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The Impact of Coronavirus in Marketing: the Role of COVID-19 in Shaping Consumer's Brand Attitude and Emotional Response.

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1. Introduction

Over the centuries, mankind had to face many major crises that occurred around the globe. As a matter of fact, only the 20th and 21st centuries were marked by some of the most significant historical events that affected humanity, such as the two World Wars, the Great Depression, and the more recent 2008 Financial Crisis. These unpredicted and sudden changes significantly affected people's lives, who had to react and eventually adapt to these phases of transformations.

Today, humas' ability to adapt to environmental changes has been once again challenged.

Indeed, the 9th of January 2020 all countries were hit by the discovery of a new coronavirus, namely SARS-CoV-2, identified in a hospitalized person with pneumonia in Wuhan, China[1]. In the meantime, the virus was already spreading across the world, as only few months later some cases of Covid-19 disease were recognized also across Europe; the continent was about to become the epicenter of the pandemic, and the first case of Covid-19 in Italy was announced the 21st of February 2020[2].

The 11th of March the World Health Organization officially declared the state of pandemic[3].

Therefore, the Covid-19 outbreak, and its rapid evolution, marked the beginning of a new phase of uncertainty, which has dramatically changed the way we live and has introduced new and very strict rules of conduct.

More than a year and a half later we are still fighting against this infectious disease, which has so far caused more than 4 million deaths across the world[4].

Covid-19 appears to be a very complex illness, and many aspects about it are still little known; for instance, we still do not know the exact origin of the new coronavirus or the reason why some people get sick while others do not. What we do know is that this virus can be particularly aggressive, as it can damage the lungs, the heart, and the brain, and even those people who recover from Covid-19 may experience some long-term effects of the disease, such as shortness of breath, extreme tiredness and problems with memory and concentrations. To this end, a study conducted by the British Medical Journal discovered that approximately 10% of patients experience prolonged illness after Covid-19[5].

The newly discovered disease came into our lives like a "perfect storm", which has forced people, governments, and companies to rethink the way they live and operate. In addition, its discovery occurred in a moment full of changes per se, where social fights, political corruption, and climate change, together with the pandemic, are all affecting the way people live and behave, also as consumers. Indeed, they are all drivers of major changes in how customers live, work, and buy (The Retail Year, 2020).

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[1] World Health Organization, 2020, January. WHO Statement regarding cluster of pneumonia cases in Wuhan, China. https://www.who.int/china/news/detail/09-01-2020-who-statement-regarding-cluster-of-pneumonia-cases-in-wuhan-china
[2] https://www.who.int/countries/ita/
[3] World Health Organization, 2020, March. WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020. https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020
[4] https://covid19.who.int/
[5] The British Medical Journal, 2020, August. Management of post-acute Covid-19in primary care, 2020, 370, doi: https://doi.org/10.1136/bmj.m3026

Therefore, the current pandemic has brought considerable changes in people's habits and behavior, which in turn has led to negative consequences from a health and psychological point of view. Indeed, Covid-19, together with the above-mentioned factors, has created favorable conditions for the development of a climate of increased fear and stress in people's lives (The Retailer Year, 2020), and as a result all these elements have led to a new type of consumer: the so-called "anxious consumer", whose behavior is shaped by a sense of anxiety and fear, and to which marketers and retailers need to adapt (Rindone, 2020). Thus, companies have been forced to reconsider their marketing, communication, and advertising strategies, to conform to the stage of crisis and the new common rules.

For what concerns the advertising field, Jiménez-Sánchez, Margalina and Vayas-Ruiz (2020) state that both big and smaller brands have completely changed their advertising strategy. Indeed, during the first stages of the global health crisis, these scholars have analyzed dozens of commercials from different countries and have highlighted some common aspects that characterize them and enabled to take distance from traditional advertising. First, a common aspect has been the intensified emotional appeal (which, especially during the first stages of the pandemic, has in most cases replaced the traditional purpose of selling), combined with musical contributions and slogans. Second, the focus of these commercials was on increasing customers' awareness of the new hygiene regulations and rules of conduct, but also on the support activities that the brands themselves have implemented to fight against the virus. Finally, all these advertising had in common a positive, encouraging tone and gratitude towards healthcare providers and citizens.

As an example, in April 2020 the Italian brand Barilla launched a new commercial entitled "All'Italia"[6], where videos of the most famous streets and squares of Italy's main cities, for the first time ever completely empty, followed each other, while the narrative voice of the actress Sophia Loren was giving words of hope and gratitude towards Italian people and all the workers that never stopped doing their job even in the hardest of times.

Today, although the health crisis has not ended yet, the emotional appeal in advertising campaigns has significantly lowered in order to align with what has become our "new normal", and as a consequence the result is less impactful. However, there may still be a long way to go before we can return to traditional advertising, where social interactions and gatherings were the norm.

Due to the relevance and topicality of the pandemic and the consequent radical changes in the marketing and advertising field, there is still lack of research that analyze the new implemented strategies and how they have been perceived by the final consumer. Therefore, this thesis aims at contributing in its little by testing how consumers react when exposed to two opposite advertising stimuli: a pre-Covid framed ad and a post-Covid framed ad. More in particular, the author plans to test how the exposure to one of the mentioned stimuli makes a consumer vary his or her response in terms of brand attitude.

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[6] https://www.youtube.com/watch?v=sMYnHQ14Nw4&t=60s&ab_channel=BarillaItalia

In addition, this research will examine whether and how nostalgia emotion mediates the relationship between the independent variable (*advertising framing*) and the dependent variable (*brand attitude*), and whether and how the presence of Covid anxiety moderates the relationship between the independent variable and the mediator.

2. Literature Review

In this chapter, an in-depth theoretical overview of the variables used throughout this study, namely advertising framing, brand attitude, nostalgia and Covid anxiety, will be presented.

First, a conceptualization of the historical period characterized by the ongoing global pandemic of Covid-19 disease will be done, with a focus on the negative consequences in terms of mental health well-being caused by the novel coronavirus, especially in terms of the general heightening of people's anxiety.

Second, the author will review the existing body of literature about nostalgia emotion and its role both in marketing, as a strategy to create emotional connections with customers, and during the pandemic, as a way to cope with it.

Finally, the last two variables involved (*brand attitude* and *advertising framing*) will be reviewed and conceptualized according to the problem at hand.

2.1 The Novel Coronavirus and the Increase of the Level of Anxiety

The Covid-19 outbreak has generated an unpredictable socio-economic crisis that has dramatically altered people from all over the world's lives (Xiong et al., 2020; Serafini et al., 2020; McFarland, Reeves, Porr and Ployhart, 2020). Indeed, the discovery of the novel coronavirus that occurred in late 2019 has shocked the world, forcing governments worldwide to establish new rules of conducts and social distancing measures to contain the spread, that have significantly changed and affected our everyday life (Gupta et al., 2020).

However, the phenomenon of the pandemic is not a new threat for humans, since over the centuries there have been some other major phenomena that we could relate to the one we are currently facing.

As a matter of fact, several infectious diseases (both newly emerging and re-emerging) have been endangering humankind since the Neolithic revolution that took place 12,000 years ago (Dobson and Carper, 1996; Morens et al., 2008; Morens et al., 2020;). These infections were "zoonotic" ones, which means that were caused by an animal pathogen; more in particular, the latter may either provoke a "dead-end infection", which does not spread among people, or a more dangerous "person-to-person spread" that may lead to the generation of a pandemic. Some examples of older pandemics are the 541 A.D. Justinian Plague and the 1348 A.D. Black Death (Morens, D. M., and Fauci, A. S., 2020).

In more recent times, the 1918 Influenza pandemic has killed more than 50 million of people, and it is recognized as the "deadliest event in human history" (Morens, D. M., Daszak, P., and Taubenberger, J. K., 2020), as it has caused more deaths than the World War I (Dobson, A. P., and Carper, E. R.,1996). Today, even if a century has passed, this disease has not been eradicated yet as it still causing outbreaks throughout the world, which highlights how a single health emergency can cause prolonged consequences (Morens, D. M., and Fauci, A. S., 2020). Among the other major pandemics, we can mention the Smallpox outbreak, the Spanish Flu and HIV/AIDS (Brodeur, Gray, Islam and Bhuiyan, 2020).

Life course research recognize that prior life experiences have a role in shaping consumer behavior during later stages of life, and behavior is the result of earlier life conditions and individuals' adaptive response to changes in life and phases of transitions within historical and socio-cultural contexts (McAlexander, 1991; Schouten, 1991; Lee, Moschis, Mathur, 1999; Moschis, 2007). Furthermore, stress and other adverse psychological conditions that may arise because of stressful life events may lead customers to change their consumption patterns (Weathon, 1990; Mathur, Moschis, Lee, 2007). Therefore, it is possible to predict that also today's global health emergency will leave some unpredictable scars in people's behavior, which in turn will affect the way they act as consumers.

In such scenario, the novel coronavirus has led to traumatic consequences to people who have experienced the illness, either directly or indirectly, while to those who have not been affected it is anyway a "persistent worry which is very stressful" (Blackman, 2020, p. 120). Indeed, the awareness of the limited amount of control over how the scenario will evolve and the uncertainty about when it will be completely ended, combined with the existential threat, generates anxiety (Barlow, 1988), which could exhibit in different symptoms, such as difficulty breathing, dizziness and heart racing (Tabri, Hollingshead and Wohl, 2020). As a matter of fact, there is a strict link between distress and anxiety, as the former typically triggers the latter (Bystrisky and Kronemyer, 2014).

Consequently, as happened with prior major crisis, the pandemic is having a significant impact also on mental health well-being and it is causing psychological consequences that could be long-lasting (Dong and Bouey, 2020; Holmes et al., 2020), with a global increase in cases of acute stress, sense of loneliness and helplessness, anxiety, fear, depression, and insomnia, but also suicide and self-harm (Rossi et al., 2020; Thakur and Jain, 2020; Xiong et al., 2020; Serafini et al., 2020; Kumar and Nayar, 2020).

In addition, because of restrictions and social distancing measures, there has also been an increase of negative health behavior, such as alcohol consumption and physical inactivity. Moreover, the impossibility to plan in the short or long term has heightened not only fear and anxiety, but also the tendency to disengage from important life goals, especially for young people (Settersten et al., 2020). The relevant spread of these phenomena has led the World Health Organizations to express its concern about the psychological distress diffusion and the general heightening of anxiety[7].

Cullen, Gulati, and Kelly (2020) state that people who have already experienced some psychological problems are particularly prone to develop further psychological distress; however, they expect a significant increase in anxiety and depression also among the general population and those who do not have some pre-existing mental health disorders. Indeed, these negative effects developed also among Italian general population, where high rates of mental distress (post-traumatic stress symptoms (PTSS), depression, anxiety, insomnia, perceived stress, and adjustment disorder symptoms (ADS)) were found three weeks after the lockdown measures were established, independently from prior traumas or mental illness (Rossi et al., 2020). Furthermore, it appears

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[7] World Health Organization, 2020, March. Mental health and psychological considerations during the COVID-19 outbreak. https://www.who.int/docs/default-source/coronaviruse/mental-health-considerations.pdf

that some categories, such as healthcare workers, female gender, and younger age groups (especially students and people under 40 years old), are more disposed to develop psychological distress' symptoms (Qiu et al., 2020; Rossi et al., 2020). For what concerns women, their proneness to develop stress-related disorders like anxiety is due to differential neurobiological responses when exposed to stressors (Eid, Gobinath and Galea, 2019).

Finally, there is no evidence that low-income countries have been more affected than medium and high-income ones (Xiong et al., 2020).

2.2 How to Cope with the New Disease: Nostalgia Emotion as a Way Out

Because of the above-mentioned negative effects that the new disease is having on mental well-being, the pandemic has led people to find adaptive behaviors and ways to cope with it (Colleen and Rifkin, 2020). Among the different reactions, there seems to be the need to reconnect with people from the past (Firth, 2020), which may be caused by nostalgia. Indeed, negative, and stressful events may lead people to seek refuge in past events and objects that stimulate past and more peaceful memories, which allow to find a sense of security (Ornstein and Ornstein, 1985). This finding may be relevant for the time of great uncertainty we are living, in which nostalgia emotion may play a role in shaping anxious consumers' responses to marketing stimuli.

