



The Impact of Emotional Appeals on Consumer Behavior Depending on Collectivism Levels

Madalena Maria Vieira Lopes

Dissertation written under the supervision of professor Cristina
Mendonça

Dissertation submitted in partial fulfilment of requirements for the MSc in
Management with Specialization in Strategic Marketing, at the
Universidade Católica Portuguesa, April 2024.

Abstract

Title: The Impact of Emotional Appeals on Consumer Behavior Depending on Collectivism Levels

Name: Madalena Maria Vieira Lopes

Nowadays, consumers are daily exposed to numerous advertisements. As a result, organizations are becoming more interested in understanding a society's cultural values and adapt their advertising campaigns accordingly, to enhance the persuasive appeal of their message. To better understand whether different cultural orientations influence consumer behavior in response to emotional appeals, an experimental study was conducted. First, the study investigated whether people with stronger collectivist ideals would react more favorably to emotional appeals focused on society rather than the self, compared to individuals with stronger individualistic ideals. The results contradict established assumptions regarding the relationship between culture orientation and advertising preferences. In addition, despite Portugal's transition towards lower collectivism levels, Portuguese consumers still prefer advertisements that focus on social values. Secondly, the study examined the impact of age on consumer behavior towards persuasive messages, suggesting that younger consumers would be less impacted by emotional appeals, due to the increase of individualism, than older consumers who have stronger collectivist values. The results validated this hypothesis, suggesting that age ranges significantly influence responses to emotional appeals. The thesis' results highlight the significance of customized advertising strategies in multicultural situations, especially within the Portuguese market, and deepen the understanding of the diversity in consumer responses to emotional appeals. Additionally, they highlight alternative mechanisms that may influence consumer's reactions to advertisements beyond cultural orientations.

Keywords: emotional appeals, culture orientation, decision making, personalized strategies, Portuguese market

Sumário

Título: O Impacto de Apelos Emocionais no Comportamento do Consumidor em Função dos Níveis de Coletivismo

Autor: Madalena Maria Vieira Lopes

Hoje em dia, os consumidores são expostos diariamente a numerosos anúncios publicitários. Como resultado, as organizações têm cada vez mais interesse em compreender os valores culturais da sociedade e em adaptar as suas campanhas publicitárias em conformidade, para aumentar o apelo persuasivo da sua mensagem. Para compreender melhor se as diferentes orientações culturais influenciam o comportamento do consumidor em resposta a apelos emocionais, foi realizado um estudo.

Primeiramente, procurou-se investigar se indivíduos com ideais mais coletivistas reagiriam mais favoravelmente a apelos emocionais centrados na sociedade do que no “eu”, comparativamente com indivíduos com valores individualistas mais fortes. Os resultados contradizem os pressupostos convencionais relativamente à relação entre orientação cultural e preferências publicitárias. Adicionalmente, apesar da tendência de transição de Portugal para uma sociedade mais individualista, os consumidores portugueses continuam a preferir anúncios que enfatizam valores sociais. Posteriormente o estudo explorou o impacto da idade no comportamento dos consumidores face a mensagens persuasivas, sugerindo que os consumidores mais jovens seriam menos afetados por apelos emocionais, devido ao aumento do individualismo, enquanto os consumidores mais velhos, tradicionalmente com valores mais coletivistas, seriam mais suscetíveis a tais apelos. Os resultados validaram esta hipótese, sugerindo que a idade influencia significativamente as respostas aos apelos emocionais.

No geral, o estudo realça a importância de estratégias publicitárias personalizadas em ambientes multiculturais, especialmente no mercado português, e aprofunda a compreensão da diversidade de reações dos consumidores aos apelos emocionais. Adicionalmente, destaca mecanismos alternativos que podem influenciar as reações dos consumidores à publicidade para além das orientações culturais.

Palavras-chave: apelos emocionais, orientação cultural, tomada de decisão, estratégias personalizadas, mercado português

Acknowledgments

This dissertation marks the culmination of my Master of Science journey, which has been both challenging and rewarding. I am grateful to all those who supported me throughout this process.

First, I want to express my gratitude to my mother for her unwavering support and constant encouragement throughout this journey. Her words of motivation have been a guiding light for me. Additionally, I would like to thank my grandfather who taught me that nothing can be achieved without dedication and that the best conquests are those for which you have to work the hardest.

Finally, I would like to express my gratitude to Professor Cristina Mendonça for her guidance and support during the completion of this dissertation. Her willingness to help and provide insightful feedback, especially during challenging moments, has been fundamental in finalizing my work.

Table of Contents

1. Introduction.....	8
2. Literature Review.....	10
2.1. Advertising and Cultural Values	10
2.2. Emotions and Emotional Appeals.....	11
2.3. Culture.....	13
2.4. Impact of Culture in Ad Efficacy.....	16
2.5. Culture in Portugal	18
2. Empirical Study	21
3.1 Methodology	21
3.1.1 Research Design	21
3.1.2 Participants	22
3.1.3 Procedure.....	23
3.1.4. Pre-tests.....	25
3.1.5 Variable Measurements	26
3.2 Data Analysis and Results.....	28
3.2.1 Scale Assessment.....	28
3.2.2 Descriptive and bivariate analyses.....	28
3.2.3 Hypotheses testing	29
3. Final Discussion.....	31
4.1 Summary of Research Findings	31
4.2 Academic and Managerial Implications.....	33
4.3 Limitations and Future Research.....	34
4. Conclusion	36
References.....	36
Appendix.....	49
Appendix 1: Questionnaire	49
Appendix 2: Attention Check Analysis.....	58
Appendix 3: Demographics	59
Appendix 4: Scale Reliability Analysis – Collectivism Scale.....	60
Appendix 5: Scale Reliability Analysis – Emotion Scale	60
Appendix 6: PROCESS Output (without Covariates).....	61
Appendix 7: PROCESS Output (with Covariates).....	63

List of Tables

Table 1: Bivariate Correlation 1..... 29

List of Figures

Figure 1: Moderated Mediation Model 1 30

List of Abbreviations

α	Cronbach's Alpha
&	And
b	Regression Coefficient
H1	Hypothesis 1 (2 respectively)
M	Mean
n	Sample Size
p	p-value
r	Pearson Correlation Coefficient
R ²	Coefficient of Determination
SD	Standard Deviation
t	t-statistic

Model 14 of Hayes PROCESS macro for SPSS

X	Independent Variable
Y	Dependent Variable
M	Mediator
W	Moderator

1. Introduction

“When dealing with people, remember you are not dealing with creatures of logic, but with creatures of emotion” - Dale Carnegie

In recent years, there has been an increasing focus on comprehending the impact of emotion in persuasive appeals within the realm of consumer behavior (Panda et al., 2013). The term emotion has been hard to define since it is subjective and context dependent (Scheer, 2012). Panda et al. (2013) defined emotions as a universal set of internal processes that are largely interconnected and innate, emerging when a situation related to a consumer's consumption experience occurs.

Emotions have been demonstrated to deeply influence how individuals respond to various forms of advertising (Mai & Schoeller, 2009). Similarly, delivering an emotional message in advertising captures the audience's attention, boosts the appeal of the product, and contributes to better brand recall (Otamendi & Martín, 2020). This is achieved by eliciting positive emotions such as joy, love, and pride, or negative emotions such as fear, anger, and shame, prompting individuals to engage in more thorough processing and examination of the advertising message they receive (Leonidou & Leonidou, 2009).

Nevertheless, while there are universal emotional experiences that are shared across cultures, leading to cross-cultural similarities, significant differences can also be observed (Hareli et al., 2015). These differences are often associated with systematic variations in individual concerns driven by distinct self-construal patterns in different cultures (Triandis, 1996). This pattern can be associated with the individualistic-collectivistic dimension, which reflects the extent to which individuals in a society are integrated into groups (Hofstede, 2011). In individualistic cultures, social connections among individuals are typically weaker and individuals prioritize their personal goals and desires rather than group objectives or societal well-being (citation missing). In contrast, collectivist cultures are characterized by robust social bonds and interdependence within the in-group (Singh & Baack, 2006). These cultures emphasize social and mutual obligations and are driven to meet group expectations and goals ahead of individual rights or personal interests (Markus & Kitayama, 1991; Oyserman & Lee, 2008).

Since the majority of participants were Portuguese, it was possible to examine these dimension of collectivism-individualism in the context of the Portuguese market. Previous studies have often considered Portugal as one of the most collectivist countries in Europe. However, a recent analysis of Hofstede's dimensions challenge this notion (Hofstede, 2023). Previously reported with a score of 27 for the individualism dimension, in October of 2023, Portugal's score increased to 59. According to Hofstede's insights (2023), this change suggests that, at the moment, Portugal demonstrates a moderate level of individualism.

In addition, there are several studies that seek to draw conclusions about whether emotional appeals that use more self-centered characteristics are more appropriate for individualistic societies and whether the presence of emotional features that are more related to society and the well-being of others are more used in collectivist situations; however, there is no consensus in this respect (for evidence in support see, e.g., Han and Ling, 2016; Kim and Johnson, 2013; for evidence against see e.g., Aaker and Williams, 1998) and no concrete in-depth study on the impact of emotional appeals on Portuguese market exists (for cross-country research where Portugal was studied, see, e.g., Rego and Cunha, 2007; Morries et al., 1994; Robalo et al., 2015). In this sense, my study goes beyond previous research by introducing a cultural orientation scale to assess participants' level of collectivism. Additionally, it features Portuguese individuals as the most representative sample, a demographic not adequately represented in earlier studies. Additionally, it incorporates age as a variable to explore potential demographic differences between participants.

In this context, the aim of my thesis is to fill this research gap and draw concrete conclusions applied to the Portuguese market. Therefore, for Portuguese marketers and advertisers, my thesis may offer useful insights, as it will allow companies to better target specific categories of consumers with their advertising campaigns, by understanding whether and how emotional appeals interact with different levels of collectivism.

In addition, previous literature is not consensual on whether cultural appeals matter or not, so this study will contribute to this research by adding a new country to the knowledgebase, one that had a classical position of one the lowest in individualism in Europe (e.g., Rego and Cunha, 2007; Morries et al., 1994; Robalo et al., 2015).

The current dissertation is organized into five sections. After this first introductory part, where the relevance of studying the impact of culture and emotional appeals on consumer behavior is described, the second chapter provides a thorough examination of pertinent literature and

theories. Therefore, the main empirical results and previous research on the impact of emotional appeals in advertisements are summarized and linked to existent insights on different culture orientations. Based on the current findings, the hypotheses will be formulated, and a conceptual framework will be established. On the third chapter, the methodology used during the experimental study and the research design are carefully explained. Specifically, a between-subjects experiment will be used to collect the data that will yield answers and clarifications for the research questions and hypotheses. The fourth chapter encompasses the analysis and interpretation of the results obtained, and the fifth and final chapter presents the discussion, limitations and recommendations for future research, and ends with a short conclusion.

2. Literature Review

2.1. Advertising and Cultural Values

The term advertising is derived from the classical Latin word "advertere" which conveys the idea of "turning towards" (Rehman et al., 2019). Richards and Curran (2002) compiled definitions from various authors and proposed that advertising could be described as a form of communication where a known source pays to convey a message with the goal of convincing the audience to take a particular action, whether immediately or later on.

Throughout the years, advertising has transformed significantly and undergone various interpretations (Abideen & Saleem, 2011). As a result, as disciplines and techniques evolve, definitions may need updating (Richards & Curran, 2002).

Advertising holds a significant role in society as it serves as a powerful tool for communication, influencing people's perceptions, choices and behaviors in multiple ways (Pollay, 1986). Moreover, according to Abideen and Saleem (2011), marketers have the main objective of connecting with potential customers to increase their brand awareness, create favorable attitudes and increase purchase intention. Due to an increased focus on brand, advertising has evolved into designs that enhance the attention given to products and also create a sense of affinity with brands and companies who supply them (Hsu & Barker, 2013).

As seen in Richard and Curran's (2002) definition, advertising involves the aim of persuading an audience. Many models and theories, some of them with 60-40 years, can be used to understand the persuasion process (e.g., the heuristic-systematic model of persuasion by

Chaiken, 1980; social judgment theory by Sherif & Hovland 1961; Sherif et al. 1965). Two particular examples follow, one from the field of marketing and one from the field of psychology.

