-generated content, i.e., the one generated by merchants (Chen, 2011). Since merchants and sellers tend to present incomplete information and emphasize only positive aspects to induce potential customers to purchase the promoted product.
As a result, in e-commerce, users' comments are also considered sources of information that help individuals to minimize information asymmetry (Tsao et al., 2011), i.e. the situation where the seller detains more information about the quality of offerings compared to the buyers, and to support a more informed purchase decision.

Despite not being strictly and directly correlated to commerce activity, social media platforms further illustrate the function and the power behind user-generated content. For example, Khobzi et al. (2019) focus on brands' Facebook pages, perceived as a public channel of interaction and communication between company and users, and show that users' comments on brand posts stimulate engagement and amplify brand visibility. Enhanced brand visibility

can lead ultimately and indirectly to improvement in brand performance by increasing sales and conversion opportunities.

In live streaming commerce, real-time users generated information is one of the most distinguished features. Indeed, there are some studies considering and exploring its role in this new commerce model. Live users' online comments represent the primary medium for social interaction between the live-streamer and connected users, between the company and connected users, and between users and users (Yank & Na, 2023).
Unlike traditional e-commerce, live streaming commerce allows all users connected to the live streaming session to use live chat and express their opinions instantly, regardless of whether they have purchased the product promoted by the streamer (Wongkitrungrueng & Assarut, 2020).
In live streaming commerce field, user-generated information can be considered forms of real-time written and online-published subjective feelings expressions, such as personal thoughts, opinions, impressions, products reviews after consumption (Hewei, 2022).
Compared to social interactions in traditional online contexts (Wang & Yu, 2017), social interactions in live-streaming commerce are instantaneous and tend to be conceptualized as instant electronic word of mouth.

According to the findings gained by Yank and Na's study (2023), consumers, that shop during a live streaming session, pay attention to the content and the authors of live comments, playing a crucial role in shaping their behavior and influencing their purchase intention.
This influence between live comments and purchase intention is explained through the intermediary effect of consumers' perceived risk associated with the uncertainty in purchase behavior.
The higher this risk perception, the more consumers pay attention to the comments generated and shared by their peers to gain information and feel more confident in their decision-making process. This ultimately impacts their purchase intention.

In the next paragraph the emotional valence of user-generated information will be analyzed. To demonstrate and support that not only the informative content of comments influences consumer behavior, but also the emotional valence attributed to comments.

1.3 THE EMOTIONAL VALENCE OF USERS' COMMENTS IN ONLINE CONTEXT: AS LIVE STREAMING SHOPPING

Many studies in the emotion psychology and cognitive science fields deal with the concept of emotional valence.

Emotional valence refers to the positive or negative connotation attributed to an emotional stimulus (Kauschke et al., 2019). According to Kauschke et al. (2019), in interpersonal interactions, nearly all events and experiences, such as faces, sounds, music, pictures, and written or spoken language, can be seen as emotional stimuli and consequently classified along the valence dimension as more or less positive or negative. A stimulus is considered to have a positive valence when it arouses pleasurable, desirable and rewarding emotions. While stimulus is considered to have a negative valence when it arouses unpleasurable and undesirable emotions (Shuman et al., 2013).

Based on the theory, the emotional valence associated with stimuli impacts how people perceive and respond to them. Past research has demonstrated that, compared to neutral stimuli, high emotionally charged stimuli tend to attract more attention, are processed and evaluated by people rapidly and efficiently, and exercise a stronger impact on people's judgment and decision-making (Colicev et al., 2019)

In face-to-face social interactions, emotional valence (behind the interaction) is generally disclosed by a combination of verbal cues, such as words used, and non-verbal cues, such as body movements, facial expressions, eye contact, and grimaces.

However, in digital environments such as e-commerce and social media, the emotional valence refers to the embedded positive or negative sentiment, evaluation, or attitude of an internet user towards the product sold by the e-commerce or the brand posts on social media. It's mainly conveyed to other users by the words adopted in textually generated content as comments or reviews.

Several studies have focused on digital and online interactions and have investigated how the emotional valence of user-generated content plays an important role in shaping consumer attitudes and purchase behavior.

Resorting text mining to categorize comments into positive and negative emotional valence, Goh et al. (2013) demonstrate the hypothesis that emotionally charged users' content under a retailer's official Facebook account has a higher impact on consumers' purchase behavior compared to the emotional charged market generated contents.

The behavioral influence of emotionally charged user-generated comments on consumer decision-making is reinforced by Chevalier and Mayzling (2006), who discover that a high volume of customer reviews with positive valence promotes the achievement of better online sales performance.

Similarly, Fan et al. (2017) notes that the sales prediction model of a company produces more accurate results when integrated with comments' emotional valence (positive, negative and neutral) extracted through the run of sentiment analysis.

Tirunillai & Tellis (2011) find out that positive and negative emotional valence of online reviews have an asymmetric impact on sale performance and stock. Indeed, in absolute value, the erosion of sales performance by negative reviews is greater than the accrual of sales performance by positive ones. According to the authors, the given result could depend on three main reasons.

First, the negativity bias, which affirms that negative events or feelings typically have a more significant impact on individual state than positive ones, even in the case of equal proportion (Baumeister et al., 2001). Consequently, compared to positive valence reviews, the negative ones result in being more impactful on individual purchasing and investors' behavior.

Second, the loss aversion bias states that individuals weigh potential loss more heavily than equivalent gain. Consequently, negative valence reviews have a heavier impact on consumer behavior, since individuals tend to be more sensitive to the eventual loss of money or time than to the potential gain of a comparable benefit suggested by positive valence reviews.

Third, negative valence reviews may have a stronger impact on sales performance than positive ones, since positive affirmation in positive valence reviews may be already well-known to potential buyers and investors thanks to company advertising and press releases.

Currently, few studies have examined the emotional valence in life-streaming commerce studies. Unlike traditional digital context, in live streaming commerce, the emotional valence concept can be observed in real-time users' comments and in the streamer's behavior, considering his speech, his facial expressions, and his body movements.

For instance, integrating the Stimulus-Organism-Response model and the Emotional Contagion Theory, the study conducted by Ma et al. (2024) explores how the emotional valence of the streamer's speech and the emotional valence of live users' comments influence live streaming commerce performance, quantified through the following dependent variables: sales growth and users connected to the live growth.

On the streamer side, the results gained by the authors highlight that the streamer's speech, regardless of its polarity (negative vs. positive) positively stimulates sales and fan growth. In contrast, emotionally flat or neutral speech results to have no significant effect on the two dependent variables considered.

While on the real-time users' comments side, different results on the company's performance are observed depending on users' comments polarity. Real-time comments with positive emotional valence lead to a growth in sales and fan base. Real-time comments with negative emotional valence lead to a reduction in sales and an increase in fan growth.

The explanation behind this result is that negative comments generate engagement by attracting attention and favoring discussion among users.

Interestingly, the study brings out that the emotional tone of streamer speech, regardless of positive, negative, or neutral connotation, significantly influences the emotional valence adopted by the subsequent user comments in the chat. This relationship between the two variables is explained through Emotional Contagion Theory, which describes how emotional expressions can spread within a social group. The emotional contagion theory is deepened in the next paragraph.

1.4 EMOTIONAL CONTAGION THEORY

Various studies have failed in providing an all-encompassing definition of emotion. As the American psychologist, Paul T Young, has highlighted, it's impossible to gain a complete definition of emotion, as it is a complex concept analyzable from different perspectives (Kleinginna & Kleinginna, 1981).

Considering the key role given to emotional valence in this thesis, the most relevant definition of emotion recalls the circumplex model of emotion developed by James Russel (2003). Jemes Russel describes emotion as a simple feeling or mental state that can be categorized in terms of valence, positive or negative, and in terms of arousal (i.e. intensity), high arousal or low arousal**.**

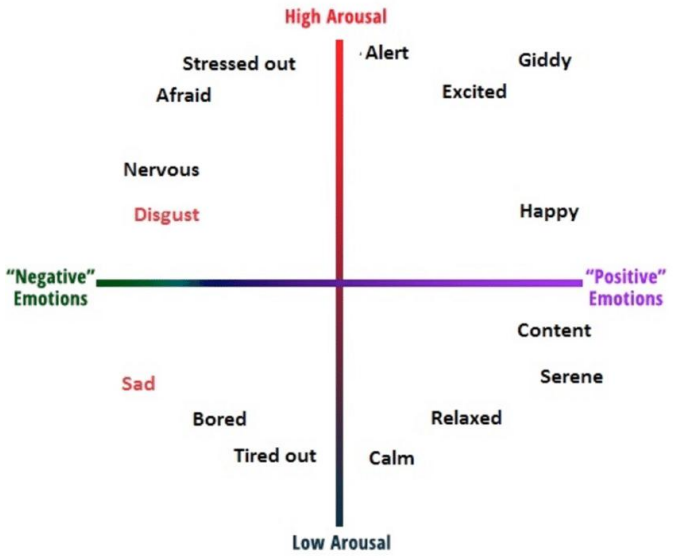


Figure 4: the two dimensions of emotions. Valence (negative/positive) and arousal (low/high) (Munoz-de-escalona & Canas, 2017)

Emotions are typically understood as personal and relatively short-term reactions to a specific stimulus and situation from the environment (Reber & Reber, 2002).

However, emotions can also be considered a social phenomenon (Reeck et al., 2016), as during social interactions people can externally express themselves through various verbal and nonverbal forms, such as gestures, facial expressions, etc (Künecke et al., 2017).
Consequently, in any social interaction there are typically an emitter, who can externally express something as his emotion, and a receptor, who is exposed to the emitter's communication, such as his emotional expression, and can reply to it.

The emotional contagion theory sustains that emotional exposure exercises an impact on the receiver and leads him to align with the emotional status of the emitter by imitating his emotional expression or attitude.
Emotional contagion is defined as "a process in which a person or group influences the emotions or behavior of another person or group through the conscious or unconscious induction of emotion states and behavioral attitudes" (Hine et al., 2010). Therefore, emotional contagion is the tendency for two or more individuals to converge emotionally.
A simple and practical diary example of how emotional contagion works is the natural tendency of individuals to smile back when someone smiles at them (Hatfield et al., 1993).

Emotional contagion is considered a form of social influence, since the emotional emitter has power over the receiver to the extent he can influence not only how he feels but also what subsequently thinks and does (Barsade et al., 2018).
In 2018, Barsade proves that emotional contagion can influence subsequent attitudes, cognitions, and behaviors in two ways: directly and indirectly. The direct influence occurs when the individual's emotion expressed immediately changes the state, thoughts, and behavior of the target of emotional contagion. The indirect influence is when the individual's expressed emotion serves as information to interpret reality and then drives behavior and attitudes of the emotional contagion target.
Emotional contagion has aroused the interest of many researchers, who have explored this applied to different types of interactions across various disciplines, from mental health to fields related to marketing.

