



DESIGNING THE SENSORY TOURIST EXPERIENCE: SPICE BAZAAR

CEYDA TELEK ALTIPARMAKOĞULLARI

Thesis for the Ph.D. Program in Design Studies

Graduate School
Izmir University of Economics
İzmir
2023

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CEYDA TELEK ALTIPARMAKOĞULLARI

THESIS ADVISOR: PROF. DR. DENİZ HASIRCI

A Ph.D. Thesis

Submitted to

The Graduate School of Izmir University of Economics

The Department of Design Studies

İzmir

2023

ETHICAL DECLARATION

I hereby declare that I am the sole author of this thesis and that I have conducted my work in accordance with academic rules and ethical behaviour at every stage from the planning of the thesis to its defence. I confirm that I have cited all ideas, information and findings that are not specific to my study, as required by the code of ethical behaviour, and that all statements not cited are my own.

Name, Surname:

CEYDA TELEK ALTIPARMAKOĞULLARI

Date:

23.10.2023

Signature:

ABSTRACT

DESIGNING THE TOURIST EXPERIENCE: SPICE BAZAAR

Telek Altıparmakogulları, Ceyda

Ph.D. Program in Design Studies

Advisor: Prof. Dr. Deniz Hasırcı

October, 2023

Research has shown that multi-sensorial experiences have a major impact on preference of the tourists' shopping experience and shopping, touristic atmosphere. Tourists constitute an important consumer group in the total Turkish market. Previous studies on tourism show that, the five senses enhance effective communication-based experience and touristic experience strategies that are important to improve the objectives and performance of tourism organizations by designing the right atmosphere. The aim of the study is to understand the sensory experience through a touristic exemplary atmosphere such as, Spice Bazaar in Istanbul, Turkey, and to create a sensory mapping. It is planned to understand the experience through the well-known example of Spice Bazaar and to create a sensory map of this experience. The dissertation aims to contribute to the discipline of interior design and window display design areas by exploring how touristic atmosphere is perceived through the five senses. The objective of this study is to describe the tourist experience and tourist

preference in terms of sensorial experience, and thus the study is planned to give the new insights for the design of the touristic atmosphere in creating new touristic environments. It is predicted that an understanding of how design disciplines interact will be achieved regarding touristic experience and touristic atmosphere through research of sensory experiences.

Keywords: Sensory Experience, Tourist Experiences, Touristic Atmosphere, Sensory Map, Spice Bazaar



ÖZET

DUYUSAL TURİST DENEYİMİ TASARIMI: MISIR ÇARŞISI

Telek Altıparmakogulları, Ceyda

Tasarım Çalışmaları Doktora Programı

Tez Danışmanı: Prof. Dr. Deniz Hasırcı

Ekim, 2023

Duyusal deneyim çalışmaları turistlerin yaşamış oldukları deneyimlerinde duyuların önemli bir etkiye sahip olduğunu ortaya koymuştur. Turizm sektörü ülke ekonomisi açısından önemli bir yere sahiptir. Turizm ile ilgili yapılan çalışmalar, beş duyunun etkileşim tabanlı deneyim ve turistik deneyim stratejileri geliştirmek için önemini ortaya koymaktadır. Bunun için doğru atmosferi tasarlamak ve geliştirmek oldukça önemlidir. Tezin amacı, Mısır Çarşısı gibi turistik bir örnek atmosfer üzerinden duyusal deneyimi anlamak ve bu deneyimin duyusal bir haritasını oluşturmak hedeflenmiştir. Çalışma, turistik atmosferin beş duyu ile nasıl algılandığını keşfederek tasarım disiplini katkıda bulunmayı amaçlamaktadır. Ayrıca bu kapsamda turist deneyimini ve turist tercihinin duyusal deneyim yönlerini keşfedilmesi ile turistik atmosferler ve çevrelerine yönelik tasarım ve iyileştirme çalışmalarına yönelik yeni öngörülerin ortaya çıkarılması planlanmıştır. Turistik deneyim ve turistik atmosferde tasarım disiplinlerinin nasıl etkileşim kurduğunun duyusal deneyimlerin araştırılmasıyla farkındalığın sağlanacağı öngörülmektedir.

Anahtar Kelimeler: Duyusal Deneyim, Turist Deneyimi, Turistik Atmosfer, Duyusal Haritalama, Mısır arşısı





This dissertation is dedicated to my father...

ACKNOWLEDGEMENT

First off, I would like to give my deepest gratitude to my supervisor Prof. Dr. Deniz Hasırcı, for always believing in me throughout the entire process, and for giving me encouragement during difficult times. I am very thankful for the guidance and support she has provided me. Her constructive feedback and insightful advice have been invaluable to my research.

I greatly appreciate the support received through the collaborative work undertaken with Assoc. Prof. Dr. Mine Ovacık and Asst. Prof. Dr. Can Özcan. Many thanks for their insightful discussions that provided support during my research and also their patience during the dissertation.

I would also like to express my gratitude to the other members of the defense committee for their valuable contributions, Prof. Dr. Murat Bengisu and Assoc. Prof. Dr. Selami Çifter, for their valuable time, insights, and comments.

As well, I would like to say thank you to the participants as well as the administration of the Spice Bazaar for sparing me their valuable time and participating in my dissertation.

Yener for his deep appreciation and supporting me unconditionally during the most difficult days of my life. Additionally, I wish to express my deepest gratitude to my mother, sister, and aunt for their continued support and encouragement.

My lovely father, who gave me the opportunity to receive my Ph.D. I am sure that you are watching over me. This dissertation is for you...

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CHAPTER 1: INTRODUCTION

Touristic environments are where intercultural interaction is experienced most intensely, and it is also important both in terms of economy and reflecting the characteristics of the region. The touristic atmosphere is the place where people perceive and experience design features sensually. This atmospheric environment and tourists' experiences are closely related to sensory experiences. Sensorial experiences enable us to perceive an atmosphere, a product or experience the process in terms of our five senses. Which sensorial experiences are hegemonic in terms of process in terms of which agents affect these sensory and tourist experiences is one of the topics investigated in this thesis.