One framework commonly used for assessing the effectiveness of advertisements in the marketing field is the AIDA model (Beard et al., 2022). According to this model, a successful ad should follow the sequence: First, it needs to capture the consumers' attention (A), then spark their interest and assimilation (I), build their desire (D) for the featured product or service and, finally, prompt them to act (A), resulting in profits. To achieve this, advertisements need to strike a balance between a) evoking emotional responses to capture attention and interest and b) conveying practical information about the product and its value to consumers (Grover & Vriens, 2006).

An example of a theory from the field of psychology is the elaboration likelihood model (Petty & Cacioppo, 1986) which proposes that there are two separate modes of processing persuasive appeals, determined by the level of elaboration adopted by the individual. This results in the existence of two distinct paths to persuasion, known as central and peripheral routes (Dröge, 1989). When the level of elaboration is high, an individual is more inclined to assume the central route of persuasion; when the level of elaboration is low, they are more prone to opt for the peripheral route (Petty & Cacioppo, 1986). According to the model, our engagement with a persuasive message hinge on its perceived relevance or interest: When we consider the information pertinent, we pay careful attention, focusing on the marketer's presented arguments and generating cognitive responses to the content. This suggests that elements like the quality of arguments in an advertisement play a crucial role in shaping attitude changes (Solomon, 2018). In contrast, when individuals lack motivation to engage with the message or their ability to think was reduced, the peripheral route is activated (Petty & Cacioppo, 1984). In this pathway, persuasion does not stem from thorough elaboration but arises through straightforward inferences regarding the message's credibility (SanJosé-Cabezudo et al., 2009). Attitudes are shaped based on positive or negative signals, referred to as peripheral cues, such as the appeal, credibility, authority of the source, as well as the social influence derived from the number of others advocating a particular position (Petty & Cacioppo, 1981).

This thesis focuses on a specific type of peripheral cue, an emotional appeal, to which we turn next.

2.2 Emotions and Emotional Appeals

Nowadays, if marketers desire to better communicate with their audience and deliver more effective appeals, it is crucial to carefully consider the type of appeal to be used for different products, media types, consumers, and other relevant factors (Hornik et al., 2017). A crucial aspect in advertising effectiveness revolves around two important appeal strategies: rational and emotional appeals (Hong-Xia et al., 2014). A rational appeal is a communicative approach designed to alter the recipient's beliefs about the brand that is being advertised, relying on the persuasive power of the arguments concerning the brand attributes (Hornik et al., 2017). Conversely, an emotional appeal is a communication technique in advertisements that elicits emotional reactions, such as feelings of pride and empathy, using various sensory elements like images, sounds, tastes, and scents (Lau-Gesk & Meyers-Levy, 2009). While there is debate over whether emotional appeals are more effective than rational appeals, this determination remains inconclusive (Hornik et al., 2017). In fact, Hong-Xia et al. (2014) suggest that rather, what should be considered is the context and relevance in which the appeal is being employed. Nonetheless, for the purpose of this study, the focus will be on emotional appeals.

In contemporary research, although a clear and consensual definition of emotion has proven to be impossible to obtain, this thesis uses as a working definition the one by Ortony et al. (1988), in which emotions are perceived as inner mental states that reflect evaluative and valenced responses to events, individuals, or objects, with differences in their intensity. According to these authors, emotions are multifaceted as they encompass feelings and experiences, physiological responses and behaviors, as well as cognitions and conceptualizations.

Hasford et al. (2015) state that marketers often rely in the use of emotional cues when developing their advertisements to influence consumer behavior. Additionally, studies have shown that emotional appeals have a substantial impact on consumers' shifts in attitudes, their ability to learn about brands, and their intentions to make purchases (Brown & Stayman, 1992). This is accomplished by evoking positive emotions (e.g., joy, love, pride) or negative emotions (e.g., fear, anger, shame), prompting individuals to engage in more thorough processing and examination of the advertising message they receive (Leonidou & Leonidou, 2009). For instance, marketers often rely on negative emotional appeals when aiming to change behavior and health attitudes. An example of this can be seen in anti-tobacco appeals that feature negative emotions such as sadness and fear, which tend to be highly effective to the respondents (Biener et al., 2000). Conversely, in food advertising, marketers frequently use the

use positive emotions such as happiness, joy and fun as these have proven to increase food consumption (Harris et al., 2009).

Furthermore, emotional appeals can be regarded as message-based peripheral cues since they elicit emotions, directed towards the promoted object (Hong-Xia et al., 2014). Peripheral cues or the utilization of simple decision rules can be conveyed through visual or verbal means or may be inherent in the characteristics of the message source (Petty et al., 1986). Although many emotional experiences are shared across cultures, creating cross-cultural similarities, there are also notable differences (Eid & Diener, 2009). These differences are often linked to systematic cultural variations in individual concerns and beliefs, stemming from distinct self-construal patterns (Triandis, 1996). This gap has prompted the introduction of the term “ego-focused” and “other focused” to describe emotions in cultural psychology, which describe “the degree to which certain emotions vary in their alignment with either an independent or an interdependent construal of the self” (Markus & Kitayama, 1991, p. 235). Aaker and Williams (1998) suggest that ego-focused emotional appeals such as pride, happiness, anger, or frustration are often linked to an individual's inner state or self-centeredness and are in line with the need for self-awareness, experience, and self-expression. Conversely, emotions that are focused on individuals' feelings towards others, such as empathy, peacefulness, guilt, and shame, often relate to their interactions within a social framework (Aaker & Williams, 1998). That said, the valuation of these emotions may depend on culture.

2.3 Culture

In a world that is characterized by growing globalization, rapid change and with the existence of frequent conflicts, it is crucial to understand the role of culture (citation missing).

Defining culture is a challenging endeavor since, similarly to other intricate human phenomena, the concept has been interpreted and defined in numerous ways. In 1952, Kroeber and Kluckhohn conducted a comprehensive analysis of the concept of culture, tracing its origins back to ancient times. They notably identified over 100 definitions of culture that were in circulation during the early 20th century, spanning diverse academic disciplines such as history, philosophy, anthropology, sociology, and psychology (Raef et al., 2020). Jahoda (2012) recommended that, since it is not feasible to examine all aspects of culture simultaneously, it is more practical to specify which aspects of culture one is focusing on at a given moment.

Overall, culture can be seen as a structure that encompasses the values, beliefs, and interpretations individuals rely on to position themselves in connection to one another and the broader world (Hsu & Barker, 2013).

Hofstede (1980) pioneered the effort to concentrate cross-national cultural diversity into country scores based on a specific set of dimensions. His culture framework was derived from data obtained through attitudinal research performed in IBM subsidiaries across 72 countries from 1968 to 1973 that were later narrowed down to 40 countries using a criterion of at least 50 respondents (Beugelsdijk & Welzel, 2018). Following Hofstede's work, other frameworks and dimensions exploring national culture emerged. Notable examples include the Globe study (House et al., 2004) and, most prominently, the Schwartz Personal Values Inventory (Schwartz, 2012). The Schwartz Value Inventory has been commonly used in cross-cultural studies (Russo et al., 2022). However, its focal point of analysis is on Europe, therefore limiting its utility for cross-cultural global comparison studies, as it may not capture the diverse value orientations present in different regions around the world (Beugelsdijk & Welzel, 2018).

As mentioned, Hofstede's (1980) cultural dimensions provide a comprehensive framework for understanding the varying values and norms across societies using six dimensions. Power distance elucidates the different solutions societies adopt to address the fundamental issue of human inequality. Uncertainty avoidance delves into the levels of stress prevalent in a society when faced with an unpredictable and unknown situation. Individualism/collectivism examines the integration of individuals into basic groups. Masculinity versus femininity explores the distribution of emotional roles between genders, shedding light on traditional perceptions. These terms were recently changed to motivation towards achievement and success since some customers expressed some discomfort as they perceived these terms to treat gender as a binary concept (Hofstede, 2023). Long-term versus short-term orientation focuses on the temporal aspects of decision-making, distinguishing between prioritizing the future or the present and past. Lastly, indulgence versus restraint scrutinizes societal attitudes towards the gratification or control of basic human desires (Hofstede, 2023).

Taras et al. (2010) conducted an extensive meta-analysis encompassing all dimensions proposed by Hofstede across 598 studies and found that the dimension of individualism-collectivism has consistently emerged as the most frequently studied cultural aspect in cross-cultural research. This observation is expected, given that the individualism versus collectivism

dimension is a fundamental component present in various cultural frameworks, including those developed by Hofstede, Schwartz, Globe, and Welzel (Beugelsdijk & Welzel, 2018). This dimension is also the focus of the current work.

Triandis (1996) argues that individualist and collectivist cultures exhibit significant differences. In individualistic cultures the main premise is that individuals are independent of each other (Oyserman et al., 2002). Relationships between individuals are loose, autonomy is valued, and individual decision-making is promoted (Singh & Baack, 2004). Furthermore, individuals focus on achieving personal goals regardless of their alignment with the goals of their social groups (Triandis, 1996). Individualist cultures are prevalent in most northern and western regions of Europe and in North America (Hofstede, 1991). Additionally, Nezelek and Humphrey (2021) suggest that young adults residing in these Western societies are showing a growing trend towards individualism. Conversely, collectivist cultures center their behaviors and emotions around group concerns (Triandis, 1995). Relationships between individuals are strong, cultural norms are followed and group decision-making is promoted (Singh & Baack, 2004). Moreover, individuals' goals are aligned with the objectives and behavior of their ingroups (Triandis, 1996) where loyalty is highly valued (Westjohn et al., 2022). Collectivist cultures are prevalent in East Asia (Kitayama et al., 2009).

Considering Markus and Kitayama's (1991) distinction between independent and interdependent self-construal, Triandis (1995) introduces the following typology of vertical-horizontal versus individualism-collectivism, outlining four variations of Individualism-Collectivism:

- 1) Horizontal Individualism represents a dimension in which people see themselves as both independent and equal to others;
- 2) Vertical Individualism reflects a perspective where people see themselves as independent but may also perceive differences or inequalities compared to others;
- 3) in Horizontal Collectivism, individuals see themselves as interdependent with others and consider everyone as equals, and
- 4) in Vertical Collectivism, individuals perceive themselves as interdependent but also recognize differences or hierarchies within the group.

Using these newly defined dimensions, Singelis et al. (1995) created a 32-item scale for assessing individualism and collectivism, incorporating the concepts of horizontal and vertical distinctions, providing a more comprehensive method for assessing these cultural attributes in the United States. Afterwards, Triandis and Gelfand (1998), while refining this instrument,

discovered that 16 items of the same scale demonstrated higher factor loadings. Subsequently, researchers have inclined toward using the more concise 16-item scale instead of the original 32-item version. Furthermore, Triandis and Gelfand (1998) also discovered that these constructs are present in a non-Western culture, Korea, indicating that this dimensional structure is not exclusive to Western contexts. The findings provide some support for the usefulness of the measurement scale in various cultural contexts. More recent studies in this area suggest that these items effectively represent the fundamental concepts in both sample groups, and the associations maintain consistency across different cultural contexts as defined in the measurement model (Li & Aksoy, 2006). Hence, the results of this research offer evidence of the practicality and utility of the I-C measurement scale in forthcoming cross-cultural investigations (Li & Aksoy, 2006).

2.4 Impact of Culture in Ad Efficacy

Sissors (1978) contended that advertising mirrors the value system of that society. With that, it is stated that values differ across cultures, leading to distinct communicating strategies aimed at influencing individuals within these diverse cultural contexts (Singh & Baack, 2004).

Moreover, Solomon (2018) argues that each culture possesses a unique national identity characterized by its own set of values, regulations, and norms, thereby highlighting their distinctiveness. Consequently, Meyers (2010) emphasized the significance of culture in shaping consumer's attitudes toward advertisements. Additionally, an individual's self-perception and their alignment with the cultural values and norms of their identified group significantly influence how they perceive and respond to the cultural symbol's existent in advertisements (Grier et al., 2006). Fundamentally, when exposed to an appeal, the audience will look for resemblances between what is being advertised and themselves. Thus, customizing persuasive messages to align with the audience's beliefs and characteristics enhances their effectiveness and relevance to the group. (Meyers, 2010; Hirsh et al., 2012; Hornikx et al., 2023).

