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The impact of film-induced tourism, emotional responses and lifestyle patterns on behavioral intentions to travel to a destination

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Master in Hospitality and Tourism Management

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Department of Marketing, Operations and General
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Resumo

O objetivo desta dissertação prende-se com o entendimento de como o turismo induzido por filmes influencia os desejos dos turistas de viajar para um destino, tendo em atenção a imagem afetiva, empatia, padrões de estilo de vida e intenções comportamentais. O local estudado foi Newport Beach, Califórnia, no contexto do episódio piloto do programa de televisão *The OC*. Este estudo utiliza uma metodologia quantitativa, com mediação e moderada e mostra a todos os participantes o episódio de *The OC*.

Os resultados deste estudo revelam que um episódio de televisão influencia a imagem afetiva e as intenções comportamentais de viajar, e a empatia medeia esse efeito. No entanto, o modelo de mediação moderada demonstrou que os padrões de estilo de vida não são um moderador significativo, enquanto a empatia permaneceu significativa.

Este estudo discute as implicações teóricas e práticas de suas descobertas e examina pesquisas futuras que possam ajudar as organizações de marketing de destino a usar o turismo induzido por filmes, a imagem afetiva, a empatia e as intenções comportamentais a seu favor.

Palavras-chave: Turismo Induzido por Filmes, Respostas Emocionais, Imagem Afetiva, Empatia, Intenções Comportamentais, Televisão, Marketing de Destino

Abstract

The goal of this dissertation is to understand how film-induced tourism impacts tourists' desires to travel to a destination regarding the constructs of affective image, empathy, lifestyle patterns and behavioral intentions. The location studied was Newport Beach, California in the context of the pilot episode of the television show *The OC*. This study uses quantitative mediation and moderated mediation designs, and shows all participants the episode of *The OC*.

The findings of this study reveal that a television episode does influence affective image and behavioral intentions to travel, and empathy mediates this effect. However, the moderated mediation model demonstrated that lifestyle patterns were not a significant moderator, while empathy stayed significant.

This study discusses the theoretical and managerial implications of its findings and examines future research that could help destination marketing organizations use film-induced tourism, affective image, empathy and behavioral intentions to their advantage.

Keywords: Film-Induced Tourism, Emotional Responses, Affective Image, Empathy, Behavioral Intentions, Television, Destination Marketing

Table of Contents

<i>Acknowledgements</i>	<i>i</i>
<i>Resumo</i>	<i>i</i>
<i>Abstract</i>	<i>iii</i>
<i>Table of Contents</i>	<i>v</i>
1. Introduction	1
1.1 Research Questions	2
1.2 Structure of dissertation	2
2. Literature Review	5
2.1 Film-induced tourism and destination image	5
2.2 Affective image, empathy and film-induced tourism	9
2.3 Behavioral intentions	11
2.4 Lifestyle tendencies	12
2.5 The OC	13
2.6 Conceptual models and hypotheses	14
3. Methodology	17
3.1 Procedure	17
3.2 Sample	17
3.3 Measure scale assessment	17
3.4 Data analysis strategy	19
4. Results	21
4.1 Reliability and validity	21
4.2 Demographics	21
4.3 Mediation	22
4.4 Moderated mediation	22
4.4.1 Shopaholic	23
4.4.2 Aspiring Indulgers	24
4.4.3 Conservative	25
4.4.4 Social Foodie	26
4.4.5 Culture Adventurous	27
4.4.6 Sport Adventurous	28
4.5 Means and correlations	29

5. Discussion	33
6. Conclusions and implications	35
6.1 Theoretical implications	35
6.2 Managerial implications	36
6.3 Limitations and future research	37
References	39
Annexes	43
Annex A Factor Analysis	43
Annex B Cronbach's Alphas	44
Annex C Demographics	45
Annex D Output PROCESS Model 4	46
Annex E Output PROCESS Model 8 - Moderated mediation: shopaholic	47
Annex F Output PROCESS Model 8 - Moderated mediation: aspiring indulger	55
Annex G Output PROCESS Model 8 - Moderated mediation: conservative	61
Annex H Output PROCESS Model 8 - Moderated mediation: social-foodie	66
Annex I Output PROCESS Model 8 - Moderated mediation: culture adventurous	72
Annex J Output PROCESS Model 8 - Moderated mediation: sports	77

List of Tables

<i>Table 2. 1 Previous studies on film and video games in tourism</i>	8
<i>Table 2. 2 Empathy Definitions</i>	10
<i>Table 2. 3 Lifestyle Dimensions</i>	12
<i>Table 4. 4 Behavioral intentions and affective image correlations after watching The OC</i>	30
<i>Table 4. 5 Behavioral intentions and empathy correlations after watching The OC</i>	31
<i>Table 4. 6 Behavioral intentions paired samples t-test before and after watching The OC</i>	31
<i>Table 4. 7 Affective image paired samples t-test before and after watching The OC</i>	32

List of Figures

Figure 2. 1 Conceptual Model PROCESS 4 _____ *14*

Figure 2. 2 Conceptual Model PROCESS 8 _____ *15*

1. Introduction

Film and screen-based media as vehicles for product placement (a perhaps subtle form of advertising) have created quite a buzz over the last 10-30 years, in particular that of locations in films (Croy & Walker, 2003; Beeton, 2006; Hudson & Ritchie, 2006; Croy, 2010; Beeton, 2016). Films and television programs have been shown to impact both people's behavioral intentions to travel to the destination they portray, and their affective image of said destination (Beeton, 2006; Shani et al., 2009; Beeton, 2016).

While there is plenty of existing literature on film-induced tourism alone, film-induced tourism has not been studied using empathy as a mediator and lifestyle as a moderator. This study tries to understand how important emotional responses and lifestyle patterns are to consumer behavioral intention, in the context of destination marketing via film-induced tourism, and aims to add further insights on how to optimize these concepts in the marketing industry.

Affective image and behavioral intentions are used in this study to measure the destination image of Newport Beach, California. These variables are measured before and after participants watch an episode of the television series *The OC*, which takes place in Newport Beach, in order to test the impact of the television show.

Rodrigues and Loureiro (2021) discuss emotional responses in regard to consumer attitudes, and state that empathy is considered the ultimate emotional response filmmakers aim for. With this in mind, this study also looks at emotional responses, particularly those of empathy and affective image, to the television program *The OC*. This study looks at the participants' emotional responses as consumer attitudes, aiming to utilize the data to further understand how emotion can be leveraged in destination marketing.

Lifestyle tendencies have also been a popular topic in destination marketing, as they have been found to impact people's behaviors and actions, including vacation choices (Fuller & Matzler, 2008; Srihadi et al., 2016). As far as this study is concerned, lifestyle has never been studied in the context of film-induced tourism, destination image and empathy, making this study novel in its variable choices.

1.1 Research Questions

Considering the importance of movies, television and all other forms of screen-based entertainment media, this study looks at marketing literature in order to explore consumer behavior around destination image formed from being exposed to a specific screen-based media. In addition to affective destination image and behavioral intentions, this study also questions whether or not empathy and lifestyle patterns effect consumer behavior after being exposed to a specific screen-based media. In other words, we plan to understand and answer the following research questions:

- I. Will destination image (affective image and behavioral intentions) about a particular place change after consumers watch an episode of a fictional television show set in that place?
- II. How important are consumers' emotional responses (affective image and empathy) to an episode of a fictional television show in deciding their behavioral intentions to travel to the place where the television show is set, and how can we use this in marketing?
- III. How important are consumers' lifestyle patterns in deciding their behavioral intentions to travel to a place that they view in a fictional television show, and how can we use this in marketing?

Ultimately, this study aims to use these research objectives in tandem with existing literature to analyze film-induced tourism with marketing concepts such as destination image, emotional responses, lifestyle and consumer behavior. To our knowledge, this approach has not been previously explored in literature.

1.2 Structure of dissertation

This dissertation has six different chapters, which are to be read in the following order: the introduction, the literature review, the methodology of the study, the results (which include numbers from the data analysis), the discussion and the conclusions and implications. The conclusions and implications chapter includes theoretical implications, managerial implications

and the research limitations and ideas for future research. Each section has a brief description of what will follow.

2. Literature Review

This section contains research from scientific and academic articles about the important concepts in this study. The main concepts of this study are film-induced tourism, destination image, affective image, empathy, lifestyle and behavioral intentions.

Film-induced tourism is the first concept discussed, and the concept that inspired this study. It is important to explain the importance film-induced tourism has gained in the marketing field, especially regarding the second topic, destination image. The third and fourth concepts are affective image and empathy, which fall under a broader category of emotional responses. The fifth concept discussed is lifestyle, and the sixth and final concept is behavioral intentions. It is important to note that affective image and behavioral intentions are used as a way to measure destination image, which was adapted from previous literature.

This section also gives a brief explanation of the television show used in this study. It then goes on to discuss the hypotheses based on the literature discussed.

2.1 Film-induced tourism and destination image

Film-induced tourism refers to a concept that has been around since the 1990s and generally refers to tourism that comes from a successful film or TV show having been shot or set in a specific location (Beeton, 2006; Beeton, 2016). On a more general note, MacCannell (1976) discusses how current media effects destination image. Throughout her in-depth book, Beeton (2016) discusses multiple types of film-induced tourism, which are: on-location, commercial on-location, mistaken identities, off-location, commercial off-location, one-off or recurring events and armchair travels.

Empirical research has shown that film and television can be very successful marketing tools for tourism destination image (Hudson & Ritchie, 2006). Cardoso et al. (2017) also discuss multiple papers involving moving images and tourism destination image. Image and tourism are strongly connected because tourism involves imagining a place and experience before it actually happens (Beeton, 2016). Cardoso et al. (2017) define film-induced tourism as a phenomenon that happens when audiovisual images are the main cause behind a tourist's decision to visit a place.

In tourism marketing there is a term called destination branding. Previous research states that the main aspects of destination branding are image, personality and destination identity (Hosany et

al., 2007; Cardoso et al., 2017). Cardoso et al (2017) continue to explain that the destination identity, or branding identity, is something that managers and advertisers present to tourists, the personality of the destination is what makes it unique, and the image is “the crucial factor within this branding process as this consists of the sum of the beliefs, ideas and impressions that tourists hold in their minds about the tourist destination” (pp. 24). So, image is a very important branding factor when discussing tourist destinations.

Destination image is often referred to as the impressions, ideas and beliefs that people attach to a given place (Kamendiou et al., 2009). Govars et al. (2017) describe destination image as a perceived mental image of a place by a person who is not there. Additionally, information received about a destination has an impact on destination image and therefore can be used for destination promotion and marketing (Molina et al., 2010).

There is ample research regarding image management as a powerful marketing tool, specifically when it comes to film and entertainment media. Image has long been a moderator of tourist’s perceptions of a destination and must be managed wisely, which is not a simple task (Barich & Kotler, 1991; Croy, 2010). Image can be managed in order to maximize the benefits and future sustainability of film and entertainment-based tourism by bridging the gap between media production companies and tourism businesses (Macionis & O’Connor, 2011).

Movies and television shows include both image and narrative (story). Narrative is also a powerful marketing tool because it often has a positive relationship with the self-brand connection (SBC), feelings towards a brand and behaviors involving a brand (Escalas, 2004). This means that when we look at a place as a brand, destination marketing organizations can use both image and narrative in television shows and films in order to manage destination perceptions and behavioral outcomes. These forms of media are useful tools in the film-induced tourism destination marketing landscape. It is worth mentioning that there is little literature on the relationship between film companies and tourism destinations (Macionis & O’Connor, 2011; Beeton, 2016). There are few examples of these partnerships, however Croy (2010) goes as far as to say that, in general, destination managers have not used the power that film-induced tourism can give their specific destination (Croy & Walker, 2003).

This study keeps in mind the research that has been done regarding the harmful effects of film-induced tourism (Beeton, 2008; Croy, 2010), as well as the research regarding positive impacts,

such as those perceived by residents in Arcos de Valdevez and Estremoz in Portugal (Mendes et al., 2016).

There is a variety of literature regarding film-induced tourism, media-induced tourism, entertainment media-induced tourism, marketing and sustainability. This field of research often includes case studies of locations that have been impacted by film-induced tourism. Table 2.1 provides a summary of relevant literature and research methods which inspired some of the methodology for this study.

Table 2. 1 Previous studies on film and video games in tourism

Reference	Research Context	Research Design	Conclusions
Hudson & Ritchie (2006)	Global DMOs (mostly US, Canada, UK)	Survey (DMOs)	Proactive efforts of destinations towards film companies is strongly related to film-tourism success.
Beeton (2008)	Goathland, UK	Case study	Film-tourism businesses must be more responsible for any negative effects they have on host communities.
Croy (2010)	New Zealand	Case study	Film has an effect on tourists' image of a destination and destination managers should use this tool.
Hudson et al. (2010)	South America	Survey (film viewers)	The film <i>The Motorcycle Diaries</i> caused a significant number of respondents to want to travel to South America.
Mendes et al. (2016)	Arcos de Valdevez, Portugal and Estremoz, Portugal	Survey, case study (residents)	TV soap operas filmed in the area contribute to tourism and positive impacts are more than negative impacts.
Dubois & Gibbs (2018)	Florence, Italy and Paris, France	Online comments (Reddit, Ubisoft, TripAdvisor)	Video games effect tourist motivations, representing a new area in destination marketing.