Some places that are deserted and lonely, for instance, Barcelona's El district, or a touristic area such as Hoxton in London or Castlefield in Manchester. The perceptions of atmosphere in these areas matched the sensory experiences and the literature on urban development, and the changes in the importance of sensory dimensions in defining atmospheric experience were observed to a large extent (Degen, 2008). For instance, Degen and Rose (2012)'s work is used as a socio-spatial management tool to make a city center or tourist atmosphere design a new experiential strategy. Milton Keynes demonstrates how the region and its atmosphere can be enriched by sensory experiences and what directly affects the feeling and atmosphere (Degen and Rose, 2012). Several factors affecting the experience provided in this manner have been identified from research sources. Based on the sources described above, it has been found that some research related to sensory marketing of tourist experiences is deficient, and this study wants to focus on these issues.

World Tourism Organization (WTO, 2001) states that tourism research and development should meet tourist's regional regulations, be sustainable, and protect and develop future opportunities for tourism organizations.

Tourism studies need to protect resources and use them throughout the years and destinations (Liu, 2003). Therefore, tourism can understand and guide tourist's needs and expectations (Akgöz, Göral and Tengilimoğlu, 2016). Avcı and Hassan (2019), determined whether the spatial preferences and spatial experiences of tourists visiting Istanbul's historical peninsula varied according to the demographic characteristics and

location of the tourists. In the first five months of 2017, 613 tourists from multiple nations visited Istanbul's historical peninsula. In the study, it was seen that the most touristic intense spatial preferences in Istanbul were in the region of Çemberlitaş and Grand Bazaar. In the region's preferences, it was observed that visiting special attractiveness, focusing on tangible and visible attractiveness, and choosing a place to stop at breaks were more prominent (Avcı and Hassan, 2019). As a traditional method of documenting a place or space, walking around practices has become an integral part of many academic researchers' approach, including urban scientists, anthropologists, and heritage scholars, in order to observe spatial behavior, cultural activities, and heritage studies (Pink, 2007; Goh, 2014; Wunderlich, 2008).

As part of the thesis will recommend ways for cooperative and local stakeholders to improve their tourism experiences, such as store owners or municipalities. In the thesis, another aim is to improve the suggestions for the cooperative and the local stakeholders like store owners or municipalities to investigate and improve their experiences with the tourists. The reviews, interviews and analyses through the process can support the tourist experience dimensions and also provide valuable information for a tourism experience process.

It is important to consider music, color, smell, and taste affect tourist experience and tourist behavior. Sensory experiences and design and equipment, as well as signs, symbols, and product designs affect the experience of tourism. These factors communicate with style and décor and allow the development of a specific image on the tourist experience (Mossberg, 2007). As seen the study shows that a tourist experience like the one above takes place in Figure 1. It has also been found in studies that generally relate to the experience of tourists. Studies that have been carried out on the tourist experience are mostly focused on rural places like Agapito's study. Agapito (2013) studied tourist experiences in rural areas; he examined the factors affecting vision, hearing, smell, taste and touch human perception, memory and behavior for the segments of tourists suitable for local development. In this context, he explored the role of senses in tourist experiences in rural areas. He has taken a holistic approach to all models of sensory experiences in tourism. From this point it is planned to study a touristic place such as Spice Bazaar, which is a more intense and frequently visited touristic atmosphere which is seen in the studies. When the factors affecting this process are examined, it is wanted to make research on the subjects that are less

studied in the literature. An investigation needs to be made on sensory experience studies on touristic atmosphere and design which are lacking in the literature.