In contrast, some studies have challenged the notion that cultural individualism or collectivism is an absolute predictor of advertising content across different cultures. For instance, in one research involving 11 countries, researchers found no significant correlation between cultural individualism and the use of advertising appeals focused on independence and other factors that are usually associated with individualistic societies (Albers-Miller & Gelb, 1996).

Nevertheless, a recent meta-analysis covering 25 years of research and including 120 comparisons between personalized and non-personalized advertising appeals, concluded that regarding the dimension of individualism and collectivism, tailored appeals were still substantially more effective than generic ones (Hornikx et al., 2023).

The congruity theory of Osgood and Tannenbaum (1955) formulates that changes in evaluation or attitude tend to move in the direction of increased alignment with the existing frame of reference. This theory thus suggests that, when advertisements resonate with a person's cultural identity, they are more likely to respond positively to those ads. For instance, advertisements that apply individualistic characteristics tend to be more persuasive in countries considered as individualist (e.g., United States), whereas appeals that emphasize family or in-group benefits are more persuasive in collectivist countries (e.g., Korea; Han & Shavitt, 1994). Moreover, a study that examined persuasion strategies across cultures found that in collectivist societies, advertisements featuring other-focused themes such as family gatherings, loyalty programs, and symbols and images alluding to their national identity were preferred over individualistic theme appeals (Singh & Baack, 2004).

Subsequently, Zhang and Shavitt (2003) further explored how different types of products (shared products vs personal used products) and media type (television ads vs magazine ads) could influence the effectiveness of culturally congruent emotional appeals. The authors found that individualism is more common in magazine appeals compared to television ones. Conversely, collectivism was found to be more prominent in magazine appeals than in television advertisements. Moreover, these authors implied that personal use products usually feature more individualistic appeals while shared products usually rely on collectivist ones. This suggests that the nature of the product plays a crucial role in determining how well an advertisement aligns with the cultural values of the audience, thereby impacting its overall effectiveness. This nuanced understanding underscores the importance of considering both cultural values and product attributes when designing advertising campaigns for diverse markets. Additionally, Heinonen and Strandvik (2007) discovered that the responsiveness to advertisements was different for age groups. Individuals aged 21 to 30 presented the most favorable attitudes towards marketing efforts across all the channels, whereas respondents above 31 years were the least responsive to marketing communication in the digital channels compared to traditional direct mail. This implies that the type of the product significantly

influences how well an advertisement aligns with the cultural values of different age groups, thereby impacting its overall effectiveness.

That said, the following hypothesis was formulated:

H1: Individuals who are more collectivist will react more favorably to emotional appeals that are society-focused rather than self-focused than individuals who are more individualistic.

2.5 Culture in Portugal

In 1980, Portugal was characterized by Hofstede as a collectivist society with a score of 27 on individualism. According to the author, this manifests as a deep and enduring dedication to one's in-group, which may encompass the family, extended family, or other close relationships. Loyalty assumes a significant role in such societies, robust bonds are cultivated, and all members of the group share responsibility for one another (citation missing). One recent study, conducted by Sorokowski et al. (2017), which gathered data from 33 countries worldwide, verified that Portugal still presents lower levels of individualism compared to the majority of the included cultures, suggesting that the mentality of the country is still very much geared towards a sense of unity and belonging in society. In addition, this research not only examined collectivism on the national level, inquiring about people's perceptions of society's individualism/collectivism, but also measured collectivism on the individual level, thus collecting people's individual opinions. The findings suggest that, in Portugal, each individual not only believes the society is collectivistic, but also detains those collectivist values themselves.

From 1926 to 1974, Portugal was governed by a corporatist authoritarian regime known as the *Estado Novo* with António de Oliveira Salazar at the helm until 1968. While the country's economy thrived during the *Estado Novo*, there is a belief that this economic progress came at the expense of political freedoms being suppressed (Stoer & Dale, 1987). Salazar also championed conservative principles and emphasized the role of the Catholic Church and its ideology, elevating it to one of the most influential institutions in the nation (Payne, 1973). Consequently, this authoritarian rule may have curtailed the individualism of the Portuguese populace. This autocratic era in Portugal came to an end when the *Revolução dos Cravos* (Carnation Revolution) toppled the dictatorship, marking the start of the reconstruction of

Portuguese democracy. Nowadays, despite 49 years of democracy, the collective mindset appears to still exert a significant influence on the country's social culture, although this situation may be gradually evolving. Notably, academic hazing can be seen as a prominent manifestation of collectivism.

According to Cohen and Hill (2007), and similarly to the more frequently studied collectivistic cultures, some religious societies emphasize the importance of social connections within religious life, considering group affiliations as crucial and defining aspects of religious identity. In these collectivistic religious cultures, such as Catholicism, individuals are regarded as inherently linked to one another and their society (Cohen & Hill, 2007). In Portugal, although the number of Catholics has fallen by around 8.1% in the last decade, this number is still quite significant, with 80.2% of the population having this religion in 2021 (INE, 2021). In addition, Cohen and Hill (2007) suggest that collectivist religious and spiritual identity and motivation are seen as giving importance to social integration, rituals and traditions. Furthermore, these authors emphasize that it is an oversimplification to suggest that any religious tradition exclusively follows either an individualistic or collectivistic orientation to the detriment of the other. Instead, they argue that religious cultures accentuate different aspects. This outlook is similar to the idea proposed by cultural psychologists (Markus & Kitayama, 1991) suggesting that cultures such as the American one, for example, do not solely manifest independence, while other cultures exclusively embody interdependence. Instead, cultures incorporate both individualistic and collectivistic elements, but they emphasize them differently in terms of one's personal attributes and personality (Triandis, 1996).

Nevertheless, although most studies consider Portugal as one of the most collectivist countries in Europe (e.g., Rego and Cunha, 2007; Morries et al., 1994; Robalo et al., 2015), a renewed analysis of Hofstede's dimensions says otherwise. Unlike the previously reported score of 27 for the individualism dimension, in October this figure changed to 59 (Hofstede, 2023). According to Hofstede's insights (2023), this change indicates that, at the moment, Portugal exhibits a moderate level of individualism. This conveys a society that is relatively loosely connected, where the norm is for individuals to take care of themselves and their close circles (Hofstede, 2023). In the corporate environment, employees are anticipated to be resourceful, self-sufficient and demonstrate proactiveness (Hofstede, 2023). Additionally, in the realm of employment, hiring and promotion, determinations are made based on merit and a person's demonstrated abilities or potential (Hofstede, 2023).

Urbanization, socioeconomic development, and current education are considered as factors related to individualism (Greenfield, 2009). According to an article in Público (2009), in Portugal, a transition occurred from a rural to a primarily urban society and although this process did not dismantle the family institution, it introduced elements of individualism into it. Furthermore, Kyriacou (2016) contended that individualism directly enhances economic development by strengthening individuals' motivation to invest, innovate and gather wealth. In October 2023, the Bank of Portugal (BdP) issued a report on the country's economic bulletin in which it stated that the Portuguese economy had increased by 2.1% in 2023 and that this figure would continue to show growth based on investment and exports. Over time, as individuals' wealth increases, their reliance on family, community, and other networks of shared social support tends to diminish, leading to a rise in individualism (Rego & Cunha, 2007).

Twenge et al. (2012) conducted a study that examined generation differences amongst young individuals and found that millennials, born between 1992 and 2003, are becoming more individualistic and adopting more self-centered behaviors when compared to previous generations. Additionally, their research suggests that millennials are less empathetic towards the society and prioritize wealth and fame over values related with self- acceptance and interdependent relationships. In this context, Konrath et al. (2011) state that nowadays, young individuals are one of the most self-absorbed and competitive groups in recent times. As a result, these authors suggest that one factor that may be contributing to this decline in empathy is the increased use of technology and social media consumption. Furthermore, they argue that with a significant part of our daily life being spent online instead of engaging in real life interacting, social relationships and other-focused emotions may have been transformed. Finally, Curran and Hill (2019) argue that the academic demands have increased as young individuals' aspirations have risen and the job market has become more competitive. Consequently, there is a constant pressure for these individuals to thrive and outperform their colleagues by focusing on academic improvement (Curran & Hill, 2019). This fact is likely to foment individualistic behaviors, as the constant ambition for personal success and accomplishment leaves young people with limited time and desire to spend with others.

Based on these findings concerning age and level of individualism, I hypothesize that:

H2: Younger consumers will be less impacted by emotional appeals, due to the increase of individualism, than older consumers who have stronger collectivist ideals.

2. Empirical Study

3.1 Methodology

3.1.1 Research Design

To test the hypotheses formulated in the previous chapter, a quantitative study in the form of an online study was designed via Qualtrics. Some benefits of this type of questionnaire are its universal use and the ability to effectively and affordably collect large amounts of data in a short amount of time (Lefever et al., 2007).

The aim of the study was to reveal a cause-and-effect connection between the use of emotional appeals and consumer behavior and whether this effect can be modified by consumers' levels of collectivism. According to Nunan et al. (2020), experiments can be defined as those in which a researcher manipulates a single or multiple independent variables and evaluates their influence on one or more dependent variables, controlling for the influence of external variables. Moreover, the authors state that an example of an experiment that meets this definition is a research project on advertising creativity, which aligns with what was developed in this thesis' study. Emotional appeal types is considered as a third variable, specifically as a moderator variable with two different states (self-focused vs other-focused appeal). A moderator influences how the independent or predictor variable relates to the dependent or criterion variable, affecting both the direction and strength of this relationship (Baron & Kenny, 1986).

In the current study, the participants were randomly assigned to one of two scenarios. In one experimental setting, respondents were presented with an emotional appeal that contained ego-focused emotions and, therefore, is typically associated with an individualistic culture. In the second experimental setting, an emotional appeal with family-orientated values was displayed, therefore referring to a more collectivist culture. Such randomization ensures external validity, enabling inferences made from the sample to be extended to the population from which the sample is taken from (Msaouel et al., 2023). In addition, since respondents are assigned to one

of two experimental groups, being exposed to only one specific combination of treatments, the study has a between-subjects design (Nunan et al., 2020). This design facilitates the comparison of participants' behavior between different groups, ensuring that there are no carry-over effects. Tourangeau and Rasinski (1989) suggest that carry-over effects occur because responding to the preceding context items heightens the accessibility of information, which is subsequently carried over and used when answering the following item. Furthermore, the external validity attribute pertains to the extent to which the observed relationships can be applied beyond the sample to the general population or to different individuals (Findley et al., 2021). In this case it can be noted that the results of the survey research, which gathers data from a diverse range of individuals, companies, or other units of analysis, often demonstrates greater generalizability to real-life situations (Bhattacharjee, 2012).

3.1.2 Participants

The data was gathered using a non-probability sampling technique – convenience sampling – since the link to the online survey was shared to the members of my personal and professional network via different social media platforms (Instagram, Facebook, LinkedIn, and Whatsapp). According to Nunan et al. (2020), in convenience sampling the selection of sampling units is mainly done by the researcher, enabling a greater level of accessibility, cooperativeness, and measurement.

Between October 29th and November 18th, a total of 332 responses were collected. However, one response was removed, since the participant claimed to be 120 years old and the majority of questions was left unanswered, therefore offering doubtful results and 109 were removed due to failing the attention-check question, such that 222 responses were considered valid and considered for further investigations. To estimate the total required sample size, the power analysis for the moderation, which is equivalent to a three-variable regression, was taken into consideration. According to Maxwell (2000), a total of 218 participants will result in a power of approximately 80% to detect a medium-sized moderation. Given this, since the final sample size was 222 respondents, this value was satisfactory. From the total valid sample, 60.2% were females, 39.4% males and 0.05% preferred not to say. Half of the participants ($n = 115$) have been randomly assigned to the collectivist advertisement and half of them ($n = 107$) to the individualistic one. Their age ranged from 18 to 88 years old ($M = 34.9$, $SD = 14.8$) and 83.8% had higher levels of education. The study encompasses participants from 18 countries, with a notable majority hailing from Portugal (71.2%) and a smaller proportion from Germany (7.9%).