Source: own elaboration

Before film-induced tourism, other forms of popular media influenced destination branding, such as literature and theatre. Tourism markers overlap in modern times, which is partially due to the effect of popular media (Beeton, 2016). This relates back to MacCannell (1976) and his views on current media and its effect on tourist destination image. In the modern world it is important to look at newer and more recent forms of popular media, mainly interactive media such as virtual reality (VR), augmented reality (AR) and video games (DuBois & Gibbs, 2018).

2.2 Affective image, empathy and film-induced tourism

There are already a few studies stating that emotional responses such as affective image have an effect on consumer behavioral intention (Crompton, 1979; Echtner & Ritchie, 1991; Baloglu & Brinberg, 1997; Baloglu & McCleary, 1999; Qu et al., 2011; Papadimitriou et al., 2015). Affective image of a destination is defined as a person's emotions and sentiments about said destination (Gartner, 1993; Shani et al., 2009). Papadimitriou et al., (2015) also studied how affective destination image, along with brand personality, can impact both behavioral intentions and overall destination image. It has also been found that overall image of destinations varied due to affective dimensions, rather than cognitive dimensions (Baloglu & McCleary, 1999). Affective image has also been shown to influence behavioral intentions (Russel & Pratt, 1980; Ekinici & Hosany, 2006). Shani et al. (2009) also find that showing the film *The Motorcycle Diaries* had an effect on participants' intentions to visit South America.

In the case of movies and TV shows, affective image can come from the narrative consumers experience while they watch (Laer et al., 2018; Rodrigues & Loureiro, 2021). When it comes to marketing, Muzellec et al. (2018) describes films as fictional brands. Narrative processing itself has been shown to help in the formation of forming self-brand connections, or SBCs (Shank & Abelson, 1995; Escalas, 2004). According to Escalas (2004) an SBC is formed when a person considers a brand as a part of their identity, and that brands with higher SBCs are more likely to be purchased – in other words, behavioral intentions are affected by SBCs. If we put this in the context of film-induced tourism and destination branding, we can predict that the more a movie or TV show connects with its audience the stronger the SBC will be, and the stronger the SBC the more likely it is that audience members will want to travel to the destination in the film or TV show. Additionally, research suggests that when it comes to film-induced tourism, tourists often want to

experience some of the narrative of the film or TV show related to the site they are visiting (Tooke & Baker, 1996; Beeton, 2016).

Studies have shown that emotional responses have an effect on willingness/desire to travel, as well as the actual tourist experience. In fact, the use of emotions in tourism promotion has become more popular in the tourism marketing field (Li & Liu, 2020). Empathy was the chosen emotional response for this study because when discussing audience responses to film or television, many members of the film industry consider empathy as the highest emotional response possible (Rodrigues & Loureiro, 2021).

Empathy itself is a term that exists within multiple contexts. Escalas & Stern (2004) make a point to define empathy within an advertisement context, because “advertising stimuli exist in the domain of created media representations rather than that of real life events, and responses relate to media phenomena rather than to naturally occurring events” (pp. 567). For the purpose of this study, we can use the same definition of empathy as Escalas & Stern (2003) because we are using a fictional television show with representations of people and places, designed by scriptwriters, producers and directors. So, empathy involves the complete and involuntary integration of another’s feelings into one’s own, meaning that a person literally feels inside the emotions of someone else (Langfeld, 1967; Escalas & Stern, 2003). Table 2.2 is adapted from Escalas & Stern (2003) and explains the definitional issues of empathy.

Table 2. 2 Empathy Definitions

Primary Component	Affective
	Feeling
Control	Involuntary
Self-other differentiation	Absent
Self-other orientation	Self
	Loses self in other
Relation to other	Merging with other
Opposite	Nonempathy
	Indifference
Attitudinal effects	Direct

Source: Adapted from: Escalas & Stern, 2003

In research about film-induced tourism and empathy, Kim & Richardson (2009) study the correlation between empathy and perceived destination image, using the film *Before Sunrise*. They had a total of seven affective and cognitive variables regarding Vienna, Austria, which they measured along with viewers' empathetic involvement with the two main characters in the film (Kim & Richardson, 2009). Kim & Richardson (2009) found that only two variables had a statistically significant connection, in this case.

In a study using tourism micro-movies, Li & Liu (2020) found that empathy had an effect on participants' desires to travel. Kim (2012) discovered that emotional involvement with a specific Korean TV drama, *Jewel in the Palace* had a positive impact on the experiences the film-tourists had when they were at the filming location. Though this is different from film-induced tourism destination image, it is a significant finding within the scope of film-tourism and destination marketing research.

2.3 Behavioral intentions

Behavioral intentions to travel to a specific destination have been referenced in multiple studies regarding destination image and marketing (Shani et al., 2009; Papadimitriou et al., 2015). Research has become more aware of the psychological approach to overall destination image and looks at both cognitive and affective dimensions (Papadimitriou et al., 2015). Behavioral intentions are conative (Gartner, 1993) and influenced by the affective image dimensions related to a destination (Crompton, 1979; Echtner & Ritchie, 1991; Baloglu & Brinberg, 1997; Baloglu & McCleary, 1999; Yüksel & Akgül, 2007; Qu et al., 2011; Papadimitriou et al., 2015).

It is noted in a few studies that more research is needed in the behavioral elements of film tourism (Hudson & Ritchie, 2006; Shani et al, 2009). Shani et al. (2009) found that participants' intentions to visit South America after watching the film *The Motorcycle Diaries* demonstrated a significant change. In other words, films, TV shows and other screen based media can affect behavioral intentions to visit the destination they portray.

2.4 Lifestyle tendencies

Lifestyle has been found to have an effect on people's behaviors and actions, including vacation choices (Fuller & Matzler, 2008; Srihadi et al., 2016). According to Plummer (1974), lifestyle is independent of culture when it comes to understanding consumer behavior and market segmentation. Lifestyle is generally measured using psychographics, more specifically people's activities, interests and opinions (Wind, 1971; Blackwell, Miniard, & Engel, 2006; Lee & Sparks, 2007; Srihadi et al., 2016). These are called AIO measurements and can tell marketing managers a lot about their consumers based on the activities they choose to spend time on, as well as their personal interests and opinions (Plummer, 1974). So perhaps if a customer at a tourism agency likes to spend a lot of time at the beach, is interested in marine biology and believes that salt water is good for their skin, these lifestyle choices may lead them to pick a vacation destination at a beach in southern California or Turks and Caicos. Table 2.3 shows the four main dimensions and their various aspects that Plummer (1974) included in his AIO measurements.

Table 2. 3 *Lifestyle Dimensions*

Activities	Interests	Opinions	Demographics
Work	Family	Themselves	Age
Hobbies	Home	Social issues	Education
Social Events	Job	Politics	Income
Vacation	Community	Business	Occupation
Entertainment	Recreation	Economics	Family size
Club membership	Fashion	Education	Dwelling
Community	Food	Products	Geography
Shopping	Media	Future	City size
Sports	Achievements	Culture	Stage in life cycle

Source: Adapted from Plummer, 1974

One can infer from this that lifestyle tendencies will effect destination image of a specific tourism location. Srihadi et al. (2016) used six lifestyle factors to separate different types of tourists: culture adventurous, shopaholic, aspiring indulger, conservative, sport adventurous, and foodie. Additionally, they found that culture adventurous and foodie factors appeared regardless of other lifestyle preferences (Srihadi et al, 2016). So, destination marketing organizations should use lifestyle preferences to separate their customers into groups so that they can advertise the right locations. They should also include cultural and gastronomical attractions for everyone.

This study looks at lifestyle as a moderator for desire to travel, in the context of how watching a television show effects destination image and empathy. As we learned from Fuller & Matzler (2008) and Srihadi et al. (2016), lifestyle tendencies can effect behavioral intentions regarding travel. But little research has been done regarding how lifestyle tendencies effect emotional responses. This study will add to literature by using a TV show called *The OC* to examine these relationships.

2.5 The OC

The OC is a TV show from the United States that aired on primetime television from 2003 to 2007. The show takes place in Newport Beach, which is a neighborhood in Orange County, California. The title *The OC* stands for the location Orange County. Therefore, the location is very important to the story.

The story starts with a teenager, Ryan, who is from a bad neighborhood in California and gets arrested after stealing a car with his brother. His lawyer lives in Newport Beach and decides to take him in when his mother proves to be an insufficient caretaker. Ryan wants a better life in Newport Beach and becomes a part of a very tight group of wealthy people in the upper-class neighborhood. Drama ensues, and the location and the people who live there are always topics of conversation.

This show was chosen for this study due to the weight that the location of Newport Beach has on the story, as well as the effect that the TV show had on the real-life Newport Beach. When the show was cancelled, LA Times wrote that “Orange County is facing a future without a series that served as a weekly hourlong infomercial for Newport Beach and has even persuaded families to cross oceans for a firsthand look” (2006). At one point, the Newport Beach Conference & Visitors Bureau saw a 20% increase in their website views when *The OC* was airing internationally (LA

Times, 2006). There are also specific tourism guides for fans of *The OC* (Bustle, 2019; LA Dreaming, 2022; Seeing Stars, n.d.). While the show ended about fifteen years ago, tourism guides are still being updated in current times, demonstrating the TV show still holds power as a marketing tool for Newport Beach. Additionally, Newport Beach has not been used in any previous studies of this nature.

2.6 Conceptual models and hypotheses

Based on the above literature, the following models, based off of Hayes (2022) PROCESS Model 4 and Process Model 8 were used to conduct research (Figure 2.1 and Figure 2.2).

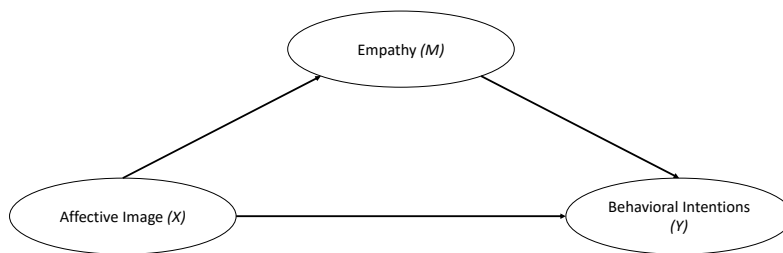


Figure 2. 1 *Conceptual Model PROCESS 4*

(Source: Own elaboration)

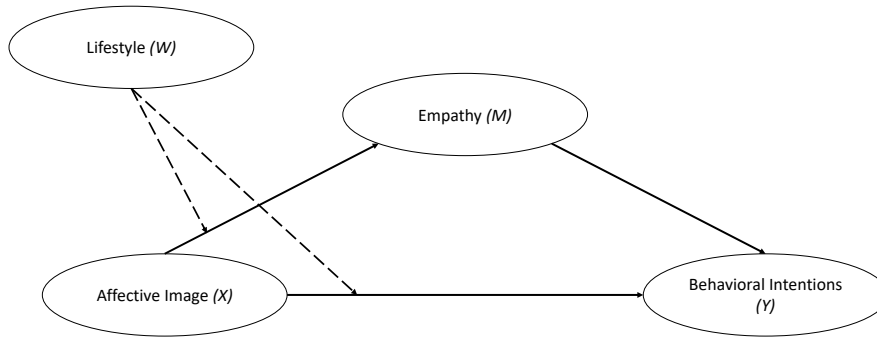


Figure 2. 2 Conceptual Model PROCESS 8

(Source: Own elaboration)

Researchers wanted to test for both a mediation effect on its own, as well as a moderated mediation effect, hence the use of both models. Based on these models and the above literature, this research makes five hypotheses. After understanding the impact of affective image on behavioral intentions (Russel & Pratt, 1980; Baloglu & McCleary, 1999; Ekinici & Hosany, 2006; Papadimitriou et al., 2015), the first two hypotheses are as follows:

H1. Affective image impacts empathy responses to a TV show.

H2. Affective image impacts behavioral intentions to travel to a destination after watching a TV show

This study also looks at empathy as a mediator for willingness to travel. Literature shows that emotional responses can effect tourist experiences (Kim, 2012), and in the case of tourism micro-movies, empathy and persuasion were positively correlated with desire to travel (Li, C-H. & Liu, C-C., 2020). Thus, this study hypothesizes that:

H3. Empathy for characters and storyline will mediate behavioral intentions to travel to the location portrayed in the show.

Finally, this study explores lifestyle patterns as a moderator for willingness to travel because lifestyle has been found to influence people's vacation choices (Fuller & Matzler, 2008; Srihadi et al., 2016). It is predicted that certain lifestyle tendencies will effect a person's desire (behavioral intentions) to visit Newport Beach, California after watching an episode of the TV show, The OC. Due to the impact lifestyle has on actions and behaviors (Fuller & Matzler, 2008; Srihadi et al., 2016), it is also predicted that lifestyle tendencies will effect empathy scores. Thus:

H4. Lifestyle patterns act as a moderator for desire to travel after watching an episode of a TV show.

H5. Lifestyle patterns act as a moderator for empathetic reactions to an episode of a TV show.

3. Methodology

This section explains the methodology used to empirically test the hypotheses. We explain the procedure, the sample population, the measure scale assessment and the data analysis strategy.

3.1 Procedure

This study uses a survey design. The dependent variable (Y) is desire to travel. The main independent variable (X) are the affective dimensions participants' have about to Newport Beach after watching an episode of the television show, *The OC*. Empathy is a mediator (M) and lifestyle patterns act as a moderator (W).