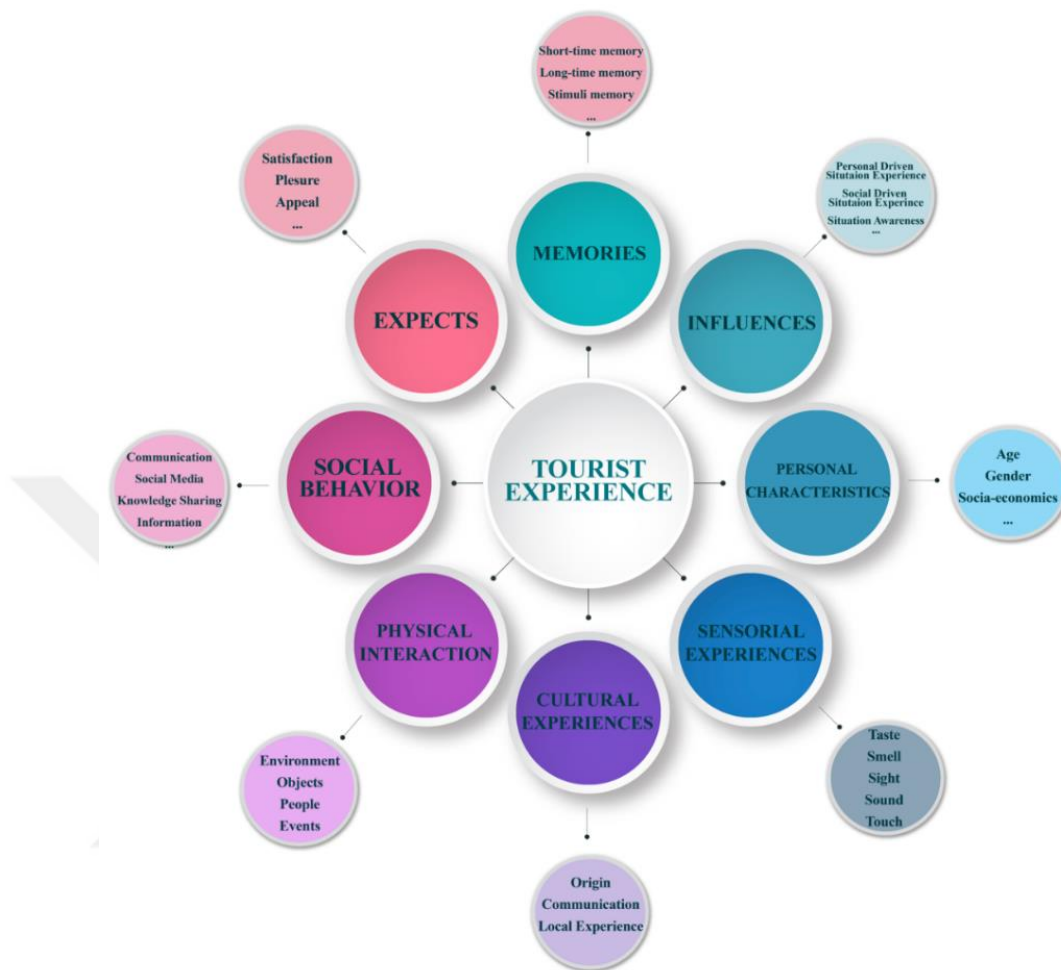


Figure 1. Factors Affecting the Tourist Experience

It has been found that the five senses play a significant role in tourists' experiences, like destinations are mixed products that produce multiple consumption experiences while consumers are considered consumers (Quan and Wang, 2004). Also, one of the important reasons is that knowledge of a place is based on bodily experience, producing multiple sensory experiences. Through discussions of the theoretical foundations, it is evident that the sensory dimension of touristic experience is being conceptualized. The human senses, as a multidisciplinary approach, should investigate all tourists' experiences and perceptions in the touristic environment using qualitative and quantitative methodologies. According to the study, the senses play an important role in designing the tourist experience. This study wants to provided new insights regarding the sensory component of tourism. (Agapito, Mendes and Valle, 2013).

The lack of a holistic approach to the role of the five senses in touristic experiences reveals the need for research and development to develop how the senses interact and function-specific sensory methods (Gretzel et al., 2006). In their research, Pan and Ryan (2009) found sensory shifts in the perception of various places mainly caused by spatial changes. Researchers have shown that by doing different studies in these areas and by preparing different routes within a variety of tourist profiles, multiple senses can be revealed (Loda, Norman and Backman, 2005; Pan and Ryan, 2009; Small, Darcy and Packer, 2012).

With technological advances, human interactions with objects or environment may also change. Especially sensory augmented reality studies conducted within the context of interaction design provide enrichment of experience and predictions about the future of design.

1.1. The Aim of the Thesis

It is the objective of this study to convert the verbal expressions of participants in the multisensory experience of the Spice Bazaar, which has a rich cultural heritage and is among the most popular tourist attractions in Türkiye, into a documentation and to contribute to the heritage of Turkey. As it has been determined that participants' expressions through the multi-sensory modalities of the spice bazaar cannot only be categorised as intangible or only tangible, different methodologies have been used together by categorizing all the expressions of the participants involved in the multi-sensory experience under two main headings, intangible and tangible, in order to ensure authenticity. A sensory modality of sensory experience contributes to cultural identity and provides important findings about culture and heritage. In light of this, it is foreseen that this study, which focuses on a tourist experience, could be applied to multi-sensory areas such as spice bazaar and provide a richer description of sensory experiences. It is believed that the physical experience created by multisensory interaction, along with people's bodily experiences of places, helps to shape the "emotional tone" of an atmosphere, and that the character of a built environment is influenced by the perception of the atmosphere. It is also important to note that the sensory dimensions of a space, including not only the visual, but also the tactile and other senses, and the subjective and compositional components, can be considered dimensions (Pallasmaa, 2016; Hasse, 2016; Böhme 2016, Ekinici and Hosany, 2016;

Cleave and Arku, 2020; Dai and Zheng, 2021). The findings have shown that multiple sensory experiences have a significant place in user perception and atmosphere experiences.

It is important to note that atmospheres are perceived and affect an experience as well as atmospheres refer to something that surrounds the boundary and is soon associated with a familiar sensibility that can be sensually detected, such as smell and the city's climate. Today, it creates basic backgrounds in interior architecture, urban planning, advertising, art, design and also interaction design (Böhme, 2013).

In the field of sensory experience studies, there has been collaboration on touristic places; however, there has not been any study on sensory mapping for touristic places in Turkey. Degen (2008) mentions that some sounds, repetitive sounds or silent sounds. When we get lost in our experience and listen to a part of the environment, the street festival, where the street obtains a certain identity, is caused by various “audible images” or police sirens and beep cars, or filters (Degen, 2008).

Otherwise, sensorial studies change due to cultural place's touristic experiences. In particular, the emergence of sensory experiences arising from cultural interactions in rich cultural atmospheres and tourist interactions with different cultures can be a valuable data source. The sensory map that can be obtained from this information can lead to any improvement or improvement studies on the region or atmosphere to be studied and the sensory experiences depending on the changes of this region over time can reveal a comparable structure. These data can be a reference for augmented reality studies that enrich the experience. Since experiences can vary from time to time, they need to be measured periodically at certain time periods, such as weather, and there is a need for a continuous measurement method.

It is the purpose of this study to realize a sensory mapping study on the example of the covered bazaar, which is one of the densely touristic regions. As well, it may also be used in other touristic or specific environments. This study can be the base for subsequent sensorial studies. The objective of the study is to investigate the sensory tourist experiences and enhance the tourist sensory experiences within the touristic environment. These sensorial experiences are linked with sensorial encodes, insights, views, atmospheric data, interdisciplinary design practices, as well as local stakeholders, municipality, design researchers and designers. From the results of the

study, it suggests that for tourist experience, it is necessary to investigate and enhance a more efficient sensory tourist experience.

Tourist experience encodes that will emerge under an experimental paradigm of the tourist experience with the sensory maps created by the sensory experience encoding that will come out of the examination of the sensory dimension of the tourist experience in the Spice Bazaar. This encodes and stimuli sensory maps can be using this criterion in other touristic places as a criterion.

The thesis explores the tourist experience and sensory aspects of tourists' preferences and reveals new insights into designing and improving touristic atmospheres and their environments, likewise designing the tourist experience for touristic atmospheres. Aside from this, the tourist experience and sensory experience that will be developed with that through can also be used to improve the design of the bazaar, and therefore it is expected that it will be able to contribute to the future design and organization of the bazaar.

Research Question 1:

- How can the stimuli regarding the touristic sensory experience be defined and explored?