Half of the respondents were single (55,1%), 39,4% were married and 5,6% had another marital status. Additionally, 58.8% of the participants did not have kids or grandkids, while the remaining respondents did. Finally, only 1.9% indicated that they paid little attention to the questionnaire, which means that, in general, most of the results can be trusted. For further details on the demographic's descriptive statistics, see Appendix 3.

3.1.3 Procedure

The questionnaire began with a brief introduction indicating the general topic being considered, the approximate length of the survey and the confidentiality statement. In this initial part of the survey, no concrete and explanatory information about the study was provided to avoid biasing the participants.

Once participants agreed to the informed consent, they were randomly and evenly allocated to one of the two scenarios, either ego-focused or other-focused emotional appeal. They were then instructed to immerse themselves in the presented situation and provide responses to the subsequent quantitative questions in a realistic manner.

For this study, I created the artificial brand name “Dunn” to avoid the influence of brand familiarity in the evaluation of advertisements. According to Campbell and Keller (2003), brand familiarity plays a significant role in shaping consumer processing and the stages of habituation and tedium. It encompasses the brand-related information stored within a consumer's memory, including the associations and knowledge related to that brand (Campbell & Keller, 2003). Moreover, as discussed in the literature review, culture plays a significant role in shaping how emotions are involved in the interpretation of a message (Osgood & Tannenbaum, 1955). Specifically, emotional appeals centered on the self are frequently associated with an individual's inner state or self-awareness, reflecting the desire for personal experience and self-expression (Aaker & William, 1998). Conversely, emotions that are oriented towards individuals' feelings about others are more closely tied to social interactions (Aaker & William, 1998). Thus, for the basis of the advertisements, I chose to include happiness and peacefulness as the focal emotions for the ego-focused and other-focused emotional appeals, respectively. In addition, both emotions have already been used in prior research to study the influence of emotional appeals across cultures (e.g., Aaker & Williams 1998).

For the development of the emotional appeals, the study by Aaker and Williams (1998) was taken as inspiration, since both studies aimed to explore how emotional appeals impact

individuals from collectivist cultures, compared to those from individualist cultures. Furthermore, incorporating questions that have been previously used and subjected to validation and reliability testing, ensures the robustness and strength of the measures used in my study (Kimberlin & Winterstein, 2008).

In both scenarios, the questions presented were equal but there were strategic changes to the advertisement. First, one of the emotional appeals featured a subject that appeared to be walking alone on the beach, whereas in the other appeal a family was presented. Then, in terms of wording, the ego-focused appeal included phrases and emotions typically associated with individualistic cultures (e.g., “Happiness”, “Remember the day by yourself at the beach”, “Your best moments”, “Your feelings”), while the other-focused advertisement mentioned collectivist ones (e.g., “Peacefulness”, “Remember the day with your family at the beach”, “The best moments together”, “Felling of unity”). Nevertheless, the structure, formatting and environments were kept constant so that a further comparative analysis was accurate.

Mobile phone was chosen as the product category due to different factors. First, both self-centered and other-centered emotional appeals could be developed for a mobile smartphone (Park & Salvendy, 2012). Second, according to a study conducted by Delloite (2017), almost every developed country surveyed by the company has at least 90% mobile phone penetration, therefore, this object can be considered a relevant product for participants and something that they are familiar with. Additionally, the emotional appeal type adaptation can be strengthened by featuring images of an individual as opposed to a collective group or family. Twenefour (2017) stated that popularity, internet access, camara, affordability, high quality, and battery life tend to be the major features considered before the selection of a mobile phone. As such, those were the main attributes described in the advertisement.

Then, an attention-check question adapted from a study conducted by Huang et al. (2012) was included to control for inattentive respondents. According to Berinsky et al. (2014), in these types of questions, subjects are asked to demonstrate that they are paying attention by selecting a survey response option in accordance with a detailed set of instructions. Consequently, this item was useful to ensure scale validity by eliminating respondents who had not answered correctly.

After, participants were asked to read two different definitions regarding individualistic and collectivistic cultures. The first one stated that, in individualistic cultures, there is an emphasis

on personal responsibility and individual accomplishments, with people being self-centered rather than group focused. Additionally, it referred that in collectivist societies, individuals are integrated into close-knit groups, and the goals and norms of the group take precedence over personal goals and attributes in shaping behavior (Triandis, 1995). The second one expressed that, in collectivist cultures, trust forms the basis for both social and business connections, whereas individualistic cultures are often characterized by more distant or transactional relationships (Samaha et al., 2014). Then, they were enquired about which type of culture is best represented in the advertisement shown previously. Finally, the participants are asked to indicate their level of agreement with 16 statements using Triandis and Gelfand's (1998) culture orientation scale: They evaluated the phrases using a 7-point Likert scale ranging from 1 (*never/definitely no*) and 7 (*always/definitely yes*). A randomization in the order of the sentences was included so that all phrases associated with each dimension were not kept together.

Participants were randomly attributed to an order condition: in the first, they identified the culture best represented in the previously shown advertisement and then indicated their level of agreement with 16 statements using Triandis and Gelfand's (1998) culture orientation scale, while in the second condition, they followed the reverse sequence. To mitigate potential carryover effects that answering a given measure first may have on the subsequent measure, I chose to randomly order the items in the 16-item culture orientation scale. Goodhue (1998) suggested that, when several questions related to the same construct are placed consecutively, individuals are inclined to employ anchoring and adjustment in their responses. They might answer the first question independently, but when addressing the subsequent questions, they tend to make minor adjustments (Goodhue, 1998). As a result, according to this author, the error terms for adjacent questions are likely to be interrelated, which can lead to an inflated appearance of reliability without a corresponding increase in actual reliability.

In the last section, a wide variety of demographics questions concerning respondent's gender, age, location, existence of children, marital status, general education, and employment status were formulated. Finally, participants were asked how much attention they paid when answering the questionnaire and were provided with an open-ended question in which participants could leave any comments if desired.

3.1.4. Pre-tests

According to Ruel et al. (2016), conducting a pre-test of a survey is a crucial step to identify potential issues, minimize measurement errors, alleviate respondent burden, verify respondents' comprehension of questions, and confirm that the question sequence does not bias respondents' answers. First, the questionnaire was shown to a non-probability sample ($N = 5$) where participants were asked to decide which of the two ads communicated individualism and which one communicated collectivism: $N = 5$ students (100%) classified the two ads as was expected. Then, another group of participants, $N = 5$, were randomly presented with one of the two emotional appeals and asked to conduct the full survey. Any comments or questions were taken into consideration and some modifications were made. In particular, the time taken for the survey completion was altered to 8 minutes and a mistake in one of the scenarios footers was corrected.

These participants were not included in the actual study, as they in practice did not experience the same survey as others.

3.1.5 Variable Measurements

Independent Variable:

Cultural Orientation: As mentioned in the Literature Review, new scales have been developed and adapted over the years to measure an individual's level of individualism and collectivism. In my study, I chose to use a 16-item scale (Triandis & Gelfand, 1998) to measure four dimensions of collectivism and individualism. Although the original scale was answered on a 9-point scale, to simplify the analysis, items were answered on a 7-point scale, ranging from 1 = “never or definitely no” to 7 = “always or definitely yes”.

Dependent variable:

Emotional Connection: Subjects responded to three attitude questions related to the advertisement on a 5-point Likert scale (1 = *not at all* to 5 = *very much*) such as “How much did you like the ad?” and “How pleasant did you find the ad?” (Diehl et al., 2003). In addition, participants were asked their level of agreement with the statement “The text of the advertisement emotionally connected with me” (Aaker & Williams, 1998).

Moderator:

Emotional appeal type: To encourage either self-referencing or other referencing, the photographs in the advertisement portrayed an individual alone as opposed to several people together (resembling a family). The manipulation of self-referencing versus other referencing was reinforced by three changes in the advertising copy: 1) the title of the appeals was either "Capture The Happiness" or "Capture The Peacefulness", 2) the first phrase mentioned "Remember the day [...] at the beach" with "by yourself" in one condition and "with your family" in the other", and 3) at the footer of the advertising the catchline said "Capture Your Feelings" or "Capture The Feelings of Unity". In addition, ads portraying happiness and peacefulness were developed using allusive photographs chosen for their ability to convey these emotions. The appeal illustrating happiness exhibits a family enjoying time together by the water, while peacefulness is expressed by an individual walking alone along the beach. In both scenarios, a beach scene was featured at the same time of the day.

Control Variables:

Demographics: Following previous studies (Hughes et al., 2016), respondent's gender, age, location, existence of children, marital status, educational and employment status were considered. Gender was obtained as either female, male or other. Since the number of respondents who identified themselves as other/prefer not to say was not substantial ($n = 1$), it was decided to aggregate these categories to the men group. The dummy variable then compares people who identify as females ($n = 130$) with everyone else ($n = 92$). Age was collected in years in an open-ended question and present location was measured in a single choice drop-down format. Given the diverse responses from participants representing 18 different nationalities, and considering that many belonged to smaller categories, a decision was made to aggregate these smaller groups. Since Portugal had the largest participant count ($n = 153$) and is the focal point of the study, it was retained as a separate category. Although Germany had the second-highest number of participants ($n = 17$), this count was considered too small for comparison purposes. Therefore, for the analysis, the category "Portuguese" was retained, and the remaining countries were collectively grouped under the "other" category. Existence of children was collected in a single choice format as either yes, no or prefer not to say. However, since none selected the option "Prefer not to say," this variable was simplified to two states: respondents who have children/grandchildren and those who do not. Marital status was collected as either married, single or other. The category "Single" displayed the largest value ($n = 119$) and was retained as an independent factor. However, few people selected "Other" (n

= 12), thus this category was combined with "Married" to form a new category labeled "Others". Consequently, the study compared individuals who were single with all other marital statuses. Employment and education status were measured in single choice format using the options provided by the platform. Regarding education, the categories of "Bachelor's degree", "Master's degree" and "Doctorate degree" were merged into a single group and the categories "Less than high school" and "High school graduate" were combined in another category. Subsequently, this dummy variable compared individuals with higher education ($n = 181$) to everyone else ($n = 35$).

3.2 Data Analysis and Results

3.2.1 Scale Assessment

The current study measures the variables emotion and culture orientation using multi-item scales. Therefore, a scale reliability test was conducted to assess the relationship between items. To examine internal consistency, a commonly employed method is calculating Cronbach's α (Nunan et al., 2020). This coefficient, which varies from 0 to 1, is considered unsatisfactory in terms of internal consistency reliability if its value is .60 or lower (Nunan et al., 2020). The emotion scale exhibited high internal consistency ($\alpha = .88$), indicating satisfactory reliability. To evaluate the matching effect, the collectivist items of the Triandis and Gelfand (1998) were reverse-coded and a single collectivist vs. individualist score was calculated (Cronbach's $\alpha = .90$), where higher numbers indicate higher individualism. This result suggests satisfactory reliability.

3.2.2 Descriptive and bivariate analyses

To understand the relationship between two metric variables, the Pearson correlation coefficient (r) is the most commonly used statistic. This statistic ranges from -1.0 to +1.0 and indicates the extent to which the variability in one variable is associated with the variability in another variable (Nunan et al., 2020). Examining the bivariate correlation table reveals that, as age increases, individuals tend to have more children ($r = .77$). Regarding individualism, having children/grandchildren correlates with a decrease in the participant's level of individualism ($r = -.21$). Additionally, being female is also linked to a decrease in individualism ($r = -.14$). Finally,

respondents from Portugal, in contrast to other nationalities, demonstrate lower levels of individualism ($r = -.38$). For further details on the bivariate correlation table, please refer to table below (Table 1).