The concept of nostalgia in the marketing domain is relatively new, as it was introduced in the 90's with the so-called "the end of the century effect", a sense of common nostalgia that spread among consumers at the end of last century that stimulated nostalgic behavior (Stern, 1992). From the 17th century to the mid part of the 20th century, nostalgia was believed to be a neurological disease that affected the most vulnerable part of the population (Sedikides et al., 2004), while today it is seen as an important resource for psychological health and a predominantly positive experience that improves positive moods, increases positive self-regard and social connectedness, and contributes to perceptions of meaning in life (Routledge, Wildshut, Sedikides and Juhl, 2013). However, at the same time some authors believe that nostalgia is also an "ambivalent concept" (e.g. Werman, 1976; Holak & Havlena, 1991; Baker & Kennedy, 1994); according to this stream of thought, the negative side of this emotion is due to the impossibility of reliving once again past events, which could generate pain (Holak & Havlena, 1991; Hirsch, 1992; Baker and Kennedy, 1994).

Moreover, contrary to common belief, nostalgia is not an emotion experienced mainly by elder people as many might think, but from people of all ages (Routledge, Wildschut, Sedikides and Juhl, 2013). Indeed, nostalgia is also a very common experience among young adults, like undergraduate students (Wildschut et al., 2006). Through nostalgia, young people can experience a sense of belonging and stability due to its fashionable character. Books, films, and television, but also the elder' evidence, allow them to get to know about past periods they have not personally experienced but that they can select as a choice of trendy consumption (Cui, 2015). For this reason, in the last few years, there has been a widespread use of nostalgia in advertising and marketing campaigns in several industries: film, music and tourism, technology, food, and fashion (Hartmann

and Brunk, 2019). As a matter of fact, the use of this marketing tactic can be highly persuasive and effective (e.g. Havlena and Holak, 1991; Baker and Kennedy, 1994; Muehling and Sprott, 2004; Pascal, Sprott, and Muehling, 2012), and there is evidence that nostalgia stimulates a variety of emotional responses which are mainly positive, such as joy, happiness, gratitude, and pleasure (Holak and Havlena, 1998).

In accordance with last statements, Cui (2015, p. 129) asserts that "nostalgic goods, is an emotion goods", and the use of marketing stimuli that elicit the past has proven to be an effective way to enchant and re-enchant many customers, who are offered with emotionally charged and exciting experiences (Hartmann and Brunk, 2019).

Finally, many scholars have assessed the positive impact provided by nostalgic emotion on several consumption patterns and cognitive responses, such as purchase intention, attitude towards the ad, attitude towards the brand; but also brand awareness, perceived quality and authenticity, brand attachment and brand trust (e.g. Pascal, Sprott and Muelhing, 2002; Muehling and Sprott, 2004; Ergin and Şahin, 2019; Wen et al., 2019). Consequently, these patterns must be considered by marketers in order to maintain existing customers, attract new ones and eventually make the brand stand out in its own market (Rajumesh, 2014).

2.3 The Role of Advertising Framing in Affecting Consumer Response

One effective marketing strategy that marketers can use when designing a communication is influencing the decision criteria used by the consumer to make choices and judgments (Wright and Barbour, 1975). One possible way to do it is *framing*, which can indeed significantly influence consumers' alternative decisions' evaluation and how a problem is perceived (Davis, 1995). To this matter, Elliott, and Hayward (1998, p. 232) stated that "a *frame* can be considered a framework within which information is considered, selected, interpreted, evaluated, or simply, understood. Framing is then any manipulation of factors causing a change in an individual's frame such that a predictable behavior is effected. That predictable behavior is a framing effect". Therefore, paying attention to the way a message is presented to the consumer is critical since the way in which information is framed may significantly affect consumers' opinions and decisions about products and brands (Chang, 2007).

Over the years, many studies in marketing and psychology have assessed the role of message framing in influencing consumer decision and judgment in a variety of domains, such as cognition, health psychology, clinical psychology, and business (Levin, Schneider and Gaeth, 1998). The amplitude of the existing literature about Framing Effect in the marketing field highlights how impactful the use of this strategy can be, suggesting the need for marketers to pay attention to the labels they put on every piece of information they share as the same information can be designed in alternative ways (e.g. either positively or negatively). To this end, each alternative message framing can have a differential effect on the consumer and can be perceived differently in terms of gains versus losses, as described by Kahneman and Tversky's Prospect Theory (1979).

Moreover, it seems that when individuals are exposed with the same messages negatively and positively framed, the negative framed ones appear more salient. As a matter of fact, this "negativity bias" takes place because negative information generally exerts a greater impact on individuals' judgments than the equivalent but positively framed information, as deeply analyzed by several research (e.g. Anderson, 1965; Birnbaum, 1972; Fiske, 1980; Slovic & Lichtenstein, 1968). Therefore, all these studies confirm what previously stated by Prospect Theory, that is that people tend to weight losses more heavily than gains. In addition, there is proof that people impute a greater value to those items they give up than to those they acquire (Ariely, Huber and Wertenbroch, 2005); to this end, experiments showed that most people are loss averse, and when examining choices their decisions are mostly driven by the threat of a loss instead of the promise of a gain (Lejarraga and Hertwig, 2017).

To sum up, based on what stated so far, marketers need to pay close attention to how they present messages to consumers, and finding the right framing for a marketing communication is crucial because of framing's powerful role in affecting behavior.

2.4 Consumer's Evaluation of a Brand: the Brand Attitude

Faircloth, Capella, and Alford (2015, p. 62,) define brand attitude as "a consumer's overall evaluation of the brand" that contributes to the formation of the brand image. In addition, Kotler, Bowen, and Makens (1999) describe brand attitude as a consumer's favorable or unfavorable evaluation, emotional feeling, and behavioral inclination towards a certain brand.

Fishbein and Ajzen (1975, p. 6) claimed that attitudes are "a learned predisposition to respond in a consistently favorable or unfavorable manner with respect to a given object", and it was proven that generating positive attitude and emotions towards a brand is essential because of their role in predicting consumer behavior (Johnson and Grayson, 2005). Indeed, understanding how consumers form their attitude is key because attitudes do impact on purchase intention; more in particular, considering the brand attitude, the latter is positively related to consumers' willingness to buy (Sicilia, Ruiz and Reynolds, 2006), and creating the conditions for consumers to have a positive attitude towards a specific brand is a prerequisite also for creating brand loyalty (e.g. Amine, 1998; Dick and Basu, 1994). Moreover, brand attitude also puts the basis for a high brand equity and can boost the economic performance of a company (Walla, Brenner and Koller, 2011).

According to Bettman (1979), consumers tend to form attitudes towards objects or brands because of their limited cognitive processing skills. Specifically, in this scenario the formation of attitude represents a heuristic[8], which is most certainly less energy-consuming for consumers than doing an accurate analysis and comparison of the available choices, and consequently more favorable.

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[8] Heuristics are commonly known in marketing as mental short-cuts, that allow "to reduce the complexity of computational tasks and to reduce the use of resources such as cognitive activity and time" (Merlo, Lukas, and Whitwell, 2008, p. 190).

It is also important to comprehend the link between attitude towards the ad and brand attitude formation, as there is a strict relationship between the latter and the way the advertising communication is designed. To this end, the theory of reasoned action[9] affirms that brand attitude derives from the way in which the communication about attributes and advantages of a brand is done, and attitudes towards the brand are also affected by the brand image and awareness (Jalilvand and Samiei, 2012).

However, it must be considered that brand attributes and beliefs about a product or brand are not the exclusive drivers of consumer's brand attitude, as emotions play a big role too (e.g. Aaker, Stayman, and Hagerty 1986; Batra and Ray 1986; Burke and Edell 1989; MacKenzie and Lutz 1989; MacKenzie, Lutz, and Belch 1986; Homer 1990; Brown and Stayman 1992; Smith 1993). Engaging consumers through positive emotions should make them infer a positive brand attitude (Pham, 2004), and to this matter, it is important to remind the positive role played by nostalgia emotion, as highlighted by several studies (e.g. Holak and Havlena, 1998; Hartmann and Brunk, 2019).

Alongside emotions, it is worth also mentioning the impact of motivation; indeed, Rossiter and Percy (1987) define the link between brand attitude and motivation, asserting that a consumer can hold several attitudes toward a brand. Thus, depending on the specific purchase motivation operative at the moment, the consumer will show a different brand attitude (Rossiter and Percy, 1991).

Finally, several scholars (e.g. Mackenzie et al. 1986; Bruner II and Kumar 2000; Stevenson et al. 2000) have proven that there is a positive relationship between attitude towards the advertising and attitude towards the brand, suggesting that the level of enjoyment of a certain advertising is likely to lead to a more favorable attitude towards the brand. Indeed, a well-designed advertising succeeds in creating more favorable attitudes towards the advertised brand over the competing ones (Patra and Datta, 2012), which in turn generates choices and behavioral intention (Vakratsas and Ambler, 1999).

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[9] Fishbein and Ajzen, 1967
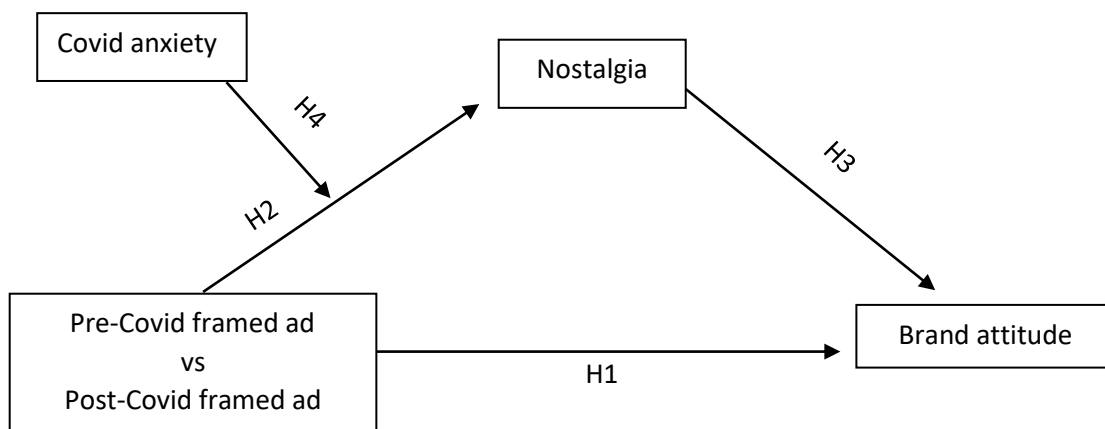
3. Conceptual Model

After a review of the existing literature about the concepts used in this research, we will now move to the conceptual model that has been drawn up to represent the relationships among the variables. Then, the hypotheses, the problem statement and the research questions will be delineated.

3.1 Model and Hypotheses

Based on the newness of the Covid-19 outbreak there is still lack of research about the role of the novel disease into affecting the way people behave as consumers. However, there is still way to go before the health emergency will be totally over, and even then, some new habits or way of thinking that people may have acquired during the Covid-19 period may persist for longer time in the mind of the consumer. Therefore, analyzing how customers behave at the time of pandemic may be relevant also for further research.

Hence, the present study aims at contributing in its little to the existing literature about the impact that the Covid-19 outbreak has had into affecting consumer behavior. Specifically, the use of Covid-19 in marketing communications may alter consumer reaction, and eventually affect the brand attitude.

For this reason, the following conceptual model has been developed:

Figure 1: *the conceptual model*

As outlined from the conceptual model (**figure 1**), the present research will not only uncover the main effect of an independent variable (*advertising framing*, namely pre-Covid framed ad *vs* post-Covid framed ad) on a dependent one (*brand attitude*), but will also assess whether and how other variables may have a mediating and moderating role into explaining and altering the direct relationship.