Elaboration: When tourists visit Spice Bazaar, which sensory experiences do they encounter? What factors directly contribute to the perception of these sensory experiences by tourists and what are the external forces influencing them?

Research Question 2:

-How can one create a sensory representation of the Spice Bazaar based on the sensory stimuli and the retrospective sensory experience.

Elaboration: An analysis of the sensory experience of a targeted group of participants who visit the bazaar can be gained through interviews and sensory walks involving these participants in order to gain insights into their sensory experience and visually represent the bazaar with their senses. As an example, it could be composed of a series of photographs, a set of verbal expression codes, or an integrated collection of all documents if they can be arranged in a meaningful and coherent manner.

Research Question 3:

-What are the sensory criteria that can be derived from the stimuli and retrospective results, and what is the connection between sensory experience and design?

Elaboration: In order to accomplish this goal, it is intended that an experience scenario based on the possible participant-interaction scenario and sensory design criteria can be developed. This scenario will enable us to understand more clearly how users respond to the product and place based on their actions.

Research Question 4:

- How can sensory experience findings be incorporated into the spice bazaar design and organization?

Elaboration: By understanding the sensory experience codes, designers can create an environment that is appealing to the senses and is relevant to the needs of the visitors. This can be done by using sensory elements such as lighting, texture, sound, and aroma, as well as by creating a variety of spaces with different sensory effects. Sensory elements can be used to create an environment that is engaging and stimulating, as well as to evoke emotions or memories.

According to Figure 2, there are 4 main milestone subjects where the key concepts of working with research questions are clustered. At the intense focus of research questions, it can be said that the study focuses on sensory experiences and sensory maps as outputs of the study, and for these data, the sensory atmosphere of the bazaar and tourist experience is supported by literature.

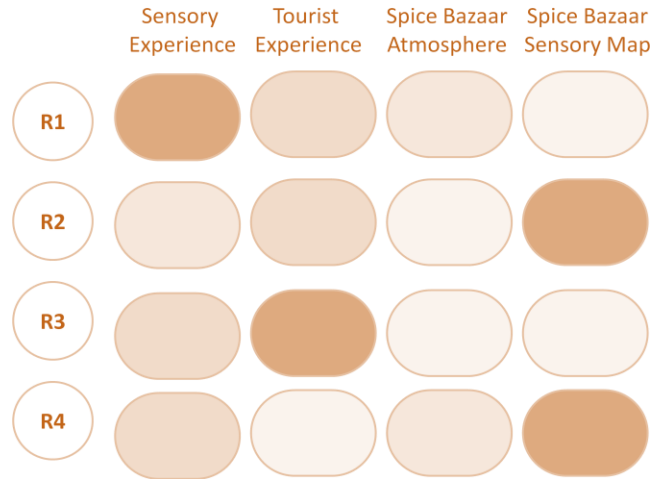


Figure 2. Density Cluster of the Key Concepts with Research Questions

1.2. Structure of the Thesis

As part of the study planned with the participation of tourists for the first time visiting the Spice Bazaar, it was the intention of the researchers to study in depth all stimuli and retrospective sensory experiences of tourists regarding this touristic atmosphere and to develop an experience map of the bazaar based on these findings. By understanding the stimuli and retrospective experiences that tourists have when visiting the Spice Bazaar, researchers will be able to develop a better understanding of how to create a more positive and memorable experience for tourists. This understanding can then be used to guide the development of design strategies and touristic activities to increase visitor numbers and improve the overall experience. Thus, can be revealed how a hegemonic tourist experience can be provided for local stakeholders in line with the opinions derived from these results. At the same time, based on this result, certain sensory experiences such as improving this atmosphere and eliminating design deficiencies can be achieved through a sensory map that will be created by researching the most effective sensory experiences and the most ineffective sensory experiences. With these investigate wants to be made qualitatively, the sensory experience criteria of the tourists will be encoded and will form the basis of the sensory map study to be created. The aim of the interview questions to be created to capture and encode these tourist sensory experience criteria, first general questions are planned to be asked to capture the most effective sensory experiences, namely the most memorable experiences, and then it is aimed to reveal data about the experiences

of the five senses. One of the effective factors for the selection of the Spice Bazaar at this point is that one of the places that receives the most touristic visits throughout the year and has a very rich data in terms of sensory experience.

These objectives of this experience research design are to determine to understand in-process interaction and sensory experiences in order to enhance and enrich through design, the tourist experience of visitors. The interview part of the method can be divided into two main parts at this stage. In the first part, the purpose of the touristic visits can be cultural and demographic information. In the second part, it is planned to focus entirely on visitors' sensory experiences.

One of the main issues in the research focuses on revealing a sensory map of the Spice Bazaar with the user experience codes that are an output of the study. It is aimed at revealing the transformation of sensory maps by examining the experiences of tourists' experiences, especially in the context of spatial and semantic memory. In this way, the sensory codes created by the tourists in Spice Bazaar can be revealed.

Scenario 1: For the field work, several destinations can be determined in the Spice Bazaar, so that the difference created by different stimuli inputs in the codes will be visible in the sensory map. In order to gain a deeper understanding of subjective experiences, first experiences and other sensory experiences will be studied in depth by thematic analysis. In other words, it can be understood how a change in stimuli results in stimuli input here creates a change on the Spice Bazaar sensory map.

Scenario 2: The experiences of newly arrived tourists in the Spice Bazaar and tourist leaving that leaving the bazaar can be compared with those sensory experiences left in mind and the difference created by this change on the sensory map can be observed.

A synthesis of the theoretical foundation of the research is to be discussed through the experiences of tourists in the first part of the thesis. The conceptualization of tourist experiences in terms of sensory dimension can be found in Figure 3. The research will highlight the implications of the study after discussing the theoretical foundation and the tourists' experiences. Based on the sensory experience of tourists, the results of the research will be discussed.