Table 1: Bivariate Correlation 1

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Emo_AVE	_													
2. Single	-.06	_												
3. Other	.06	1.0**	_											
4. Less Education	.03	.07	-.07	_										
5. Higher Education	-.03	-.07	.07	-1.0**	_									
6. Kids	.01	-.85**	.85**	-.09	.09	_								
7. NoKids	-.01	.85**	-.85**	.09	-.09	-1.0**	_							
8. What is your age?	-.06	-.71**	.71**	-.02	.02	.77**	-.77**	_						
9. Female	.11	-.01	.01	-.03	.03	-.01	.01	-.03	_					
10. Others	-.11	.01	-.01	.03	-.03	.01	-.01	.03	-1.0**	_				
11. Portuguese l	-0.5	.07	-.07	.17*	-.17*	-.01	.01	.07	.18**	-.18**	_			
12. OtherNat	.05	-.07	.07	-.17*	.17*	.01	-.01	-.07	-.18**	.18**	-1.0**	_		
13. C_AVE	-.09	.06	-.06	-.12.	.12	-.07	.07	-.04	-.1	.1	-.37**	.37**	_	
14. L_AVE	.21	.10	-.10	-.03	0.3	-.21**	.21**	-.20**	-.14*	.14*	-.38**	.38**	.42**	_

** Correlation is significant at a 0.01 level (2-tailed).

* Correlation is significant at a 0.05 level (2-tailed).

3.2.3 Hypotheses testing

To test the two hypotheses formulated, a statistical analysis was conducted using the SPSS macro process version 4.2 by Hayes (2022). This conditional process analysis is a methodological approach that allows the combined analysis of mediation and moderation to investigate and test hypotheses regarding how mechanisms change based on contextual factors or individual variations (Hayes & Rockwood, 2020).

Process offers 92 different models based on the nature of the variables involved. For this experiment, Model 14 (moderated mediation) was selected as it aligns with the research design of the study.

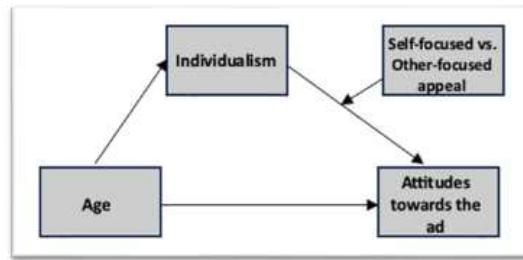


Figure 1: Moderated Mediation Model 1

H1 suggested that self-vs-other-appeals would be more effective in individualistic-vs-collectivist participants. H1 was not supported as the moderation effect was not significant ($b = - 0.42$, $t = - 1.01$, $p = .314$), thus showing that there was no match between level of personal individualism and type of ad appeal that increased positive emotions towards the ad.

H2 suggested that older participants would be more collectivistic. Indeed, there was a significant negative impact of age on individualism ($b = - 0.01$, $t = - 2.08$, $p < .001$), indicating that, as the age of the participants increased, the level of individualism decreased, therefore, H2 was supported. Nevertheless, the coefficient of determination was low ($R^2 = 0.02$), suggesting that age only explains a small part of the variation in individualism and the potential existence of other factors that may better explain this variability. For the full complete output of this analysis, please refer to Appendix 6.

Although not the primary focus of this study, I opted to incorporate various covariates into the model to assess the impact of control variables on levels of individualism. The selection of variables was determined by identifying those with the strongest correlation with individualism, as indicated in the bivariate correlation analysis. The findings indicate that having children or grandchildren decreases individuals' levels of individualism ($b = - 0.40$, $t = 0.18$, $p < .001$). Additionally, the data suggests that Portuguese individuals demonstrate lower levels of individualism compared to other nationalities ($b = - 0.89$, $t = - 6.96$, $p < .001$), which corroborates the findings discussed in the literature review. After the covariates were added to the model, there were notable changes in the significance levels of the predictors. Regarding H1, the moderation effect remained non-significant ($p = .155$). However, there was a shift in the pattern for H2, with the moderation effect no longer being significant ($p = .618$). This change can be attributed to the strong correlation between age and having children or grandchildren ($r = .77$). Consequently, when having children or grandchildren is

added as a covariate in the model, the variable age stops being a good predictor. For more detailed information, please see Appendix 7.

The significance of having children or grandchildren in predicting individualism could stem from the influence of family relationships and social bonds on shaping cultural values. In collective societies, the reliance on other family members for support and guidance is considered normal and encouraged (Sharma & Manikutty, 2005). Moreover, this interdependence is reinforced by prioritizing social bonds and involving children in decision-making activities (Triandis et al., 1988). Consequently, in individualistic communities where autonomy and independence are prioritized, the decision to have children may be less desired, as individuals tend to prioritize their own interests and consider the consequences of their actions for themselves (Tamis-LeMonda et al., 2007). As a result, parenthood may serve as a stronger indicator to predict individualism than age alone, as it reflects broader cultural and social values related to family interaction and independent relationships.

3. Final Discussion

4.1 Summary of Research Findings

Nowadays, marketers are becoming more interested in investigating the impact of adapting messages to the characteristics of their target audience, as studies have demonstrated that it can increase the persuasive effect of that message (Hornikx et al., 2023). In fact, what distinguishes the effectiveness of advertising is not the selection of benefits that it offers, but rather the ability of the marketer to present benefit claims in a more emotionally compelling or captivating way (Rossiter et al., 1991).

This dissertation sought to investigate whether the impact of emotional appeals on consumer behavior varies depending on the level of collectivism. The theoretical foundation of this study identified a gap in the existing research literature, prompting the formulation of two hypotheses that were subsequently tested through an experimental approach.

H1 proposed that individuals with higher collectivist tendencies would react more favorably to emotional appeals focused on society, compared to those focused on the self, in contrast to individuals with higher individualistic values. However, this hypothesis was not supported. Therefore, the influence of collectivism on how individuals respond to emotional appeals may

not be as significant as previous studies suggested (e.g., Han & Shavitt, 1994; Hornikx et al., 2023). This suggests that cultural individualism or collectivism may not serve as decisive indicators of advertising content across different cultures, indicating that the relationship between cultural values and advertising content may be more subjective and context-dependent (Albers-Miller & Gelb, 1996; Aaker & Williams, 1998).

This finding can be linked with the elaboration likelihood model (Petty & Cacioppo, 1986), which suggests that individuals vary in their motivation to engage with an emotional appeal. According to the model, as the personal relevance of an emotional appeal increases, individuals are more motivated to engage with the content of the message presented (Petty & Cacioppo, 1986). Some may deeply process information due to personal relevance (central route), while others may be less motivated (peripheral route). Individual preferences, such as associations, images, and previous experiences, also influence the level of motivation individuals have to engage with emotional appeals. Since emotional appeals, primarily act on the peripheral route, they compete with all these other cues. As a result, the effect of the emotional appeal may not be as significant compared to these other cues. Therefore, the lack of support for H1 could be attributed to participants' insufficient motivation to process the appeal. This highlights the complexity of how individuals process information and the extent to which cultural orientations influence their responses to persuasive appeals. Additionally, previous cross-cultural research has typically categorized collectivism and individualism based on participants' country of birth and residence (Kitirattarkarn et al., 2019). However, emerging studies recognize the potential coexistence of individualist and collectivist orientations within an individual, society, organization, or group (Chen & Ünal, 2023). Moreover, the authors argue that these orientations may evolve or adapt over time in response to emerging challenges.

Regarding H2, which posited that younger consumers would be less impacted by emotional appeals due to the increase in individualism compared to older consumers with stronger collectivist ideals, these findings supported the assumption. However, this correlation is relatively weak, indicating that age explains only a small portion of the variation in individualism and the presence of other factors that may better account for this variability. Additionally, despite recent literature suggesting that Portugal is transitioning towards a more individualistic country, the study's findings suggest that, compared to other countries, Portugal still demonstrates high levels of collectivistic values. Furthermore, the data indicates that having children or grandchildren decreases an individual's level of individualism.

4.2 Academic and Managerial Implications

This research holds significant implications for scholar and academics. First, the findings of the study challenge the widely held belief that individuals with higher collectivist values would react more favorably to emotional appeals focused on society compared to self-focused appeals, as opposed to individuals with higher individualistic tendencies (e.g., Zhang & Shavitt, 2003; Han & Shavitt, 1994) and suggests that this relationship may not be so linear. In fact, the study adds to the emerging body of cross-cultural research on emotional appeals in advertising (Otamendi & Martín, 2020; Vrtaňa & Křižanová, 2023), as it questions the assumption that the effectiveness of ego- and other-focused ad-evoked emotions is solely dictated by consumers' cultural backgrounds. Instead, it suggests that other factors, such as individual's motivation to process a persuasive message (Aaker & Williams, 1998) and their personality traits (Faseur & Geuens, 2012), likely contribute to the impact of emotions elicited by ads focused on the self and others across diverse cultural contexts.

In this context, another implication is that replicating the study has enhanced the robustness of previous research findings due to the alterations made. The initial study, published in 1998, advertised a camera using black-and-white imagery, which may be considered outdated in today's society. Furthermore, the original study did not include a cultural orientation scale to measure the level of collectivism among participants, nor did it have Portuguese people as the most representative sample. Finally, it introduced the variable of age to study to understand potential demographic differences within participants. This finding suggests that there may be significant generational effects that could be important to consider in understanding consumer behavior towards advertising, effects which previous research may have neglected.

Regarding Portugal, these results advance the comprehension of how consumer reactions to emotional appeals differ across cultures, with Portugal serving as a focal point for analysis. As outlined in the literature review, recent insights from Hofstede (2023) reveal a significant shift in Portugal towards lower collectivism scores, indicating a transition towards more individualistic mindsets and behaviors, diverging from previous research trends (Heu et al., 2019; Rego & Cunha, 2007). Nonetheless, the results reveal that, relative to the other nations examined, Portuguese consumers still exhibit a preference for advertisements that emphasize social values. This highlights the need for nuanced approaches to studying consumer behavior

across different cultural contexts, considering the unique cultural nuances and dynamics present in each country or region.

Regarding marketers, as previous mentioned, different types of products and media type can influence the effectiveness of culturally congruent emotional appeals (Zhang & Shavitt, 2003). Additionally, Heinonen and Strandvik (2007) discovered that the responsiveness to advertisements was different for age groups. In the future, marketers can tailor marketing campaigns to younger consumers where individualistic values are highlighted and distribute them in multiple channels, while campaigns targeting older consumers could emphasize collectivist values and rely more on traditional mail for transmission.

Concerning the Portuguese context, this study's results reinforce the idea that for future campaigns, marketers should persist in customizing their advertising strategies towards more collectivist themes, incorporating narratives that emphasize societal living and highlight the significance of family and interdependence in Portugal. In fact, some recent examples of Portuguese advertising that have elicited positive reactions from consumers were centered around collectivist behaviors. For instance, in 2023, Lay's introduced a new emotional appeal titled "For the Little Big Moments," aiming to capture authentic family moments as it portrays the reality of Portuguese families during mealtimes (Marketeer, 2023). Another example could be Vodafone's Christmas campaign, featuring the slogan "No matter how many other voices are heard, it's never too late to listen to your heart" (Vodafone, 2023), where the reflection on the importance of acceptance and love, in different forms is encouraged. Moreover, this implication is particularly relevant since recent research has suggested an increase in individualism in Portugal (Hofstede, 2023).

4.3 Limitations and Future Research

Although this study offers relevant implications, its findings are subject to several limitations, which will be outlined first, followed by recommendations for future research. First, one notable limitation is the reliance on a non-probability sampling technique for the data collection. While this method was chosen due to time and convenience constraints, it may have resulted in a non-representative sample (Nunan et al., 2020). Specifically, most participants were recruited directly through a Qualtrics link shared via social media platforms, leading to an overrepresentation of individuals from Portugal. Consequently, the generalizability of the

findings to broader populations may be limited. The use of convenience samples raises concerns about the validity of the study's findings, since samples are prone to biases that can affect both society-level effects and subpopulation differences (Jager et al., 2017). Future studies should rely on the use of probability sampling techniques to address these limitations. For instance, the use of stratified sampling would guarantee that all subpopulations were represented on the target population, therefore ensuring a more reliable representation of the sample (Nunan et al., 2020).