Therefore, this study will comprise of the following variables:

- Advertising framing *(pre-Covid framed ad* vs *post-Covid framed ad*) as independent variable.
- Brand attitude as dependent variable.

- Nostalgia as mediator.
- Covid anxiety as moderator.

By manipulating the independent variable, this research plans to investigate customer's different reactions when exposed to two opposite scenarios: the first one showing an advertising with a pre-Covid setting, where people could easily enjoy spending time together without any limitation or rule of conduct, and the second one showing an advertising at the time of pandemic, where no gatherings are allowed but loneliness is present.

We could say that the pre-Covid framed ad shows a more pleasantly framed experience than the post-Covid framed ad. Consequently, we could hypothesize that the pre-Covid framed ad will likely generate more positive reactions in terms of emotions, affect and eventually brand attitude, than the post-Covid framed one. Hence, the final aim is to examine how the exposure to these two opposite marketing stimuli makes customers' reaction vary, and, how the different reactions affect customers perception of the brand, which will be measured by the brand attitude variable.

Therefore, the following first hypothesis has been developed:

H1: A pre-Covid framed ad has a more positive impact on consumers' brand attitude than a post-Covid framed ad.

In addition, the two opposite advertising will likely have a different emotional impact on the consumer: the exposure to the pre-Covid framed ad in this historical period will likely make consumers experience more nostalgic thoughts than the exposure to the post-Covid framed one, and the presence of a feeling of nostalgia may in turn positively alter consumer evaluation of the brand.

There is strong support from the literature about nostalgia's role in influencing positively consumer's brand attitude. As a matter of fact, several analyses (e.g. Baker and Kennedy, 1994; Holak and Havlena, 1998; Marchegiani and Phau, 2010) showed that when nostalgia is elicited by an ad exposure, it can generate more favorable responses in terms of affect, which is in turn transferred to the advertising itself or the advertised brand. The underlying mechanism is the classical conditioning[10].

As an example, an empirical study about nostalgic print ads for Kodak and Toshiba conducted by Pascal, Sprott and Muehling (2002) noted a positive correlation between ad-evoked nostalgia and both attitude towards the ad and the brand. In addition, Muehling and Sprott (2004) claimed that the positive ad-attitude and brand attitude generated by the nostalgic advertising was even higher than the one generated by their non-nostalgic ad, reporting no difference in terms of the participants' age.

Hence, nostalgia emotion may play a role in mediating the relationship between the independent variable (*advertising framing*) and the dependent one (*brand attitude*). For this reason, the following second and third hypotheses have been developed:

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[10] Ivan Pavlov, 1927.

H2: When consumers are exposed to a pre-Covid framed ad they feel more nostalgic than when they are exposed to a post-Covid framed ad.

H3: When consumers feel nostalgic, they show an even higher positive brand attitude when they are exposed to the pre-Covid framed ad compared to when they are exposed to the post-Covid framed one.

Another variable that may alter consumer response is the presence of higher (vs lower) levels of Covid anxiety. As previously stated by many scholars (e.g. Rossi et al., 2020; Thakur and Jain, 2020; Xiong et al., 2020; Serafini et al., 2020; Kumar and Nayar, 2020) the unexpected pandemic and its consequences, that forced us to change our everyday life, has led to negative implications also for people's mental health well-being, and among the different negative reactions there has been a significant heightening of the diffusion of anxiety.

Over the years, many studies in psychoanalysis, philosophy and psychology have explored the relationship between nostalgia and anxiety, suggesting that "they are each governed with the concern of time" (Trigg, 2018, p. 43); indeed, anxiety is future oriented, and suggests a concern about the unknown and the uncertainty, while nostalgia is caused by the knowledge of a pleasant past time that cannot be relieved (Trigg, 2018).

During the pandemic there has been a wide use of nostalgic stimuli as a manner to cope with the increased anxiety, since "the knowable and comforting past is perhaps far more enjoyable – and far less anxiety-inducing – than contemplating a traumatic present and a potentially bleak future" (Gammon and Ramshaw, 2020, p. 135).

Therefore, the presence of Covid anxiety may alter consumer response in terms of nostalgia. In particular, a consumer who suffers from Covid anxiety may feel the need to cope with it by finding in nostalgia a refugee, and he or she may feel more nostalgic than a consumer whose anxiety levels have not increased during the pandemic. Consequently, a pre-Covid setting may be more impactful in influencing positively his or her brand attitude.

Therefore, Covid anxiety may moderate the relationship between the independent variable (*advertising framing*) and the mediator (*nostalgia*).

Hence, the following last hypothesis has been developed:

H4: Covid anxiety positively moderates the relationship between advertising framing and consumer's nostalgia.

3.2 Problem Statement

Based on what stated so far, this research plans to provide an answer to the following central problem statement:

What is the effect of advertising framing (pre-Covid framed ad vs *post-Covid framed ad) on consumer's brand attitude? Is this relationship mediated by nostalgia emotion? Is there a moderating effect of Covid anxiety on the relationship between advertising framing and nostalgia?*

3.3 Research Questions

Thus, the research at hand aims at answering the following research questions:

- To what extent advertising framing affects consumer's brand attitude?
- Does nostalgia mediate the relationship between advertising framing and brand attitude?
- Does Covid anxiety moderate the relationship between advertising framing and nostalgia?

4. Research Design and Methodology

The following section will discuss the research method and design that were chosen to validate the hypotheses established in chapter 3.

The first part will be dedicated to the type of experiment suitable for addressing the research problem. Then, a focus on the selected sampling method will be done.

The last part of this section will delineate the practical development of the experimental study. First, we will focus on the pre-test procedure, with an examination of the designing and the characteristics of the manipulated marketing stimuli, the structure of the pre-test and the results. Lastly, an overview of the main test development (structure, measurement scales selection and controlled variables) will be presented.

4.1 Experiment

In accordance with what stated so far, the research at hand aims at investigating two relationships.

The first relationship concerns the mediated effect of the independent variable (*advertising framing*) on the dependent variable (*brand attitude*) through the mediator (*nostalgia*), while the second relationship considers the presence of a moderator (*Covid anxiety*) that may moderate the effect of the independent variable on the mediator. Therefore, the most suitable type of research in this case is the experiment. Indeed, experimental studies allow researchers to establish the causality between an independent variable and a dependent one, and to measure, control and eventually manipulate the variables of interest (Patzer, 1996)

Consequently, with the objective of empirically test the hypotheses established in chapter 3, a *2 (advertising framing: pre Covid framed ad vs post-Covid framed ad) x1 (brand attitude) between-subject design* has been conducted, where advertising framing has been manipulated by creating two opposite marketing stimuli: pre-Covid framed ad *vs* post-Covid framed ad.

Specifically, the type of experiment that was chosen for this study is the online experiment. Indeed, online experiments have several advantages: they allow to reach a large and heterogeneous sample in little time and in a convenient way, and they are lower cost compared to field and laboratory experiments (Birnbaum, 2004). In addition, the possibility to collect data from a diverse sample permits to generalize the findings to the general population (Reips, 2000).

However, as any other method, it does not come without drawbacks, such as multiple submissions and lack of experimental control, which can lower external validity of the experiment, and consequently decrease generalization to the general population. As a matter of fact, an experiment possesses external validity "to the extent and manner in which the results of an experiment can be generalized to different subjects, settings, experimenters, and, possibly, tests" (Bracht and Glass, 1968, p. 438). However, this disadvantage can be in part overcome with randomized exposure of participants to the experimental conditions (Reips, 2000).

Considering all the above, the experiment has been run through an online survey that was constructed in the online platform Qualtrics*,* since it allows to expose experimental groups to randomized conditions.

The experiment comprises of two parts: first, a pre-test analysis has been performed to test the validity of the two marketing stimuli developed by the author; then, the main test has been run to collect data about participants' reaction generated by the exposure to such stimuli.

4.2 Population and Sample

The population of this study is composed by Italian people, mostly aged between 18 and 35 years old.

It was decided not to target a specific age group with the purpose of exploring possible differences of responses in terms of participants' age, as well as for gender. For this reason, in the main test age and gender has been used as control variables.

In both the pre-test and the main experiment, participants were approached through *snowball sampling* from the author's personal network, by sending invitations to participate in the research via the most popular social networks (WhatsApp, Facebook, Instagram). In turn, these people were asked to share the survey link with individuals of their personal network. Indeed, snowball sampling is a non-probability method of sample selection that appears to be particularly convenient for data-gathering in qualitative research, since it yields a research sample through participants who share similar characteristics with other people and invite them to take part to the experiment (Biernacki and Waldorf, 1981; Johnson, 2005). This method relies on referrals from initial participants to other people who share common characteristics, that are of interest in the study; therefore it is also known as *chain referral sampling* (Johnson, 2005).

Finally, for what concerns the main experiment only, invitations were also sent to several Facebook pages and groups of students who help each other when dealing with experimental studies and data collection.

4.3 Pre-test

4.3.1 Stimulus Design

As previously mentioned, in this research the independent variable (*advertising framing*) was manipulated by creating two conditions: a pre-Covid framed ad and a post-Covid framed ad.

In experimental research the manipulation of the independent variable allows the researcher to discover the cause-and-effect relationship with the dependent variable: if the manipulation causes a change in the measure of the dependent variable, then the researcher can assume that the independent variable was responsible (Perdue and Summers, 1986). Moreover, assessing that the manipulation is well designed it is important to begin with a "careful pre-experimental explication of constructs so that the definitions are clear and in conformity with public understanding of the words being used" (Cook and Campbell, 1979, p. 60).

In order to capture customer's different reactions, respondents have been exposed to two opposite print ads (**figure 2** and **figure 3**) that aim at eliciting different reactions in the mind of the consumer.

In particular, the pre-Covid framed ad (figure 2) shows a moment of social consumption and it was designed to evoke more nostalgic thoughts, while the post-Covid framed ad (figure 3, that shows a woman who is

laughing in front of a laptop with a glass of wine in her hands, suggesting that she is having a video call with someone that otherwise she could not meet in person) should be perceived as "closer in time" as it is set at the time of pandemic, and should therefore stimulate less nostalgic feelings.

As previously anticipated, to assess participants' perception of the stimuli and check the manipulation effectiveness, a pretest has been run. Through the pretest, the author wanted to assess whether participants could perceive the two stimuli differently, and in particular, verify that the pre-Covid framed ad was perceived as more of a moment of consumption in social context compared to the post-Covid framed one.

The pretest consisted of a digital survey designed on Qualtrics where, after a short introduction, participants were randomly assigned to one of the two conditions and asked to rate on a 7-point Likert Scale (1=strongly disagree; 7=strongly agree) the following statement:

"On a scale from 1 (strongly disagree) to 7 (strongly agree), to what extent do you think that the print ad that you have just seen shows a moment of social consumption?"

Moreover, in order to assess whether participants could remember the fictitious brand name "Cantine Italiane", they were asked to write it down. For the complete survey flow, please refer to APPENDIX A.