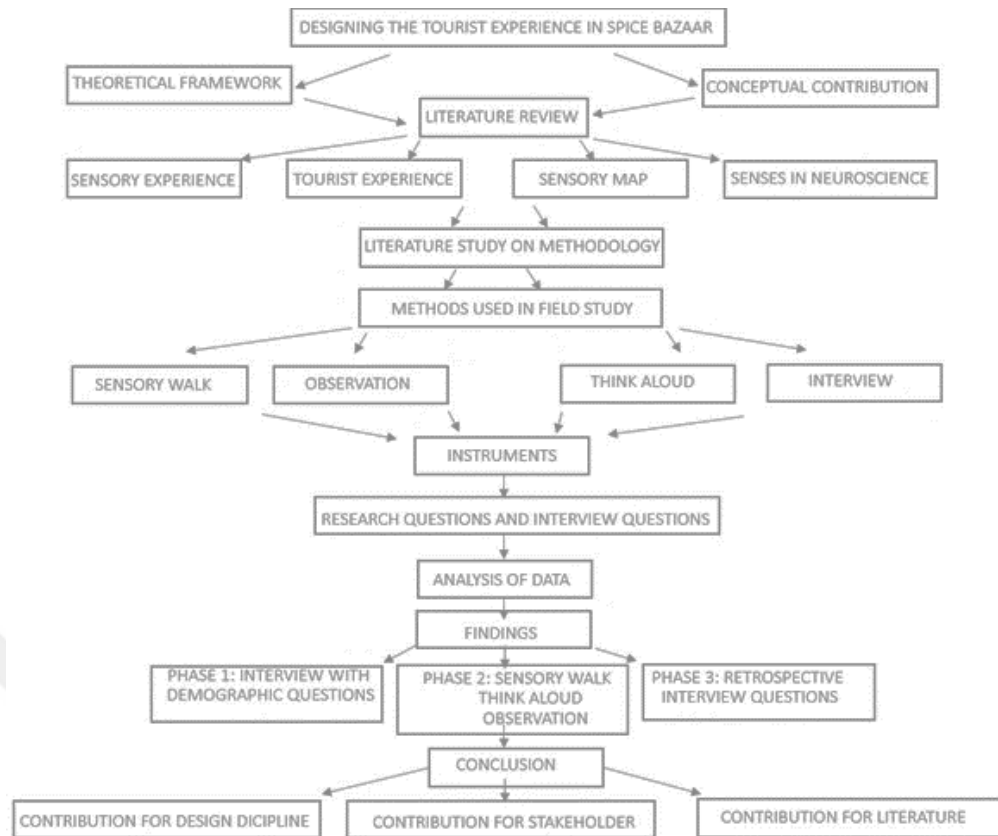


Figure 3. Structure of the Thesis

Finally, the conclusion of the research will be discussed. The second part will be thematicization of sensory criteria with the phenomenological reduction method. This reduction method will be obtained from the participants in terms of their five senses experiences. The phenomenological reduction method describes a method of phenomenology based on the notion of phenomena and experiences as the focus of the study. This method involves gathering data from many people who have had a similar experience to define a phenomenon based on those experiences. There is one major limitation to conducting a phenomenological study such as this one, and that is that the process can take a significant amount of time and be labor intensive (Moustakas, 1994; Creswell, 2014; Janesick, 2011; Miles, Huberman and Saldana, 2014; Patton 2002; Palmer, 2023).

The third part aims to create a conceptual framework for examining the suitability of the planned research and support its suitability. In the fourth stage, findings and discussion will be made. Sensorial experiences and sensory-themed tourist experiences perceived by tourists. In the Spice Bazaar or the selected touristic area, it is purposed to ask the sensory investigated based on sensory experiences.

1.3. Theoretical Framework

Mehrabian and Russell (1974) model suggests that behaviour's dimensions and levels should be taken into consideration besides Mehrabian and Russell (1974) found the three factor (pleasure, arousal, dominance) The Mehrabian Russell Affect Model argue that, which happiness, wish or desire from the atmosphere or environment human gets, it is directly related with stimuli. This approach, suggests that desires or wishes are directly connected with interaction and experience with the atmosphere or environment. In fact, that Mehrabian and Russell (1974) which are environmental psychologists identified that pleasure is entirely covered by the positive or negative senses they developed as a theoretical model on atmosphere and shopping behavior. This theory is used be use to define environmental experiences which user experience, as well as it is the method of environmental psychology. They use three emotional dimensions' pleasure, arousal and dominance to describe human perceptions of physical environments. Mehrabian and Russell (1974) compared the three dimensions' pleasure, arousal and dominance with the three factors evaluation, activity and potency developed by Osgood et al. (1957) whereas both triads show some similarities, some dissimilarities come to the fore as well (Osgood et al., 1957; Russell and Mehrabian, 1974; Baker, Levy and Grewal, 1992; Gifford, 2001; Chebat and Michon, 2003; Bakker et al. 2014; Walter et al., 2011). Puccinelli et al. (2009) mentions that, user behavior and user decision studies have been done Since 1900s. The studies that based on the user behavior and user psychology shows that, behavior of the users' attitudes are specific summaries of an element and its power (Schwarz and Bohner 2001). Fishbein and Ajzen (1975) state that user behavior is predictable, so they suggest that instead of observing user behavior and decisions, experimental studies on experience studies (Puccinelli et al. 2009).

Holbrook and Hirschmann (1982) had been one of the first writer and researcher that investigate experience decisions of users. Andrews et al. (2012)'s study embarked that Holbrook and Hirschmann (1982) gives the multi-dimensional conceptualisation of experience forms of the user. Users' perceptual defines may occur from the symbolic meanings, hedonic feelings or from social interactions from its surroundings (Andrews et al. 2012). Additionally, Nagasawa and Otsu (2015) states that Holbrook and Hirschmann found out the Subjective experiential consumption theory which argues

that other studies cannot take into account user's experience totally. He states that, experience and behaviour are quite important and also individual experience and thinks represent individual experience (Nagasawa and Otsu, 2015).

Berry, Leonard, Zeithaml and Leonard (1985) defines SERVQUAL approach that is based on the attitude and behavior in a specific way, which is an important contribution to the retailing and related to the stores. SERVQUAL model suggests providing an overall assessment of the quality of their experience and suggests a pattern of attitude or behavior of the user while in the retailer store. With these studies, it is observed that to users 'duration of the users' stays in the store, their thoughts and attitudes towards the store, and the longer-lasting relationships of the customer store where they are more loyal customers (Berry, Leonard, Parasuraman and Zeithaml, 1985; Meyer, 2007; Puccinelli et al. 2009).