Most marketing studies on emotional contagion have focused on understanding how positive emotions converge in positive or negative consumer behavior (Herrando & Constantinides,

2021). Furthermore, most of them have explored the emotional contagion in offline shopping, where observing and capturing emotional cues turns out to be easier thanks to in person face-to-face interactions.

For example, when employees show positive emotions to the customers during service encounters, employee emotion affects the consumers positively, and that emotional contagion leads consumers to evaluate the service quality more favorably (Pugh, 2001).

Nowadays many interactions take place in a digital environment, and they are rarely verbal interactions, thus, researchers have started to explore whether emotional contagion can occur without direct and physical interactions, such as text-based interactions.

Through his experiment Kramer et al. (2014) demonstrate that in person face-to-face verbal interactions and non-verbal cues, such as tone of voice, facial expression, gesture, and direct eye contact, are not strictly necessary for making emotional contagion theory happen.

Indeed, emotionally charged (positive or negative) textual content of Facebook posts is sufficient to influence the emotional tone adopted by other users in their subsequent posts.

While Admand and Guzman (2021) explore the emotional contagion mediating role between online users' negative reviews and readers' brand equity perception. They prove that negatively charged reviews trigger emotional convergence in readers, which in turn negatively affects their perceived brand equity.

As Goldenberg and Gross (2020) highlight, in a digital context, it is more appropriate to speak about digital emotional contagion.

Digital emotion contagion differentiates itself from emotional contagion for two main reasons. First, internet users' emotions are expressed in comments, reviews, or posts and conveyed through digital media, such as social media, apps, forums, and websites.

Second, these online emotional expressions can rapidly reach millions of users through platform algorithms, becoming viral.

Consequently, internet users are constantly and simultaneously exposed to emotionally charged content, usually characterized by high levels of intensity due to platform structures that prioritize contents able to generate elevated rates of engagement.

Compared to offline emotional exposure, the online one may impact the perceivers less, despite higher frequent and intense exposure, as they learn to ignore the overwhelming flow of content and perceive online social interactions as less intimate and valuable.

Although the literature about the role of emotional contagion in digital contexts has increased, few studies have investigated this theory, implementing it to the phenomenon of live streaming commerce.

A notable exception is the study conducted by Meng et al. (2021), which considers emotional contagion theory to investigate separately how online celebrities and positive users' real-time comments influence audience purchase intentions**.**

Combining survey-based structural modeling and textual econometric analysis, the authors demonstrate how positive emotions conveyed by celebrities and peer comments act as positive emotional stimuli, which, through the mechanism of emotional contagion, are unconsciously internalized by viewers and positively impact their purchase intentions.

The literature treated in these paragraphs demonstrates and supports that in live streaming commerce emotionally charged user-generated real-time comments can influence readers' behavior, such as their willingness to buy.

The next paragraph will try to evidence the importance of reacting to emotionally charged comments in digital context.

1.5 THE IMPORTANCE TO MANAGE TO NEGATIVE COMMENTS IN ONLINE CONTEXT

Multiples empirical studies have pointed out that the adoption of digital technologies, such as social media or electronic commerce, is an opportunity for business. These digital tools allow brands and companies to spread easily and quickly their messages, their identity, and their offers to a broad audience. Unlike traditional media, the usage of digital media allows

companies to build up a bidirectional relationship with their consumers, since these digital media enable them to listen and respond directly to consumers' feedback (Crijns et al., 2017).

Besides these opportunities, integrating digital solutions exposes companies to the lack of controls on consumers' digital interactions, increasing its vulnerability. For instance, when a company posts something on its social media account, consumers can immediately and publicly react by commenting. These comments can have both a wide reach, being visible to all individuals visiting company social media accounts, and a large impact on the exposed audience. However, these users-generated comments might not be always positively emotionally charged.

In digital contexts such as e-commerce and social media, it has been observed how a negative user's generated content, such as a negative consumer review, damages more purchase intention than how much a positive one increases it (Rim & Song, 2016).
This phenomenon, according to which negative information has greater impact on product, service or brand evaluation compared to positive on, is known as negativity bias.
There are various theories explaining this bias.
The frequency-as-information theory suggests that negative information is more useful, because it is less frequent compared to the positive one and, thus, more informative (Skowronski & Carlston, 1989).
The attribution-based perspective theory sustains that positive reviews are often considered as the results of reviewer's personal motivation (e.g. the desire to appear kind), while the negative ones are perceived more associated with the product itself, making them more credible (Mizerski, 1982).
Finally, the category diagnosticity theory states that negative information is generally considered more useful for evaluating and judging the product considered, since it turns out to be clearer, more informative, and less ambiguous than the positive one (Skowronski & Carlston, 1989).

Since negative users generated content are inevitable, it's essential for companies and brands to figure out whether to react to them. As the e-commerce field demonstrates, when companies and firms deal with negative reviews, management response results to be an

increasingly practical and pervasive intervention form (Li et al., 2018). Past research has pointed out that a response from the brand to negative comments produces always better results than ignoring and not responding to them.

Consequently, mainly in e-commerce and social media contexts, exploratory past studies have focused on discovering how and which response strategies companies can adopt to mitigate the negative effects of negative comments on consumers' behavior, business success, and corporate reputation.

These past research have tended to compere different response features, such as the rapidity in answering (immediate vs delayed response), the personalization degree (tailored vs standardized response) and the response sidedness (on way sided vs two way sided response), to discover which type of response or feature results to be more effective into minimizing the effect of negative users generated content.

For instance, Lie et al. (2018) and Sparks et al. (2016) have observed how in hotel industry rapid responses to clients' complaints and negative reviews are fundamental. Since the response minimizes the negative impact of users generated content on clients' attitudes and hotel image by generating higher level of trust and alleviating consumer concerns.

While the study conducted by Crijns et al. (2017), in social media context, shows that providing personalized replies to user negative feedback reinforces the perception of authentic and humanized communication, contributing positively to protect organizational reputation.

Rim and Song (2016) observe that a two-sided response, i.e. response presenting both the persuader's argument and the opposing argument, to a negative consumer comment regarding a company's CSR campaign on social media is more effective compared to a one-sided response, i.e. a response representing only the persuader's argument.

A company adopting a two-sided response is perceived as more credible, since its attempt to present itself in a favorable light becomes less evident. This result is aligned with the general literature of message's sidedness, which states that mentioning both positive and negative aspects in the message enhances perceived credibility and persuasiveness.

Overall, the usage of rapid, highly personalized, and two-sided responses by brands or companies has been repeatedly validated in e-commerce and social media contexts as mechanism able to mitigate the negative impact of negative user-generated content on the exposed audience.

Unlike e-commerce and social media, in live streaming shopping the responsibility of the negative comments' management falls under streamer's duties, who embodies the brand or the company during the live session.
In live streaming shopping context, existing studies have demonstrated the effectiveness of two-sided messaging in product presentation and of rapid, personalized answers to users' questions in shaping consumer attitudes. However, no research has specifically addressed these elements in relation to streamer responses to negative comments.
Nevertheless, given the consolidated evidence supporting the effectiveness of high rapidity, personalized communication, and two-sided responses in digital context comparable to live streaming shopping; it is reasonable to expect similar results may be observed when streamers react to users' negative feedback in real time.

Therefore, chapter 3 of this thesis will focus on comparing accommodative versus defensive communication style in streamer's response to negative comments. This focus is relevant, because the literature on this topic, even in digital contexts close to live streaming shopping, has led to mixed findings and results not being consolidated.

Considering the literature treated by now, chapter 2 of this thesis will focus on the interactivity of the streamer, i.e. a key element to be considered when dealing with emotional valence users' comments and live streaming shopping. Specifically, chapter 2 analyzes the role of the streamer in live streaming shopping in more depth.

CHAPTER 2

2.1 THE FIGURE OF STREAMER IN LIVE STREAMING PLATFORMS

In general, live streamers are content creators who perform actions on screen, record live, and broadcast on the internet, providing directly their audience with entertainment, without the need for downloading the content but simply enjoying the stream online in real-time (Bankova & Stancheva, 2021). As previously highlighted, through live chat features, live streamers can engage with their audience, fostering the creation of a fanbase and a community around their content.

The choice of which streaming platforms to use and which type of content to create relies on streamers. Among these streaming platforms, Twitch is currently the most popular (Zhao et al., 2021). Twitch was born with the aim to bring together people with common interests, mainly for video games, and reaching in 2024 35 million subscribed active users per day (*Twitch Usage & Growth Statistics: How Many People Use Twitch? 2025)*.

Despite being originally linked to entertainment and gaming, the figure of streamer has acquired a key role in digital commerce with the emergence of live streaming commerce. Specifically, in this context, the live streamer, definable too as anchor or live host, guides and conducts the live stream while furthering brand's sales, showcasing and demonstrating products, explaining promotions, and addressing in real time connected audience questions (Yang et al., 2024**)**.

It can be stated that the streamer can play a double role. On one side, he may be an entertainer, able to keep users' attention and high level of engagement, on the other he may cover the role of salesperson (Ma, 2021), as he may shape target users' purchase decisions through his presentation of various product details and his clarification regarding areas of consumer confusion (Chen & Zhang, 2023).

Additionally, in live streaming shopping literature the streamer is defined and seen as a market intermediary (Wang et al., 2021), as he covers the role of agent who establishes and maintains market relationships between merchants and consumers by helping the last one in searching for information and evaluating the products and by driving sales (Z. Chen et al., 2020). Previous studies in digital commerce have mainly investigated two types of market intermediaries: internet influencers (Geng et al., 2020) and average people (Z. Chen et al., 2020), which can be conjugated into broadcaster's figure in live streaming shopping models.

Indeed, to explore and leverage this innovative sales tactic, it's essential for companies to hire a broadcaster, i.e. a market intermediary. Companies can either run live streaming shopping shows on their channel choosing as broadcaster an average person such as their internal employee, as in the case of UNIQLO Italy on its website section named UNIQLO LIVE STATION (*LiveStation*, s.d.), or collaborating with independent influencers or live streaming influencers, as done by Gisou and many other beauty brands (*Gisou Live shopping experience*, s.d.) or by Carrefour Italia.