The survey was online and spread via social media, including but not limited to Instagram, Facebook and Reddit. Answers were confidential. The data collection process lasted between April and July 2022.

3.2 Sample

In total, 223 questionnaires were filled out by respondents. Three questionnaires were excluded due to prior knowledge about the study. Therefore, the population of this study consisted of 220 participants, ages eighteen and up. Participants were of an international background, the majority of which were from The United States, Portugal and Canada. 87.7% of participants had watched *The OC* previously, however only 12.3% of participants had been to Newport Beach, California. All participants watched the first episode of the television show *The OC*.

3.3 Measure scale assessment

This study asks participants to fill out a questionnaire in order to measure a variety of constructs with multi-item scales, as well as some basic background questions and demographics.

Section one, titled "Demographics" asks about age, gender identity, nationality, current location (country) and education level.

Section two, titled “Background” asks participants whether or not they have been to Newport Beach. It also asks whether or not they have been to Orange County or if they have been to California, as it is possible to go to those places without visiting Newport Beach. These are all yes/no questions. Finally, it asks participants if they have ever seen the television show *The OC*. This is also a yes/no question.

Section three, titled “Lifestyle actions, interests and opinions” is adapted from Srihadi et al. (2016). It uses a 7-point Likert scale and uses different questions to divide participants into six different categories: culture adventurous, shopaholic, aspiring indulgers, conservative, sport adventurous and social-foodie.

Section four, titled “Behavioral intentions (before watching)” is adapted from Shani et al. (2009). It uses a 7-point Likert scale to measure participants desire to travel to Newport Beach before watching an episode of *The OC*. This section asks about awareness, desire and intention to travel to Newport Beach, California. Shani et al. (2009) based this scale off of Strong (1925) and the hierarchy of effects models, most often used in advertising.

Section five, titled “Affective dimensions (before watching)” is adapted from Shani et al. (2009). It uses four affective adjectives in semantic differential form (eight adjectives total) measuring how participants feel about Newport Beach before watching an episode of *The OC*. The scale ranges from 1 (negative feeling) to 7 (positive feeling). Shani et al. (2009) adapted this scale from Russell (1980), whose original scale uses the dimensions “unpleasant-pleasant,” “sleepy-lively,” “gloomy-exciting,” and “distressing-relaxing.”

Section six, titled “The OC – Episode 1” shares a link to the 34-minute edit of the first episode of *The OC*. It also tells participants that they are 80% finished with the survey in order to motivate them.

Section seven, titled “Behavioral intentions (after watching)” is identical to section four, adapted from Shani et al. (2009). It uses a 7-point Likert scale to measure participants desire to travel to Newport Beach after watching an episode of *The OC*. This section asks about awareness, desire and intention to travel to Newport Beach, California. Shani et al. (2009) based this scale off of Strong (1925) and the hierarchy of effects models, most often used in advertising. The difference between section five and section seven will give some information about how destination image of Newport Beach changes after watching an episode of *The OC*.

Section eight, titled “Affective dimensions (after watching)” is identical to section five and adapted from Shani et al. (2009). It uses four affective adjectives in semantic differential form (eight adjectives total) measuring how participants feel about Newport Beach before watching an episode of The OC. The scale ranges from 1 (negative) to 7 (positive). Shani et al. (2009) adapted this scale from Russell (1980), whose original scale uses the dimensions “unpleasant-pleasant,” “sleepy-lively,” “gloomy-exciting,” and “distressing-relaxing.”

Section nine, titled “Empathy” is adapted from Escalas & Stern (2003). This section uses a 7-point Likert scale to measure the level of empathy participants felt when they were watching The OC.

3.4 Data analysis strategy

Construct validity was tested with exploratory factor analysis. Using exploratory factor analysis, a construct is valid when it has a KMO higher than 0.50. Additionally, the Bartlett’s sphericity test should have a significant p-value of the chi-square and items must have communalities above 0.50.

Average extracted variance (AVE) was used to check convergent validity. In this case, the AVE of factor solutions must be a minimum of 50% to be considered valid (Fornell & Larcker, 1981).

Finally, we used Cronbach’s Alpha to determine the consistency of items (Nunnally, 1994), as well as the validity of each variable.

Additionally, factor analysis was used to group the 38 different items on the AIO lifestyle scale, in order to find broader variables explaining lifestyle. Just like in Srihadi et al. (2016), six factors were extracted with high reliability coefficients and eigenvalues greater than 1.00. Any item that loaded lower than 0.40 was removed (Hair et al., 2019). The six factors explained 49.40% of the total variance (Annex A).

Reliability coefficients were calculated and the factors were labeled accordingly. Factor one was labeled “Shopaholic” and accounted for 15.72% of the total variance. Factor two was labeled “Aspiring indulger” and accounted for 13.40% of the total variance. Factor three was labeled “Conservative” and accounted for 6.16% of the total variance. Factor four was labeled “Social-foodie” and accounted for 5.48% of the total variance. Factor five was labeled “Culture adventurous” and accounted for 4.93% of the total variance. Finally, factor six was labeled “Sport

adventurous” and accounted for 3.72% of the total variance. See Annex A for the total variance explained.

Finally, we used moderated mediation to analyze our data further. We used Hayes (2022) PROCESS macro for SPSS – specifically moderated mediation Model 8. PROCESS makes it possible to analyze multiple paths between variables at one time and looks for both direct and indirect effects on the dependent variable. Indirect effects show how and if a mediator has an effect (Tavares, 2019; Hayes, 2022). In the case of this study, the mediator is empathy. The moderator is lifestyle.

We used a bootstrap method with 5000 iterations and a 95% confidence interval (CI) to understand statistical significance (Hayes, 2022). We focused on multiple variables and paths (a, b, c’) and used lower and upper CI limits to determine further significance for direct and indirect effects.

4. Results

This section will elaborate on the empirical results of the study. As stated previously, SPSS and PROCESS macro for SPSS were used to analyze the data. First, we analyzed the reliability and validity of our variables, to confirm it was appropriate to proceed with further analyses. We then analyzed the demographics of our sample using SPSS. Following the demographics, we used PROCESS Model 4 to search for a mediation effect and then used PROCESS Model 8 to search for a moderated mediation effect. Finally, we used SPSS to analyze means and correlations.

4.1 Reliability and validity

Results of exploratory factor analysis gave us nine factors: empathy, culture adventurous lifestyle, shopaholic lifestyle, social-foodie lifestyle, conservative lifestyle, sport adventurous lifestyle, aspiring indulger lifestyle, affective dimensions after watching an episode of *The OC* and behavioral intentions to travel to Newport Beach after watching an episode of *The OC*. Construct validity was confirmed ($KMO=0.810$; $p=0.000$).

All factor solutions had an AVE of 50% or higher, except the lifestyle factor labeled as “Foodie.” For the purpose of this study, the “Social” and “Foodie” factor solutions were combined into one factor called “Social-foodie” because this was done in a previous study by Srihadi et al. (2016). Additionally, “Social-foodie” had a Cronbach’s Alpha of 0.681 which shows a composite reliability that is high enough to proceed (Hair et al., 2019).

Cronbach’s Alpha gave a score of .858 for the 38 items, showing fairly high internal consistency. Cronbach’s Alpha for each variable can be found in Annex B.

4.2 Demographics

The demographics for this study included age, gender identity, nationality, where participants currently live and their level of education. Results can be seen in Annex C.

4.3 Mediation

In order to analyze a simple mediation effect, the PROCESS macro for SPSS was used. First a mediation effect of empathy was analyzed, using Model 4 in PROCESS (see Annex D). We looked at the path between X and M to see if affective image has an effect on empathy alone. The results were significant ($p=0.000$) explained about 44.7% of the variance. Additionally, bootstrap results for the path between X and M did not contain zero ($BootLLCI=0.557$, $BootULCI=1.006$). These results support H1, that affective image impacts empathy responses to a television show. We also looked at the direct effects of X on Y and results were significant ($p=0.000$). Bootstrap results for the impact of affective image on behavioral intention did not contain zero ($BootLLCI=0.613$, $BootULCI=0.897$). These result support H2, that affective image impacts behavioral intentions to travel to a destination after watching a television show.

The indirect effect of empathy is 0.167. Because our indirect effect bootstrap confidence interval limits do not include zero ($BootLLCI=0.096$, $BootULCI=0.255$) we can argue that there is a mediation effect. The bootstrap results for regression model parameters also do not contain zero ($BootLLCI=0.136$, $BootULCI=0.293$). This supports H3 and tells us that empathy does act as a mediator between affective image and behavioral intentions to travel to travel to Newport Beach after watching an episode of *The OC*.

4.4 Moderated mediation

PROCESS Model 8 was used to test for a moderated mediation effect, to see if lifestyle choices have a conditional indirect effect on behavioral intentions to travel to Newport Beach after watching an episode of *The OC*. As there were six different components, or types of lifestyle patterns in this study, the model was run in PROCESS macro for SPSS six different times.

For each lifestyle component, we looked at the indirect effect of affective image on behavioral intentions to travel to Newport beach, mediated by empathy at three different values (the mean value; +1 standard deviation; -1 standard deviation) the bootstrap intervals did not contain zero. Here there was an indirect effect, supporting H3 in all six scenarios.

4.4.1 Shopaholic

First, we looked at $W=Shopaholic$ (see Annex E). The bootstrap interval for the index of moderated mediation did contain zero ($BootLLCI=0.000$; $BootULCI=0.013$), which is not significant. Therefore, in this case, there is no conditional indirect effect of W on X and Y . In other words, shopping a lot as a lifestyle choice did not have an indirect effect on empathy and behavioral intentions to travel to Newport Beach and $H4$ and $H5$ were not supported.

Next, we looked at the direct effect of shopaholic as a lifestyle type on behavioral intentions to travel to Newport Beach after watching *The OC* at three different values (the mean value; +1 standard deviation; -1 standard deviation; $p=0.000$). This means that the shopaholic lifestyle has a positive conditional direct effect on the impact of affective image after watching an episode of *The OC* on participants' intentions to travel to Newport Beach, CA.

We analyzed the two paths of PROCESS Model 8 on their own. First, we look at the moderated path between X and M (X =affective image after watching *The OC*; M =empathy) and then at the path between M and Y (M =empathy; Y =behavioral intentions to travel). Finally, we look at the moderated path between X and Y (X =affective image after watching *The OC*; Y =behavioral intentions to travel). The interaction between X and M was significant ($p<0.05$; $p=0.034$), supporting $H1$ in the case of shopaholic. The interaction explains 1.8% of the variance of empathy ($R^2=0.018$). Conditional effects show a significant effect of the W (shopaholic lifestyle) on the path between X and M , at three different values (the mean value; +1 standard deviation; -1 standard deviation; $p=0.006$; $p=0.000$; $p=0.000$). Johnson-Neyman was used and found that -8.893 was a statistically significant transition point. Therefore, for values below -8.893 the effects are no longer statistically significant.

The interaction between M (empathy) and Y (behavioral intentions) was also significant ($p=0.000$), supporting $H3$. The moderated path between X and Y , however, was not statistically significant ($p=0.069$), meaning that the effect of shopaholic lifestyle on the interaction between affective image after watching *The OC* and the intentions to travel to Newport Beach was not significant. In the case of shopaholic lifestyle, $H4$ was not supported and we did not have a moderated direct effect. Only 0.7% of the variance of the intentions to travel to Newport Beach was explained by this interaction. The Johnson-Neyman regions showed no statistically significant transition points.

Checking the bootstrap results showed statistical significance because the confidence intervals for the interaction did not contain zero ($BootLLCI=0.001$; $BootULCI=0.062$) and the confidence intervals for the effect mediator has on the intention to travel to Newport Beach did not contain zero ($BootLLCI=0.115$; $BootULCI=0.269$). This supports H1 and H2. However, there was no significant interaction for the direct effect of the path between X and Y when moderated by W because the confidence interval did contain zero ($BootLLCI=0.000$).

4.4.2 Aspiring Indulgers

Second, we looked at W=Aspiring indulgers (see Annex F). The bootstrap interval for the index of moderated mediation did contain zero ($BootLLCI=-0.006$; $BootULCI=0.014$), which is not significant. Therefore, in this case, there is no conditional indirect effect of W on X and Y. In other words, being an aspiring indulger as a lifestyle choice did not have an indirect effect on empathy and behavioral intentions to travel to Newport Beach and H4 and H5 were not supported.

Next, we looked at the direct effect of aspiring indulgers as a lifestyle type on behavioral intentions to travel to Newport Beach after watching *The OC* at three different values (the mean value; +1 standard deviation; -1 standard deviation; $p=0.000$). This means that the aspiring indulger lifestyle has a positive conditional direct effect on the impact of affective image after watching an episode of *The OC* on participants' intentions to travel to Newport Beach, CA.

We analyzed the two paths of PROCESS Model 8 on their own. First, we look at the moderated path between X and M (X=affective image after watching *The OC*; M=empathy) and then at the path between M and Y (M=empathy; Y=behavioral intentions to travel). Finally, we look at the moderated path between X and Y (X=affective image after watching *The OC*; Y=behavioral intentions to travel). The interaction between X and M was not significant ($p=0.427$). The interaction only explains 0.3% of the variance of empathy ($R^2=0.003$).