To build on the academic implications discussed earlier, the study included collectivism as the only mediator. However, as stated previously, there are more dimensions that can influence the degree of culture variation and ultimately its impact on consumer behavior, such as masculinity, power distance, uncertainty avoidance and long-term vs short-term orientation (Hofstede et al., 2010). Identifying and incorporating these dimensions would represent a significant advancement in cross-cultural research, providing a more thorough understanding of cultural differences. That said, for future studies on collectivism, examiners should integrate these dimensions and understand their impact on consumer behavior and the underlying relationships.

Furthermore, even though the advertisements and their text were adapted from an existent study to enhance external validity by employing authentic situations, the arrangement remained artificial. Moreover, participants were instructed to envision themselves within the outlined scenario and provide responses based on their anticipated emotions and actions in that described situation. Although researchers often rely on this approach as consumers' self-reported intentions serve as convenient proxies for actual behavior (Chandon et al., 2005), such intentions often fail to account for all the variations in the behavior, creating what has become known as the intention-behavior gap (Conner & Norman, 2022). Future studies could use a mixed methods approach, gathering and examining both qualitative and quantitative data from both participant self-reports and observations of participants' behavior (Brill & Schwab, 2019). By combining these methods, researchers can achieve higher reliability in their findings and apply them to a broader population (Brill & Schwab, 2019).

Finally, as previously mentioned, cultural values and consumer behavior may evolve over time. In fact, as discussed earlier, the scores associated to Hofstede's dimensions are variable, making today's societal observations potentially outdated in a short period of

time. Indeed, one recent event that has significantly influenced individuals' cultural dimensions, particularly regarding individualism and collectivism is the COVID-19 pandemic. This global crisis has significantly impacted people's lives, including their work, economic stability, relationships, politics and cultural values (Wang et al., 2024). Wang et al. (2024) found that initially, the Covid-19 pandemic resulted in an increase in collectivism and a subsequent decrease in individualism. However, as these situations stabilized, these patterns reversed. Furthermore, the authors stipulated that the severity of the situation, the policies and norms adopted during that period, and media attention were identified as significant factors influencing these changes. Therefore, future longitudinal studies or additional data points could provide a more comprehensive understanding of trends compared with cross-sectional analyses (Gibbons et al., 2010).

4. Conclusion

Organizations are constantly focusing their marketing efforts on customizing product offers and advertising appeals to match with individual's personal preferences. This thesis challenges the prevailing notion that individuals' cultural orientation dictates their preferred type of appeal. Nevertheless, regarding Portugal, it contradicts recent research indicating a rise in the country's level of individualism, suggesting that Portuguese consumers continue to prefer advertisements that focus on family and interdependent relationships. Finally, it suggests that besides cultural orientation, there may be other inherent factors influencing individual's preference for certain advertisements. In summary, these results open opportunities for further investigation into the complex relationship between individual characteristics and marketing effectiveness.

References

Aaker, J. L., & Maheswaran, D. (1997). The effect of cultural orientation on persuasion. *Journal of consumer research*, 24(3), 315-328.

Albers-Miller, N. D., & Gelb, B. D. (1996). Business advertising appeals as a mirror of cultural dimensions: A study of eleven countries. *Journal of advertising*, 25(4), 57-70.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173.

Beard, E., Henninger, N. M., & Venkatraman, V. (2022). Making ads stick: Role of metaphors in improving advertising memory. *Journal of Advertising*, 1-18.

Berinsky, A. J., Margolis, M. F., & Sances, M. W. (2014). Separating the shirkers from the workers? Making sure respondents pay attention on self-administered surveys. *American Journal of Political Science*, 58(3), 739-753.

Beugelsdijk, S., & Welzel, C. (2018). Dimensions and dynamics of national culture: Synthesizing Hofstede with Inglehart. *Journal of Cross-Cultural Psychology*, 49(10), 1469-1505.

Bhattacharjee, A. (2012). *Social science research: Principles, Methods, and Practices*. USA.

Biener, L., McCallum-Keeler, G., & Nyman, A. L. (2000). Adults' response to Massachusetts anti-tobacco television advertisements: impact of viewer and advertisement characteristics. *Tobacco Control*, 9(4), 401-407.

Brill, M., & Schwab, F. (2019). A mixed-methods approach using self-report, observational time series data, and content analysis for process analysis of a media reception phenomenon. *Frontiers in Psychology*, 10, 467915.

Brown, S. P., & Stayman, D. M. (1992). Antecedents and consequences of attitude toward the ad: A meta-analysis. *Journal of consumer research*, 19(1), 34-51.

Campbell, M. C., & Keller, K. L. (2003). Brand familiarity and advertising repetition effects. *Journal of Consumer Research*, 30(2), 292-304.

Chaiken, S. (1980). Heuristic versus systematic information processing and the use of source versus message cues in persuasion. *Journal of personality and social psychology*, 39(5), 752.

Chandon, P., Morwitz, V. G., & Reinartz, W. J. (2005). Do intentions really predict behavior? Self-generated validity effects in survey research. *Journal of marketing*, 69(2), 1-14.

Chen, C. C., & Unal, A. F. (2023). Individualism-collectivism: a review of conceptualization and measurement. *Oxford Research Encyclopedia of Business and Management*.

Cohen, A. B., & Hill, P. C. (2007). Religion as culture: Religious individualism and collectivism among American Catholics, Jews, and Protestants. *Journal of Personality*, 75(4), 709-742.

Conner, M., & Norman, P. (2022). Understanding the intention-behavior gap: The role of intention strength. *Frontiers in Psychology*, 13, 923464.

Curran, T., & Hill, A. P. (2019). Perfectionism is increasing over time: A meta-analysis of birth cohort differences from 1989 to 2016. *Psychological Bulletin*, 145(4), 410.

Diehl, S., Terlutter, R., & Weinberg, P. (2003). Advertising effectiveness in different cultures: Results of an experiment analyzing the effects of individualistic and collectivistic advertising on Germans and Chinese. *ACR European Advances*.

Dröge, C. (1989). Shaping the route to attitude change: Central versus peripheral processing through comparative versus noncomparative advertising. *Journal of Marketing Research*, 26(2), 193-204.

Eid, M., & Diener, E. (2001). Norms for experiencing emotions in different cultures: inter-and intrainational differences. *Journal of Personality and Social Psychology*, 81(5), 869.

Fasseur, T., & Geuens, M. (2012). On the effectiveness of ego-and other-focused ad-evoked emotions: The moderating impact of product type and personality. *International Journal of Advertising*, 31(3), 529-546.

Fernandes, J. M. (2009). Nós, os portugueses, pobres, felizes e individualistas. *PÚBLICO*. <https://www.publico.pt/2009/06/30/jornal/nos-os-portugueses-pobres-felizes-e-individualistas-17151063>

Findley, M. G., Kikuta, K., & Denly, M. (2021). External validity. *Annual Review of Political Science*, 24, 365-393.

Gibbons, R. D., Hedeker, D., & DuToit, S. (2010). Advances in analysis of longitudinal data. *Annual Review of Clinical Psychology*, 6, 79-107.

Global mobile consumer trends: 2nd edition. (n.d.). *Deloitte United States*. <https://www2.deloitte.com/us/en/pages/technology-media-and-telecommunications/articles/global-mobile-consumer-trends.html>

Goodhue, D. L. (1998). Development and measurement validity of a task-technology fit instrument for user evaluations of information system. *Decision sciences*, 29(1), 105-138.

Greenfield, P. M. (2009). Linking social change and developmental change: shifting pathways of human development. *Developmental Psychology*, 45(2), 401.

Grier, S. A., Brumbaugh, A. M., & Thornton, C. G. (2006). Crossover dreams: consumer responses to ethnic-oriented products. *Journal of Marketing*, 70(2), 35-51.

Grover, R., & Vriens, M. (Eds.). (2006). *The handbook of marketing research: uses, misuses, and future advances*. Sage.

Han, J., & Ling, J. (2016). Emotional appeal in recruitment advertising and applicant attraction: Unpacking national cultural differences. *Journal of Organizational Behavior*, 37(8), 1202-1223.

Han, S. P., & Shavitt, S. (1994). Persuasion and culture: Advertising appeals in individualistic and collectivistic societies. *Journal of experimental social psychology*, 30(4), 326-350.

Hareli, S., Kafetsios, K., & Hess, U. (2015). A cross-cultural study on emotion expression and the learning of social norms. *Frontiers in Psychology, 6*, 1501.

Harris, J. L., Bargh, J. A., & Brownell, K. D. (2009). Priming effects of television food advertising on eating behavior. *Health psychology, 28*(4), 404.

Hasford, J., Hardesty, D. M., & Kidwell, B. (2015). More than a feeling: Emotional contagion effects in persuasive communication. *Journal of Marketing Research, 52*(6), 836-847.

Hayes, A. F. (2022). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach (3rd edition). New York: *The Guilford Press*.

Hayes, A. F., & Rockwood, N. J. (2020). Conditional process analysis: Concepts, computation, and advances in the modeling of the contingencies of mechanisms. *American Behavioral Scientist, 64*(1), 19-54.

Heinonen, K., & Strandvik, T. (2007). Consumer responsiveness to mobile marketing. *International Journal of Mobile Communications, 5*(6), 603-617.

Hirsh, J. B., Kang, S. K., & Bodenhausen, G. V. (2012). Personalized persuasion: Tailoring persuasive appeals to recipients' personality traits. *Psychological Science, 23*(6), 578-581.

Heu, L. C., van Zomeren, M., & Hansen, N. (2019). Lonely alone or lonely together? A cultural-psychological examination of individualism–collectivism and loneliness in five European countries. *Personality and Social Psychology Bulletin, 45*(5), 780-793.

Hofstede, G. (1980). Culture and organizations. *International studies of management & organization, 10*(4), 15-41.

Hofstede, G. (1991). *Empirical models of cultural differences*.

Hofstede Insights. (2023, October 16). *Country comparison tool*. <https://www.hofstede-insights.com>.

Hornikx, J., Janssen, A., & O'Keefe, D. J. (2023). Cultural Value Adaptation in Advertising is Effective, But Not Dependable: A Meta-Analysis of 25 Years of Experimental Research. *International Journal of Business Communication*, 23294884231199088.

Hornik, J., Ofir, C., & Rachamim, M. (2017). Advertising appeals, moderators, and impact on persuasion: A quantitative assessment creates a hierarchy of appeals. *Journal of Advertising Research*, 57(3), 305-318.

House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (Eds.). (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*. Sage publications.

Hsu, S. Y., & Barker, G. G. (2013). Individualism and collectivism in Chinese and American television advertising. *International Communication Gazette*, 75(8), 695-714.

Huang, J. L., Curran, P. G., Keeney, J., Poposki, E. M., & DeShon, R. P. (2012). Detecting and deterring insufficient effort responding to surveys. *Journal of Business and Psychology*, 27, 99-114.

Hughes, J. L., Camden, A. A., & Yangchen, T. (2016). Rethinking and updating demographic questions: Guidance to improve descriptions of research samples. *Psi Chi Journal of Psychological Research*, 21(3), 138-151.

Jager, J., Putnick, D. L., & Bornstein, M. H. (2017). II. More than just convenient: The scientific merits of homogeneous convenience samples. *Monographs of the Society for Research in Child Development*, 82(2), 13-30.

Jahoda, G. (2012). Critical reflections on some recent definitions of "culture". *Culture & Psychology*, 18(3), 289-303.

Kim, J. E., & Johnson, K. K. (2013). The impact of moral emotions on cause-related marketing campaigns: A cross-cultural examination. *Journal of Business Ethics*, 112, 79-90.

Kimberlin, C. L., & Winterstein, A. G. (2008). Validity and reliability of measurement instruments used in research. *American Journal of Health-System Pharmacy*, 65(23), 2276-2284.

Kitirattarkarn, G. P., Araujo, T., & Neijens, P. (2019). Challenging traditional culture? How personal and national collectivism-individualism moderates the effects of content characteristics and social relationships on consumer engagement with brand-related user-generated content. *Journal of Advertising*, 48(2), 197-214.