Verhoef et al. (2009) argue that for SERVQUAL model has limited extents because of that to understand the limits of the user and understand the user experience strictly, should measure with a broader and more holistic conceptualization (Verhoef et al. 2009; Maklan, Klaus 2018). Maklan, Klaus (2018) also states that SERVQUAL method of conceptual, methodological, and dimensional validity today's concept of experience should be built to review numerous debates. SERVQUAL model suggests rather than the user experience it focuses on the general user evaluation and user process interaction (Mangold and Babakus 1991; Brand, Cronin and Routledge 1998; Richard and Allaway 1993). Verhoef et al. (2009)'s study attempts to show that SERVQUAL has limits to catch the user experience with all dimensions, so lack of this dimension should be aware of to focus user experience the other dimensions. This article argues that a broader and more holistic conceptualization and the involvement of the cognitive part of the user experience at different levels (rational, emotional, sensory, physical and spiritual) experience should be added to the research (Verhoef et al. 2009).

One of the most significant current studies belongs to Ogilvy (1988), she defines, user decisions mostly affected from the environmental factors that can be like an advertisement or a memory from the social life. The aim of this study was to evaluate and validate the user experience, the atmospheric and environmental effects should be considered during the process. The importance of using this information with correct analysis includes values that will help companies or atmospheres to be differentiated

by the user and to experience more positive user experience process (Ogilvy, 1988).

Nagasawa, Otsu (2015)'s research has tended to discuss on Ogilvy (1988) and Holbrook and Hirschmann (1982) models. Ogilvy argues that experiences are determined by their subjectivity. Ogilvy point out the environmental factors and individual factors are the important factors that directly affect the user experience. Environmental factors contain many contexts and also it is not limited with user individual experience. Ogilvy's argument relies too heavily on analysis of individual experiences, that experiences occur in a variety of situations, namely situations that surround and directly experience users. In 1997, Oliver, Rust and Varki published a paper in which they described and tested ORV complementary model for the user behavioral basis of user satisfaction. Another important finding was that used a structural equation modeling approach is used for ORV model and tested on two different groups of consumers. First group was wild life theme park visitors of 90 examples and second group was who bought 104 single tickets at the symphony concert. The most obvious finding to emerge from this study is that the hypotheses that pleasure and user behavior are directly affected by positive affect and arousal is supported from the environmental factors (Ogilvy, 1988; Nagasawa and Otsu, 2015).

Schmitt's analysis (SEMs) has been criticised by a number of writers. Nagasawa and Otsu (2015) for instance, points out that user's physiological and psychological activities as well as user behavior. Most studies in that field focussed situational demands and short-term memory subjects which based on user behavior prediction and memory- related behavior prediction. Following these studies can lead to content and context has an important role in user behavior, especially in the store atmosphere. The key aspects of the most studied areas are contextual atmospheric studies (Bitner 1992). One of the current discussions have done in store atmospherics by Low and Lichtenstein (1993), revealed that the relationship between the context and the store atmosphere positively affects the user's attitude (Schmitt, 1999; Low and Lichtenstein, 1993; Arnold et al., 2005; Puccinelli et al. 2009). Further research investigated from Schmitt (1999), he influenced from Holbrook and Hirschmann (1982)'s study; he dealt with user experiences, a marketing strategy that emphasizes the consumer. Schmitt (1999) describes the user experiences, and stated that a feature of the experiences is a special and individual situation (personal, subjective). Schmitt was apparently argued that experiences could be classified, that is, they could be categorized into different

categories depending on their structure. It is necessary to clarify exactly what is meant by Schmitt (1999); he has divided experience into five strategic experiential modules (SEM). These are SENSE (sensory experiences), FEEL (emotional experiences), THINK (cognitive experiences), ACT (behavioral experiences), and RELATED (relational experiences) (Schmitt, 1999; Nagasawa and Otsu, 2015).

So far according to this new model as reflected in Figure 4, which is also analyzed in terms of behavioral science, it is argued that behavior and experience can be classified in two categories, overt and covert. First, overt behavior is (observable behavior, e.g. speech, expression, lines of sight and physical movements) and covert behavior (unobservable behavior in the body and in the mind such as consciousness, perception, recognition, memory, image, thoughts, emotions and attitudes). Schmitt (1999) attempt that both overt and covert behavior constitute components of the user's individual experience (Schmitt, 1999; Sasaki and Mishima, 2001; Nagasawa and Someya, 2007; Higuchi and Morioka, 2008; Nagasawa and Ishikawa, 2010; Nagasawa 2016; Nagasawa and Otsu, 2015). Schmitt calls "cognitive consistency" because they follow a stylistic and thematic order, so that our brains process similarities between the various stimuli (Moore and Wilson, 2002).

Module	Contents of Customer Experience
SENSE	<i>Sensory experience value</i> that appeals to the five senses
FEEL	<i>Emotional experience value</i> that appeals to feelings and moods
THINK	<i>Intellectual experience value</i> that appeals to creativity and cognitive functions
ACT	<i>Behavioral experience value</i> that appeals to physical behavior and lifestyle
RELATE	<i>Relative experience value</i> that appeals to confirmative groups and cultural groups

Figure 4. Strategic Experiential Modules (SEMs) (Source: Schmitt, 1999)

Technological changes, competitive environment has become quite different and we can say that it was difficult. Prior studies that have shown the importance of it is possible to see many efforts and efforts in the strategies of companies to reach users. More experiential and deep behavioral interactions with the user can turn into unforgettable experiences for users. The results of the studies and researches reveal the importance of experiential user interaction and sensory experiences. Schmitt's studies major points are about 5 important experiential steps in his theory. Sense:

about how there is an emotional communication between the user and the product. Feel: the user's physical understanding of the products or the environment. Think: the process of interaction between the product and the user. Act: after the thinking phase, it can be said that the user should act, make their choices. Relate: In this last stage, the user associates the product or environment with the process before or after.