Moreover, depending on the desired level of reach and authenticity, companies in collaboration with independent live streaming influencers can choose to stream from brand official channels, as in the case of Gisou, or from the streamer's own personal account, as in "Figure 8" portraying the Chinese beauty blogger, Austin Li Jiaqi, showcasing Hermes lipsticks on his personal account on Taobao live streaming platform (Bolondi, 2020).
Although hiring influential and well-known streamers can favor the arrival of potential consumers to the live broadcasting session, brands have to remunerate them with higher commission fees, which may reduce the profitability related to live streaming shopping sale format.
Therefore, to save commission costs, many companies prefer to hire ordinary individuals as streamers, such as employees, products manufacturers (Fan et al., 2024), or company owners.

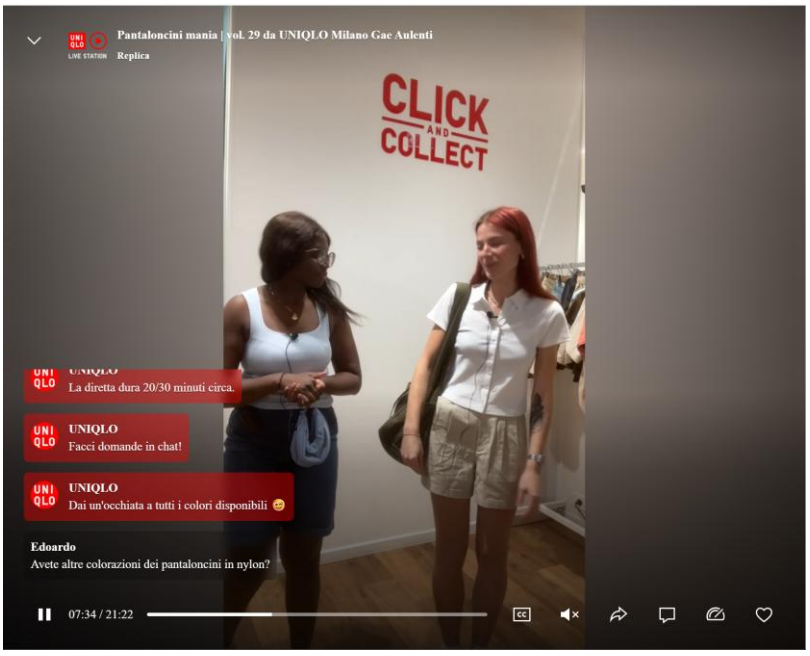


Figure 5: UNIQLO ITALY live streaming session directed by employees (LiveStation, s.d).

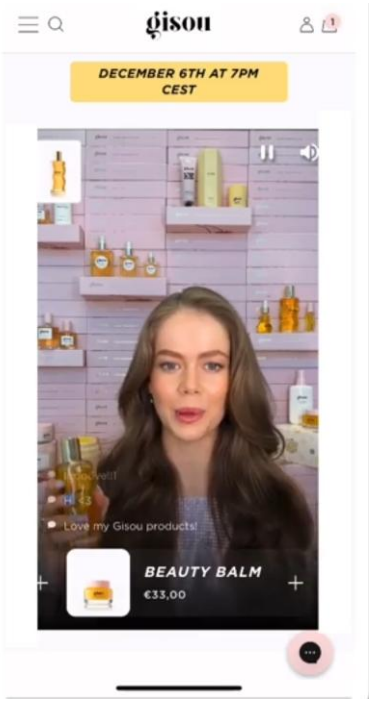


Figure 6: Gisou Live Streaming Session directed by an beauty influencer (Gisou Live shopping experience, s.d).

Figure 7: Carrefour Live Streaming Session conducted by Valentin Tozza, an italian food blogger (Live Shopping Carrefour - carrefour.it, s.d.).

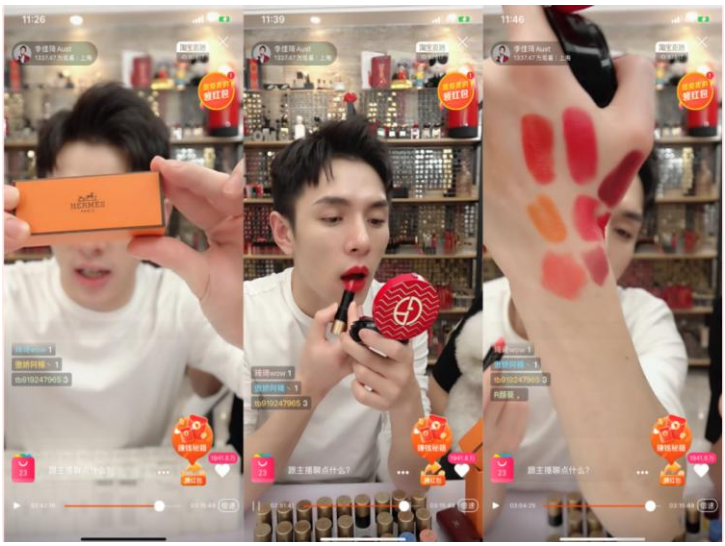


Figure 8: Austin Lin during a Live streaming session (Bolondi, 2020).

It might be assumed that, compared to average people directing a live stream shopping session, professional live streaming influencers exercise a higher influence on shaping the target consumers' purchase decision thanks to their popularity and their consolidated fan base.
However, recent studies, such as the analysis conducted over 55.000 live shopping session on Taobao Live by Yin et al (2023), have demonstrated that streamer's notoriety, quantified through the number of followers on streamer's personal account, does not have a statistically significant effect on the Gross Merchandise Value, i.e. the total value of all products sold during a live shopping event or stream.
Differently, selling more products and spending more time on describing each product during the livestreaming show favor the improvement of sales.

Indeed, in digital commerce contexts like live streaming shopping, which tend to be characterized by high level uncertainty due to online transactions, past studies, by recurring to Stimulus-Organism-Response (SOR) model, have evidenced how stimuli other than information provider's popularity, such as platform technical features and information provider's physical and behavioral attributes, can affect organism, i.e. users' internal states, which in turn influence their response, i.e. users' behavioral responses (Hossain et al., 2023; Song et al., 2022).

For example, in live streaming commerce field Hossain et al. (2023) consider several stimuli: streamer's source credibility, defined as the degree to which streamer is seen as credible and likely to provide impartial opinions on a product and quantified through expertise, trustworthiness and attractiveness; streamer's response capability, defined as the degree to which streamer is rapid and efficient in answering and meeting connected users' requirements; and interactional elements of live streaming platform, such as the live chat layout.
They observe both how these stimuli generate in connected users' internal states, such as users' customer engagement and buyer-seller interpersonal relationship; and how these

internal states subsequently affect users' responses, such as purchase intentions and actual purchase behaviors.

Their finding confirms that it's more probable that a streamer perceived as authentic, transparent, expert, and effective in answering questions can active cognitive and emotional process, like consumer engagement and the development of parasocial buyer-consumer relationship, in users' minds leading to willingness to buy or effective purchase actions.

Therefore, this permits to state that both average people and nano, micro and macro influencers can effectively cover the role of the streamer in live streaming shopping models, whether they are gifted with good communication and engagement skills.

This conclusion reinforces the idea that streamers' ability to engage, build trust, and shape purchasing behavior hinges mainly on how they communicate and interact with their audience. Therefore, in the next section, the focus will shift to one of the streamer's most distinctive features: interactivity, and how this real-time communication dynamic shapes the live connected users' response.

2.2 CONCEPTUALIZING INTERACTIVITY IN LIVE STREAMING COMMERCE

In the literature the concept of "interactivity" has been defined under multiple and different perspectives, but scholars have generally agreed with the following definition "interactivity is the degree to which two or more communication parties can act on each other, on the communication medium, and on the messages and the degree to which such influences are synchronized" (Liu & Shrum, 2002).

Many studies conceptualize interactivity as a stimulus (Kang et al., 2021) able to affect the individuals' behavior through the stimulation of their psychological arousal. These studies have explored interactivity mainly via three research areas: human-to-document interactions, human-to-system interactions and human-to-human interactions (McMillan et al., 2003).

In the first two research areas, the concept of interactivity focuses on how humans interact with and control specific technologies such as computers and further media (Joo & Yang, 2023). Consequently, in these two cases at least one communication party is an inanimate object.

According to Burton and Soboleva (2011) there are two types of interactivities: interpersonal interactivity under which human-to-human interactions fall, and machine interactivity under which human-to-system interactions and human-to-document interactions fall.

Machine interactivity refers to the user's ability to control and modify digital content through technology (Hoffman & Novak, 1996) and, in the context of digital commerce, can be observed in e-commerce. For example, an individual can experience machine interaction when zooming in or out the pictures of products displayed by online stores (Xue et al., 2020). This kind of interactivity acts as an atmospheric cue to stimulate consumers' cognitive states and subsequently affect their behavioral responses like an effective purchase action (Sheng & Joginapelly, 2012).

However, with the rise of live streaming shopping, the focus in digital commerce has shifted toward the interpersonal interactivity, since, in this sale format, two kinds of interpersonal interactions mediated by computer or phone are observable: consumer to consumer interactions and streamer-consumer interactions (Xue et al., 2020).

For instance, in live streaming commerce by using a smartphone with a touch screen, consumers may experience high level of live interactivity by engaging with anchor and with their peers. Consumers write comments, feedback and questions in the live chat, while anchors can answer them, dispel doubts about products, and show the unique selling points in live rooms. At the same time, consumers interact with their peers by sharing their shopping knowledge and experiences, reading and sending comments and feedback in real time (Xue et al., 2020).

Therefore, in live streaming commerce research, live interactivity is defined as the degree to which the streamer, the connected audience, or more communication parties can act on each other in a real-time way, on the communication medium, and on the messages, and the degree

to which such influences are synchronized (Xue et al., 2020). Specifically, the experiment conducted in this thesis in chapter 3 focuses on the streamer-audience interactivity.

Some prior studies have highlighted that, to maximize transaction chance and engagement, the streamer should not only display products during the live, but also actively interact with the audience by reading aloud comments published on the live-chat, answering product-related questions, and adapting his tone and behavior considering audience feedback (Zhang et al., 2023; Xue et al., 2020; Liu & Zhang, 2024).

However, only few researchers have explored how streamers should effectively interact with their audience.

For instance, in the study conducted by Kang et al. (2021), streamer interactivity is conceptualized as a social stimulus and is subdivided in two different components: responsiveness, defined as streamer's speed and rate of response to questions expressed in the live-chat; and personalization, defined as the degree to which the delivered information is tailored to meet a user's needs. Practical examples of personalization can be addressing users by their name or making personalized recommendations. Applying the Stimulus – Organism – Response (SOR) framework, they observe that an effective usage of responsiveness and personalization facilitates the establishment of a social connection between streamer and his audience, which turns out in increasing customer engagement during the live sessions. Additionally, they evidence how excessive and abusing usage of responsiveness and personalization can cause undesired effects such as learning myopia and privacy threat's perception.