The interaction between M (empathy) and Y (behavioral intentions) was also significant ($p=0.000$), supporting H3. The moderated path between X and Y, however, was not statistically significant ($p=0.208$), meaning that the effect of an aspiring indulger lifestyle on the interaction between affective image after watching *The OC* and the intentions to travel to Newport Beach was not significant. In the case of an aspiring indulger lifestyle, H4 was not supported and we did not

have a moderated direct effect. Only 0.5% of the variance of the intentions to travel to Newport Beach was explained by this interaction.

Checking the bootstrap results showed no significant interaction on the path between X and M ($BootLLCI=-0.026$; $BootULCI=0.065$). However, the confidence intervals for the effect mediator has on the intention to travel to Newport Beach did not contain zero ($BootLLCI=0.128$; $BootULCI=0.286$), showing a significant interaction between M and Y, supporting H3. However, there was no significant interaction for the direct effect of the path between X and Y when moderated by W because the confidence interval did contain zero ($BootLLCI=-0.051$; $BootULCI=0.008$).

4.4.3 Conservative

Third, we looked at W=Conservative (see Annex G). The bootstrap interval for the index of moderated mediation did contain zero ($BootLLCI=-0.013$; $BootULCI=0.011$), which is not significant. Therefore, in this case, there is no conditional indirect effect of W on X and Y. In other words, being conservative and spending a lot of time at home as a lifestyle choice did not have an indirect effect on empathy and behavioral intentions to travel to Newport Beach and H4 and H5 were not supported.

Next, we looked at the direct effect of a conservative lifestyle on behavioral intentions to travel to Newport Beach after watching *The OC* at three different values (the mean value; +1 standard deviation; -1 standard deviation; $p=0.000$). This means that the conservative lifestyle has a positive conditional direct effect on the impact of affective image after watching an episode of *The OC* on participants' intentions to travel to Newport Beach, CA.

We analyzed the two paths of PROCESS Model 8 on their own. First, we look at the moderated path between X and M (X=affective image after watching *The OC*; M=empathy) and then at the path between M and Y (M=empathy; Y=behavioral intentions to travel). Finally, we look at the moderated path between X and Y (X=affective image after watching *The OC*; Y=behavioral intentions to travel). The interaction between X and M was not significant ($p=0.949$). The interaction did not explain any of the variance of empathy ($R^2=0.000$).

The interaction between M (empathy) and Y (behavioral intentions) was also significant ($p=0.000$), supporting H3. The moderated path between X and Y, however, was not statistically

significant ($p=0.992$), meaning that the effect of a conservative lifestyle on the interaction between affective image after watching *The OC* and the intentions to travel to Newport Beach was not significant. In the case of a conservative lifestyle, H4 was not supported and we did not have a moderated direct effect. None of the variance of the intentions to travel to Newport Beach was explained by this interaction.

Checking the bootstrap results showed no significant interaction on the path between X and M ($BootLLCI=-0.061$; $BootULCI=0.049$). However, the confidence intervals for the effect mediator has on the intention to travel to Newport Beach did not contain zero ($BootLLCI=0.137$; $BootULCI=0.289$), showing a significant interaction between M and Y, supporting H3. However, there was no significant interaction for the direct effect of the path between X and Y when moderated by W because the confidence interval did contain zero ($BootLLCI=-0.027$; $BootULCI=0.023$).

4.4.4 Social Foodie

Fourth, we looked at W=Social-foodie (see Annex H). The bootstrap interval for the index of moderated mediation did contain zero ($BootLLCI=-0.012$; $BootULCI=0.018$), which is not significant. Therefore, in this case, there is no conditional indirect effect of W on X and Y. In other words, having a social-foodie lifestyle did not have an indirect effect on empathy and behavioral intentions to travel to Newport Beach and H4 and H5 were not supported.

Next, we looked at the direct effect of a social-foodie lifestyle on behavioral intentions to travel to Newport Beach after watching *The OC* at three different values (the mean value; +1 standard deviation; -1 standard deviation; $p=0.000$). This means that the social-foodie lifestyle has a positive conditional direct effect on the impact of affective images after watching an episode of *The OC* on participants' intentions to travel to Newport Beach, CA.

We analyzed the two paths of PROCESS Model 8 on their own. First, we look at the moderated path between X and M (X=affective image after watching *The OC*; M=empathy) and then at the path between M and Y (M=empathy; Y=behavioral intentions to travel). Finally, we look at the moderated path between X and Y (X=affective image after watching *The OC*; Y=behavioral intentions to travel). The interaction between X and M was not significant ($p=0.862$). The interaction did not explain any of the variance of empathy ($R^2=0.000$).

The interaction between M (empathy) and Y (behavioral intentions) was significant ($p=0.000$), supporting H3. The moderated path between X and Y, however, was not statistically significant ($p=0.875$), meaning that the effect of a social-foodie lifestyle on the interaction between affective image after watching *The OC* and the intentions to travel to Newport Beach was not significant. In the case of a social-foodie lifestyle, H4 was not supported and we did not have a moderated direct effect. None of the variance of the intentions to travel to Newport Beach was explained by this interaction.

Checking the bootstrap results showed no significant interaction on the path between X and M ($BootLLCI=-0.052$; $BootULCI=0.080$). However, the confidence intervals for the effect mediator has on the intention to travel to Newport Beach did not contain zero ($BootLLCI=0.135$; $BootULCI=0.299$), showing a significant interaction between M and Y, supporting H3. However, there was no significant interaction for the direct effect of the path between X and Y when moderated by W because the confidence interval did contain zero ($BootLLCI=-0.033$; $BootULCI=0.027$).

4.4.5 Culture Adventurous

Fifth, we looked at W=Culture adventurous (see Annex I). The bootstrap interval for the index of moderated mediation did contain zero ($BootLLCI=-0.024$; $BootULCI=0.003$), which is not significant. Therefore, in this case, there is no conditional indirect effect of W on X and Y. In other words, having a culture adventurous lifestyle did not have an indirect effect on empathy and behavioral intentions to travel to Newport Beach and H4 and H5 were not supported.

Next, we looked at the direct effect of a culture adventurous lifestyle on behavioral intentions to travel to Newport Beach after watching *The OC* at three different values (the mean value; +1 standard deviation; -1 standard deviation; $p=0.000$). This means that the culture adventurous lifestyle has a positive conditional direct effect on the impact of affective image after watching an episode of *The OC* on participants' intentions to travel to Newport Beach, CA.

We analyzed the two paths of PROCESS Model 8 on their own. First, we look at the moderated path between X and M (X=affective image after watching *The OC*; M=empathy) and then at the path between M and Y (M=empathy; Y=behavioral intentions to travel). Finally, we look at the moderated path between X and Y (X=affective image after watching *The OC*; Y=behavioral

intentions to travel). The interaction between X and M was not significant ($p=0.158$). The interaction only explained 0.8% any of the variance of empathy ($R^2=0.008$).

The interaction between M (empathy) and Y (behavioral intentions) was significant ($p=0.000$), supporting H3. The moderated path between X and Y, however, was not statistically significant ($p=0.555$), meaning that the effect of a culture adventurous lifestyle on the interaction between affective image after watching *The OC* and the intentions to travel to Newport Beach was not significant. In the case of a culture adventurous lifestyle, H4 was not supported and we did not have a moderated direct effect. Only 0.1% of the variance of the intentions to travel to Newport Beach was explained by this interaction ($R^2=0.001$).

Checking the bootstrap results showed no significant interaction on the path between X and M ($BootLLCI=-0.104$; $BootULCI=0.016$). However, the confidence intervals for the effect mediator has on the intention to travel to Newport Beach did not contain zero ($BootLLCI=0.131$; $BootULCI=0.288$), showing a significant interaction between M and Y, supporting H3. However, there was no significant interaction for the direct effect of the path between X and Y when moderated by W because the confidence interval did contain zero ($BootLLCI=-0.041$; $BootULCI=0.023$).

4.4.6 Sport Adventurous

Last, we looked at W=Sport adventurous (see Annex J). The bootstrap interval for the index of moderated mediation did contain zero ($BootLLCI=-0.006$; $Boot ULCI=0.021$), which is not significant. Therefore, in this case, there is no conditional indirect effect of W on X and Y. In other words, having a sport adventurous lifestyle did not have an indirect effect on empathy and behavioral intentions to travel to Newport Beach and H4 and H5 were not supported.

Next, we looked at the direct effect of a sport adventurous lifestyle on behavioral intentions to travel to Newport Beach after watching *The OC* at three different values (the mean value; +1 standard deviation; -1 standard deviation; $p=0.000$). This means that the sport adventurous lifestyle has a positive conditional direct effect on the impact of affective image after watching an episode of *The OC* on participants' intentions to travel to Newport Beach, CA.

We analyzed the two paths of PROCESS Model 8 on their own. First, we look at the moderated path between X and M (X=affective image after watching *The OC*; M=empathy) and then at the

path between M and Y (M=empathy; Y=behavioral intentions to travel). Finally, we look at the moderated path between X and Y (X=affective image after watching *The OC*; Y=behavioral intentions to travel). The interaction between X and M was not significant ($p=0.278$). The interaction only explained 0.5% any of the variance of empathy ($R^2=0.005$).

The interaction between M (empathy) and Y (behavioral intentions) was significant ($p=0.000$), supporting H3. The moderated path between X and Y, however, was not statistically significant ($p=0.059$), meaning that the effect of a sport adventurous lifestyle on the interaction between affective image after watching *The OC* and the intentions to travel to Newport Beach was not significant. In the case of a sport adventurous lifestyle, H4 was not supported and we did not have a moderated direct effect. Only 0.5% of the variance of the intentions to travel to Newport Beach was explained by this interaction ($R^2=0.005$). The Johnson-Neyman method showed no statistically significant transition points within the observed range of the moderator.

Checking the bootstrap results showed no significant interaction on the path between X and M ($BootLLCI=-0.027$; $BootULCI=0.093$). However, the confidence intervals for the effect mediator has on the intention to travel to Newport Beach did not contain zero ($BootLLCI=0.138$; $BootULCI=0.229$), showing a significant interaction between M and Y, supporting H3. However, there was no significant interaction for the direct effect of the path between X and Y when moderated by W because the confidence interval did contain zero ($BootLLCI=-0.053$; $BootULCI=0.002$).

4.5 Means and correlations

When comparing the means of the affective dimensions, before and after watching the TV show, there a slight increase in the average mean. Before watching the show, the summed mean score was 19.30 and after the show it was 20.65. It went up a little bit more than one point. In this affective dimension scale, the lowest mean score could be 4, and the highest could be 28. The actual minimums were 7 (before watching) and 6 (after watching). The maximums were 28 both before and after watching the TV show. Higher scores indicate more positive emotions. So, while the change was slight, participants did respond with more positive emotions after watching the show.

When comparing the means of the behavioral intentions and desire to travel to Newport beach after watching the TV show, the average mean increased from 14.66 (before watching) to 17.52

(after watching). One can infer that the TV show does have a small effect on participants behavioral intentions and desire to travel to Newport Beach. For this behavioral intentions scale, the minimum summed mean scores were 4 before and after watching the TV show. The maximum summed mean scores were 28 before and watching the TV show.

It is interesting to note that mean scores were slightly higher in the affective reactions than the behavioral actions. This could be because it is easier to have emotions evoked than to commit to planning a vacation.

A Pearson correlation was run between the affective dimensions and the behavioral intentions to test the relationship between the emotional aspects of destination image and the desire to travel. Results showed a correlation of 0.710 ($p < 0.001$), showing a positive relationship (see Table 4.4). This supports H2 by proving that the affective image after watching a TV show does, in fact, impact behaviors of potential tourists.

Table 4. 4 Behavioral intentions and affective image correlations after watching The OC

		Behavioral intentions after	Affective image after
Behavioral intentions after	Pearson Correlation	1	0.710**
	Sig. (2-tailed)		<0.001
	N	220	220
Affective image after	Pearson Correlation	0.710**	1
	Sig. (2-tailed)	<0.001	
	N	220	220

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

Source: Own elaboration based on SPSS output

A Pearson Correlation was also run between the empathy scores and behavioral intentions. Results showed a correlation of 0.546 ($p > 0.001$), showing a positive linear relationship (see Table 4.5). This supports H3 by demonstrating that empathy does, in fact, have an effect on behaviors of potential tourists after they watch a destination-related TV show.

Table 4.5 Behavioral intentions and empathy correlations after watching *The OC*

		Behavioral intentions after	Empathy
Behavioral intentions after	Pearson Correlation	1	0.546**
	Sig. (2-tailed)		<0.001
	N	220	220
Empathy	Pearson Correlation	0.546**	1
	Sig. (2-tailed)	<0.001	
	N	220	220

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

Source: Own elaboration based on SPSS output

A paired-samples t-test between the behavioral intentions of participants to visit Newport Beach before watching *The OC* and after watching *The OC* had a t-value of -9.171 ($p < 0.001$) and therefore we can reject the null hypothesis and say that watching an episode of *The OC* does have an effect on travel motivations of potential tourists (see Table 4.6). So, we agree that a TV show does have an effect on behavioral intentions to travel to a specific destination.