Figure 2: Pre-Covid framed ad   *Figure 3: Post-Covid framed ad*
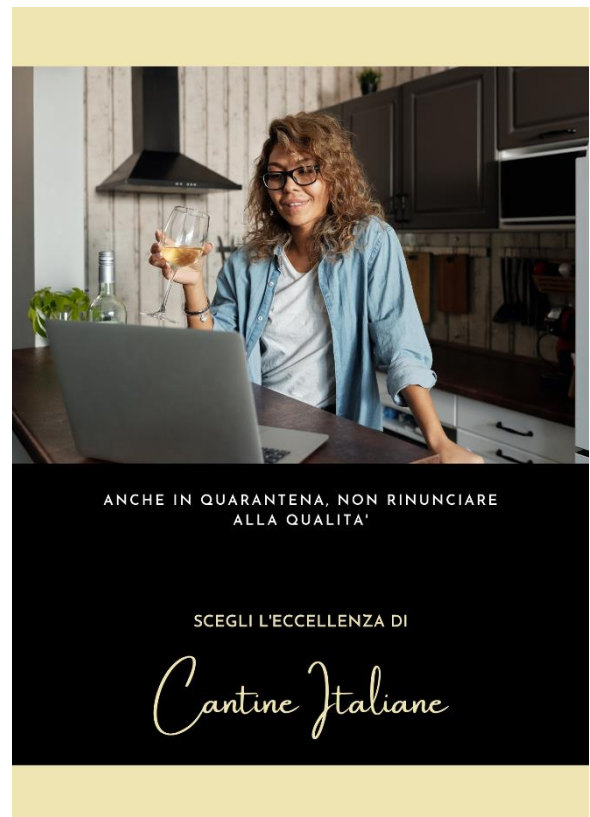
4.3.2 Pre-test Results

In total, 72 respondents (36 per each condition) took part to the pre-test. The collected data was analyzed through the software SPSS.

An Independent Samples T-test was conducted to compare the mean scores for advertising framing, yielding a significant difference between the pre-Covid framed ad (M = 6.39) and the post-Covid framed ad (M = 3.28; $T_{(70)}$ = 8.905; p-value < 0.05). These results led to the conclusion that group means were significantly different; in particular, participants perceived the pre-Covid framed ad as more of a moment of social consumption compared to the post-Covid framed one, as expected by the author. Moreover, for what concerns question 2 ("*Did you remember the name of the brand that was shown in the print ad you have just seen?*") most of the participants wrote down the correct brand name. To see the complete results, please refer to APPENDIX B.

These results made us conclude that the manipulation did work; therefore, figure 2 and 3 has been used as, respectively, Condition 1 and Condition 2 (see APPENDIX C). We can now continue and focus on the main test.

Image	Perception of consumption in social context	
	Mean	Standard Deviation
1: pre-Covid framed ad	6,39	0,994
2: post Covid framed ad	3,28	1,846

Table 1: *level of perception of consumption in social context across the two stimuli*

4.4 Main Test Overview

After having designed the experimental stimuli and verified that the manipulation worked successfully, the main experiment for the present research was conducted. Indeed, a new questionnaire was constructed on Qualtrics and sent to participants who, after reading the instructions, were randomly assigned to one of the two conditions: either the pre-Covid framed ad or post-Covid framed ad (see figures 2 and 3).

Once exposed to one condition, respondents were asked to answer questions that aimed at measuring the variables of interest of this study. Finally, they answered demographic questions (for the complete questionnaire of the main test, please refer to APPENDIX E).

Therefore, the next subparagraph will explore all the steps that were undertaken for gathering the final data, from the very first phase of scales selection to development of the survey, and will therefore lead us to the conclusive part of this study.

4.4.1 Scales and Procedure

The variables of interest in this study, namely brand attitude, nostalgia and Covid anxiety, were measured through existing marketing scales. As a matter of fact, an extensive research throughout the existing literature has been performed in order to find the most suitable scales to employ in this experiment.

Hence, we will now delineate the scales that have been selected for the main study:

- *Brand attitude*: the scale used is a seven-point semantic differential scale developed by Taute, Sierra, Carter, and Maher (2017), made of five questions. It has been used to measure participants' brand attitude towards the brand "Cantine Italiane" after being exposed to one of the two conditions (pre-Covid framed ad vs post-Covid framed ad).

- *Nostalgia*: concerning nostalgia emotion, the scale that has been selected is the one employed by Baker and Kennedy (1994). It is a 5-point Likert scale (1=strongly agree; 5=strongly disagree) that comprises of six questions. This scale was used with the purpose of investigating participants' level of nostalgia after being exposed to one of the two conditions, and later discuss possible differences caused by the stimulus exposure. In addition, it is worth mentioning that two out of six items (namely items 3 and 5) of this scale are reverse coded. Therefore, when the questionnaire has been constructed in Qualtrics, the "recode values" option for these two items has been selected in order to guarantee that all the numerical scoring ran in the same direction.

- *Covid anxiety*: for Covid anxiety variable the scale developed by Patalay et al. (2020) has been chosen. It is a 5-point Likert scale (1=strongly disagree; 5=strongly agree) made of 7 items, asking participants to rate their level of anxiety due to Covid-19 pandemic.

Finally, since the sample was made of Italian people, the scales were translated into Italian to allow a high turn-out. Please, refer to APPENDIX D for the scales' items.

4.4.2 Control Variables and Demographic Questions

At the end of the questionnaire, all participants were asked to answer two demographic questions regarding their gender and age. These variables have been included as control variables in order to avoid a possible influence of their effects on the final outcome, but rather to enhance internal validity. Therefore, by controlling age and gender we ensured that the results were entirely caused by the experimental manipulation.

5. Results and Analysis

In this final chapter the results of the experiment will be outlined. As for the pre-test, the entire analysis has been run using the IBM SPSS Statistics software platform.

First, an overview of the preliminary data analysis will be done, with a focus on the sample structure and the reliability of the selected measurement scales. Second, we will perform the moderated mediation analysis to assess whether the hypotheses were confirmed, and lastly the final key findings and possible limitations for further research will be presented.

5.1 Preliminary Data Analysis and Sample Structure

The total number of participants to the main study was 286 (*n=286*). After a preliminary examination of the dataset, we found out that 58 respondents did not complete the entire questionnaire; therefore, these partial responses were dropped, resulting in a final sample of 228 (*n=228*) useful responses.

As for the sample structure, 62.3% of respondents were female (*n=142*) and 37.7% were male (*n=86*). Participants' mean age was 30.23 (SD=11.802), with the youngest respondent aged 18 and the oldest 69 years old. Most of participants were young people, indeed in total 73.6% (n=167) of respondents were 30 years old or younger. For more details about the sample structure, please refer to APPENDIX F.

5.1.2 Reliability of the Scales and Data Standardization

Before analyzing the data, a check of the internal consistency of the measurement scales has been performed to evaluate their level of reliability. For a scale to be considered reliable, it is recommended to have a Cronbach's alpha of at least α=0.70. Therefore, the Cronbach's alpha score was assessed for each of the three multi-item measurement scales used to measure the variables of interest in this study.

This analysis showed satisfying results: indeed, nostalgia and brand attitude scales had excellent internal consistency of the responses (respectively, α=0.955 and α=0.958), while Covid anxiety scale revealed a lower but still satisfying score (α=0.824). These results enabled us to compute the mean scores of the scale items with no need to exclude any of them.

As previously mentioned, the selected scales are of different types (that is, two 5-point Likert scales and one 7-point semantic differential scale). Therefore, after the computation of the variables' mean scores, it was necessary to standardize the data to reduce them to the same scale, and make variables comparable.

Variable	Scale	Cronbach's alpha
Brand attitude	Taute, Sierra, Carter, and Maher (2017)	0.958
Nostalgia	Baker and Kennedy (1994)	0.955
Covid anxiety	Patalay et al. (2020)	0.824

Table 2: *Reliability of the selected measurement scales*

5.2 Main Analysis: checking Moderated Mediation through PROCESS Macro Model 7

The data from the experiment was tested through Hayes' Macro PROCESS Model 7, as it allows to investigate moderated mediation models like the one at hand.

Since the independent variable (*advertising framing*) has two levels, it was entered as a dummy variable and coded as follows: 0=pre-Covid framed ad; 1=post-Covid framed ad. As for the other variables, there was no need to create binary variables. Moreover, gender and age were included as control variables.

Results for the effects on nostalgia (Model: $R^2 = 0.489$; $F (5.221) = 42.314$) showed a significant negative a-path (a = -3.306; t = -4.797; p = 0.000 < 0.05) indicating that advertising framing is a significant predictor of the mediator (*nostalgia*): when participants were exposed to the post-Covid framed ad (*vs* the pre-Covid framed ad, reference level), nostalgia decreased of 3.306, which lent support to hypothesis 2.

The interaction term between advertising framing and Covid anxiety was statistically significant too (a×w = 0.437; t = 2.299; p = 0.022 < 0.05), revealing that the level of anxiety did alter the impact of advertising framing on nostalgia. In particular, the presence of higher Covid anxiety in case of exposure to the post-Covid framed ad made increase participants' nostalgia of 0.437 compared to when anxiety was lower.

To have a clearer view of the kind of interaction, a linear plot was generated (**figure 4**). To this end, Covid anxiety was recoded into a different variable, namely Anxiety Levels, coded as 0 for low levels of anxiety (>2.5) and as 1 for higher levels (>2.5).

As it can be noticed from the plot, the line segments that represent the two levels of anxiety (low vs high) cross each other, meaning that there is a *crossover interaction*, and that the level of participants' anxiety changed according to the type of advertising they were showed to. Indeed, when participants were exposed to the pre-Covid framed ad (=0,00), lower anxiety had a greater effect than higher anxiety; in this case nostalgia was higher. Instead, the exposure to the post-Covid framed ad (=1,00) generated a general increase of the level of anxiety and a significant decrease of nostalgia.
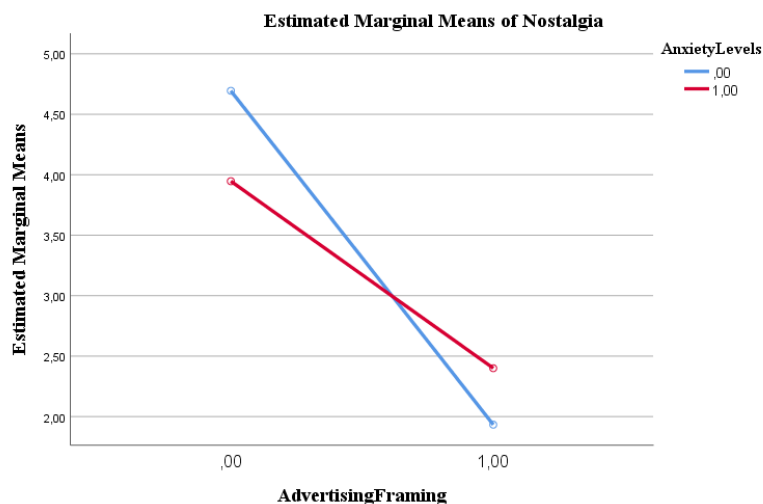

Figure 4*: interaction plot*

As for the main effect of Covid anxiety on nostalgia, it was insignificant at 5% but significant at 10% (e = -0.2766; t = -1.942; p = 0.053 > 0.05, < 0.1). However, results for the interaction term led us to the acceptance of hypothesis 4.

Concerning the effects on brand attitude (Model: R^2 = 0.654; F (4.222) = 104.991; p = 0.000 < 0.05), the b-path was significant (b = 0.945; t = 11.858; p = 0.000), meaning that nostalgia had a positive effect on brand attitude: when participants felt more nostalgic, brand attitude increased of 0.945. Hence, hypothesis 3 was confirmed. In addition, the c-path was significant (c = -0.788; t = -3.927; p = 0.000 < 0.05), showing that when participants were exposed to Condition 2 (post-Covid framed ad), their brand attitude decreased of 0.788 compared to when they were exposed to Condition 1 (pre-Covid framed ad). Therefore, also hypothesis 1 was confirmed.

As for age and gender variables, their effect as covariates was insignificant both for nostalgia (age = -0.000; t = -0.105; p = 0.916 > 0.05. Gender = -0.074; t = -0.581; p = 0.561 > 0.05) and brand attitude (age = 0.001; t = 0.209; p = 0.834 > 0.05. Gender = 0.133; t =0.872; p = 0.384 > 0.05). Hence, the demographic variables have no impact in the model, meaning that there are no differential effects depending on participants' age or gender. Finally, the observation of the index of moderated mediation (i.e. the difference of the indirect effects across the moderator[11]) revealed that the presence of moderated mediation was confirmed; indeed, by looking at the bootstrap confidence interval (BottLLCI = 0.0964, BootULCI = 0.7784) it is possible to notice that it does not include 0, meaning that the index is significant.