Kitayama, S., Park, H., Sevincer, A. T., Karasawa, M., & Uskul, A. K. (2009). A cultural task analysis of implicit independence: comparing North America, Western Europe, and East Asia. *Journal of Personality and Social Psychology*, 97(2), 236.

Konrath, S. H., O'Brien, E. H., & Hsing, C. (2011). Changes in dispositional empathy in American college students over time: A meta-analysis. *Personality and Social Psychology Review*, 15(2), 180-198.

Kyriacou, A. P. (2016). Individualism–collectivism, governance and economic development. *European Journal of Political Economy*, 42, 91-104.

Lau-Gesk, L., & Meyers-Levy, J. (2009). Emotional persuasion: When the valence versus the resource demands of emotions influence consumers' attitudes. *Journal of Consumer Research*, 36(4), 585-599.

LeDoux, J. E., & Hofmann, S. G. (2018). The subjective experience of emotion: a fearful view. *Current Opinion in Behavioral Sciences*, 19, 67-72.

Lefever, S., Dal, M., & Matthíasdóttir, Á. (2007). Online data collection in academic research: advantages and limitations. *British Journal of Educational Technology*, 38(4), 574-582.

Leonidou, L. C., & Leonidou, C. N. (2009). Rational versus emotional appeals in newspaper advertising: Copy, art, and layout differences. *Journal of Promotion Management*, 15(4), 522-546.

- Li, F., & Aksoy, L. (2007). Dimensionality of individualism–collectivism and measurement equivalence of Triandis and Gelfand’s scale. *Journal of Business and Psychology, 21*, 313-329.
- Li, Y., Wen, Z., Hau, K. T., Yuan, K. H., & Peng, Y. (2020). Effects of cross-loadings on determining the number of factors to retain. *Structural Equation Modeling: A Multidisciplinary Journal, 27*(6), 841-863.
- Mai, L. W., & Schoeller, G. (2009). Emotions, attitudes and memorability associated with TV commercials. *Journal of Targeting, Measurement and Analysis for Marketing, 17*, 55-63.
- Marketeer. (2023, May 9). *Lay’s quer transformar refeições dos portugueses em “pequenos grandes momentos”*. <https://marketeer.sapo.pt/lays-quer-transformar-refeicoes-dos-portugueses-em-pequenos-grandes-momentos/>
- Markus, H. R., & Kitayama (1991). Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review, 98*, 224–253.
- Maxwell, S. E. (2000). Sample size and multiple regression analysis. *Psychological Methods, 5*(4), 434.
- Meyers, Y. J. (2010). Target marketing and the product: categorizing products to understand the resulting marketing communication outcome measures. *Journal of Management and Marketing Research, 5*, 1.
- Morris, M. H., Davis, D. L., & Allen, J. W. (1994). Fostering corporate entrepreneurship: Cross-cultural comparisons of the importance of individualism versus collectivism. *Journal of international business studies, 25*, 65-89.
- Msaouel, P., Lee, J., & Thall, P. F. (2023). Interpreting Randomized Controlled Trials. *Cancers, 15*(19), 4674.
- Nezlek, J. B., & Humphrey, A. (2021). Individualism, collectivism, and well-being among a sample of emerging adults in the United States. *Emerging Adulthood, 11*(2), 520-524.

Nunan, D., Malhotra, N. K., & Birks, D. F. (2020). *Marketing Research: Applied Insight*. Pearson UK.

Ortony, A., Clore, G. L., & Collins, A. (1988). *The cognitive structure of emotions*. Cambridge, UK: Cambridge University Press.

Otamendi, F. J., & Sutil Martín, D. L. (2020). The emotional effectiveness of advertisement. *Frontiers in Psychology, 11*, 2088.

Osgood, C. E., & Tannenbaum, P. H. (1955). The principle of congruity in the prediction of attitude change. *Psychological Review, 62*(1), 42.

Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin, 128*(1), 3.

Oyserman, D., & Lee, S. W. (2008). Does culture influence what and how we think? Effects of priming individualism and collectivism. *Psychological bulletin, 134*(2), 311.

Panda, T. K., Panda, T. K., & Mishra, K. (2013). Does Emotional Appeal Work in Advertising? The Rationality Behind Using Emotional Appeal to Create Favorable Brand Attitude. *IUP Journal of Brand Management, 10*(2).

Park, T., & Salvendy, G. (2012). Emotional factors in advertising via mobile phones. *International Journal of Human-Computer Interaction, 28*(9), 597-612.

Payne, S. G. (1973). *A history of Spain and Portugal* (Vol. 2). Madison: University of Wisconsin Press.

Petty, R. E., & Cacioppo, J. T. (1981). Issue involvement as a moderator of the effects on attitude of advertising content and context. *ACR North American Advances*.

Petty, R. E., & Cacioppo, J. T. (1984). Source factors and the elaboration likelihood model of persuasion. *Advances in consumer research, 11*(1), 668-672.

Petty, R. E., Cacioppo, J. T., Petty, R. E., & Cacioppo, J. T. (1986). *The elaboration likelihood model of persuasion* (pp. 1-24). Springer New York.

Pollay, R. W. (1986). The distorted mirror: Reflections on the unintended consequences of advertising. *Journal of Marketing*, 50(2), 18-36.

Raeff, C., Fasoli, A. D., Reddy, V., & Mascolo, M. F. (2020). The concept of culture: Introduction to spotlight series on conceptualizing culture. *Applied Developmental Science*, 24(4), 295-298.

Rego, A., & Cunha, M. P. (2009). How individualism–collectivism orientations predict happiness in a collectivistic context. *Journal of Happiness Studies*, 10, 19-35.

Rehman, F., Javed, F., Yusoff, R., Harun, A., Khan, A., & Ismail, F. (2019). What is advertising? A short review of historical development. *Academic Research International*, 10(4), 10-4.

Richards, J. I., & Curran, C. M. (2002). Oracles on “advertising”: Searching for a definition. *Journal of Advertising*, 31(2), 63-77.

Robalo, A., Kainzbauer, A., & Durão, I. (2015). Portuguese cultural standards from an Austrian perspective. *Global Economics and Management Review*.

Rossiter, J. R., & Percy, L. (1991). Emotions and motivations in advertising. *Advances in Consumer Research*, 18(1).

Ruel, E., Wagner III, W. E., & Gillespie, B. J. (2016). *The practice of survey research: Theory and applications*. Sage Publications.

Russo, C., Danioni, F., Zagrean, I., & Barni, D. (2022). Changing personal values through value-manipulation tasks: a systematic literature review based on Schwartz’s theory of basic human values. *European Journal of Investigation in Health, Psychology and Education*, 12(7), 692-715.

Samaha, S. A., Beck, J. T., & Palmatier, R. W. (2014). The role of culture in international relationship marketing. *Journal of Marketing*, 78(5), 78-98.

Saleem, S., & Abideen, Z. (2011). Effective advertising and its influence on consumer buying behavior. *European Journal of Business and Management*, 3(3), 55-67.

SanJosé-Cabezudo, R., Gutiérrez-Arranz, A. M., & Gutiérrez-Cillán, J. (2009). The combined influence of central and peripheral routes in the online persuasion process. *CyberPsychology & Behavior*, 12(3), 299-308.

Scheer, M. (2012). Are emotions a kind of practice (and is that what makes them have a history)? A Bourdieuan approach to understanding emotion. *History and Theory*, 51(2), 193-220.

Schwartz, S. H. (2012). An overview of the Schwartz theory of basic values. *Online readings in Psychology and Culture*, 2(1), 11.

Sharma, P., & Manikutty, S. (2005). Strategic divestments in family firms: Role of family structure and community culture. *Entrepreneurship Theory and Practice*, 29(3), 293-311.

Sherif, C. W., Sherif, M., & Nebergall, R. E. (1965). *Attitude and attitude change: The social judgment-involvement approach* (pp. 127-167). Philadelphia: Saunders.

Sherif, M., & Hovland, C. I. (1961). *Social judgment: Assimilation and contrast effects in communication and attitude change*.

Singelis, T. M., Triandis, H. C., Bhawuk, D. P., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research*, 29(3), 240-275.

Singh, N., & Baack, D. W. (2004). Web site adaptation: A cross-cultural comparison of US and Mexican web sites. *Journal of Computer-Mediated Communication*, 9(4), JCMC946.m

Sissors, J. Z. (1978). Another look at the question: Does advertising affect values?. *Journal of Advertising*, 7(3), 26-30.

Solomon, M. R. (2018). *Consumer behavior: buying having and being*. Pearson.

Sorokowski, P., Randall, A. K., Groyecka, A., Frackowiak, T., Cantarero, K., Hilpert, P., ... & Sorokowska, A. (2017). Marital satisfaction, sex, age, marriage duration, religion, number of children, economic status, education, and collectivistic values: Data from 33 countries. *Frontiers in Psychology*, 8, 1199.

Stoer, S. R., & Dale, R. (1987). Education, state, and society in Portugal, 1926-1981. *Comparative Education Review*, 31(3), 400-418.

Tamis-LeMonda, C. S., Way, N., Hughes, D., Yoshikawa, H., Kalman, R. K., & Niwa, E. Y. (2008). Parents' goals for children: The dynamic coexistence of individualism and collectivism in cultures and individuals. *Social Development*, 17(1), 183-209.

Taras, V., Kirkman, B. L., & Steel, P. (2010). Examining the impact of Culture's consequences: a three-decade, multilevel, meta-analytic review of Hofstede's cultural value dimensions. *Journal of Applied Psychology*, 95(3), 405.

Tourangeau, R., Rasinski, K. A., Bradburn, N., & D'ANDRADE, R. O. Y. (1989). Carryover effects in attitude surveys. *Public Opinion Quarterly*, 53(4), 495-524.

Triandis, H. C. (1996). The psychological measurement of cultural syndromes. *American Psychologist*, 51(4), 407.

Triandis, H. C., Bontempo, R., Villareal, M. J., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of personality and Social Psychology*, 54(2), 323

Triandis, H. C., & Gelfand, M. J. (1998). Converging measurement of horizontal and vertical individualism and collectivism. *Journal of Personality and Social Psychology*, 74(1), 118.

Twenge, J. M., Campbell, W. K., & Freeman, E. C. (2012). Generational differences in young adults' life goals, concern for others, and civic orientation, 1966–2009. *Journal of Personality and Social Psychology*, 102(5), 1045

Twenefour, F. B. (2017). Major Determinants that Influence the Choice of Brand of Mobile Phone. *Open Journal of Statistics*, 7(4), 663-675.

Vodafone. (2023, December 1). *Campanha de Natal da Vodafone inspira a “ouvir o coração”*. <https://www.vodafone.pt/press-releases/2023/12/campanha-de-natal-da-vodafone-inspira-a-ouvir-o-coracao.html>

Vrtana, D., & Krizanova, A. (2023). The Power of Emotional Advertising Appeals: Examining Their Influence on Consumer Purchasing Behavior and Brand–Customer Relationship. *Sustainability*, 15(18).

Wang, X., Liu, M., & Luo, F. (2024). Impact of the COVID-19 epidemic on collectivism and individualism in China: A study of Weibo users. *Journal of Pacific Rim Psychology*, 18.

Westjohn, S. A., Magnusson, P., Franke, G. R., & Peng, Y. (2022). Trust propensity across cultures: The role of collectivism. *Journal of International Marketing*, 30(1), 1-17.

Zhang, H., Sun, J., Liu, F., & G. Knight, J. (2014). Be rational or be emotional: advertising appeals, service types and consumer responses. *European Journal of Marketing*, 48(11/12), 2105-2126.

Zhang, J., & Shavitt, S. (2003). Cultural Values in Advertisements to the Chinese X-Generation--Promoting Modernity and Individualism. *Journal of advertising*, 32(1), 23-33.

Appendix

Appendix 1: Questionnaire

Survey Flow

Block: Introduction (1 Question) Standard: (1 Question)
BlockRandomizer: 1 - Evenly Present Elements
EmbeddedData Condition = Individualistic EmbeddedData Condition = Collectivistic
Standard: Advertisement (2 Questions) Standard: Reactions to the advertisement (5 Questions)
BlockRandomizer: 2 - Evenly Present Elements
Standard: Individualism vs Collectivism (1 Question) Standard: Culture Orientation Scale (1 Question)
Standard: Demographics (9 Questions)

Page Break

Start of Block: Introduction



Q21 Dear participant,

Welcome and thank you for considering participating in this experiment on advertising. My name is Madalena Lopes and I am conducting this experiemnt as part of my Master Thesis at Católica Lisbon School of Business and Economics, under the supervision of Cristina Mendonça.