Table 4.6 Behavioral intentions paired samples t-test before and after watching *The OC*

	Mean	SD	LLCI	ULCI	t	df	Sig. (2-tailed)
Behavioral intentions before / Behavioral intentions after	-2.859	4.624	-3.474	-2.245	-9.171	219	<0.001

Source: Own elaboration based on SPSS output

A paired-samples t-test between the affective dimensions participants felt about Newport Beach before watching *The OC* and after watching *The OC* had a t-value of -5.661 ($p < 0.001$) and

therefore we can reject the null hypothesis and say that watching an episode of The OC does influence affective dimensions (emotions) related to a particular destination (see Table 4.7). This shows that film and media have an effect on emotions related to a specific tourist destination.

Table 4. 7 *Affective image paired samples t-test before and after watching The OC*

	Mean	SD	LLCI	ULCI	t	df	Sig. (2- tailed)
Affective image before / Affective image after	-1.341	3.514	-1.808	-0.874	-5.661	219	<0.001

Source: Own elaboration based on SPSS output

5. Discussion

This study is the first to consider the concepts of affective image, empathy, lifestyle and behavioral intentions in the context of film-induced tourism when watching the pilot episode of *The OC*. Affective image was studied in H1 (affective image impacts empathy responses to a TV show) and H2 (affective image impacts behavioral intentions to travel to a destination after watching a TV show). Both H1 and H2 were supported by the results.

H1 was lacking research and therefore this study contributes to a gap in related literature. We found that affective image after watching *The OC* did have an effect on empathy responses when using PROCESS Model 4, confirming the hypothesis. However, when using PROCESS Model 8, with six different lifestyle patterns as moderators, affective image only had a significant effect on empathy in the case of one lifestyle pattern (shopaholic). Further research should be done to find more specific ways to moderate this effect or to learn whether or not a moderator helps the relationship between affective image and empathy at all.

Regarding the impact of affective image on behavioral intentions, we can agree with Crompton (1979), Echtner & Ritchie (1991), Baloglu & Brinberg (1997), Baloglu & McCleary (1999), Qu et al., 2011, and Papadimitriou et al. (2015). This study adds to their work of literature regarding affective image and how it impacts behavioral intentions and desire to travel to a specific destination.

Shani et al. (2009) found that affective image after watching the film *The Motorcycle Diaries* had an effect on participants' behavioral intentions to travel to South America. This study shows that affective image after watching the television show *The OC* had an effect on participants' behavioral intentions to travel to Newport Beach, California. This supports Shani et al. (2009), as well as Russel & Pratt (1980) and Ekinici & Hosany (2006).

H3 (empathy for characters and storyline will mediate behavioral intentions to travel to the location portrayed in the show) was supported throughout our results. We can agree with previous literature and conclude that empathy is positively correlated with desire and behavioral intentions to travel (Li & Liu, 2020). When comparing with Kim & Richardson (2009) we found more statistical significance regarding empathy, however we did not use any cognitive variables. Perhaps because we were measuring affective (emotional) image there was a higher relationship with empathy.

This study uses the same empathy definition as Escalas & Stern (2003) because their definition falls within an advertisement context, which involves representations outside of real life (fictional designed representations). In the case of this study, *The OC* was a designed fictional representation of Newport Beach, California used as an advertising tool for the destination. According to this study's findings, empathy mediates the interaction between affective image and behavioral intentions. Therefore, when used in the advertising context, empathy can increase consumers' intentions to visit a destination.

Finally, we looked at H4 and H5, which assume that lifestyle will act as a moderator between affective image and empathy, and between affective image and behavioral intentions. These assumptions were based on research by Fuller & Matzler (2008) and Srihadi et al. (2016). These hypotheses were rejected; therefore, we do not agree that lifestyle is related to the decision-making processes regarding travelling to a destination advertised on a TV show. Neither Fuller & Matzler (2008) or Srihadi et al. (2016) were studying film-induced tourism and neither study included a TV show. We conclude from this that lifestyle patterns did not have a significant role as a moderator; whereas affective image and empathy significantly influence behavioral intentions to visit a destination. Additionally, lifestyle as a variable only significantly moderated empathy in one case out of six, demonstrating that the impact of empathy as a mediator depends on the variables. Our findings show that the mediation effect of empathy responses to a television show is more consistent and influential than the moderation effect of lifestyle patterns, in the context of film-induce tourism and destination image. In other words, empathy responses to a TV show had a strong influence in this study and are more important to destination marketing than lifestyle patterns.

6. Conclusions and implications

This section will go over the theoretical implications of the findings of this study, in other words it will explain ways in which it contributes to literature. Then we will discuss the managerial implications, such as how DMOs can use the data from this study. This dissertation concludes by discussing its limitations, as well as ideas for further related research.

6.1 Theoretical implications

This study contributes to current literature on film-tourism and destination image by investigating mediators and moderators during a before/after study where participants watch a specific TV show that takes place in Newport Beach, California. It also confirms theories from existing literature, particularly regarding emotional responses to film and television and how they impact behavioral intentions to travel to the destination they portray.

When looking at the first research question, findings reveal that watching an episode of *The OC* did increase the average scores of affective image and behavioral intentions to travel to Newport Beach. Shani et al. (2009) used affective image and behavioral intentions to measure participants' destination image and found that after watching the film *The Motorcycle Diaries* these same variables changed. This study supports the findings from Shani et al. (2009) and supports that affective image and behavioral intentions as constructs are reliable and valid to use in further studies of this nature.

Looking at the second research question, it is clear that emotional responses (affective image and empathy) to characters and narratives in a television show have an effect on behavioral intentions to travel to the destination portrayed. This supports findings that affective destination image combined with brand personality (in this case, the personality given to Newport Beach by *The OC*) impact behavioral intentions to travel, as well as overall destination image (Papadimitriou et al., 2015). This study emphasizes the importance of affective image of a location on behavioral intentions to travel to that location, when influenced by a fictional television show. Additionally, empathy was a very constant and significant mediator, proving that it is a very important emotional response in the context of film-induced tourism and behavioral intentions to travel to a destination. The current study suggests, along with previous

literature, that researchers should study affective attributes of destination image more than cognitive attributes, as emotional responses are incredibly influential in the decision-making process.

Looking at the third research question, this study shows that lifestyle patterns were not all that important in moderating consumer behavioral intentions in the context of film-induced tourism. Fuller and Matzler (2008) and Srihadi et al. (2016) found that lifestyle can have an effect on vacation choices, however their studies were in a different context. Therefore, we conclude that in the case of film-induced tourism and *The OC*, lifestyle is not the best indicator of behavioral intentions. When looking at the emotional responses aspect of this study, lifestyle was not a significant moderator between affective image and empathy in the context of film-induced tourism and *The OC*.

6.2 Managerial implications

The managerial implications of this study are significant to destination marketing organizations (DMOs) and production companies alike. Our findings emphasize the power and potential influence that fictional television has on the consumer decision-making process by demonstrating that just one episode of a television show influence affective image and behavioral intentions to travel to the destination portrayed. Managers should use the ample amount of television content that exists to influence consumers to visit their destination. DMOs and production companies could also team up and for partnerships in order to create new content to maximize the benefits of film-induced tourism. Macionis and O'Connor (2011) discuss bridging this gap between media production companies and tourism benefits, and our findings suggest that this kind of partnership would benefit both entities.

Additionally, managers should be aware of narrative and emotional responses. Escalas (2004) found that narratives can have a positive effect on connections between feelings and behaviors involving a brand. If the brand is a location, a film or television show that takes place in the location becomes a narrative about that brand. Additionally, because affective image and empathy were the variables with the strongest impacts on behavioral intentions to travel to Newport Beach after watching an episode of *The OC*, managers should look at how fictional narratives can influence emotions. By doing this, managers can use fictional narratives that potentially induce emotions that they want to portray about their location in order to pull tourists in.

6.3 Limitations and future research

It is always important to discuss limitations of the current study, as they can have an effect the results. One limitation of this study was that all participants watched *The OC* in separate environments, via a Google Drive link. The environment was not controlled, and the difference between one person's laptop and another's 4K television could have caused a variety in the responses. This study should be repeated in a controlled environment, where participants watch *The OC* in the same screening place.

Another limitation of this study was that many participants had previously watched *The OC*. This study could be repeated with a larger pool of participants, in order to screen out those who had already seen the show. Perhaps the novelty of a television show has a different impact on behavioral intentions to travel. We also did not screen out participants who had already been to Newport Beach, California. This would be worth doing in a future study.

For the participants who had not seen *The OC before*, they only watched one episode of the show. A longitudinal study could be done to see if there is a different impact on behavioral intentions to travel to Newport Beach after watching multiple episodes of *The OC* over time.

Additionally, *The OC* is a show geared towards younger people. It would be interesting to do this study again with an age group of 16-22 and to compare it with results of older age groups. It is important when marketing a destination to know the age group being targeted. Different films and television shows will be attractive to different ages, and when used correctly this is an excellent marketing tactic.

One thing to mention is that while lifestyle patterns were not a good indicator of behavioral intentions in this study, it is of course possible to test this in a different context: with a different television show, film, categories of lifestyle patterns, a different scale, etc. It could also be tested as a mediator, instead of a moderator. Lifestyle can still be tested differently in future studies.

Finally, this study wants to touch on the prospects of Virtual Reality (VR), Augmented Reality (AR) and video games. These were not tested in this study; however, they are important to mention in any modern screen-based media research. VR, AR and video games are forms of modern interactive media with many similarities, as well as their own unique properties.

Most of the research on destination marketing and VR/AR has been conducted in the last 20 years (Loureiro et al., 2020). Loureiro et al. (2020) used correlated topic models to find latent topics within the last 20 years of literature and discovered that tourism destination marketing was among the top 10 latent topics in journal papers, showing potential in this area.

The researchers think it would be worth using the same variables but with a VR group and a control group. It would also be worth doing a study where instead of watching *The OC*, participants play a video game that takes place in a certain location. How would a video game or VR video influence participants' behavioral intentions to travel, in comparison to a film or TV show of the same location? How might video games and VR impact empathy? This needs further development and should be investigated in order to properly use VR, AR and video games as destination marketing tools.

References

- Baloglu, S. & Brinberg, D. (1997). Affective images of tourism destinations. *Journal of Travel Research*, 35(4), 11-15. <https://doi.org/10.1177/004728759703500402>
- Baloglu, S. & McCleary, K. W. (1999). A model of destination image formation. *Annals of Tourism Research*, 26(4), 868-897. [https://doi.org/10.1016/s0160-7383\(99\)00030-4](https://doi.org/10.1016/s0160-7383(99)00030-4)
- Barich, H., & Kotler, P. (1991). A framework for marketing image management. *Sloan Management Review*, 32(2), 94-104.
- Beeton, S. (2006). Understanding Film-induced Tourism. *Tourism Analysis*, 11, 181-188. <http://doi.org/10.3727/108354206778689808>
- Beeton, S. (2008). Location, Location, Location: Film Corporations' Social Responsibilities. *Journal of Travel & Tourism Marketing*, 24(2-3), 107-114. <http://doi.org/10.1080/10548400802092551>
- Beeton, S. (2016). *Film-induced tourism* (2nd ed.). Channel View Publications.
- Blackwell, R. D., Miniard, P. W., & Engel, J. F. (2006). *Consumer behavior* (10th ed.). Ohio: Thomson South-Western.
- Cardoso, Lucília., Estevão, C., Fernandes, C., & Alves, H. (2017). Film-induced tourism: a systematic literature review. *Tourism & Management Studies*, 13(3), 23-30. <http://doi.org/10.18089/tms.2017.13303>
- Crompton, J. L. (1979). Motivations for pleasure vacation. *Annals of Tourism Research*, 6(4), 408-424. [https://doi.org/10.1016/0160-7383\(79\)90004-5](https://doi.org/10.1016/0160-7383(79)90004-5)
- Croy, W. G. (2010). Planning for Film Tourism: Active Destination Image Management. *Tourism and Hospitality Planning & Development*, 7(1), 21-30. <https://doi.org/10.1080/14790530903522598>
- Croy, W. G., & Walker, R. D. (2003). Rural tourism and film-issues for strategic regional development. In D. Hall, L. Roberts, & M. Mitchell (Eds), *New directions in rural tourism* (pp. 115-133). Routledge. <https://doi.org/10.4324/9781315248097>
- Dubois, L., & Gibbs, C. (2018). Video game-induced tourism: A new frontier for destination marketers. *Tourism Review*, 17(2), 133-155. <https://doi.org/10.1108/TR-07-2017-0115>
- Filming Locations From The OC That Fans Should Visit*. (2022, March 8). LA Dreaming. Retrieved April 27, 2022, from <https://ladreaming.com/movies-tv/filming-locations-from-the-oc-that-fans-should-visit/>
- Echtner, C.M. & Ritchie, J.R.B. (1991). The meaning and measurement of destination image. *The Journal of Tourism Studies*, 2, 2-12.
- Escalas, J. (2004). Narrative processing: Building consumer connections to brands. *Journal of Consumer Psychology*, 14(1&2), 168-180. https://doi.org/10.1207/s15327663jcp1401&2_19
- Escalas, J. & Stern, B. (2003). Sympathy and empathy: Emotional responses to advertising dramas. *Journal of Consumer Research*, 29, 566-578. https://doi.org/10.1207/s15327663jcp1401&2_19
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Fuller, G. & Matzler, K. (2008). (2018). Customer delight and market segmentation: An application of the three-factor theory of customer satisfaction on lifestyle groups. *Tourism Management*, 29, 116-126. <https://doi.org/10.1016/j.tourman.2007.03.021>