Learning myopia verifies when a streamer provides low quality insights or overcharges his audience of information through overresponding. Indeed, in this case, the main aim of streamer seems to be short-term sales, and he seems to be not more interested in providing high-quality content or services. This compromises the perceived authenticity of streamer and impacts negatively on the tie strength among streamer and audience. While audience can feel uncomfortable and threatened, when the streamer adopts overly invasive interaction practices (e.g. referencing a specific user's past transaction during the live to recommend

repeatedly during the live a product), i.e. invasive personalization techniques, which undermine the development of parasocial relationships between the two parties.

Similarly, the SOR model is also adopted in the study of Xue et al. (2020), where the role of streamer interactivity in favoring live streaming engagement, conceptualized as audience active participation (i.e. raising question, seeking advice, subscribing to anchors and sending like) and as passive participation (i.e. reading comments and keeping connected to the session), through the improvement of live session perceived usefulness and the weakening of online transaction perceived risk and psychological distance among streamer and audience.

In this study, streamer interactivity is decomposed into three factors: personalization, responsiveness, and entertainment. Entertainment is seen as streamer's ability to make audience feel pleasure during the live streaming session by conducting activities such as initiating a prize draw and adopting useful function of some innovative technologies (e.g. virtual reality) to showcase products.

According to their findings, a streamer's interaction style oriented towards better customized information and better recommendation increases perceived usefulness and decreases both perceived risk and psychological distance, since the streamer is perceived as honest, friendly and careful to individuals' needs.

Analogously, an interaction style oriented towards a high level of responsiveness reinforces ulteriorly perceived utility and minimizes the perceived risk and psychological distance, as it favors the creation of a bidirectional digital context.

While a streamer, who adopts entertainment techniques and technologies, makes the audience's experience more useful and memorable, as he reduces perceived risk and favors the overcoming of psychological distance among the two parties.

Thus, this study highlights that different interaction styles can impact the subsequent audience's behavior, such as their participation extent (i.e., live streaming engagement) during the live streaming session.

Through this literature the benefits of a streamer's interactivity on engagement and trust are well pointed out.
The next paragraph will explore the benefits of the streamer's interactivity on consumers' behavior and attitudes, mainly focusing on willingness to buy.

2.3 STREAMER INTERACTIVITY AND PURCHASE INTENTION

"Purchase intention" is often used interchangeably with "willingness to buy". In in the purchasing decision-making process, "Purchase intention" can be defined as "the psychological stage" (Wells et al., 2011), in which the consumer is intentionally and consciously planning to buy a specific product or service (Rebelo, 2017). This concept relates synchronously both to the consumer's attitude toward adopting a purchase behavior and his readiness to pay (Lin & Nuangjamnong, 2022). According to the theory of Reasoned action developed by Fishbein and Ajzen in 1975, the individuals' behavioral intention turns out to be a predictor of their actual behavior. This is the reason why many empirical studies adopt purchase intention as the outcome variable.

Especially in digital contexts, willingness to buy results to be a strong predictor of actual purchase behavior, since, in these environments, consumers need just simple clicks and short timeframes, such as second, to shift from the intention to buy to the effective purchase. Additionally, internet and user-generated content make the intermediate stage of decision-making process, such as the information search one, faster, easier and costless (Teo & Yeong, 2003,).

In the context of livestreaming commerce, willingness to buy is the attitude of a user, exposed to product presentation by streamer during a live session, toward adopting purchase behavior either during the stream or shortly afterward (Zhang et al., 2024). In live streaming commerce, the gap between the intention form and the effective purchase can be even shorter due to the presence of leverages stimulating the impulsive buying like discounts or vouchers,

the possibility of collecting the information needed by users immediately either through the live chat comments or the answers given aloud by streamer, and the environment more immersive, dynamic and interactive thanks to the live-platform features and the communicational, interactional, engaging streamer's skills (Song et al., 2022; Zhang et al., 2024).

As a result, streamer interactivity may act as a powerful persuasive mechanism capable of enhancing consumers' willingness to buy.

This position has been confirmed by multiple empirical studies, which recur to the SOR model and conceptualizes streamer's interactivity, as a social stimulus, capable of triggering in live connected users cognitive and emotional states, that subsequently evoke purchase intention toward the displayed product (Liao et al., 2022, Hossain et al., 2023).

For instance, the study conducted by Liao et al (2022) starts with defining salesperson's communication style as a skill that, unlike personality traits, can be controlled (Dion et al., 1972) and it is based on individual's tendency to communicate through a unique combination of patterns, content and communication rules. They identify three dimensions of the salesperson's communication style: task orientation, self-orientation, and interaction orientation (Williams & Spiro, 1985). Considering the centrality of interactivity in the live streaming shopping model, they focus on the interaction-oriented communication style, that manifests as streamers actively interacting with viewers and providing them assistance, demonstrating with availability to listen and an empathetic and helpful attitude.

Through their research they demonstrate that a streamer characterized by a more interactional-oriented communication style positively influences purchase intention. As explanation of this they provide the enhancement of immersion and parasocial relationship experience, which are boosted by the adoption of this communication style by the streamer.

These results support the idea that salesperson's interactive responses, such as real-time replies and clarifications, are not only tactics to favor engagement but also strategic levers for driving purchase intention, especially in real-time shopping environments. However, live streaming shopping literature is extremely limited for empirical studies considering simultaneously the dimension of user-generated real-time comments, which result not to be

questions but thoughts or opinions with an own emotional valence (e.g. criticism or complaints) towards the displayed product, and the possible interaction-oriented techniques or styles adoptable by streamer in responding to these emotionally charged comments.

For this reason, the next chapters will be dedicated to the conduction and execution of empirical research to explore whether a different and underexplored streamer's interactive response (accommodative vs. defensive communication style) to negatively charged user-generated comment may influence the live connected users' willingness to buy.

CHAPTER 3: EXPERIMENTAL RESEARCH

3.1 RESEARCH INTRODUCTION AND GAP

Since its emergence in 2016 in China, live streaming shopping has become an increasingly known on a global scale sales format (McKinsey & Company, 2021). The global rise of it was accelerated by the advent of Covid-19 in 2020. The pandemic crisis has highlighted how the following sales model permitted merging the benefits of traditional shopping with the ones of online shopping (such as time savings). This format recreated a dynamic online shopping environment funded on real-time interactions thanks to the live streamers' presence and to the implementation of a live chat used mainly by the connected audience to ask questions and comment on the showcased product (Merritt & Zhao, 2022, Cai & Wohn, 2019, Yun et al., 2023, Han, 2022). Despite this, outside Asian boundaries, live streaming shopping is still not so consolidated. This is confirmed by the fact that most of the available live streaming shopping literature comes from consolidated data collected, articles or experimental studies conducted in Asiatic markets or on Asiatic samples.

Additionally, reviewing the available literature, it emerges that most studies tend to adopt unidimensional focus on either the streamer's figure or user-generated content (Yank & Na, 2023, Meng et al, 2021). While the studies exploring simultaneously the two dimensions have just considered the streamer's attitude to user-generated questions, directing their attention to Q&A real-time dynamic between the connected audience and the streamer (Ma et al. 2024).

However, it's crucial to be aware of two aspects of the content published by connected audience on the live-chat section.

First, it can achieve a wide reach, being visible to all users connected to the live session (Goldenberg and Gross, 2020). Second, the content can consist of questions and comments

too. Similarly to other digital contexts (considerable close to live streaming commerce), live streaming shopping comments can either have a positive or negative valence, such as in the case of the reviews' section on e-commerce platforms and of the comments section on social commerce or social media.

In addition, the live-streaming shopping comments do not imply the previous consumption or purchase of the product as in the case of e-commerce (Wongkitrungrueng & Assarut, 2020). Therefore, many live streaming shopping comments are related to aesthetic rather than functional aspects of the promoted goods.

In live streaming shopping sessions, as in social media and in e-commerce platforms, brands, companies, or firms cannot exercise control over audience-generated content. They cannot avoid real-time negative content, such as criticism, published on the live chat.

As different studies have highlighted, there is a human tendency, known as negativity bias, in providing higher relevance to negative information than to positive ones (Baumeister et al., 2001). This tendency leads to negative reviews, ratings, and comments to be more impactful on shaping readers' attitude and behavior compared to what positive ones do.

When receiving negative comments, brands and companies wonder about whether and how to react to them. Past research has highlighted that brands providing a response to negative user-generated comments achieve better results than those ignoring and not responding to them.

Therefore, companies and brands must figure out how to react to negative content to mitigate and minimize its negative effect on prospects' behavior and attitudes.

In e-commerce and social media, the company or the brand itself acts directly to mitigate negative comments' effect by answering them through its official account. While in live streaming commerce, a third party acts on the company's or brand's behalf by managing and promptly replying to negative comments, i.e., the streamer.

As a result, in live streaming shopping format, the streamer plays simultaneously the roles of salesperson, entertainer, and brand ambassador (Ma, 2021).

Existing studies on how to manage negatively charged user-generated content have been mainly conducted in the fields of electronic commerce, social commerce, and social media

rather than in live streaming shopping, considered an emerging and not so consolidated phenomenon (Admand & Guzman, 2021; Chavalier and Mayzling, 2006; Fan et al., 2017). These studies have primarily focused on the content (one-sided vs. two-sided; tailored vs. not tailored) and the speed (fast vs. slow) of companies' responses to negative comments, demonstrating and validating the individuals' general preference for personalized, fast, two-sided responses over the opposite conditions (Min et al., 2014; Rim and Song, 2016; Crijns et al. 2017).

An additional interesting and relevant dimension for experiments on the management of negatively emotionally charged comments is communication style.

In social interactions context, "communication style" is defined as the way a person sends verbal, paraverbal, and nonverbal signals showing how he or she tends to relate to people with whom interacts (de Vries et al., 2009). Although this definition is primarily tied to interpersonal interactions, the concept of communication style can be extended to brand-consumer and company-stakeholder interactions. When dealing with negative user-generated content, companies tend to interpret it as "threat" to their business and feel in the position of protecting their image (Conlon & Murray, 1996). As studies in corporate crisis management show, the adoptable strategies in these circumstances can be roughly divided into defensive and accommodative communication styles (Marcus & Goodman, 1991). While Lee and Song (2010) identify three communication styles against negative user-generated content: no-action, accommodative and defensive.

The no-action communication style, definable also as passive communication style, relies on not facing the negativity related to the user-generated content remaining silent, making meaningless comments or engaging in futile or short-sighted reactions (Lee, 2004).