Please, refer to APPENDIX G for the complete SPSS output.
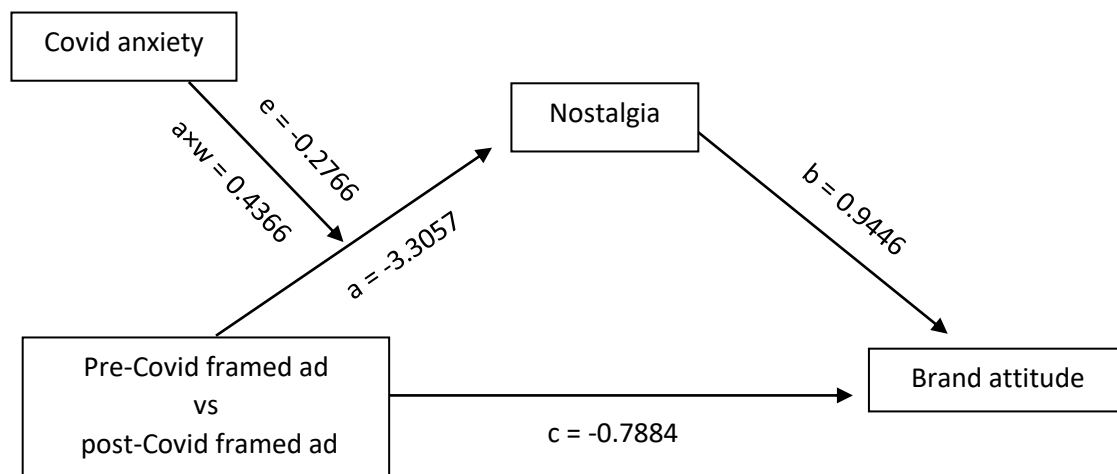
***Figure 5**: the conceptual model with coefficients*

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[11] Hayes, 2015

Hypothesis	Acceptance/rejection
H1: A pre-Covid framed ad has a more positive impact on consumers' brand attitude than a post-Covid framed ad.	*Accepted*
H2: When consumers are exposed to a pre-Covid framed ad they feel more nostalgic than when they are exposed to a post-Covid framed ad.	*Accepted*
H3: When consumers feel nostalgic, they show an even higher positive brand attitude when they are exposed to the pre-Covid framed ad compared to when they are exposed to the post-Covid framed one.	*Accepted*
H4: Covid anxiety positively moderates the relationship between advertising framing and consumer's nostalgia.	*Accepted*

Table 3: *overview of the research hypotheses*

5.3 Discussion

The present study was conducted to give contribution both from a theoretical and a managerial point of view. Indeed, the aim of the research was to contribute in its little by investigating how the use of a Covid-19 setting in marketing stimuli makes consumer response vary in terms of brand attitude, and whether and how particular emotional states (nostalgic and anxious consumer) can have a role in altering his or her reaction.

In particular, this research gives enrichment to a variety of marketing research topics.

First, it provides contribution to consumer behavior research. Since the coronavirus outbreak, most of research have focused on investigating the newly discovered virus mainly from a scientific and medical angle, and there is still lack of research in the marketing field. Results from our experiment gave us clues that the pandemic is having a role in shaping consumer behavior, highlighting the relevance of the phenomenon, and suggesting that more interest from the literature would be needed to provide support to marketing managers' decisions.

Second, results show meaningful implications for the powerful use of nostalgia in marketing, giving contribution to the already widely explored Nostalgia Marketing literature. To this matter, Nostalgia Marketing is a marketing strategy that aims at triggering and activating consumers' nostalgia emotion, evoke memories (nostalgia cognition) and eventually positively affect consumer buying behavior (nostalgia behavior) by using nostalgic stimuli (Cui, 2015). This study confirms what many authors have previously

assessed (e.g. Havlena and Holak, 1991; Baker and Kennedy, 1994; Muehling and Sprott, 2004; Pascal, Sprott, and Muehling, 2012), which is that the use of nostalgia in marketing can be powerful and induce positive consumption behavior.

Last, the study at hand contributes to advertising literature, providing the perspective of designing an advertising at the time of pandemic and revealing how framing marketing stimuli by adding coronavirus related contents can negatively impact consumer response.

Furthermore, this study provides practical implication that can be helpful to marketers when addressing consumers in this particular moment of crisis. The experiment gave rise to interesting findings, which can be summarized as follows:

1. ***The exposure to an advertising showing a pre-Covid setting can generate better responses in terms of brand attitude than an advertising that is set at the time of pandemic***.

   This finding is particularly relevant as the use of Covid-19 related messaging in advertising is still quite unexplored. As previously mentioned, many scholars (e.g. Vakratsas and Ambler, 1999; Sicilia, Ruiz, and Reynolds, 2006) have highlighted how key is the role of brand attitude formation in influencing behavioral intention. Indeed, brand attitude is part of brand equity, which can be defined as "the added value of a brand to a product" (Kim, 2001, p. 91). Brand equity is constituted by a set of brand assets, and it is positively related to the company's sales and revenues.

   According to our results, it seems that consumers do not appreciate Covid-19 related contents in advertising anymore; as a matter of fact, although the global pandemic is not over yet, the novelty of the situation has worn off, and consumer seem to be ready for advertising to tackle different contents. Thus, nowadays marketing managers must proceed carefully when designing marketing stimuli, as consumers seem to be tired of Covid-19 related ads. Therefore, brands should put less emphasis on Covid-19 when addressing consumers, and slightly go back to normal advertising, while in the meantime they should not completely forget to remind them to be responsible as the emergency is still ongoing.

2. ***Consumers feel nostalgic about pre-pandemic times, and nostalgia confirms itself to be a mainly positive emotion which can in turn positively influence attitude towards the brand***.

   As previously mentioned, eliciting nostalgic thoughts to consumers can be an effective marketing strategy that can produce positive turnovers.

   Results from our experiment confirm that nostalgia can be an effective emotional driver for consumers, especially in this particular historical period, and it turns out that it affects them with no particular distinction about their age and gender. Therefore, marketers can exploit this takeover to establish an emotional bond between consumers and the brand, and eventually boost the company's performance.

3. ***It may be better to expose consumers to a pre-Covid framed ad as it generates more nostalgic feelings and lower anxiety, and Covid anxiety moderates the relationship between the type of advertising framing and nostalgia.***

In our experiment, the use of a Covid-19 setting in advertising seem to elicit higher levels of consumers' anxiety about catching the novel coronavirus. This last finding suggests that many consumers still feel anxious either about getting infected or the uncertainty of the moment, and as a consequence a good practice would be to reassure them.

Brands should not ignore this emotional state: alongside with a minor use of Covid-19 related contents, they should show they care about consumers and let them know that better times are coming, by encouraging them to gradually go back to a more normal life but still in a responsible way. In turn, the brand can benefit from this practice with an enhancement in emotional engagement and purchase intention (Mirza and Zahra, 2014), brand trust (e.g. Alhaddad, 2015) and consequently brand loyalty (e.g. Sung, Kim, and Jung, 2010; Ming, Ismail, and Rasiah, 2011). Moreover, reassuring consumers may be even more effective as it may create a strong bond with consumers.

On the other hand, a pre-Covid framed ad elicits less anxiety and higher nostalgia, which may lead to a higher brand attitude. Hence, in accordance with the first finding, a better strategy would probably be to leverage less on Covid-19 contents.

5.4 Limitations and Further Research

This study does not come without limitations, and some of them offer interesting starting points for future research.

First, this experiment was conducted through a traditional marketing research method, that is the online survey, due to the impossibility to use Neuromarketing tools as the pandemic is still ongoing. However, this study would perfectly fit for a Neuromarketing experiment as it investigates consumer emotional response to a marketing visual stimulus. Instruments such as the EEG and biometrics would allow to capture respondents' unconscious mind and help us to detect more genuine reactions, allowing to overcome traditional marketing methods limitations.

Second, the print ad that was developed by the author figures a fictitious wine brand, "Cantine Italiane". The experiment could be reproduced by displaying other type of brands, for instance representing a service instead of a product. In addition, other types of advertising different from the print ad could be used.

Third, the data was collected in April and May 2021, when the vaccination campaign against Covid-19 in Italy was at its beginning. Therefore, the same experiment could produce different results after mass immunization and when the health emergency will be over. Moreover, it would be interesting to repeat the experiment some years after the end of the pandemic to explore the evolution of consumers' emotions induced by the same marketing stimuli.

Finally, another limitation is caused by the sampling procedure. In this study, the data was collected through a convenience sampling method, which has for instance determined a low mean age of participants. Therefore, it would be interesting to explore different and more varied samples. For instance, future research could repeat the experiment by addressing samples from other countries to detect differences in response, as they have not been all affected by Covid-19 in the same way.

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7. Appendices

APPENDIX A: Pretest Survey Flow

Introduction

Ciao, sono una studentessa di Marketing dell'università LUISS Guido Carli di Roma. Potresti rispondere a questo breve questionario per la mia tesi? Le tue risposte saranno completamente anonime. Solo un numero limitato di persone sarà intervistato, quindi la tua opinione è molto importante. Grazie!

Q1/Q2: Randomized exposure to the two conditions

Ti sarà chiesto di rispondere a delle domande riguardanti questa locandina, quindi prenditi qualche secondo per osservarla con attenzione:

Note: this is an example showing the pre-Covid framed ad. Through randomization, only some participants were presented with this stimulus, while those belonging to the other experimental group were shown to the post-Covid framed ad.

Q3: Perception of consumption in social context (7-point Likert scale)

Da una scala da 1 (in completo disaccordo) a 7 (completamente d'accordo), quanto pensi che la locandina che hai appena visto mostri un momento di consumo in contesto sociale?

○ In completo disaccordo (1)

○ In disaccordo (2)

○ Abbastanza in disaccordo (3)

○ Né d'accordo né in disaccordo (4)

○ Abbastanza d'accordo (5)

○ D'accordo (6)

○ Completamente d'accordo (7)

Q4: Brand name (open question)

Ti ricordi il nome del brand?

_____

End of questionnaire

APPENDIX B: Pretest Results

Group Statistics

|	Image	N	Mean	Std. Deviation	Std. Error Mean
Score	1	36	6,39	,994	,166
	2	36	3,28	1,846	,308

Table 4: *group statistics from the pretest*

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		Lower	Upper
Score	Equal variances assumed	29,394	,000	8,905	70	,000	3,111	,349		2,414	3,808
	Equal variances not assumed			8,905	53,717	,000	3,111	,349		2,411	3,812

Table 5: *test for equality of means (pre-Covid framed ad vs post-Covid framed ad)*

APPENDIX C: Conditions
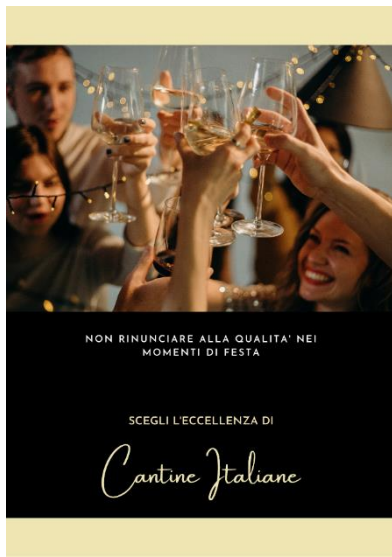
Figure C.1: Condition 1=pre-Covid framed ad

Figure C.2: Condition 2=post-Covid framed ad

APPENDIX D: Main Test Measurement Scales

Variable	Number of Items	Measurement	Items	Source
Brand attitude	5	7-point semantic differential scale	1. Bad/Good 2. Unpleasant/Pleasant 3. Dislike/Like 4. Unfavorable/Favorable 5. Negative/Positive	Taute, Sierra, Carter and Maher (2017)
Nostalgia	6	5-point Likert scale	1. This ad reminds me of an experience from the past. 2. This ad makes me think of an experience which I feel sad about because it is over, yet it is a happy memory. 3. This ad does not make me have any feelings about the past. 4. I wish I could relive the experience(s) this ad makes me think of. 5. I do not think about the past when I look at this ad. 6. I associate this ad with a happy experience, yet it makes me feel sad.	Baker and Kennedy (1994)
Covid anxiety	7	5-point Likert scale	1. I'm worried that I will catch COVID-19. 2. I'm worried that family and friends will catch COVID-19. 3. I'm afraid to leave the house right now. 4. I'm worried I might transmit the infection to someone else. 5. I'm worried about missing school/work. 6. I'm worried about the amount of money we have coming in. 7. I'm worried about the long-term impact this will have on my job prospects and the economy.	Patalay et al. (2020)

Table 6: scales employed in the main test for measuring the variables

APPENDIX E: Main Test Survey Flow

Introduction

Ciao, sono una studentessa di Marketing dell'università LUISS Guido Carli di Roma. Potresti rispondere a questo breve questionario per la mia tesi?