- Gartner, W. C. (1993). Image formation process. *Journal of Travel and Tourism Marketing*, 2(2/3), 191-215. https://doi.org/10.1300/J073v02n02_12
- Govers, R., Go, F., & Kumar, K. (2007). Promoting Tourism Destination Image. *Journal of Tourism Research*, 46(1), 15-23. <http://doi.org/10.1177/0047287507302374>
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2019). *Multivariate Data Analysis* (8th ed.). Upper Saddle River, New Jersey: Pearson Education Limited.
- Hayes, A. R. (2022). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (3rd ed.). Guilford Publications.
- Hosany, S., Ekinci, Y., & Muzaffer, U. (2007). Destination image and destination personality. *International Journal of Culture, Tourism and Hospitality Research*, 1(1), 62-81. <https://doi.org/10.1108/17506180710729619>
- Hudson, S., & Ritchie, J. R. B. (2006). Promoting Destinations via Film Tourism: An Empirical Identification of Supporting Marketing Initiatives. *Journal of Travel Research*, 44, 387-396. <https://doi.org/10.1177/0047287506286720>
- Hudson, S., Wang, Y., & Gil, S. M. (2010). The influence of a film on destination image and the desire to travel: a cross-cultural comparison. *International Journal of Tourism Research*, 13, 177-190. <https://doi.org/10.1002/jtr.808>
- Kim, S. (2012). Audience involvement and film tourism experiences: Emotional places, emotional experiences. *Tourism Management*, 33(2), 387-396. <https://doi.org/10.1016/j.tourman.2011.04.008>
- Langfeld, H. S. (1967). *The aesthetic attitude* (2nd ed.). Kennikat Press.
- Lee, S. H., & Sparks, B. (2007). Cultural influences on travel lifestyle: A comparison of Korean Australians and Koreans in Korea. *Tourism Management*, 28, 505-518. <https://doi.org/10.1016/j.tourman.2006.03.003>
- Liu, C. H., & Liu, C. C. (2020). The effects of empathy and persuasion of storytelling via tourism micro-movies on travel willingness. *Asia Pacific Journal of Tourism Research*, 25(4), 382-392. <https://doi.org/10.1080/10941665.2020.1712443>
- Loureiro, S. M. C., Guerreiro, J., & Ali, F. (2020). 20 years of research on virtual reality and augmented reality in tourism context: A text-mining approach. *Tourism Management*, 77, 1-20. <https://doi.org/10.1016/j.tourman.2019.104028>
- MacCannell, D. (1976). *The tourist: A new theory of the leisure class*. Schocken Books.
- Macionis, N., & O'Connor, N. (2011). How can the film-induced tourism phenomenon be sustainably managed? *Worldwide Hospitality and Tourism Themes*, 3(2), 173-178. <https://doi.org/10.1108/17554211111123032>
- Mendes, R., Vareiro, L., & Ferreira, A. R. (2016). Residents' perceptions of film-induced tourism: A Portuguese case study. *Tourism and Hospitality Research*, 17(4), 424-433. <https://doi.org/10.1177/1467358416646624>
- Molina, A., Gómez, M., & Martín-Consuegra, D. (2010). Tourism marketing information and destination image management, *African Journal of Business Management*, 4(5), 722-728.
- Nunnally, J. C., & Bernstein, I.H. (1994). *Psychometric theory* (3rd. Ed.) New York: McGraw Hill.
- Papadimitriou, D., Apostolopoulou, A., & Kaplanidou, K. (2015). Destination personality, affective image, and behavioral intentions in domestic urban tourism. *Journal of Travel Research*, 54(3), 302-315. <http://dx.doi.org/10.1016/j.tmp.2016.03.005>
- Pine, B.J., & Gilmore, J.H. (1998). Welcome to the Experience Economy. *Harvard Business Review*, 76(4), 97-105.
- Plummer, J. T., (1974). The concept and application of life style segmentation. *Journal of Marketing*, 38(1), 33-37. <https://doi.org/10.2307/1250164>

- Qu, H., Kim, L., & Im, H. (2011). A model of destination branding: Integrating the concepts of the branding and destination image. *Tourism Management*, 32(3), 465-478.
<https://doi.org/j.tourman.2010.03.014>
- Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, 39(6), 1161-1178. <https://doi.org/10.1037/h0077714>
- Russell, J. A., & Pratt, G. (1980). A description of the affective quality attributed to environments. *Journal of Personality and Social Psychology*, 38(2), 311-322.
<https://doi.org/10.1037/0022-3514.38.2.311>
- Schank, R. C., & Abelson, R. P. (1995). Knowledge and memory: the real story. In R. S. Wyer, Jr. (Ed.), *Knowledge and memory: the real story* (pp. 1-85). Lawrence Erlbaum Associates, Inc
- Srihadi, T. F., Hartoyo, Sukandar, D., Soehade, A. H. (2016). Segmentation of the tourism market for Jakarta: Classification of foreign visitors' lifestyle typologies. *Tourism Management Perspectives*, 19, 32-39. <http://dx.doi.org/10.1016/j.tmp.2016.03.005>
- Strong, E. (1925) *The psychology of selling*. MacGraw-Hill.
- Tooke, N. & Baker, M. (1996). Seeing is believing: The effect of film on visitor numbers to screened locations. *Tourism Management*, 17(2), 87-94.
[https://doi.org/10.1016/0261-5177\(95\)00111-5](https://doi.org/10.1016/0261-5177(95)00111-5)
- Villarreal, Y., & Powers, A. (2006, December 12). *If "The O.C." dies, will O.C. mourn?* Los Angeles Times. Retrieved February 13, 2022, from
<https://www.latimes.com/archives/la-xpm-2006-dec-12-me-uncool12-story.html>
- Wind, J. (1971). Life style analysis: A new approach. In F.C. Allvine (Ed.), *Marketing in Motion* (pp. 302-305). Chicago: American Marketing Association (Apr 1971).
- Wylde, K. (2019, January 14). *11 'The O.C.' Filming Locations In California That You Can Actually Visit In Real Life*. Bustle. Retrieved April 27, 2022, from
<https://www.bustle.com/p/11-the-oc-filming-locations-in-california-that-you-can-actually-visit-in-real-life-15796472>
- "The O.C" *Tour Map*. (n.d.). SEEING STARS: The Ultimate Guide to Hollywood.
<https://www.seeing-stars.com/OC/TheOCMap.shtml>

Annexes

Annex A Factor Analysis

Factor	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.433	17.733	17.733	3.929	15.715	15.715	2.749	10.997	10.997
2	3.795	15.178	32.911	3.347	13.390	29.105	2.377	9.508	20.505
3	1.986	7.944	40.855	1.540	6.162	35.267	1.954	7.815	28.319
4	1.867	7.468	48.323	1.371	5.484	40.751	1.922	7.687	36.007
5	1.660	6.642	54.965	1.233	4.933	45.683	1.782	7.127	43.133
6	1.432	5.730	60.694	.929	3.715	49.399	1.566	6.265	49.399
7	.947	3.788	64.483						
8	.916	3.666	68.148						
9	.879	3.517	71.665						
10	.761	3.045	74.710						
11	.720	2.880	77.590						
12	.661	2.643	80.233						
13	.624	2.496	82.729						
14	.565	2.260	84.989						
15	.528	2.112	87.101						
16	.455	1.819	88.920						
17	.397	1.586	90.506						
18	.384	1.536	92.042						
19	.365	1.462	93.504						
20	.351	1.404	94.908						
21	.309	1.236	96.144						
22	.293	1.174	97.317						
23	.258	1.031	98.349						
24	.222	.887	99.236						
25	.191	.764	100.000						

Extraction Method: Principal Axis Factoring.

Annex B Cronbach's Alphas

Dimensions	Means	SD
Lifestyle -- Culture Adventurous (Chronbach = 0.694)		
I enjoy exploring different cultures	6.35	.941
I am interested in experiencing a different way of life	5.90	1.322
I often go to cultural events (exhibitions, concerts, opera, theatre)	5.15	1.566
Lifestyle -- Shopaholic (Chronbach = 0.844)		
I usually buy well-known brands	4.31	1.682
I spend a lot of money on shopping	3.85	1.728
My choice of brands for products/services is always influenced by advertising	3.25	1.554
I like to try new products when they come out on the market	3.57	1.619
I usually buy new products before my friends do	3.10	1.758
Lifestyle -- Conservative (Chronbach = 0.811)		
I prefer staying home after work	5.06	1.575
I prefer staying home on the weekend	4.06	1.776
My recreational activities happen around my house	4.34	1.578
Lifestyle -- Aspiring Indulger (Chronbach = 0.814)		
I feel optimistic about my future	5.31	1.488
I am sure that my life is meaningful	5.33	1.586
I pay attention to my personal achievements	5.60	1.291
Personal goals that I established are practical and feasible	5.32	1.166
Lifestyle -- Sport Adventurous (Chronbach = 0.766)		
I enjoy water sport activities (eg. surfing, fishing)	3.78	1.963
I enjoy outdoor sport activities (eg. golf, tennis)	4.15	1.883
Lifestyle -- Social-foodie (Chronbach = 0.681)		
I enjoy meeting new people	5.45	1.308
I like spending time with my good friends	6.55	0.834
I frequently visit friends and relatives	5.44	1.368
I enjoy a great variety of food (cuisine)	5.91	1.295
I enjoy eating out at a restaurant with friends	6.31	1.075
Empathy (Chronbach = 0.940)		
While watching <i>The OC</i> , I experienced feelings as if the events were really happening to me	4.09	1.731
While watching <i>The OC</i> , I felt like I was one of the characters	3.91	1.940
While watching <i>The OC</i> , I felt as though the events in the show were happening to me	3.68	1.863
While watching <i>The OC</i> , I experienced many of the same feelings that the characters portrayed	4.62	1.621
While watching <i>The OC</i> , I felt as if the characters' feelings were my own	4.00	1.836
Affective Dimensions (after watching <i>The OC</i>) (Chronbach = 0.901)		
When I think of Newport Beach, I feel: sleepy (1) → lively (7)	5.27	1.174
When I think of Newport Beach, I feel: unpleasant (1) → pleasant (7)	5.21	1.345
When I think of Newport Beach, I feel: gloomy (1) → excited (7)	5.19	1.300
When I think of Newport Beach, I feel: distressing (1) → relaxing (7)	4.97	1.446
Behavioral Intentions (after watching <i>The OC</i>) (Chronbach = 0.854)		
I am aware of Newport Beach, California as a suitable tourist destination	5.41	1.416
I currently desire to visit Newport Beach, California	4.53	1.837
I am likely to book a vacation to Newport Beach, California	3.50	1.884
I am interested in getting more information on travelling to Newport Beach, California	4.09	2.062

Annex C Demographics

Demographics	%	Frequency
Age		
18-24	25.5%	56
25-29	30.5%	67
30-34	25.5%	56
35-39	8.6%	19
40-44	1.4%	3
45-49	2.3%	5
50-54	0.5%	1
55-59	2.3%	5
60+	3.6%	8
Gender Identity		
Female	74.1%	163
Male	22.7%%	50
Non-binary	1.8%	4
Not listed	0.5%	1
Prefer not to answer	0.9%	2
Nationality (top 5)		
United States	39.1%	86
Portugal	15.5%	34
Canada	10.5%	23
United Kingdom	6.4%	14
Brazil	3.6%	8
Current location (top 5)		
United States	41.4%	91
Portugal	24.1%	53
Canada	11.4%	25
United Kingdom	7.3%	16
Brazil	2.7%	6
Education level		
Bachelor's degree	54.1%	119
Master's degree	25.0%	55
High school	13.2%	29
Ph.D. or higher	3.6%	8
Trade School	1.8%	4
Prefer not to say	1.4%	3
Some high school	0.9%	2

Annex D Output PROCESS Model 4

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.1 *****

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

Model : 4
Y : after_BI
X : afterEA
M : empathy

Sample
Size: 220

OUTCOME VARIABLE:
empathy

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.447	.200	52.607	42.879	1.000	218.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	4.177	2.558	1.633	.104	-.864	9.218
afterEA	.781	.119	6.548	.000	.546	1.016

OUTCOME VARIABLE:
after_BI

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.754	.569	15.936	185.925	2.000	217.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	-2.516	1.155	-2.179	.030	-4.792	-.240
afterEA	.761	.073	10.388	.000	.616	.905
empathy	.213	.040	5.288	.000	.134	.293

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

Direct effect of X on Y

Effect	se(HC4)	t	p	LLCI	ULCI
.761	.073	10.388	.000	.616	.905

Indirect effect(s) of X on Y:

	Effect	BootSE	BootLLCI	BootULCI
empathy	.167	.040	.096	.255

***** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS*****

OUTCOME VARIABLE:

empathy

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	4.177	4.089	2.462	-.632	9.005
afterEA	.781	.785	.115	.557	1.006

OUTCOME VARIABLE:

after_BI

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	-2.516	-2.521	1.152	-4.703	-.142
afterEA	.761	.761	.073	.613	.897
empathy	.213	.213	.040	.136	.293

***** 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: A heteroscedasticity consistent standard error and covariance matrix estimator was used.