While a variety of studies indicate that experience is a long and effective process and an exhaustive process that should be evaluated from many aspects. In 2000, Barry and coworkers demonstrated Q Methodology, it is maintenance is the research design to examine individual users' subjective experiences and decisions; afterwards collection that meanings and experience on the collective level (Barry and Proops, 2000; Andrews et al. 2012).

Fernández and Bonillo (2007) states in their study, user or consumer decisions have multiple directions and it is like multiple a structure (Fernández and Bonillo, 2007). The theory of consumptionvalue also the way of that user's option decision in terms of five elements: functional, social, emotional, conditional and epistemic. This theory is based on especially user's decision on purchasing products while using which criteria.

The past decades have seen the rapid development and new researches interest in, when looked recent researches in experience and user behavior, it can be seen see more evaluation and less use of behavior predictions (Schwarz and Bohner, 2001). "The early summation approach" (Fishbein and Ajzen 1975) took its place "an assessment-based model" that describes attitudes as assessments. Hence, the validity of the attitude-behavior link between consumer scenarios is questioned in the current studies (Puccinelli et al., 2009). Recently, researches reveal that reading customers' non-verbal cues enables stakeholders to identify and respond to user needs (Puccinelli, 2008).

It is necessary to here to clarify experience means what, experience is very multidirectional concept for instance; experience can be psychological, physical, sensorial or spiritual. Experiential products and services seem to be in a vast expansion with changing technologies and atmospheres. Lipovetsky (2004) noted "the emotion is being sold more and more because it is vivid experiences" (Kervenoael et al. 2008).

Wood and Masterman (2008) identify seven event attributes (the 7 'I's) which enhance the experiential capability and potential; "Involvement, Interaction, Immersion, Intensity, Individuality, Innovation, Integrity, Affects, moods, emotions and feelings thus clearly influence all stages of the consumer decision process" (Lipovetsky, 2004; Kervenoael et al. 2008; Puccinelli et al. 2009).

To date, various methods have been developed and introduced to measure and research user experience and atmospheric effects on this process. It seems possible that from these results three major items that define the retail environment have been seen, these are design, ambient and social factors. Many studies have shown that, it is quite an important point that should consider external factors and variables such as window display and internal variables and factors such as flooring, lighting or decoration. Many corporate companies that want to increase user experience by using these stimuli, work with a special designer for continuous window display and layout management of internal and external stimuli. Since the style of the layout, equipment, furniture and decor will positively affect the consumers' perception of the store or atmosphere; companies or stakeholders allocate an enormous scale budget and time for this stage (Puccinelli et al. 2009).

The term "the customer experience quality (EXQ) scale" is used by Klaus (2018) to refer to three phases of the three-dimensional customer experience: brand (pre-purchase), service provider (at time of purchase) and post-purchase experience and contains 25 substances. The (EXQ) scale includes: items that distinguish between private and individual experiences, channels (online and offline), other post-purchase evaluations, and includes the customer experience of an individual and the role of other customers in this process, and includes the concept of social value. Klaus (2018) examined customer experience quality and its new theorization. Although the scale was validated as suggested in all three, Klaus encouraged researchers to test the scale in different dimensions and reported that its contexts were more generalizable (Kuppelwieser and Klaus, 2020).

1.4. Epistemological Approach

Kant mentions three related layers of facts and reflections around the human. These are the experiences we have through the senses, our associating our environment with the concepts we internalize, and our understanding and reasoning by using the filter of

mind (Lengkeek, 2001).

Throughout daily life, human understand and define daily life with the help of their sensory experiences. People have a wide imagination, which is influenced not only by signs and formal language but also by written and verbal contexts. In other words, the experience can be triggered by different context and inputs, and as a result, the experience may differ.

The philosopher John Dewey (1925) views experience as the intertwining of human beings and their environments. He critiques the purely cognitive Kantian view of experience as knowledge, arguing that knowledge (classifying, analyzing, and reasoning about things) is only one part of a person's understanding of the world. In addition to intellectual experiences resulting from knowledge, experiences also include perceiving (through the senses), feeling, and doing. Moreover, human beings are fundamentally connected with other people. Following Dewey, Dubé and LeBel (2003) distinguish four "pleasure dimensions": intellectual, emotional, social, and physical pleasures (Dewey, 1925; Brakus, Schmitt and Zarantonell, 2009).

Simmel in his article "Metropolis and Mental Life" (1903), presented the sharpest snapshots of life in the modernist metropolis. In a modern metropolis, the human being has an emotional experience because of external and continuous rapid external change and internal stimuli. Simmel matches with Walter Benjamin's metropolis, over stimulated by sensory experience and distracted by the human being's portrait and fragmented existence of Modern life. Compared to Benjamin's flaneur, the individual in Simmel's metropolis becomes an individual of that crowd, unlike the flaneur (Leach, 1997; Simmel 2014).

Within spatial practice there is a representation of spaces and atmosphere. Facades, showcases, perspective and plan views have an enlightenment within this designed area. Like the objectification or individualization of these atmospheres through the senses, this dreamed and perceived atmosphere belongs to a visual world. The representations in the atmosphere are related to that atmosphere or the environment (Leach, 1997). Thus, individuals are exposed to many sensory inputs with that atmosphere and the inputs of collective stimuli. When the process analysis of this experience and the effects of the inputs are investigated, the effects of these sensory experiences that individuals are exposed to can be analyzed.

Relph's study *Place and Placelessness*, published in 1976 states that Phenomenology enables the events, meanings, and experiences of human experiences and situations to emerge as conscious awareness in daily life (Relph, 1976).

Wants to gain knowledge of experience, we need to learn and analyze it in depth. It is necessary to go through an approach in order to reach deep knowledge of the person or people whose experiences are desired to be learned. Phenomenology reveals the ontological potential of human experience as it can be defined as how phenomena arise. Phenomenology developed by Heidegger and Gadamer suggests not only the study of the sensory field, but also the sensory experiences of human through all the senses (Leach, 1997). Phenomenology began as a philosophical movement that focused on the experience of those who experienced the phenomenon from their perspective. Another form of expression is lived experience and examines through interviews, stories or observations to find the qualities and essence of an experience. Phenomenology aims to focus on consciousness and judgments, and the exact content of conscious experience such as perception and emotion. Phenomenology is used as a research method in many fields of research such as psychology, education (Connelly, 2010).