A defensive communication style arises when the communicator, such as a brand, perceives a threat (or wants to anticipate it) and reacts consequently through self-protective patterns (Gibb, 1961). Therefore, defensive responses imply rejecting responsibility, denying the existence of a problem, providing justifications or excuses like external or uncontrollable factors, blaming other parties or minimizing the negative observations or the issues exposed by the interlocutor, such as the brand's customers (Lee and Song, 2010).

With the defensive communication style, the communicator has the aim to protect directly its reputation, image, and point of view (Li et al., 2018). Thus, defensive communication is perceived as an approach oriented towards personal interests, where the communicator may transmit incapacity of listening, lack of empathy and care (Trevino and Castano, 2013). These are factors that can be detrimental in terms of communicator's trustworthiness, such as perceived brand's trustworthiness.
However, when the defensive response is characterized by realistic and credible argumentations or justifications, it may positively influence and persuade the audience not directly involved in communicator-interlocutor interaction (Gillespie, 2020).

An accommodative communication style arises when the communicator, such as the brand, receives a negatively connotated comment from its interlocutor and responds by seeking to protect its reputation in the eyes of that specific interlocutor, adopting a customer-oriented approach toward him.
In accommodative responses, the communicator acknowledges the problem or flaw met by its interlocutor, takes eventually partial or total responsibility, provides apologies, and tries to propose solutions and recovery actions (Lee and Song, 2010). Therefore, the accommodative responses include emphatic statements (Min et al., 2014a). Understanding interlocutor's (i.e. complainer) feelings and point of view allows the achievement of higher level of complainer's satisfaction and leads the communicator (i.e. the brand) to be perceived as more trustworthy among its audience (not directly involved in the brand-complainer interaction). However, some authors have argued that the positive impact of an apology may be invalidated by the interpretation of apology as effective admission of guilt.

This study focuses only on accommodative and defensive strategies, since past studies have shown that the "no-action communication style" to negativity is the least effective in preventing and minimizing individuals' negative attitudes and behaviors toward the communicator.

Considering the definition of defensive and accommodative responses, in commercial and business contexts the conventional wisdom is based on the saying "Customers are always

right even when they are wrong" and, thus, suggests to companies or brands to favor accommodative responses over defensive ones to get better outcomes (C. Li et al., 2018b).

This conventional wisdom regarding the comparison accommodative versus defensive communication style has been tested in the context of negative reviews in electronic commerce of services and products, where have been observed mixed results.

Studies, as the one conducted by Cheng et al. (2015) show how, independently from the severity of the problems raised by clients in their negative reviews, brand's accommodative responses are more effective both on the upset clients and other readers (i.e. potential clients). Accommodative responses lead reviewers and readers to perceive the brand as less guilty and responsible for product flaws. This permits the brand to protect indirectly its reputation and, thus, to reduce the propensity of customers to engage in negative word-of-mouth. On the contrary, defensive responses increase perception of brand guiltiness, causing anger among customers too.

While studies as the one of P.Li et al. (2025) have demonstrated that defensive responses to ordinary negative reviews lead to better sales performance than accommodative ones. Accommodative responses can be interpreted by clients and readers as confirmation of the existence of a flaw around the product. This leads potential consumers to be more cautious in making a purchase decision. While defensive responses, through the usage of self-protective patterns, may provide potential consumers with the benefit of doubt regarding the actual existence of a problem or a flaw around the product.

Therefore, considering these mixed results observed in e-commerce field, it becomes particularly relevant to compare these two-communication styles (accommodative vs defensive) in addressing negative users' generated content and to explore their impact on audience attitudes in a context that has not yet been explored: live streaming commerce.

This thesis aims to bridge this gap by investigating the effect of streamer's real-time responses to users' criticisms on the attitudes of connected audience, who observe the streamer-complainer interaction (Li et al., 2018).

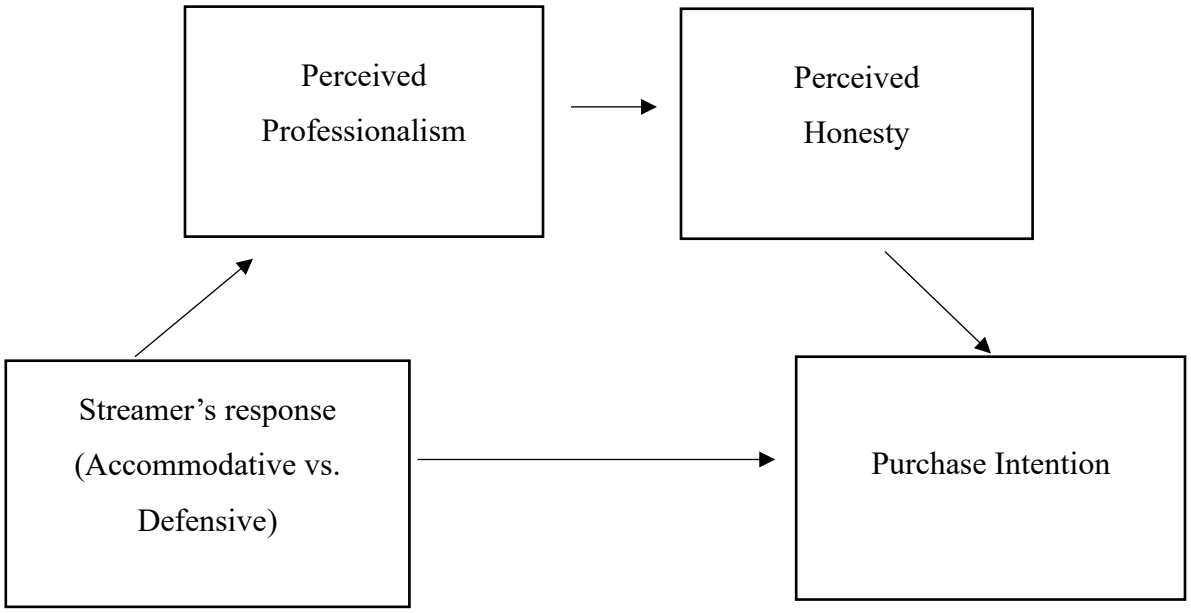
Based on this research gap and objective, the central questions guiding this study are:

1) Which are the effects of streamer's real-time response (accommodative vs defensive communication style) to user-generated negative comments on connected audience attitudes and behavior?
2) How does this response (accommodative vs defensive communication style) influence connected users' attitudes and behaviors?

In this study, to explain the effect of accommodative vs defensive communication style in streamer response on audience attitude, two possible mediators are considered: perceived Professionalism and Perceived honesty. Perceived professionalism refers to audience evaluation of streamer expertise in managing the live session and it will be supported the idea that accommodative communication style reinforces perceived professionalism. While perceived honesty is audience evaluation of streamer transparency during live sessions. Studies in business have shown that these two dimensions are related. According to Newell and Goldsmith (2001) when a company is perceived as professional and expertise, it tends to be perceived also as more honest and reliable. Therefore, in this study it is expected that a streamer who demonstrates high levels of professionalism and expertise will be perceived as more honest and transparent by the audience, which in turn may affect audiences' attitudes.

Therefore, to explore these questions, the research considers the following variables and related conceptual models:
IV: Streamer response (accommodative vs. defensive)
DV1: Purchase Intention
DV2: Willingness to Participate in further Live Streaming Sessions conducted by the same streamer
DV3: Attitude toward Live Streamer
M1: Perceived Professionalism
M2: Perceived Honesty


Streamer's response (Accommodative vs. Defensive)
Purchase Intention, Willingness to Participate, Attitude toward Live Streamer


Perceived Professionalism
Perceived Honesty
Streamer's response (Accommodative vs. Defensive)
Purchase Intention

3.2 METHODOLOGY

3.2.1 METHODOLOGICAL APPROACH

The experiment was conducted in Italy between the first and third week of August 2025 through the creation of a self-administered online survey designed with the platform Qualtrics XM. The survey was distributed to the participants through an anonymous link generated by Qualtrics XM; and it was sent via messaging techniques and social medias networks such as Whatsapp, Instagram and Facebook. As a result, the convenience sample technique, which main benefits rely on the following features: rapidity, low cost and ease of use, was adopted.

3.2.2 DESCRIPTION OF THE STIMULI

Given the live streaming shopping context, the stimuli consisted into a video in Italian language, where a live streaming shopping session of an existing brand "The North Face" directed by a streamer was simulated.

It's important to highlight that, to avoid potential bias, the streamer's role was played neither by a famous-notorious person nor by a person involved in the redaction of the following research.

The streamer can fall under the category of average person, since she is an Italian female of 27 years old and works in real-life in a field far from social media and direct selling.

A further precaution was adopted in the individuation and selection of the object to be showcased and promoted by the streamer during the live streaming shopping session. The choice felt on an accessorize item, which can be considered unisex and genderless both for its nature (i.e. it's usable both by male and female population) and its color: a backpack.

Given the nature of the research questions, the experimental study consisted in an independent control group experiment, also known as a between-subjects experiment, where

participants have been assigned casually to one of the two scenarios of the independent variable (accommodative vs defensive communication style).

To ensure that any difference in experiment participants' attitudes and perception arose only from the attributed streamer's response, the two scenarios were characterized by a first initial and equal video, to which, through Canvas' video-editing tools, was added a second video representing streamer response to a user's criticism: accommodative vs. defensive communication style.

In both cases, the video's length was 24 seconds and there were no differences in illumination, since the videos were recorded on the same day during the same hour.

At the beginning of the initial and common video, the streamer's line was: "*Among the latest arrivals there is also this North Face backpack in Borealis model and in military green color. It's perfect for city sightseeing and for your hiking to the mountains*".
While concluding this line, the streamer received on the live-chat a negative valence comment from the connected user "@marco_94".
The comment was a criticism to the backpack color, i.e. an aesthetic feature of the product shown.
Indeed, Marco's comment was: "*The color of this backpack is horrible*".
To ensure that the observer of the video caught its arrival and its negative content, the comment was announced by a notifying ring and reported below in writing in the video (as if there was a real live chat).
Additionally, the streamer highlighted the comment by the following line: "*A comment has arrived! Marco says that the color of this backpack is horrible*".

After this first video, if the observer was exposed to the first scenario (accommodative), the video continued with the streamer saying:
"*Marco, I'm sorry that you think in this way. Stay connected to the live to see other backpacks in different colors!*"

While, if the observer was exposed to the second scenario (defensive), the video continued with the streamer replying with:
"*Marco, it's surely fault of the illumination in this room, I assure you that the green of this backpack is beautiful!*"

3.2.3 SURVEY STRUCTURE

Survey participants were exposed to a questionnaire composed of 8 questions: 1 attention check, 1 manipulation check, 5 specific and 3 demographics (age, gender, actual occupation). The questionnaire was divided into four sections.