Le tue risposte saranno completamente anonime. Solo un numero limitato di persone sarà intervistato, quindi la tua opinione è molto importante. Grazie!

Q1/Q2: Randomized exposure to the two conditions

Ti sarà chiesto di rispondere a delle domande riguardanti questa locandina, quindi prenditi qualche secondo per osservarla con attenzione:

Note: Note: this is an example showing the post-Covid framed ad. Through randomization, only some participants were presented with this stimulus, while those belonging to the other experimental group were shown to the pre-Covid framed ad.

1st block of questions: Nostalgia

Q1.1 Questa locandina mi ricorda un'esperienza passata.

◯ In completo disaccordo (1)

◯ In disaccordo (2)

◯ Né d'accordo né in disaccordo (3)

◯ D'accordo (4)

○ Completamente d'accordo (5)

Q2.1 Questa locandina mi fa pensare a un'esperienza in particolare. Pensare a questa esperienza mi rende triste perché è passata, anche se è legata a un ricordo felice.

○ In completo disaccordo (1)

○ In disaccordo (2)

○ Né d'accordo né in disaccordo (3)

○ D'accordo (4)

○ Completamente d'accordo (5)

Q3.1 Questa locandina non mi genera nessuna emozione rispetto al passato.   X→

○ In completo disaccordo (5)

○ In disaccordo (4)

○ Né d'accordo né in disaccordo (3)

○ D'accordo (2)

○ Completamente d'accordo (1)

Q4.1 Vorrei poter rivivere l'esperienza illustrata nella locandina.

○ In completo disaccordo (1)

○ In disaccordo (2)

○ Né d'accordo né in disaccordo (3)

○ D'accordo (4)

○ Completamente d'accordo (5)

Q5.1 Quando guardo questa locandina non penso al passato. x→

○ In completo disaccordo (5)

○ In disaccordo (4)

○ Né d'accordo né in disaccordo (3)

○ D'accordo (2)

○ Completamente d'accordo (1)

Q6.1 Associo questa locandina a un'esperienza felice, ma pensarla mi rende triste.

○ In completo disaccordo (1)

○ In disaccordo (2)

○ Né d'accordo né in disaccordo (3)

○ D'accordo (4)

○ Completamente d'accordo (5)

2nd block of questions: Brand attitude

Q1.2 Come reputi il brand Cantine Italiane illustrato nella locandina?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Pessimo	○	○	○	○	○	○	○	Ottimo
Spiacevole	○	○	○	○	○	○	○	Piacevole
Non mi piace	○	○	○	○	○	○	○	Mi piace
Sono sfavorevole	○	○	○	○	○	○	○	Sono favorevole
Negativo	○	○	○	○	○	○	○	Positivo

3rd block of questions: Covid anxiety

Q1.3 In una scala da 1 (in completo disaccordo) a 5 (completamente d'accordo), quanto sei d'accordo con le seguenti affermazioni?

	In completo disaccordo (1)	In disaccordo (2)	Né d'accordo né in disaccordo (3)	D'accordo (4)	Completamente d'accordo (5)
Sono preoccupato di poter prendere il Covid-19 (1)	○	○	○	○	○
Mi preoccupa che la mia famiglia e i miei amici possano ammalarsi di Covid-19 (2)	○	○	○	○	○
Ho paura di uscire di casa (3)	○	○	○	○	○
Mi preoccupa poter trasmettere l'infezione a qualcun altro (4)	○	○	○	○	○
Mi preoccupa perdere giorni di scuola/lavoro (5)	○	○	○	○	○
Mi preoccupa questa nuova situazione di difficoltà economica (6)	○	○	○	○	○
Sono preoccupato dell'impatto a lungo termine che la pandemia avrà sulle mie possibilità lavorative e sull'economia (7)	○	○	○	○	○

4th block of questions: Demographics

Gender: Qual è il tuo genere?

○ Uomo (1)

○ Donna (2)

Age: Quanti anni hai?

_____

End of questionnaire

APPENDIX F: Demographics

Qual è il tuo genere?

	Frequency	Percent	Valid Percent	Cumulative Percent
Uomo	86	37,7	37,7	37,7
Donna	142	62,3	62,3	100
Total	228	100	100	

Table 7: *overview of participants' gender*

Quanti anni hai?

Age Group	Frequency	Percent	Valid Percent	Cumulative Percent
18-24	109,0	47,8	47,8	47,8
25-35	72,0	31,6	31,6	79,4
36-45	15,0	6,6	6,6	86,0
46-55	15,0	6,6	6,6	92,5
56-65	12,0	5,3	5,3	97,8
66+	5,0	2,2	2,2	100,0
Total	228	100	100	

Table 8: *overview of participants' age*

APPENDIX G: SPSS Output

```
Run MATRIX procedure:

***************** PROCESS Procedure for SPSS Version 3.4 *****************

          Written by Andrew F. Hayes, Ph.D.        www.afhayes.com
     Documentation available in Hayes (2018). www.guilford.com/p/hayes3

**************************************************************************
Model  : 7
    Y  : BrandAtt
    X  : Advertis
    M  : Nostalgi
    W  : CovidAnx

Covariates:
 Gender    AgeGroup

Sample
Size: 227

**************************************************************************
OUTCOME VARIABLE:
 Nostalgi

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,6994      ,4891      ,8278    42,3140     5,0000   221,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant    5,2538      ,6282     8,3629      ,0000     4,0157     6,4919
Advertis   -3,3057      ,6892    -4,7966      ,0000    -4,6639    -1,9475
CovidAnx    -,2766      ,1424    -1,9420      ,0534     -,5573      ,0041
Int_1        ,4366      ,1899     2,2993      ,0224      ,0624      ,8108
Gender      -,0745      ,1282     -,5812      ,5617     -,3271      ,1781
AgeGroup    -,0006      ,0054     -,1055      ,9161     -,0111      ,0100

Product terms key:
 Int_1    :        Advertis x        CovidAnx

Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W      ,0122     5,2869     1,0000   221,0000      ,0224
----------
    Focal predict: Advertis (X)
          Mod var: CovidAnx (W)

Conditional effects of the focal predictor at values of the moderator(s):

   CovidAnx      Effect         se          t          p       LLCI       ULCI
     2,4286     -2,2454      ,2696    -8,3277      ,0000    -2,7768    -1,7140
     3,7143     -1,6841      ,1787    -9,4262      ,0000    -2,0362    -1,3320
     4,4286     -1,3722      ,2465    -5,5665      ,0000    -1,8580     -,8864

**************************************************************************
OUTCOME VARIABLE:
 BrandAtt

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      ,8088      ,6542     1,1895   104,9906     4,0000   222,0000      ,0000

Model
              coeff         se          t          p       LLCI       ULCI
constant    1,9885      ,4899     4,0593      ,0001     1,0231     2,9538
Advertis    -,7884      ,2008    -3,9273      ,0001    -1,1841     -,3928
Nostalgi     ,9446      ,0797    11,8579      ,0000      ,7877     1,1016
Gender       ,1337      ,1533      ,8721      ,3841     -,1684      ,4358
AgeGroup     ,0013      ,0063      ,2099      ,8340     -,0112      ,0138
```

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

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
     -,7884       ,2008    -3,9273      ,0001    -1,1841     -,3928


Conditional indirect effects of X on Y:

INDIRECT EFFECT:
 Advertis    ->    Nostalgi    ->     BrandAtt


   CovidAnx      Effect      BootSE    BootLLCI    BootULCI
     2,4286     -2,1211       ,2496     -2,5884     -1,5980
     3,7143     -1,5908       ,2010     -1,9684     -1,1757
     4,4286     -1,2963       ,2680     -1,7830      -,7182


      Index of moderated mediation:
             Index      BootSE    BootLLCI    BootULCI
CovidAnx      ,4124       ,1747       ,0964       ,7784
---

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

Level of confidence for all confidence intervals in output:
  95,0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

W values in conditional tables are the 16th, 50th, and 84th percentiles.

NOTE: Variables names longer than eight characters can produce incorrect output.
      Shorter variable names are recommended.