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

Annex E Output PROCESS Model 8 - Moderated mediation: shopaholic

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.1 *****

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

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

Model : 8

Y : after_BI

X : afterEA

M : empathy

W : Shop

Sample

Size: 220

OUTCOME VARIABLE:

empathy

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.500	.250	49.805	28.368	3.000	216.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	20.118	.498	40.412	.000	19.136	21.099
afterEA	.714	.117	6.084	.000	.483	.945
Shop	.218	.078	2.797	.006	.064	.371
Int_1	.034	.016	2.132	.034	.003	.066

Product terms key:

Int_1 : afterEA x Shop

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

	R2-chng	F(HC4)	df1	df2	p
X*W	.018	4.546	1.000	216.000	.034

Focal predict: afterEA (X)

Mod var: Shop (W)

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

Shop	Effect	se(HC4)	t	p	LLCI	ULCI
-6.551	.488	.177	2.767	.006	.141	.836
.000	.714	.117	6.084	.000	.483	.945
6.551	.940	.137	6.859	.000	.670	1.210

Moderator value(s) defining Johnson-Neyman significance region(s):

Value	% below	% above
-8.893	10.455	89.545

Conditional effect of focal predictor at values of the moderator:

Shop	Effect	se(HC4)	t	p	LLCI	ULCI
-13.077	.264	.266	.992	.322	-.260	.788
-11.627	.314	.245	1.280	.202	-.169	.797
-10.177	.364	.225	1.619	.107	-.079	.806
-8.893	.408	.207	1.971	.050	.000	.816
-8.727	.414	.205	2.020	.045	.010	.817
-7.277	.463	.186	2.496	.013	.098	.829
-5.827	.513	.168	3.060	.002	.183	.844

-4.377	.563	.151	3.721	.000	.265	.862
-2.927	.613	.137	4.475	.000	.343	.883
-1.477	.663	.125	5.286	.000	.416	.910
-.027	.713	.117	6.070	.000	.482	.945
1.423	.763	.114	6.703	.000	.539	.987
2.873	.813	.115	7.073	.000	.586	1.039
4.323	.863	.121	7.151	.000	.625	1.101
5.773	.913	.130	7.000	.000	.656	1.170
7.223	.963	.143	6.717	.000	.680	1.245
8.673	1.013	.159	6.381	.000	.700	1.325
10.123	1.063	.176	6.043	.000	.716	1.409
11.573	1.112	.194	5.726	.000	.730	1.495
13.023	1.162	.214	5.439	.000	.741	1.584
14.473	1.212	.234	5.183	.000	.751	1.673
15.923	1.262	.255	4.958	.000	.760	1.764

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Shop empathy .

BEGIN DATA.

-4.633	-6.551	16.430
.000	-6.551	18.693
4.633	-6.551	20.956
-4.633	.000	16.810
.000	.000	20.118
4.633	.000	23.426
-4.633	6.551	17.190
.000	6.551	21.543
4.633	6.551	25.896

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH empathy BY Shop .

OUTCOME VARIABLE:

after_BI

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.761	.580	15.676	117.891	4.000	215.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	13.537	.892	15.176	.000	11.779	15.295
afterEA	.757	.074	10.176	.000	.610	.904
empathy	.192	.040	4.768	.000	.112	.271
Shop	.058	.044	1.319	.188	-.029	.146
Int_1	.016	.009	1.825	.069	-.001	.034

Product terms key:

Int_1 : afterEA x Shop

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

	R2-chng	F(HC4)	df1	df2	p
X*W	.007	3.329	1.000	215.000	.069

Focal predict: afterEA (X)

Mod var: Shop (W)

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

Shop	Effect	se(HC4)	t	p	LLCI	ULCI
-6.551	.649	.103	6.320	.000	.447	.851
.000	.757	.074	10.176	.000	.610	.904
6.551	.865	.087	9.963	.000	.694	1.036

There are no statistical significance transition points within the observed range of the moderator found using the Johnson-Neyman method.

Conditional effect of focal predictor at values of the moderator:

Shop	Effect	se(HC4)	t	p	LLCI	ULCI
-13.077	.541	.150	3.607	.000	.246	.837
-11.696	.564	.139	4.050	.000	.290	.839
-10.315	.587	.129	4.555	.000	.333	.841
-8.934	.610	.119	5.132	.000	.375	.844
-7.553	.632	.109	5.790	.000	.417	.848
-6.173	.655	.100	6.531	.000	.457	.853
-4.792	.678	.092	7.349	.000	.496	.860
-3.411	.701	.085	8.220	.000	.533	.869
-2.030	.724	.080	9.090	.000	.567	.880
-.649	.746	.076	9.870	.000	.597	.895
.732	.769	.074	10.456	.000	.624	.914
2.113	.792	.074	10.762	.000	.647	.937
3.494	.815	.076	10.762	.000	.665	.964
4.875	.837	.080	10.502	.000	.680	.995
6.256	.860	.085	10.069	.000	.692	1.029
7.637	.883	.092	9.549	.000	.701	1.065
9.018	.906	.101	9.007	.000	.708	1.104
10.399	.929	.109	8.481	.000	.713	1.144
11.780	.951	.119	7.990	.000	.717	1.186
13.161	.974	.129	7.544	.000	.720	1.229

14.542	.997	.140	7.142	.000	.722	1.272
15.923	1.020	.150	6.782	.000	.723	1.316

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Shop after_BI .

BEGIN DATA.

-4.633	-6.551	14.040
.000	-6.551	17.046
4.633	-6.551	20.052
-4.633	.000	13.922
.000	.000	17.429
4.633	.000	20.936
-4.633	6.551	13.804
.000	6.551	17.811
4.633	6.551	21.819

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH after_BI BY Shop .

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

Conditional direct effect(s) of X on Y:

Shop	Effect	se(HC4)	t	p	LLCI	ULCI
-6.551	.649	.103	6.320	.000	.447	.851
.000	.757	.074	10.176	.000	.610	.904
6.551	.865	.087	9.963	.000	.694	1.036

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

afterEA -> empathy -> after_BI

Shop	Effect	BootSE	BootLLCI	BootULCI
-6.551	.094	.040	.028	.181
.000	.137	.037	.072	.216
6.551	.180	.044	.096	.272

Index of moderated mediation:

	Index	BootSE	BootLLCI	BootULCI
Shop	.007	.003	.000	.013

***** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS *****

OUTCOME VARIABLE:

empathy

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	20.118	20.119	.491	19.131	21.088
afterEA	.714	.714	.111	.493	.935
Shop	.218	.221	.076	.072	.375
Int_1	.034	.034	.016	.001	.062

OUTCOME VARIABLE:

after_BI

Coeff	BootMean	BootSE	BootLLCI	BootULCI
--------------	-----------------	---------------	-----------------	-----------------

constant	13.537	13.552	.880	11.871	15.261
afterEA	.757	.757	.072	.609	.889
empathy	.192	.191	.039	.115	.269
Shop	.058	.059	.044	-.026	.149
Int_1	.016	.017	.009	.000	.035

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

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: A heteroscedasticity consistent standard error and covariance matrix estimator was used.

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

Shop afterEA

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

Annex F *Output PROCESS Model 8 - Moderated mediation: aspiring indulger*

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.1 *****

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

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

Model : 8

Y : after_BI

X : afterEA

M : empathy

W : Indulge

Sample

Size: 220

OUTCOME VARIABLE:

empathy

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.491	.241	50.392	20.113	3.000	216.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	20.247	.490	41.292	.000	19.280	21.213
afterEA	.728	.119	6.138	.000	.495	.962
Indulge	.365	.114	3.197	.002	.140	.590
Int_1	.020	.025	.796	.427	-.029	.069

Product terms key:

Int_1 : afterEA x Indulge

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

	R2-chng	F(HC4)	df1	df2	p
X*W	.003	.634	1.000	216.000	.427

Focal predict: afterEA (X)

Mod var: Indulge (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Indulge empathy .

BEGIN DATA.

```
-4.633  -4.460  15.652
.000    -4.460  18.618
4.633   -4.460  21.585
-4.633   .000   16.872
.000     .000   20.247
4.633     .000   23.621
-4.633   4.460   18.092
.000     4.460   21.875
4.633     4.460   25.658
```

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH empathy BY Indulge .

OUTCOME VARIABLE:

after_BI

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
----------	-------------	------------	---------------	------------	------------	----------

.759 .577 15.794 92.599 4.000 215.000 .000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	13.386	.935	14.309	.000	11.542	15.230
afterEA	.759	.074	10.246	.000	.613	.906
empathy	.206	.042	4.961	.000	.124	.288
Indulge	.069	.072	.955	.341	-.073	.210
Int_1	-.020	.016	-1.264	.208	-.052	.011

Product terms key:

Int_1 : afterEA x Indulge

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

	R2-chng	F(HC4)	df1	df2	p
X*W	.005	1.598	1.000	215.000	.208

Focal predict: afterEA (X)

Mod var: Indulge (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Indulge after_BI .

BEGIN DATA.

-4.633 -4.460 13.336
.000 -4.460 17.271
4.633 -4.460 21.205
-4.633 .000 14.059
.000 .000 17.577

4.633	.000	21.096
-4.633	4.460	14.781
.000	4.460	17.883
4.633	4.460	20.986

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH after_BI BY Indulge .

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

Conditional direct effect(s) of X on Y:

Indulge	Effect	se(HC4)	t	p	LLCI	ULCI
-4.460	.849	.083	10.171	.000	.685	1.014
.000	.759	.074	10.246	.000	.613	.906
4.460	.670	.119	5.639	.000	.436	.904

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

afterEA -> empathy -> after_BI

Indulge	Effect	BootSE	BootLLCI	BootULCI
-4.460	.132	.043	.061	.232
.000	.150	.038	.084	.232
4.460	.169	.044	.088	.259

Index of moderated mediation:

	Index	BootSE	BootLLCI	BootULCI
Indulge	.004	.005	-.006	.014

***** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS *****

OUTCOME VARIABLE:

empathy

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	20.247	20.230	.480	19.274	21.151
afterEA	.728	.732	.114	.506	.959
Indulge	.365	.360	.109	.150	.569
Int_1	.020	.019	.023	-.026	.065

OUTCOME VARIABLE:

after_BI

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	13.386	13.385	.921	11.583	15.146
afterEA	.759	.761	.070	.625	.896
empathy	.206	.206	.041	.128	.286
Indulge	.069	.071	.069	-.066	.204
Int_1	-.020	-.020	.015	-.051	.008

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

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: A heteroscedasticity consistent standard error and covariance matrix estimator was used.

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

Indulge afterEA

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

Annex G *Output PROCESS Model 8 - Moderated mediation: conservative*

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.1 *****

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

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

Model : 8

Y : after_BI

X : afterEA

M : empathy

W : Conserva

Sample

Size: 220

OUTCOME VARIABLE:

empathy

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.452	.205	52.787	14.610	3.000	216.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	20.306	.494	41.113	.000	19.332	21.279
afterEA	.785	.120	6.529	.000	.548	1.022
Conserva	-.131	.122	-1.074	.284	-.371	.109
Int_1	-.002	.028	-.064	.949	-.058	.054

Product terms key:

Int_1 : afterEA x Conserva

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

	R2-chng	F(HC4)	df1	df2	p
X*W	.000	.004	1.000	216.000	.949

Focal predict: afterEA (X)

Mod var: Conserva (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Conserva empathy .

BEGIN DATA.

```
-4.633  -4.206  17.185
.000    -4.206  20.856
4.633   -4.206  24.527
```

-4.633	.000	16.670
.000	.000	20.306
4.633	.000	23.941
-4.633	4.206	16.155
.000	4.206	19.755
4.633	4.206	23.355

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH empathy BY Conserva .

OUTCOME VARIABLE:

after_BI

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.754	.569	16.076	92.871	4.000	215.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	13.207	.906	14.581	.000	11.421	14.992
afterEA	.762	.073	10.474	.000	.619	.905
empathy	.212	.040	5.317	.000	.134	.291
Conserva	-.021	.063	-.331	.741	-.145	.103
Int_1	.000	.013	.010	.992	-.026	.026

Product terms key:

Int_1 : afterEA x Conserva

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

R2-chng	F(HC4)	df1	df2	p
----------------	---------------	------------	------------	----------

X*W .000 .000 1.000 215.000 .992

Focal predict: afterEA (X)

Mod var: Conserva (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Conserva after_BI .

BEGIN DATA.

-4.633	-4.206	14.078
.000	-4.206	17.605
4.633	-4.206	21.133
-4.633	.000	13.988
.000	.000	17.518
4.633	.000	21.048
-4.633	4.206	13.898
.000	4.206	17.431
4.633	4.206	20.963

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH after_BI BY Conserva .

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

Conditional direct effect(s) of X on Y:

Conserva	Effect	se(HC4)	t	p	LLCI	ULCI
-4.206	.761	.088	8.680	.000	.588	.934
.000	.762	.073	10.474	.000	.619	.905
4.206	.762	.095	8.039	.000	.576	.949

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

afterEA -> empathy -> after_BI

Conserva	Effect	BootSE	BootLLCI	BootULCI
-4.206	.168	.047	.087	.274
.000	.167	.040	.096	.253
4.206	.165	.047	.081	.267

Index of moderated mediation:

	Index	BootSE	BootLLCI	BootULCI
Conserva	.000	.006	-.013	.011

***** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS *****

OUTCOME VARIABLE:

empathy

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	20.306	20.284	.488	19.325	21.239
afterEA	.785	.785	.117	.552	1.016
Conserva	-.131	-.128	.122	-.364	.112
Int_1	-.002	-.003	.027	-.061	.049

OUTCOME VARIABLE:

after_BI

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	13.207	13.198	.872	11.448	14.887
afterEA	.762	.763	.071	.619	.897
empathy	.212	.213	.039	.137	.289
Conserva	-.021	-.017	.063	-.136	.108
Int_1	.000	.000	.013	-.027	.023

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

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: A heteroscedasticity consistent standard error and covariance matrix estimator was used.