In the first section, participants were welcomed with a small introduction featuring both an explanation of the academic purpose of the experimental study and a kind request to participate in the survey, being conscious that there were no right or wrong answers.

Furthermore, participants were informed about the compliance with privacy principles, since information, answers and data were collected in completely anonymous way.

In the second section, it was communicated to the participants that, after clicking on next, they would have seen and listened to a short extract from a live streaming shopping session done by the brand "The North Face". Additionally, it was asked to listen carefully to the extract.

The third part of the survey featured a randomized block made up of two different scenarios, i.e. the two different videos. The randomization condition is fundamental in questionnaire at the base of experimental studies to guarantee that participants are exposed uniformly to all the stimuli. In the following case, participants could only go to the fourth section after watching completely the video.

In the fourth section participants were exposed to: 3 questions regarding the dependent variables (purchase intention, willingness to participate in further live streaming sessions conducted by the same streamer, and attitude toward live streaming streamer) and 2 questions regarding mediators (perceived honesty and perceived professionalism).

All the questions were validated by a 7-point Likert Scale.

Regarding the dependent variables "Purchase intention" and "willingness to participate in further live streaming sessions conducted by the same streamer" it has been used one-item scale (1=not at all likely; 7=very likely).
The choice of using one-items scale derives from the idea that "willingness" and "intention" are unidimensional constructs, that simply predict the probability or propensity of an individual in doing or repeating an action.
By adopting this point of view, it's not a necessity decomposing "willingness" and "intention" in different sub-items, because these will refer to the same dimension. Indeed,

studies measuring these variables through the single item chosen are: *Spangenberg, E. R., Crowley, A. E., & Henderson, P. W. (1996). Improving the store environment: do olfactory cues affect evaluations and behaviors?. Journal of marketing, 60(2), 67-80* and *Li, P., Spence, C., & Wu, C. (2025). What motivate consumers' purchase intention and the intention to continue watching in livestream shopping. Humanities and Social Sciences Communications, 12(1).*

The third scale related to the "Attitude toward Live Streamer" derives from the pre-validated scale from *Tian, B., Chen, J., Zhang, J., Wang, W., & Zhang, L. (2023). Antecedents and Consequences of Streamer Trust in Livestreaming Commerce. Behavioral Sciences, 13(4), 308.*

The fourth scale related to the mediator (M1) perceived professionalism derives from the pre-validated scale from *Carr, C. T., & Stefaniak, C. (2012). Sent from My iPhone: The Medium and Message as Cues of Sender Professionalism in Mobile Telephony. Journal of Applied Communication Research, 40(4), 403–424.*

The fifth scale related to the mediator (M2) perceived honesty derives from the pre-validated scale from *Yan, L., & Hua, C. (2021). Which reviewers are honest and caring? The effect of constructive and prosocial information on the perceived credibility of online reviews. International Journal of Hospitality Management, 99, 102990.*

To fulfil the needs of this experimental study, all the scales have been adjusted.

The fourth part of the survey displayed the block featuring demographic questions, where participants were asked about their gender, age and actual occupation.

3.3 RESULTS

3.3.1 DATA CLEANING AND SAMPLING PROCEDURE

The survey was distributed to 148 individuals. After the data collection through the questionnaire generated by Qualtrics XM, they recorded answers have been exported to the statical software SPSS (Statistical Package for Social Science) to be analyzed.
However, before dealing with analysis stage, the dataset has been subjected to a data cleaning process, where some of the rows associated with some individuals have been delated as not passing the attention check question.
Through the following stage, a sample of 123 people has been obtained.
114 over 123 people took part completely and exhaustively in the survey. As a result, inside the cleaned dataset, there were 9 participants, who did not complete the survey. The responses associated with these 9 individuals were not eliminated, as SPSS took into consideration in the analysis only the responses given and it treated the absent ones as missing values (i.e. values not considered in the statistical analysis and not impacting on analysis' results).

3.3.2 PARTICIPANTS AND DEMOGRAPHIC RESULTS

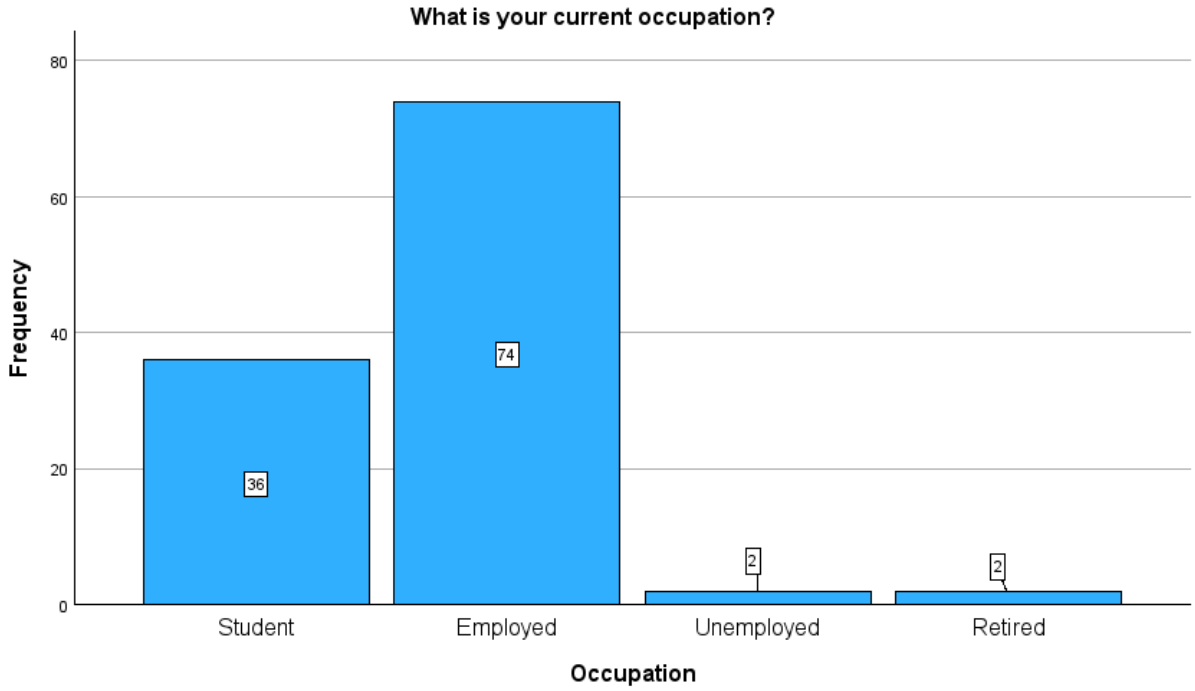
For each of the 3 demographic questions, the valid responses were 114.
Considering the valid responses (114), the target sample was composed by 64,9% (74/114) of workers, 31,6% (36/114) of students, 1,8% (2/114) of unemployed and 1,8% (2/114) of retired.

Outcome 1: Descriptive statistics on occupation

Statistics		
What is your current occupation?		
N	Valid	114
	Missing	9

Occupation					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	36	29,3	31,6	31,6
	Worker	74	60,2	64,9	96,5
	Unemployed	2	1,6	1,8	98,2
	Retired	2	1,6	1,8	100,0
	Total	114	92,7	100,0	
Missing	System	9	7,3		
Total		123	100,0		

Outcome 2: Istogram for occupation



Regarding the age of participants, on average the participants were 33 years of age. The frequency table showed that the age range was between a minimum of 18 years of age and a maximum of 64 years of age, with a median of 26 years old.

This indicated a distribution skewed moderately toward higher ages; indeed, the skewness value was positive and higher than 1 (1,094).

Additionally, the boxplot revealed that 50% of the sample belonged to the young adults and middle-aged adults' category. Through its buffers, boxplot confirmed the moderate asymmetrical distribution of ages towards rights.

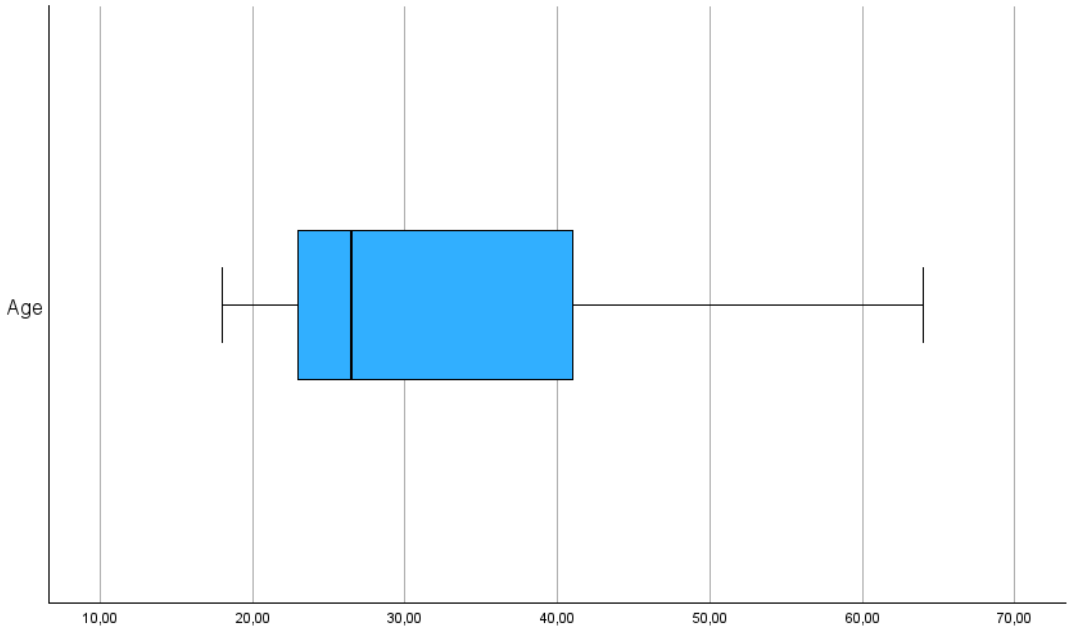
Outcome 3: Descriptive statistics on age