------ END MATRIX -----
```

Summary

The Master's Thesis at hand comprises of five chapters in which the author describes the step-by-step procedure for designing and performing the experimental study. The latter aimed at assessing possible influences that the use of contents related to the newly discovered Covid-19 disease in the marketing communication can have in terms of consumers' brand attitude and emotional response.

The *first chapter* introduces the historical moment we are currently living, the one characterized by the ongoing global pandemic of Covid-19 disease, which has once again challenged humans' ability to adapt to environmental changes and phases of transformation.

Indeed, the 9th of January 2020 all countries were hit by the discovery of a new coronavirus, namely SARS-CoV-2, identified in a hospitalized person with pneumonia in Wuhan, China[12]. In the meantime, the virus was already spreading across the world, as only few months later some cases of Covid-19 disease were recognized also across Europe; the continent was about to become the epicenter of the pandemic, and the first case of Covid-19 in Italy was announced the 21st of February 2020[13], while the 11th of March the World Health Organization officially declared the state of pandemic[14].

Therefore, the Covid-19 outbreak, and its rapid evolution, marked the beginning of a new phase of uncertainty, which has dramatically changed the way we live and has introduced new and very strict rules of conduct, and has so far caused more than 4 million deaths across the world[15]. Indeed, although many aspects about Covid-19 are still little known, this disease appears to be a very complex illness that can be particularly aggressive, as it can damage the lungs, the heart, and the brain, and those people who recover from Covid-19 may experience some long-term effects of the disease.

The newly discovered disease came into our lives like a "perfect storm", which has forced people, governments, and companies to rethink the way they live and operate. As a matter of fact, the pandemic has brought considerable changes in people's habits and behavior, which in turn has led to negative consequences from a health and psychological point of view. Indeed, Covid-19, together with social fights, political corruption, and climate change, has created favorable conditions for the development of a climate of increased fear and stress in people's lives (The Retailer Year, 2020), and as a result all these elements have led to a new type of consumer: the so-called "anxious consumer", whose behavior is shaped by a sense of anxiety and fear, and to which marketers and retailers need to adapt (Rindone, 2020). Thus, companies have been forced to reconsider their marketing, communication, and advertising strategies, to conform to the stage of crisis and the new common rules.

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[12] World Health Organization, 2020, January. WHO Statement regarding cluster of pneumonia cases in Wuhan, China. https://www.who.int/china/news/detail/09-01-2020-who-statement-regarding-cluster-of-pneumonia-cases-in-wuhan-china

[13] https://www.who.int/countries/ita/

[14] World Health Organization, 2020, March. WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020. https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020

[15] https://covid19.who.int/

Concerning the advertising field, Jiménez-Sánchez, Margalina, and Vayas-Ruiz (2020) have analyzed common changes in the advertising strategy during the first stages of the global health crisis, characterized by the intensified emotional appeal and the purpose of increasing customers' awareness of the new hygiene regulations and rules of conduct, but also on the support activities that the brands themselves have implemented to fight against the virus. Moreover, all these advertising had in common a positive, encouraging tone and gratitude towards healthcare providers and citizens. An example that perfectly fit with what described by these scholars is a commercial launched in April 2020 by the Italian brand Barilla entitled "All'Italia"[16].

Today, although the health crisis has not ended yet, the emotional appeal in advertising campaigns has significantly lowered in order to align with what has become our "new normal", and as a consequence the result is less impactful. However, there may still be a long way to go before we can return to traditional advertising, where social interactions and gatherings were the norm.

Due to the relevance and topicality of the pandemic and the consequent radical changes in the marketing and advertising field, there is still lack of research that analyze the new implemented strategies and how they have been perceived by the final consumer. Therefore, this thesis aimed at contributing in its little by exploring how the use of Covid-19 related contents in advertising may affect consumer response in terms of brand attitude, and how the presence of nostalgia and Covid anxiety may alter results.

Following with the *second chapter*, an extensive literature review has been done regarding the variables of interest (namely advertising framing, brand attitude, nostalgia and Covid anxiety) and their relationships.

Starting with Covid anxiety, the discovery of the novel coronavirus that occurred in late 2019 has shocked the world, forcing governments worldwide to establish new rules of conducts and social distancing measures to contain the spread. These measures have significantly changed and affected our everyday life (Gupta et al., 2020), leading to traumatic consequences to people who have experienced the illness, either directly or indirectly (Blackman, 2020, p. 120). Indeed, the awareness of the limited amount of control over how the scenario will evolve and the uncertainty about when it will be completely ended, combined with the existential threat, generates anxiety (Barlow, 1988).

Life course research recognize that prior life experiences have a role in shaping consumer behavior during later stages of life, and behavior is the result of earlier life conditions and individuals' adaptive response to changes in life and phases of transitions within historical and socio-cultural contexts (McAlexander, 1991; Schouten, 1991; Lee, Moschis, Mathur, 1999; Moschis, 2007). Furthermore, stress and other adverse psychological conditions that may arise because of stressful life events may lead customers to change their consumption patterns (Weathon, 1990; Mathur, Moschis, Lee, 2007). Therefore, it is possible to predict that also today's global health emergency will leave some unpredictable scars in people's behavior, which in turn will affect the way they act as consumers.

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[16] https://www.youtube.com/watch?v=sMYnHQ14Nw4&t=60s&ab_channel=BarillaItalia

Consequently, as happened with prior major crisis, the pandemic is having a significant impact also on mental health well-being and it is causing psychological consequences that could be long-lasting (Dong and Bouey, 2020; Holmes et al., 2020), with a global increase in cases of acute stress, sense of loneliness and helplessness, anxiety, fear, depression, and insomnia, but also suicide and self-harm (Rossi et al., 2020; Thakur and Jain, 2020; Xiong et al., 2020; Serafini et al., 2020; Kumar and Nayar, 2020).

In addition, because of restrictions and social distancing measures, there has also been an increase of negative health behavior, such as alcohol consumption and physical inactivity. Moreover, the impossibility to plan in the short or long term has heightened not only fear and anxiety, but also the tendency to disengage from important life goals, especially for young people (Settersten et al., 2020).

These negative effects developed also among Italian general population, where high rates of mental distress (e.g. post-traumatic stress symptoms (PTSS), depression, anxiety, insomnia) were found three weeks after the lockdown measures were established, independently from prior traumas or mental illness (Rossi et al., 2020). In such scenario, it appears that some categories, such as healthcare workers, female gender, and younger age groups (especially students and people under 40 years old), are more disposed to develop psychological distress' symptoms (Qiu et al., 2020; Rossi et al., 2020), while women proneness to develop stress-related disorders like anxiety is due to differential neurobiological responses when exposed to stressors (Eid, Gobinath and Galea, 2019).

Therefore, the pandemic has forced people to find adaptive behaviors and ways to cope with it (Colleen and Rifkin, 2020). Among the different reactions, there seems to be the need to reconnect with people from the past (Firth, 2020), which may be caused by nostalgia. Indeed, negative, and stressful events like the pandemic may lead people to seek refuge in past events and objects that stimulate past and more peaceful memories, which allow to find a sense of security (Ornstein and Ornstein, 1985).

Until the mid-part of the 20th century, nostalgia was believed to be a neurological disease that affected the most vulnerable part of the population (Sedikides et al., 2004). Instead, in the marketing domain the concept of nostalgia is relatively new, as it was introduced in the 90's with the so-called "the end of the century effect", a sense of common nostalgia that spread among consumers at the end of last century that stimulated nostalgic behavior (Stern, 1992). Today it is seen as an important resource for psychological health and a predominantly positive experience that improves positive moods, increases positive self-regard and social connectedness, and contributes to perceptions of meaning in life (Routledge, Wildshut, Sedikides and Juhl, 2013), although at the same time some authors believe that nostalgia is also an "ambivalent concept" (e.g. Werman, 1976; Holak & Havlena, 1991) that can generate pain due to the impossibility of reliving once again past events (Holak & Havlena, 1991; Hirsch, 1992; Baker and Kennedy, 1994).

In addition, contrary to common belief, nostalgia is not an emotion experienced mainly by elder people as many might think, but from people of all ages (Routledge, Wildschut, Sedikides and Juhl, 2013) and it is also a very common experience among young adults, like undergraduate students (Wildschut et al., 2006). For this

reason, in the last few years, there has been a widespread use of nostalgia in advertising and marketing campaigns in several industries: film, music and tourism, technology, food, and fashion (Hartmann and Brunk, 2019). As a matter of fact, the use of this marketing tactic can be highly persuasive and effective (e.g. Baker and Kennedy, 1994; Pascal, Sprott, and Muehling, 2012), and there is evidence that nostalgia stimulates a variety of emotional responses which are mainly positive, such as joy, happiness, gratitude, and pleasure (Holak and Havlena, 1998).

Finally, many scholars have assessed the positive impact provided by nostalgic emotion on several consumption patterns and cognitive responses, such as purchase intention, attitude towards the ad, attitude towards the brand; but also brand awareness, perceived quality and authenticity, brand attachment and brand trust (e.g. Pascal, Sprott and Muelhing, 2002; Muehling and Sprott, 2004; Ergin and Şahin, 2019; Wen et al., 2019).

Trying to elicit positive emotions to the consumer, that may lead to positive attitude and consumption behavior, requires to pay attention to the way a message is presented. As a matter of fact, the way in which information is framed may significantly affect consumers' opinions and decisions about products and brands (Chang, 2007). To this end, another effective marketing strategy is *framing,* that aims at influencing the decision criteria used by the consumer to make choices and judgments (Wright and Barbour, 1975).

The amplitude of the existing literature about Framing Effect in the marketing field highlights how impactful the use of this strategy can be, suggesting the need for marketers to pay close attention to the labels they put on every piece of information they share as the same information can be designed in alternative ways, for instance either positively or negatively. To this matter, it seems that when individuals are exposed with the same messages negatively and positively framed, the negative framed ones appear more salient and a "negativity bias" takes place: negative information generally exerts a greater impact on individuals' judgments than the equivalent but positively framed information, as deeply analyzed by several research (e.g. Anderson, 1965; Birnbaum, 1972; Fiske, 1980; Slovic & Lichtenstein, 1968), and each alternative message framing can be perceived differently in terms of gains versus losses, as described by Kahneman and Tversky's Prospect Theory (1979).

Finally, marketers need to pay close attention to how they present messages to consumers, and finding the right framing for a marketing communication is key because of framing's powerful role in affecting behavior.

All the variables mentioned so far may play a role in affecting consumers' brand attitude in our study. According to Kotler, Bowen, and Makens (1999), brand attitude can be defined as a consumer's favorable or unfavorable evaluation, emotional feeling, and behavioral inclination towards a certain brand.

Understanding how consumers form their attitude is crucial because attitudes do impact on purchase intention, and the brand attitude is positively related to consumers' willingness to buy (Sicilia, Ruiz and Reynolds, 2006). Moreover, creating the conditions for consumers to have a positive attitude towards a specific brand is a prerequisite for creating brand loyalty (e.g. Amine, 1998; Dick and Basu, 1994), and brand attitude also puts

the basis for a high brand equity. It can therefore contribute to boost the economic performance of a company (Walla, Brenner and Koller, 2011).

It is also important to comprehend the link between attitude towards the ad and brand attitude formation.

To this end, the theory of reasoned action[17] affirms that brand attitude derives from the way in which the communication about attributes and advantages of a brand is done, and attitudes towards the brand are also affected by the brand image and awareness (Jalilvand and Samiei, 2012).

However, brand attributes and beliefs about a product or brand are not the exclusive drivers of consumer's brand attitude, as emotions play a big role too (e.g. Aaker, Stayman, and Hagerty 1986; Batra and Ray 1986; Burke and Edell 1989; Brown and Stayman 1992; Smith 1993), and engaging consumers through positive emotions should make them infer a positive brand attitude (Pham, 2004),

Alongside emotions, it is worth also mentioning the impact of motivation: since a consumer can hold several attitudes toward a brand, depending on the specific purchase motivation operative at the moment he or she will show a different brand attitude (Rossiter and Percy, 1991).

Finally, the positive relationship between attitude towards the advertising and attitude towards the brand has been proven by several studies (e.g. Mackenzie et al. 1986; Bruner II and Kumar 2000), meaning that the level of enjoyment of a certain advertising is likely to lead to a more favorable attitude towards the brand, which in turn generates choices and behavioral intention (Vakratsas and Ambler, 1999).

With the *third chapter* we move to the conceptual model that has been drawn up to represent the relationships among the variables, which is the following:
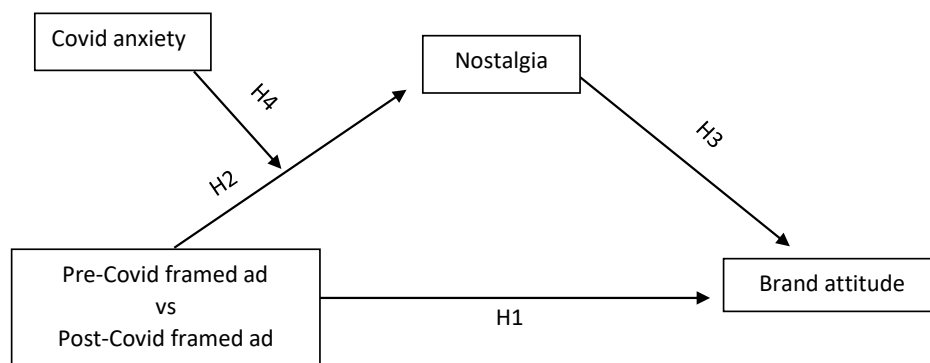
As outlined from the conceptual model, the present research aimed to not only uncovered the main effect of an independent variable (*advertising framing*, namely pre-Covid framed ad *vs* post-Covid framed ad) on a dependent one (*brand attitude*), but also to assess whether and how other variables had a mediating and moderating role into explaining and altering the direct relationship.

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[17] Fishbein and Ajzen, 1967

Therefore, this study comprises of the following variables:

- Advertising framing *(pre-Covid framed ad* vs *post-Covid framed ad)* as independent variable.
- Brand attitude as dependent variable.
- Nostalgia as mediator.
- Covid anxiety as moderator.