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

Conserva afterEA

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

Annex H *Output PROCESS Model 8 - Moderated mediation: social-foodie*

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.1 *****

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

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

Model : 8

Y : after_BI

X : afterEA

M : empathy

W : Soc_Food

Sample

Size: 220

OUTCOME VARIABLE:

empathy

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.475	.225	51.424	18.091	3.000	216.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	20.298	.497	40.876	.000	19.319	21.277
afterEA	.760	.118	6.454	.000	.528	.992
Soc_Food	.389	.176	2.208	.028	.042	.736
Int_1	.006	.037	.174	.862	-.067	.080

Product terms key:

Int_1 : afterEA x Soc_Food

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

	R2-chng	F(HC4)	df1	df2	p
X*W	.000	.030	1.000	216.000	.862

Focal predict: afterEA (X)

Mod var: Soc_Food (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Soc_Food empathy .

BEGIN DATA.

-4.633	-3.289	15.596
.000	-3.289	19.020
4.633	-3.289	22.443
-4.633	.000	16.776
.000	.000	20.298
4.633	.000	23.820
-4.633	3.289	17.956
.000	3.289	21.576
4.633	3.289	25.196

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH empathy BY Soc_Food .

OUTCOME VARIABLE:

after_BI

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.755	.570	16.059	91.914	4.000	215.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	13.113	.937	13.991	.000	11.266	14.961
afterEA	.761	.074	10.349	.000	.616	.906
empathy	.217	.042	5.215	.000	.135	.299
Soc_Food	-.046	.088	-.526	.599	-.219	.127
Int_1	-.003	.016	-.157	.875	-.035	.030

Product terms key:

Int_1 : afterEA x Soc_Food

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

	R2-chng	F(HC4)	df1	df2	p
X*W	.000	.025	1.000	215.000	.875

Focal predict: afterEA (X)

Mod var: Soc_Food (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Soc_Food after_BI .

BEGIN DATA.

-4.633 -3.289 14.109

.000 -3.289 17.672

4.633	-3.289	21.236
-4.633	.000	13.996
.000	.000	17.521
4.633	.000	21.045
-4.633	3.289	13.884
.000	3.289	17.369
4.633	3.289	20.855

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH after_BI BY Soc_Food .

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

Conditional direct effect(s) of X on Y:

Soc_Food	Effect	se(HC4)	t	p	LLCI	ULCI
-3.289	.769	.089	8.605	.000	.593	.945
.000	.761	.074	10.349	.000	.616	.906
3.289	.752	.093	8.088	.000	.569	.936

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

afterEA -> empathy -> after_BI

Soc_Food	Effect	BootSE	BootLLCI	BootULCI
-3.289	.160	.046	.075	.253
.000	.165	.040	.093	.247
3.289	.170	.047	.087	.271

Index of moderated mediation:

Index	BootSE	BootLLCI	BootULCI
-------	--------	----------	----------

Soc_Food	.001	.007	-.012	.018
-----------------	------	------	-------	------

***** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS *****

OUTCOME VARIABLE:

empathy

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	20.298	20.305	.489	19.328	21.274
afterEA	.760	.759	.109	.545	.972
Soc_Food	.389	.377	.162	.049	.686
Int_1	.006	.009	.034	-.052	.080

OUTCOME VARIABLE:

after_BI

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	13.113	13.129	.941	11.298	14.957
afterEA	.761	.762	.072	.613	.897
empathy	.217	.217	.041	.135	.299
Soc_Food	-.046	-.052	.081	-.220	.095
Int_1	-.003	-.003	.015	-.033	.027

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

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
5000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: A heteroscedasticity consistent standard error and covariance matrix estimator was used.

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

Soc_Food afterEA

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

Annex I *Output PROCESS Model 8 - Moderated mediation: culture adventurous*

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.1 *****

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

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

Model : 8

Y : after_BI

X : afterEA

M : empathy

W : Culture

Sample

Size: 220

OUTCOME VARIABLE:

empathy

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.469	.220	51.785	20.170	3.000	216.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	20.281	.488	41.530	.000	19.319	21.244
afterEA	.825	.112	7.378	.000	.605	1.046
Culture	.247	.135	1.832	.068	-.019	.513
Int_1	-.046	.033	-1.418	.158	-.111	.018

Product terms key:

Int_1 : afterEA x Culture

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

	R2-chng	F(HC4)	df1	df2	p
X*W	.008	2.010	1.000	216.000	.158

Focal predict: afterEA (X)

Mod var: Culture (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Culture empathy .

BEGIN DATA.

-4.633	-3.727	14.735
.000	-3.727	19.361
4.633	-3.727	23.986
-4.633	.000	16.457
.000	.000	20.281
4.633	.000	24.105
-4.633	3.727	18.178
.000	3.727	21.201
4.633	3.727	24.224

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH empathy BY Culture .

OUTCOME VARIABLE:

after_BI

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.755	.570	16.037	94.306	4.000	215.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	13.278	.938	14.152	.000	11.429	15.128
afterEA	.774	.072	10.782	.000	.632	.915
empathy	.209	.041	5.062	.000	.127	.290
Culture	.043	.072	.597	.551	-.099	.185
Int_1	-.010	.017	-.591	.555	-.044	.024

Product terms key:

Int_1 : afterEA x Culture

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

	R2-chng	F(HC4)	df1	df2	p
X*W	.001	.349	1.000	215.000	.555

Focal predict: afterEA (X)

Mod var: Culture (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Culture after_BI .

BEGIN DATA.

-4.633	-3.727	13.594
.000	-3.727	17.353
4.633	-3.727	21.111
-4.633	.000	13.929
.000	.000	17.513
4.633	.000	21.098
-4.633	3.727	14.263
.000	3.727	17.674
4.633	3.727	21.084

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH after_BI BY Culture .

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

Conditional direct effect(s) of X on Y:

Culture	Effect	se(HC4)	t	p	LLCI	ULCI
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-3.727	.811	.091	8.910	.000	.632	.991
.000	.774	.072	10.782	.000	.632	.915
3.727	.736	.100	7.326	.000	.538	.934

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

afterEA -> empathy -> after_BI

Culture	Effect	BootSE	BootLLCI	BootULCI
-3.727	.208	.056	.108	.328
.000	.172	.042	.098	.262
3.727	.136	.041	.068	.231

Index of moderated mediation:

	Index	BootSE	BootLLCI	BootULCI
Culture	-.010	.007	-.024	.003

***** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS *****

OUTCOME VARIABLE:

empathy

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	20.281	20.269	.484	19.329	21.208
afterEA	.825	.826	.109	.608	1.039
Culture	.247	.235	.128	-.022	.483
Int_1	-.046	-.045	.031	-.104	.016

OUTCOME VARIABLE:

after_BI

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	13.278	13.280	.917	11.445	15.020
afterEA	.774	.772	.071	.627	.908
empathy	.209	.208	.041	.131	.288
Culture	.043	.041	.070	-.097	.175
Int_1	-.010	-.009	.016	-.041	.023

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

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: A heteroscedasticity consistent standard error and covariance matrix estimator was used.

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

Culture afterEA

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

Annex J *Output PROCESS Model 8 - Moderated mediation: sports*

Run MATRIX procedure:

***** PROCESS Procedure for SPSS Version 4.1 *****

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

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

Model : 8

Y : after_BI

X : afterEA

M : empathy

W : Sports

Sample

Size: 220

OUTCOME VARIABLE:

empathy

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.458	.210	52.441	14.963	3.000	216.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	20.274	.497	40.823	.000	19.295	21.253
afterEA	.774	.124	6.267	.000	.531	1.017
Sports	.168	.146	1.153	.250	-.119	.455
Int_1	.035	.032	1.087	.278	-.028	.097

Product terms key:

Int_1 : afterEA x Sports

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

	R2-chng	F(HC4)	df1	df2	p
X*W	.005	1.182	1.000	216.000	.278

Focal predict: afterEA (X)

Mod var: Sports (W)

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Sports empathy .

BEGIN DATA.

-4.633 -3.462 16.661

.000 -3.462 19.693

4.633 -3.462 22.725

-4.633 .000 16.688

.000 .000 20.274

4.633 .000 23.860

-4.633 3.462 16.716

.000 3.462 20.856

4.633 3.462 24.995

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH empathy BY Sports .

OUTCOME VARIABLE:

after_BI

Model Summary

R	R-sq	MSE	F(HC4)	df1	df2	p
.758	.574	15.889	95.869	4.000	215.000	.000

Model

	coeff	se(HC4)	t	p	LLCI	ULCI
constant	13.113	.926	14.164	.000	11.289	14.938
afterEA	.757	.071	10.597	.000	.616	.898
empathy	.218	.041	5.351	.000	.138	.298
Sports	-.004	.073	-.059	.953	-.149	.140
Int_1	-.026	.014	-1.899	.059	-.053	.001

Product terms key:

Int_1 : afterEA x Sports

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

	R2-chng	F(HC4)	df1	df2	p
X*W	.005	3.607	1.000	215.000	.059

Focal predict: afterEA (X)

Mod var: Sports (W)

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

Sports	Effect	se(HC4)	t	p	LLCI	ULCI
-3.462	.847	.078	10.929	.000	.695	1.000
.000	.757	.071	10.597	.000	.616	.898
3.462	.667	.093	7.146	.000	.483	.851

There are no statistical significance transition points within the observed range of the moderator found using the Johnson-Neyman method.

Conditional effect of focal predictor at values of the moderator:

Sports	Effect	se(HC4)	t	p	LLCI	ULCI
-5.936	.912	.097	9.393	.000	.721	1.103
-5.365	.897	.092	9.769	.000	.716	1.078
-4.794	.882	.087	10.144	.000	.711	1.054
-4.222	.867	.083	10.505	.000	.705	1.030
-3.651	.852	.079	10.832	.000	.697	1.007
-3.079	.838	.075	11.102	.000	.689	.986
-2.508	.823	.073	11.286	.000	.679	.966
-1.936	.808	.071	11.358	.000	.668	.948
-1.365	.793	.070	11.297	.000	.655	.931
-.794	.778	.070	11.095	.000	.640	.916
-.222	.763	.071	10.760	.000	.623	.903
.349	.748	.073	10.310	.000	.605	.891
.921	.733	.075	9.777	.000	.585	.881
1.492	.718	.078	9.192	.000	.564	.872
2.064	.703	.082	8.586	.000	.542	.865
2.635	.689	.086	7.983	.000	.519	.859
3.206	.674	.091	7.398	.000	.494	.853
3.778	.659	.096	6.844	.000	.469	.849
4.349	.644	.102	6.325	.000	.443	.845
4.921	.629	.108	5.845	.000	.417	.841
5.492	.614	.114	5.402	.000	.390	.838
6.064	.599	.120	4.995	.000	.363	.836

Data for visualizing the conditional effect of the focal predictor:

Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/

afterEA Sports after_BI .

BEGIN DATA.

-4.633	-3.462	13.630
.000	-3.462	17.556
4.633	-3.462	21.482
-4.633	.000	14.033
.000	.000	17.541
4.633	.000	21.049
-4.633	3.462	14.436
.000	3.462	17.526
4.633	3.462	20.616

END DATA.

GRAPH/SCATTERPLOT=

afterEA WITH after_BI BY Sports .

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

Conditional direct effect(s) of X on Y:

Sports	Effect	se(HC4)	t	p	LLCI	ULCI
-3.462	.847	.078	10.929	.000	.695	1.000
.000	.757	.071	10.597	.000	.616	.898
3.462	.667	.093	7.146	.000	.483	.851

Conditional indirect effects of X on Y:

INDIRECT EFFECT:

afterEA -> empathy -> after_BI

Sports	Effect	BootSE	BootLLCI	BootULCI
-3.462	.143	.045	.065	.239

.000	.169	.041	.095	.258
3.462	.195	.050	.104	.300

Index of moderated mediation:

	Index	BootSE	BootLLCI	BootULCI
Sports	.008	.007	-.006	.021

***** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS *****

OUTCOME VARIABLE:

empathy

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	20.274	20.276	.492	19.320	21.236
afterEA	.774	.771	.118	.537	.998
Sports	.168	.173	.143	-.107	.458
Int_1	.035	.034	.030	-.027	.093

OUTCOME VARIABLE:

after_BI

	Coeff	BootMean	BootSE	BootLLCI	BootULCI
constant	13.113	13.117	.935	11.257	14.898
afterEA	.757	.754	.072	.611	.892
empathy	.218	.218	.041	.138	.299
Sports	-.004	-.002	.073	-.148	.140
Int_1	-.026	-.026	.014	-.053	.002

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

Level of confidence for all confidence intervals in output:

95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:

5000

W values in conditional tables are the mean and +/- SD from the mean.

NOTE: A heteroscedasticity consistent standard error and covariance matrix estimator was used.

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

Sports afterEA

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