Riepilogo elaborazione casi

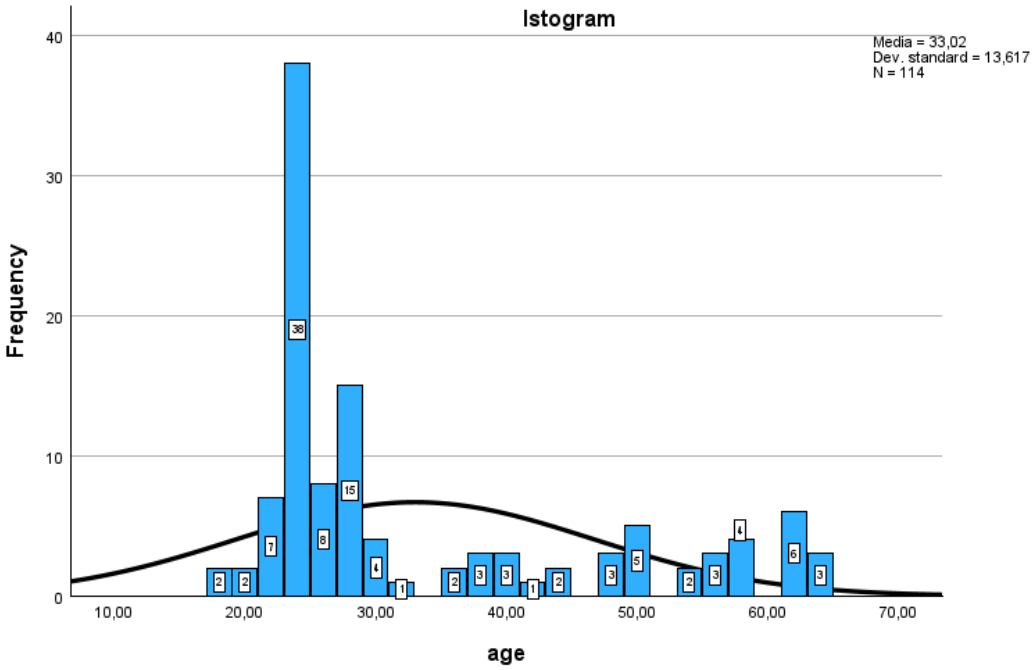
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
How old are you?	114	92,7%	9	7,3%	123	100,0%

Descriptive			
		Statistics	Std. error
Age	Mean	33,0175	1,27539
	Median	26,5000	
	Variance	185,433	
	Standard deviation	13,61739	
	Min	18,00	
	Max	64,00	
	Range	46,00	
	Interquartile Range	18,50	
	Skewness	1,094	,226
	Kurtosis	-,304	,449

Outcome 4: Boxplot for age



Outcome 5: Istogram for age



Regarding the gender of participants, the descriptive analysis revealed that the female gender prevailed representing 71,1% (81/114) of valid responses, while the male gender represented just 44.7% (33/114) of it.

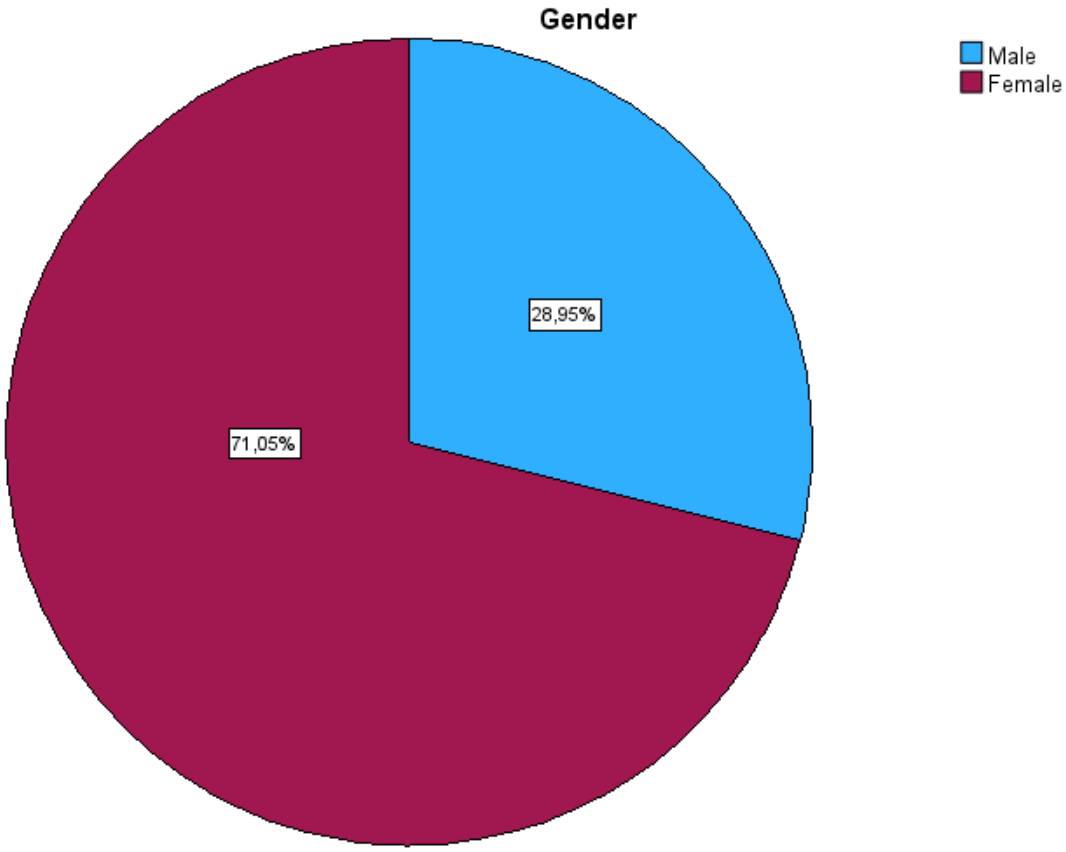
No respondents selected as answer the option “prefer not to say”.

Outcome 6: Descriptive statistics for gender

Statistics		
What is your gender?		
N	Valid	114
	Missing	9

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	33	26,8	28,9	28,9
	Female	81	65,9	71,1	100,0
	Total	114	92,7	100,0	
Missing	Sistema	9	7,3		
Total		123	100,0		

Outcome 7: Pie chart for Gender



3.3.3 DATA ANALYSIS

To proceed with data analysis a dummy variable was created to codify the independent variable characterized by a categorical nominal nature: accommodative versus defensive.
The participants randomly exposed to the defensive condition were assigned to the value 1. While the participants randomly exposed to accommodative condition, were assigned to value 0.

An initial independent sample t-test was conducted on the two manipulation check questions with the aim to observe whether the manipulation of the independent variable was perceived and understood by participants as in the following experimental research intended.
As the group statistics table suggested the 59 participants assigned to condition 1 perceived on average streamer's response to comment as more defensive and aggressive oriented. While the 57 participants assigned to condition 0 perceived on average streamer's response to comment as more accommodative, assertive and peaceful oriented.

Outcome 8: Group Statistics

	IV	N	Mean	Standard deviation	Standard error of the mean
Defensive: Assertive	1=defensive	59	2,98	1,843	,240
	0=accommodative	57	5,44	1,570	,208
Peaceful: Aggressive	1=defensive	59	3,25	1,890	,246
	0=accommodative	57	1,65	1,246	,165

The observed difference between two groups' means (Defensive: Assertive = -2,456; Peaceful:Aggressive= 1,605) were statistically significant, since the bilateral p-value was, in both manipulations check questions for independent variable, lower than 0,005.
The given result validated the real and desired efficacy of independent variable manipulation.

Outcome 9: Independent Sample T-test

	IV	Difference in mean	T	p-value
Defensive: Assertive	1=defensive	-2,456	-7,713	<,001
	0=accommodative	-2,456	-7,734	<,001
Peaceful: Aggressive	1=defensive	1,605	5,380	<,001
	0=accommodative	1,605	5,417	<,001

After the manipulation check step, the preliminary analysis on "Willingness to participate to another live conducted by the streamer", "Attitude toward live streaming" and "Willingness to buy" were conducted through an independent sample t-test to observe whether the manipulated independent variable (accommodative vs defensive) exercised a direct effect over these three.

The results of the t-test highlighted the existence of statistically significant direct and immediate effects of streamer's response (accommodative vs defensive) on the three considered dependent variables.

For all dependent variables, an accommodative response to negative comment led to statistically higher means compared to a defensive response.

Indeed, participants exposed to accommodative condition (Ma=3,52, SDa=2,04) recorded a higher purchase intention than the one assigned to defensive condition (Md=2,85, SDd=1,364), with a statistically significant difference among the means ($t = -2,110$, $p = 0,037$).

The attitude toward live streamer turned out to be more statistically favorable ($t = -4,186$, $p < 0,001$) when streamer adopted an accommodative response (Ma = 4,73, SDa = 1,65) rather than a defensive response (Md= 3,52, SDd = 1,50).

While the willingness to participate again in another live session directed by the same streamer resulted to be statically higher ($t = -4,302$, $p < 0,001$) for the group assigned to the

accommodative response (Ma = 4,05, SDa = 2,06) compared to the one assigned to defensive response (Md=2,64, SDd = 1,50).

Outcome 10: Group Statistics

	IV	N	Mean	Standard deviation	Standard error of the mean
Purchase Intention	1=defensive	61	2,85	1,364	,175
	0=accommodative	60	3,52	2,038	,263
Attitude toward Live Streamer	1=defensive	61	3,52	1,501	,192
	0=accommodative	59	4,73	1,649	,215
Willingness to participate	1=defensive	61	2,64	1,495	,191
	0=accommodative	59	4,05	2,063	,269

Outcome 11: Independent Sample T-test

	Difference in mean	t	p-value
Purchase Intention	-,664	-2,110	0,037
Attitude toward Live Streamer	-1,204	-4,186	<0,001
Willingness to participate	-1,412	-4,302	<0,001

Before proceeding with serial mediation analysis, reliability tests were conducted to assess the reliability of the scales used for the two different mediators by the values of Cronbach's

alpha, ensuring that they were higher than 0.7. For Perceived professionalism Cronbach's alpha was 0,933 (> 0.7). For Perceived honesty Cronbach's alpha was 0,913 (> 0.7).
No reliability tests were conducted on the three dependent variables scales.

Outcome 12: Reliability Statistics – Perceived professionalism

Cronbach's Alpha	N. of items
,933	4

Outcome 13: Reliability Statistics – Perceived Honesty

Cronbach's Alpha	N. of items
,913	2

A serial mediation analysis was conducted applying model 6 of the SPSS Process Macro extension Version 4.2 by Adrew F.Hayes.
The model was applied on a sample of 118 people and considered four variables.
The independent variable indicated with X was the communication style streamer's response to the comment: accommodative vs defensive.
The dependent variable indicated with Y was Purchase Intention. While the remaining two variables were the mediators. M1 was perceived professionalism and M2 was perceived honesty.
The aim of serial mediation model was to explore if the effect of communication style of streamer's response on purchase intention was indirectly conveyed through a sequential process involving perceived professionalism and perceived honesty.
Specifically, the expectation was that the defensive response style, unlike accommodative response style, would negatively impact on perceived professionalism, which in turn would negatively affect perceived honesty, and ultimately lead to a lower Purchase intention. Consequently, the accommodative response would positively impact on perceived

professionalism, which in turn would positively affect on perceived honesty, and ultimately lead to a better Purchase intention, thus mitigating the negative comment effect on connected audience.