The study consists of reading an ad and answering multiple questions about it, along with some questions about your demographics and culture. It will take about 8 minutes to complete. The purpose is to gain insights into advertising and culture.

Your participation is completely voluntary and under no circumstance are you obliged to answer any of the questions. You may withdraw from the survey at any time if you feel uncomfortable answering any of the questions. To do so, simply close the web page.

All the information that you provide will be anonymous and confidential. The data collected will exclusively serve research purposes and may be presented in my thesis or disseminated in academic

journals, always in a aggregated form, without disclosing individual responses.

Thank you!

For any question regarding this survey, please contact me via e-mail: s-mamavilopes@ucp.pt

End of Block: Introduction

Start of Block:

Q17 You will now be presented with a fictitious advertisement. I kindly ask you to read all the aspects mentioned in it carefully and to try to image yourself in the situation presented.

End of Block:

Start of Block: Advertisement

Display This Question:

If Condition = Individualistic

Q14

Display This Question:

If Condition = Collectivistic

Q30

End of Block: Advertisement

Start of Block: Reactions to the advertisement

Page Break

Q20 How much did you experience of each of the following emotions while reading the previous advertisement?

	Not at all (1)	A little (2)	A moderate amount (3)	A lot (4)	Very much (5)
Cheerfulness (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contentment (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Relaxation (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Joy (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Serenity (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fulfillment (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Love (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Q26 How much did you like the ad? (1 = "not at all" to 5 = "very much")

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)

Q27 How pleasant did you find the ad? (1 = "not at all" to 5 = "very much")

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)

Page Break

Attention-Check To ensure that you are reading this question attentively, please select "Disagree".

- Strongly disagree (1)
- Disagree (2)
- Neither agree nor disagree (3)
- Agree (4)
- Strongly agree (5)

Q28 To what extent do you agree or disagree with the statement: The text of the advertisement emotionally connected with me.

- Strongly disagree (1)
- Disagree (2)
- Neither agree nor disagree (3)
- Agree (4)
- Strongly agree (5)

End of Block: Reactions to the advertisement

Start of Block: Individualism vs Collectivism

Q11 To answer the next question, please take into consideration the following definitions:

In individualistic cultures, there's an emphasis on personal responsibility and individual accomplishments, with people being self-centered rather than group-focused. In collectivist societies, individuals are assimilated into close-knit groups, and the goals and norms of the group take precedence over personal goals and attributes in influencing behavior. (Triandis 1996)

In collectivist cultures, trust forms the basis for both social and business connections. On the other hand, individualistic cultures are often characterized by more distant or transactional relationships (Samaha et al., 2014).

According to what you have read, what type of culture do you think is best represented in the advertisement?

- Individualistic culture (1)
- Collectivist culture (2)

End of Block: Individualism vs Collectivism

Start of Block: Culture Orientation Scale



Q10 In this part of the study, I would kindly ask you to indicate your level of agreement with the following statements using the following 7-point Likert scale ranging from 1 = never/definitely no and 7 = always/definitely yes.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
I'd rather depend on myself than others. (Q10_1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If a coworker gets a prize, I would feel proud. (Q10_2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My personal identity, independent of others, is very important to me. (Q10_3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to me that I respect the decisions made by my groups. (Q10_4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competition is the law of nature. (Q10_5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family members should stick together, no matter what sacrifices are required. (Q10_6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rely on myself most of the time; I rarely rely on others. (Q10_7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel good when I cooperate with others. (Q10_8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

It is my duty to take care of my family, even when I have to sacrifice what I want.
(Q10_9)

It is important that I do my job better than others.
(Q10_10)

When another person does better than I do, I get tense and aroused.
(Q10_11)

I often do "my own thing."
(Q10_12)

The well-being of my coworkers is important to me. (Q10_13)

Parents and children must stay together as much as possible.
(Q10_14)

To me, pleasure is spending time with others.
(Q10_15)

Winning is everything.
(Q10_16)

End of Block: Culture Orientation Scale

Start of Block: Demographics

In this final section, I would kindly ask you to respond to a set of demographic questions. It's important to reinforce that all responses are kept strictly anonymous and confidential, ensuring that your answers cannot be associated with your identity.

Page Break

Q2 Which of the following genders do you most identify with?

- Male (1)
- Female (2)
- Other (3) _____
- Prefer not to say (6)



Q3 What is your age?

Page Break



country In which country do you currently live?

▼ Afghanistan (1) ... Zimbabwe (1357)

Q5 What is the highest degree or level of school you have completed? If currently enrolled, highest degree received?

- Less than high school (1)
- High school graduate (2)
- Bachelor's degree (3)
- Master's degree (4)
- Doctorate degree (5)
- Other (6) _____

Page Break

Q6 What is your marital status?

- Married (1)
- Single (2)
- Other (3) _____

Q7 Do you have kids/grandkids?

- Yes (1)
- No (2)
- Prefer not to say (3)

Page Break

Q8 How much attention did you pay during this survey?

- None at all (1)
 - A little (2)
 - A moderate amount (3)
 - A lot (4)
 - A great deal (5)
-

Q9 If you have any comments, please feel free to leave it bellow. If not, just leave it blank.

End of Block: Demographics

Appendix 2: Attention Check Analysis

Attention Check 1

	Frequency	%
Fail	109	32.8
Pass	223	67.2
Total	332	100.0

Appendix 3: Demographics

Sample demographic characteristics 1

		Count	%
Gender	Female	130	60.2
	Male	85	39.4
	Other	0	.0
	Prefer not to say	1	.5
Education level	Less than high school	1	0.5
	High school graduate	34	15.7
	Bachelor's degree	106	49.1
	Master's degree	69	31.9
	Doctorate degree	6	2.8
	Other	0	.0
Marital Status	Married	85	39.4
	Single	119	55.1
	Other	12	5.6

Descriptive Statistics: Age 1

	N	Mean	Std. Deviation
Age	215	34.87	14.83

Kids/Grandkids 1

		Frequency	%
Kids/grandkids	Yes	89	41.2
	No	127	58.8

Sample Nationality Distribution 1

	Frequency	%
Angola	5	2.3
Belgium	7	3.3
Brazil	1	0.5
Cape Verde	1	0.5
China	2	0.9
France	1	0.5
Germany	17	7.9
Hong Kong	1	0.5
Italy	1	0.5
Japan	1	0.5
Mozambique	1	0.5
Netherlands	1	0.5
Portugal	153	71.2
Spain	6	2.8
Sweden	1	0.5

Switzerland	8	3.7
United Kingdom	2	0.9
United states of America	6	2.8

Appendix 4: Scale Reliability Analysis – Collectivism Scale

Case Processing Summary 1

		N	%
Cases	Valid	216	97.3
	Excluded	6	67.2
	Total	222	100.0

Reliability Statistics 1

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Frequency
.903	.902	16

Appendix 5: Scale Reliability Analysis – Emotion Scale

Case Processing Summary 2

		N	%
Cases	Valid	220	99.1
	Excluded	2	0.9
	Total	222	100.0

Reliability Statistics 2

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	Frequency

Appendix 6: PROCESS Output (without Covariates)

Run MATRIX procedure:

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

Written by Andrew F. Hayes, Ph.D. www.afhayes.com

Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 14

Y : Emo_Ave

X : Age

M : IC_AVE1

W : ADV

Sample

Size: 213

OUTCOME VARIABLE:

IC_AVE1

Model Summary

R	R-sq	MSE	F	df1	df2	p
,1414	,0200	,8578	4,3041	1,0000	211,0000	,0392

Model

	coeff	se	t	p	LLCI	ULCI
constant	,3093	,1620	1,9089	,0576	-,0101	,6286
Age	-,0089	,0043	-2,0746	,0392	-,0174	-,0004

OUTCOME VARIABLE:

Emo_Ave

Model Summary

R	R-sq	MSE	F	df1	df2	p
,3438	,1182	,8594	6,9700	4,0000	208,0000	,0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,5375	,2462	18,4265	,0000	4,0520	5,0229
Age	-,0024	,0043	-,5452	,5862	-,0109	,0062
IC_AVE1	,3543	,2303	1,5380	,1256	-,0998	,8084
ADV	-,6509	,1297	-5,0207	,0000	-,9065	-,3953
Int_1	-,1415	,1401	-1,0101	,3136	-,4177	,1347

Product terms key:

Int_1 : IC_AVE1 x ADV

Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
M*W	,0043	1,0204	1,0000	208,0000	,3136

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

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-,0024	,0043	-,5452	,5862	-,0109	,0062

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

Age -> IC_AVE1 -> Emo_Ave

ADV	Effect	BootSE	BootLLCI	BootULCI
1,0000	-,0019	,0012	-,0046	,0000
2,0000	-,0006	,0008	-,0027	,0007

Index of moderated mediation (difference between conditional indirect effects):

Index	BootSE	BootLLCI	BootULCI	
ADV	,0013	,0012	-,0009	,0041

***** 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

NOTE: The following variables were mean centered prior to analysis:

IC_AVE1

----- END MATRIX -----

Appendix 7: PROCESS Output (with Covariates)

Run MATRIX procedure:

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

Written by Andrew F. Hayes, Ph.D. www.afhayes.com

Documentation available in Hayes (2022). www.guilford.com/p/hayes3

Model : 14

Y : Emo_Ave

X : Age

M : IC_AVE1

W : ADV

Covariates:

PT Kids Female

Sample

Size: 212

OUTCOME VARIABLE:

IC_AVE1

Model Summary

R	R-sq	MSE	F	df1	df2	p
,4806	,2310	,6860	15,5409	4,0000	207,0000	,0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	,7671	,1950	3,9345	,0001	,3827	1,1515
Age	,0031	,0062	,4995	,6180	-,0091	,0153
PT	-,8934	,1283	-6,9619	,0000	-1,1464	-,6404
Kids	-,4014	,1844	-2,1766	,0306	-,7649	-,0378
Female	-,1265	,1188	-1,0655	,2879	-,3607	,1076

OUTCOME VARIABLE:

Emo_Ave

Model Summary

R	R-sq	MSE	F	df1	df2	p
,3876	,1502	,8410	5,1528	7,0000	204,0000	,0000

Model

	coeff	se	t	p	LLCI	ULCI
constant	4,6450	,2939	15,8034	,0000	4,0655	5,2245
Age	-,0093	,0069	-1,3565	,1765	-,0229	,0042
IC_AVE1	,4560	,2324	1,9622	,0511	-,0022	,9142
ADV	-,6828	,1291	-5,2878	,0000	-,9374	-,4282
Int_1	-,2014	,1410	-1,4283	,1547	-,4795	,0766
PT	-,1311	,1591	-,8237	,4111	-,4448	,1827
Kids	,3127	,2084	1,5008	,1350	-,0981	,7236
Female	,2563	,1321	1,9408	,0537	-,0041	,5168

Product terms key:

Int_1 : IC_AVE1 x ADV

Test(s) of highest order unconditional interaction(s):

R2-chng	F	df1	df2	p
---------	---	-----	-----	---

M*W ,0085 2,0401 1,0000 204,0000 ,1547

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

Direct effect of X on Y

Effect	se	t	p	LLCI	ULCI
-.0093	,0069	-1,3565	,1765	-,0229	,0042

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

Age -> IC_AVE1 -> Emo_Ave

ADV	Effect	BootSE	BootLLCI	BootULCI
1,0000	,0008	,0016	-,0024	,0043
2,0000	,0002	,0007	-,0012	,0015

Index of moderated mediation (difference between conditional indirect effects):

Index	BootSE	BootLLCI	BootULCI	
ADV	-,0006	,0015	-,0042	,0019

***** 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

NOTE: The following variables were mean centered prior to analysis:

IC_AVE1

----- END MATRIX -----