By manipulating the independent variable, we wanted to investigate customer's different reactions when exposed to two opposite scenarios: the first one showing an advertising with a pre-Covid setting, where people could easily enjoy spending time together without any limitation or rule of conduct, and the second one showing an advertising at the time of pandemic, where no gatherings are allowed but loneliness is present. Due to the more pleasantly framed experience in the pre-Covid setting, we hypothesized that the pre-Covid framed ad would likely generate more positive reactions in terms of emotions, affect and eventually brand attitude, than the post-Covid framed one.

Thus, the following first hypothesis has been developed:

H1: A pre-Covid framed ad has a more positive impact on consumers' brand attitude than a post-Covid framed ad.

In addition, the two opposite advertising could have a different emotional impact on the consumer: the exposure to the pre-Covid framed ad in this historical period could make consumers experience more nostalgic thoughts than the exposure to the post-Covid framed one, and the presence of a feeling of nostalgia may in turn positively alter consumer evaluation of the brand. Several analyses (e.g. Baker and Kennedy, 1994; Holak and Havlena, 1998; Marchegiani and Phau, 2010) showed that when nostalgia is elicited by an ad exposure, it can generate more favorable responses in terms of affect, which is in turn transferred to the advertising itself or the advertised brand. Hence, we hypothesized that nostalgia may play a role in mediating the relationship between the independent variable (*advertising framing*) and the dependent one (*brand attitude*). For this reason, the following second and third hypotheses have been developed:

H2: When consumers are exposed to a pre-Covid framed ad they feel more nostalgic than when they are exposed to a post-Covid framed ad.

H3: When consumers feel nostalgic, they show an even higher positive brand attitude when they are exposed to the pre-Covid framed ad compared to when they are exposed to the post-Covid framed one.

Another variable that may alter consumer response is the presence of higher (vs lower) levels of Covid anxiety. During the pandemic there has been a wide use of nostalgic stimuli as a manner to cope with the increased anxiety, since the consumer may find in the comforting past a way to lower anxiety (Gammon and Ramshaw, 2020).

Therefore, a consumer who suffers from Covid anxiety may feel the need to cope with it by finding in nostalgia a refugee, and he or she may feel more nostalgic than a consumer whose anxiety levels have not increased during the pandemic. Consequently, the fourth hypothesis states that a pre-Covid setting may be more impactful in influencing positively consumer's brand attitude.

H4: Covid anxiety positively moderates the relationship between advertising framing and consumer's nostalgia.

Finally, the goal of this research was to provide an answer to the following central problem statement:

What is the effect of advertising framing (pre-Covid framed ad vs *post-Covid framed ad) on consumer's brand attitude? Is this relationship mediated by nostalgia emotion? Is there a moderating effect of Covid anxiety on the relationship between advertising framing and nostalgia?*

The *fourth chapter* discussed the research method and design that were chosen to validate the hypotheses.

The type of research that was believed to be the most suitable to investigate the relationships among the variables is the online experiment. Indeed, experiments allow researchers to establish the causality between an independent variable and a dependent one, and to measure, control and eventually manipulate the variables of interest (Patzer, 1996). Moreover, when they are conducted online there are several advantages, such as the possibility to reach a large and heterogeneous sample in little time and in a convenient way, and the cost needed to perform it is low (Birnbaum, 2004).

Consequently, with the objective of empirically test the hypotheses established in chapter 3, a *2 (advertising framing: pre Covid framed ad vs post-Covid framed ad) x1 (brand attitude) between-subject design* has been conducted, where advertising framing has been manipulated by creating two opposite marketing stimuli: pre-Covid framed ad *vs* post-Covid framed ad.

To increase external validity and the generalization of the results to the general population, we decided to randomize participants' exposure to experimental conditions through the online platform Qualtrics, were we constructed both the pre-test and the main test. Indeed, the experiment comprises of two parts: first, a pre-test analysis has been performed to test the validity of the two marketing stimuli developed by the author; then, the main test has been run to collect the data about participants' reaction generated by the exposure to such stimuli.

In both the pre-test and the main experiment, participants were approached through *snowball sampling* from the author's personal network, by sending invitations to participate in the experiment via the most popular social networks. In turn, these people were asked to share the survey link with individuals of their personal network. For what concerns the main experiment only, invitations were sent also to several Facebook pages and groups of students who help each other when dealing with experimental studies and data collection.

As for the pre-test, the aim was to assess whether the independent variable's manipulation was successful, and that the two conditions developed by the author (pre-Covid framed ad *vs* post-Covid framed ad, both print ads) were able to elicit different reactions in the mind of the consumer.

In particular, the pre-Covid framed ad shows a moment of social consumption and it was designed to evoke more nostalgic thoughts, while the post-Covid framed ad (that shows a woman who is laughing in front of a laptop with a glass of wine in her hands, suggesting that she is having a video call with someone that otherwise she could not meet in person) should be perceived as "closer in time" as it is set at the time of pandemic, and should therefore stimulate less nostalgic feelings.

Therefore, the pre-test consisted of an online survey constructed on Qualtrics, where after a short introduction, participants were randomly assigned to one of the two conditions and asked to rate on a 7-point Likert Scale (1=strongly disagree; 7=strongly agree) the following statement:

"On a scale from 1 (strongly disagree) to 7 (strongly agree), to what extent do you think that the print ad that you have just seen shows a moment of social consumption?"

In addition they were asked to write down the fictitious brand name "Cantine Italiane", whose logo is present in both conditions, to assess whether they could remember it.

In total 72 respondents (36 per each condition) took part to the pre-test. The collected data was analyzed through the software SPSS, and a comparison of the mean scores for advertising framing through an Independent Samples T-test revealed excellent results, yielding a significant difference between the pre-Covid framed ad (M = 6.39) and the post-Covid framed ad (M = 3.28; T (70) = 8.905; p-value < 0.05). Therefore, group means were significantly different, meaning that participants perceived the pre-Covid framed ad as more of a moment of social consumption compared to the post-Covid framed one, as expected by the author. Furthermore, most of the participants wrote down the correct brand name. To see the final conditions, please refer to APPENDIX C.

After having designed the experimental stimuli and verified that the manipulation worked successfully, the fourth chapter closes with a general overview of the main experiment.

The variables of interest in this study, namely brand attitude, nostalgia and Covid anxiety, were measured through existing marketing scales from the literature. The selected scales were one seven-point semantic differential scale (for brand attitude) and two 5-point Likert scale (1=strongly agree; 5=strongly disagree; for nostalgia and Covid anxiety). Therefore, after the computation of the variables' mean scores, it was necessary to standardize the data to reduce them to the same scale, and make variables comparable.

Moreover, all participants were asked to answer two demographic questions regarding their gender and age. These variables have been included as control variables in order to avoid a possible influence of their effects on the final outcome, but rather to enhance internal validity.

Hence, a new questionnaire was constructed on Qualtrics and sent to participants who, after reading the instructions, were randomly assigned to one of the two conditions. Once exposed to one condition, respondents were asked to answer questions that aimed at measuring the variables of interest of this study, and finally, they answered demographic questions.

The *final chapter* outlines the experiment results, obtained by running the analysis using SPSS Statistics. Before conducting the data analysis, a check of the internal consistency of the measurement scales has been performed to evaluate their level of reliability. Therefore, Cronbach's alpha value for each of the three multi-item measurement scales used to measure the variables of interest in this study was computed, leading to excellent results in terms of internal consistency of the responses. Indeed, nostalgia and brand attitude scales had excellent scores (respectively, α=0.955 and α=0.958), while Covid anxiety scale revealed a lower but still satisfying score (α=0.824). Thus, we could compute the mean scores of the scale items with no need to exclude any of them.

As for the sample structure, after a preliminary inspection of the dataset and the deleting of incomplete answers, the final sample resulted of 228 (*n=228*) useful responses, where 62.3% of respondents were female (*n=142*) and 37.7% were male (*n=86*). Moreover, most of participant were young people aged 30 years old or younger (73.6% (n=167)).

The data from the experiment was tested through Hayes' Macro PROCESS Model 7, as it is the most suitable tool for assessing moderated mediation models like the one at hand.

The analysis of the collected data gave rise to interesting interpretations: all the hypotheses were accepted, and the observation of the index of moderated mediation confirmed the presence of moderated mediation. Consequently, this research gives contribution both from a theoretical and a managerial point of view.

Starting from the contribution provided to the literature, this experiment gives enrichment to a variety of marketing research topics.

First, it provides contribution to consumer behavior research. Since the coronavirus outbreak, most of research have focused on investigating Covid-19 mainly from a scientific and medical angle, and there is still lack of research in the marketing field. Results from our experiment gave us clues that the pandemic is having a role in shaping consumer behavior, highlighting the relevance of the phenomenon, and suggesting that more interest from the literature would be needed to provide support to marketing managers' decisions.

Second, results show meaningful implications for the powerful use of nostalgia in marketing, giving contribution to the already widely explored Nostalgia Marketing literature. This study confirms what many authors have previously assessed (e.g. Havlena and Holak, 1991; Baker and Kennedy, 1994; Muehling and

Sprott, 2004; Pascal, Sprott, and Muehling, 2012), which is that the use of nostalgia in marketing can be powerful and induce positive consumption behavior.

Last, the study at hand contributes to advertising literature, providing the perspective of designing an advertising at the time of pandemic and revealing how framing marketing stimuli by adding coronavirus related contents can negatively impact consumer response.

From a practical point of view, this study provided interesting key findings:

1. *The exposure to an advertising showing a pre-Covid setting can generate better responses in terms of brand attitude than an advertising that is set at the time of pandemic.* This finding is particularly relevant as the use of Covid-19 related messaging in advertising is still quite unexplored.

   According to our results, it seems that consumers do not appreciate Covid-19 related contents in advertising anymore; as a matter of fact, although the global pandemic is not over yet, the novelty of the situation has worn off, and consumer seem to be tired of the use of Covid-19 in advertising, and ready for different contents. Therefore, brands should put less emphasis on Covid-19 when addressing consumers, and slightly go back to normal advertising, while in the meantime they should not completely forget to remind them to be responsible as the emergency is still ongoing.

2. *Consumers feel nostalgic about pre-pandemic times, and nostalgia confirms itself to be a mainly positive emotion which can in turn positively influence attitude towards the brand.* Results from our experiment confirm that nostalgia can be an effective emotional driver for consumers, especially in this particular historical period, and it turns out that it affects them with no particular distinction about their age and gender. Therefore, marketers can exploit this takeover to establish an emotional bond between consumers and the brand, and eventually boost the company's performance.

3. *It may be better to expose consumers to a pre-Covid framed ad as it generates more nostalgic feelings and lower anxiety, and Covid anxiety moderates the relationship between the type of advertising framing and nostalgia.* In our experiment, the use of a Covid-19 setting in advertising seem to elicit higher levels of consumers' anxiety about catching the novel coronavirus. This last finding suggests that many consumers still feel anxious either about getting infected or the uncertainty of the moment, and as a consequence a good practice would be to reassure them. Reassuring customers may generate a strong bond with customers and generate positive turnovers for the brand (e.g. enhancement in emotional engagement and purchase intention (Mirza and Zahra, 2014); brand trust (e.g. Alhaddad, 2015); brand loyalty (e.g. Sung, Kim, and Jung, 2010; Ming, Ismail, and Rasiah, 2011)). However, a pre-Covid framed ad elicits less anxiety and higher nostalgia, which may lead to a higher brand attitude. Hence a better strategy would probably be to leverage less on Covid-19 contents.

To conclude, at the end of chapter 5 the author presents the limitations of the study, which may be of interest for future research.

The first limitation concerns the research method employed. Indeed, the online survey is a traditional marketing research method and, as such, it comes with several limitations. Future research may overcome traditional methods' limitations by running a Neuromarketing experiment; indeed, this study would perfectly fit for a Neuromarketing experiment as it investigates consumer emotional response to a marketing visual stimulus, and it would help us to detect more genuine reactions.

The second limitation concerns the stimuli designed: the experiment could be reproduced by using other types of advertising than the print ad, and could display other types of brands, for instance representing a service instead of a product.

The third limitation comes from the period in which the data was gathered, that is between April and May 2021. Indeed, the same experiment could produce different results when the great majority of the population will be vaccinated against Covid-19, or when the health emergency will be over. Hence, it would be interesting to repeat the experiment some years after the end of the pandemic to explore the evolution of consumers' emotions and reactions induced by the same marketing stimuli.

Finally, the last limitation is caused by the sampling procedure chosen to collect the data, which is a convenience sampling method. As a matter of fact, in the future the experiment could be replicated by addressing different samples, for instance samples from other countries as they have not been all affected by Covid-19 in the same way. Therefore, detecting possible differences in results may be interesting.