Outcome 14: model 6 applied on a sample of 118

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 4.2 *****************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model  : 6
    Y  : Purchase
    X  : defensiv
   M1  : mean_Pro
   M2  : mean_Per

Sample
Size:  118
```

The first outcome of model 6 measured the effect of the independent variable (X) on the first mediator (M1), perceived professionalism. The defensive response's effect on perceived professionalism resulted to be negative and significant (Coeff= -2,2297, t= -9,5604, p < 0.001). This demonstrated that participants exposed to the condition of streamer's defensive response (1) perceived significantly lower levels of professionalism.

Outcome 15: Effect of X on M1

```
**************************************************************************
OUTCOME VARIABLE:
 mean_Pro

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,6639      ,4407     1,6042    91,4010     1,0000   116,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     6,0172      ,1663    36,1813      ,0000     5,6878     6,3466
defensiv    -2,2297      ,2332    -9,5604      ,0000    -2,6917    -1,7678

**************************************************************************
```

The second outcome of the model focused on the effect of the first mediator (M1), perceived professionalism, on the second mediator (M2), perceived honesty. It resulted that perceived professionalism exercised a positive and significant effect on perceived honesty (coeff= 0,7406, t= 9,3908, p < 0.001). This indicated that the higher participants perceived professionalism, the higher perceived honesty was. While lower levels of perceived professionalism translated into the lower level of perceived honesty.

Outcome 16: Effect of M1 on M2

```
**************************************************************************
OUTCOME VARIABLE:
 mean_Per

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,7731      ,5977     1,1574    85,4266     2,0000   115,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     1,0781      ,4951     2,1774      ,0315      ,0974     2,0589
defensiv     -,1498      ,2649     -,5655      ,5728     -,6745      ,3749
mean_Pro      ,7406      ,0789     9,3908      ,0000      ,5844      ,8968

**************************************************************************
```

The third outcome of the model explored the impact of the second mediator (M2), perceived honesty, on the dependent variable (Y), purchase intention. As the outcome variable below showed, the effect of perceived honesty on purchase intention was positive and statistically significant (coeff= 0,4284, t= 3,1212, p =0,0023). Therefore, participants experiencing higher levels of perceived honesty recorded higher levels of purchase intention.

Outcome 17: Effect of M2 on Y

```
**************************************************************************
OUTCOME VARIABLE:
 Purchase

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,4550      ,2071     2,5076     9,9225     3,0000   114,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant      ,3231      ,7437      ,4345      ,6647    -1,1501     1,7964
defensiv      ,4427      ,3904     1,1339      ,2592     -,3308     1,2162
mean_Pro      ,1368      ,1543      ,8864      ,3773     -,1689      ,4425
mean_Per      ,4284      ,1373     3,1212      ,0023      ,1565      ,7003
```

Through the "ind3" it was possible to discover whether globally the serial mediation model was significant. Specifically, in this case, the serial indirect effect (ind3) resulted to be negative and significant (Effect= -0,7075, BootLLCI= -1,2153, BootULCI= -0,3131. It was considered significant as the confidence interval did not contain inside of it the value of zero. The meaning of this ending result was that a defensive streamer's response led to a decrease of perceived professionalism, which in turn reduced perceived honesty, and lastly lowered participants' purchase intention.

Outcome 18: Direct and indirect effects of X on Y

```
****************** DIRECT AND INDIRECT EFFECTS OF X ON Y ******************

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
      ,4427      ,3904     1,1339      ,2592     -,3308     1,2162

Indirect effect(s) of X on Y:
          Effect     BootSE   BootLLCI   BootULCI
TOTAL    -1,0766      ,2700    -1,6472     -,5857
Ind1      -,3050      ,3115     -,9322      ,3101
Ind2      -,0642      ,1204     -,3302      ,1525
Ind3      -,7075      ,2311    -1,2153     -,3131

Indirect effect key:
Ind1 defensiv    ->    mean_Pro    ->    Purchase
Ind2 defensiv    ->    mean_Per    ->    Purchase
Ind3 defensiv    ->    mean_Pro    ->    mean_Per    ->    Purchase

************************ ANALYSIS NOTES AND ERRORS ************************
```

CHAPTER 4: CONCLUSION

4.1 GENERAL DISCUSSION

4.1.1 THEORETICAL CONTRIBUTIONS

This experimental study enriches through several theoretical contributions the literature on the emerging phenomenon of live streaming commerce and, more broadly, on online users' attitudes and behavior.

First, previous studies have mainly focused on either the role of streamers or the impact of real-time comments. While this study goes a step further by integrating these two-characteristics of live streaming shopping model, since it pays attention to how streamers can manage negative comments in real time.

By manipulating the streamer's communication style response (accommodative vs defensive) to a constant negative comment, this study isolates the impact of communication strategies. It points out how the figure of streamer should address real-time criticism to shape audience attitude in a favorable way for business. In doing so, it extends the literature on the management of negative user-generated content in a little explored digital context: live streaming shopping.

Second, the findings contribute to clarifying the mixed results in previous studies regarding the management of negative user-generated content by accommodative versus defensive responses in online contexts, such as e-commerce.

Prior research in e-commerce has conducted to inconsistent outcomes. On one hand, some studies demonstrate the effectiveness of accommodative responses for their high level of empathy and consumer centricity. On the other hand, other studies sustain the adoption of defensive responses, as the lack of apology and the lack of a solution proposal may safeguard sales by deflecting attention from promoted product flaws and problems.

The results of this study highlight that in a sales model like live streaming shopping, with real-time interaction and high degree of dynamism, responses perceived as accommodating

results to be more effective in favoring better level of purchase intention and positive attitudes towards streamer.

Third, the study considers the communication style adopted by streamer's response as a key stimulus that shapes audience inner perceptions of professionalism, which subsequently impacts perceptions of honesty, and in turn influences purchase intention.

In doing so, the study shows that audience's cognitive and emotional evaluations of streamers' response are relevant also in driving behavioral and attitudinal responses.

4.1.2 MANAGERIAL IMPLICATIONS

Considering live streaming shopping commerce as a sales model gaining more popularity and interest in European and Italian markets, the results of this study also provide meaningful implications for brands, companies and streamers that are willing to implement this innovative and dynamic sales format in these markets.
Indeed, the study highlights that the communication style used by streamers is a strategic driver for connected audience purchase intentions and attitudes.
Communication style is not completely innate. It is partly shaped by the environment in which individuals grow up. Meanwhile, communication style is mainly a set of skills and abilities, that can be learned, trained and improved through practice.

Therefore, the first managerial implication is that companies should invest in the training of streamers. In live streaming shopping model, live streamers play simultaneously the roles of salespeople, entertainers, and brand ambassadors. Thus, they are in charge of managing negative comments. Their ability to deal with this task is crucial for minimizing negative comments' impact on sales performance. Specifically, this study demonstrates that accommodative streamers' responses are more effective compared to the defensive ones in building perception of professionalism, which then enhances perceived honesty, ultimately fostering purchase intention.

The second important managerial implication is that this study shows to brands and companies that communication style plays an important role for building a long-term relationship with their audience. Indeed, accommodative responses are associated with higher levels of audience's desire to participate in future live sessions. To evaluate the effectiveness of live streaming commerce format, brands and companies could measure performance both through transactional metrics, as sales volume, and through behavioral and attitudinal KPIs.
For example, these KPIs may be related to perceived professionalism, perceived honesty and willingness to engage in future live sessions. They may be defined and computed through post-live surveys, re-participation rate (monitored directly though live streaming platforms) and executions of comment sentiment analysis.

The third managerial implication is that this study confirms the importance of recurring to a proactive and accommodative management of negative comments during live streaming shopping sessions.
According to the findings, negative comments should not be addressed in a defensive manner. Instead, they should be considered by streamers as opportunities to showcase their professionalism and honesty. Therefore, it may be a good strategy to design response protocols that encourage streamers to acknowledge criticism respectfully and redirect attention toward possible solutions or alternative options.

In conclusion, this study demonstrates to brands and companies that streamers' communication style, often considered simply a matter of personal expression, can be a strategic managerial choice in live streaming commerce models.

4.4.2 LIMITATIONS AND FURTHER RESEARCH

Despite providing many contributions, this study presents some limitations to be considered in the interpretation of results and in future research about live streaming commerce and management of real-time user-generated content.

The first limitation deals with sample dimension and demographic characteristics. The experimental study was conducted on a limited group of individuals, i.e. 124 participants, mainly composed by women and young adults. This sample composition may not be so fully representative of the heterogeneity of online shoppers. It does not include many young (for example between 16-18 years old) and many old people, who may record different attitudes to streamer communication styles. As a result, expanding the sample will permit to have a more heterogeneous sample and will improve the generalizability of the findings to whole population.
A better representation of the population may be achievable by using a different sampling technique from convenience sample to obtain a more diversified sample.

The second limitation is related to the geography, as the experiment was conducted in Italy. As a result, the findings cannot be worldwide extended due to different cultural norms across countries. Therefore, in the future, it may be necessary and valuable to conduct the same study in different countries to observe whether the preference for accommodative over defensive responses is universal or is culturally contingent.

The third limitation is linked to the experimental design, as it was used a simulated live streaming shopping scenario. Despite all the precautions taken, this scenario cannot entirely capture the spontaneity and dynamism of real-time live streaming shopping sessions. Next study should be developed as field experiments or use an actual and real-time live streaming commerce event.

The fourth limitation is related to the consideration of just two mediators, perceived professionalism and perceived honesty (arranged in a sequential pathway), to provide an explanation of how the communication style of streamer's response impact on audience attitudes.
Indeed, to enrich the explanatory framework, future studies should extend the model to more possible mediators such perceived engagement, perceived trust, perceived freedom and perceived manipulation.

Finally, another limitation could be that only one type (and constant) of negative comment was used. Indeed, in digital contexts like live streaming shopping, online users are completely free in commenting. Thus, online users may publish extremely negative and verbally aggressive comments. Therefore, future studies can consider more typologies of negative comments and explore which type of communication style may be more effective in facing them.

Although this thesis provides a deeper understanding on how streamer communication style can shape connected audience attitudes and behavior in live streaming commerce models, more aspects should be explored by future research to build a more comprehensive and robust theoretical framework for this innovative sales model.

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