An example of the Relph's article on *Place and Placelessness* (1976), investigated the relationship of place, the meaning and meanings of people's experiences on that area, using the phenomenology method to examine the relationship of space with the field, using the phenomenology method, questioning and deep research, which is one of the strongest aspects of phenomenology (Relph, 1976; Seamon and Sowers, 2008). The fact that the cognitive space concepts of the spatial modes defined by Relph can be understood through maps of the human spatial experience provides benefits for academic researchers (Seamon and Sowers, 2008).

1.5. Theoretical Contribution

This chapter introduces a theoretical concept related to touristic atmospheres and emerging within the design discipline that connects the bridge between tourist atmosphere and sensorial experience interaction with a phenomenological approach in terms of a sensorial theoretical concept and background. In order to understand experiences of tourists or foreign visitors in the Spice bazaar or in the touristic atmosphere to be determined in depth information, it is planned to conduct research in

accordance with the daily or arrival frequency of the tourists. The goal of a research is to understand the experience through an accomplished example Spice Bazaar and to design a template / model.

As qualitative research design provides a good match with a phenomenological research approach as it focuses on questions, practices and experiences (Hierl, 2019), the output of the study can be used for improvement in design studies that may take place in the touristic atmospheres. For instance, in technology-driven design practice (augmented reality or an interface application) in various fields of design such as architecture, interior architecture, and landscape e.g. which can be realized to enhance the experiences of a tourist, knowing the points where the sensory activity is weak or strong may provide a guiding infrastructure.

Creating a sensory map of a space or a place, especially a sensory map of a cultural and touristic area with such intense sensory interaction, is a visual representation of an important interaction between visitors and that space. At the same time, by depicting the experiences of that moment, it can provide valuable data for future visitor experiences, and make it an important and effective data for seeing changes and developments.

The sensory interaction that tourists experience during their visit to the bazaar can be important in order to see the intangible and embodied effects and meanings of that place. It was aimed to extract the multi-sensory experience map or maps of the bazaar from the results of the deep information to be obtained from the sensory experiences of the tourists during their visits, by interviews and observations.

CHAPTER 2: SENSORY EXPERIENCES AND SENSORY-BASED TOURIST EXPERIENCES

There are several possible explanations for sensory experience and sensory-based tourist experiences. In this chapter, thesis literature in tourist environment, sensory experience, tourist experience field were reviewed.

2.1. The Sensorial Context and Scope Analysis

As shown in Figure 5, Scopus research has been conducted using keywords “sensory experience”. It appears that there is a rising research focus. For instance, besides all the relatively unexplored topics Krishna have already mentioned, “We know very little about individual differences in the need for sensory perception or ability” (Krishna, 2011).

Sensory experience is becoming increasingly important as a very promising approach to reach customers effectively. In order to anticipate and better understand the success of sensory marketing, it is necessary to examine and evaluate the sensory cues and perceptions of the customers (Klaus and Wiedmann, 2018). Recently researches show that companies are now aware that sensory experience is an important issue and that it is important to attract the customers of the study by benefiting from the sensory market. The sensory affective and cognitive processes of the human brain are related to neuromarketing field which is still developing (Hultén, 2009).

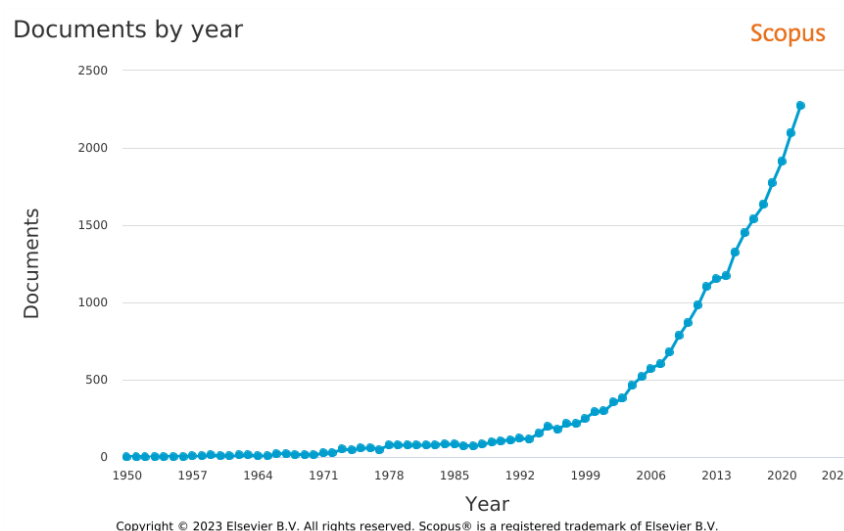


Figure 5. Sensory Experience Scopus 2023 research results year by year (Source: Scopus, 2023)

An experience can be defined as “the result of encounters, passing or living situations” and “because of stimuli triggered to the senses, the heart and the mind.” (Meacci and Liberatore 2015). The senses play a central role in our perception of the surrounding world and in the process of experience. The study of the sensory dimensions of tourism experience has recently been stated to be very important for management in the tourism industry. In particular, recent studies have shown that it is not in a dominant sense, but that a successful tourism destination should attract tourists more and provide all the senses (Meacci and Liberatore, 2015). There are methods that can be used to plan and implement more attractive tourist experiences. Sensory experience has become the key and strategy of marketing and design in tourism literature by understanding, managing and planning tourism experiences. Bringing tourists to the market has become a very important issue and has become a marketing strategy (Agapito et al., 2013).

Tourism is an important economic initiative and development in the world, which is estimated to contribute global gross domestic product (GDP) in 2015. It is an important sector and an important source of employment and investment for cities in developed and developing economies around the world (World Travel & Tourism Council (WTTC), 2015).

Tourist experience:

In Scopus, as shown Figure 6 “tourist experience” subject is an important topic in the

research about the actuality of the subjects over the years and it has started to be investigated rapidly.

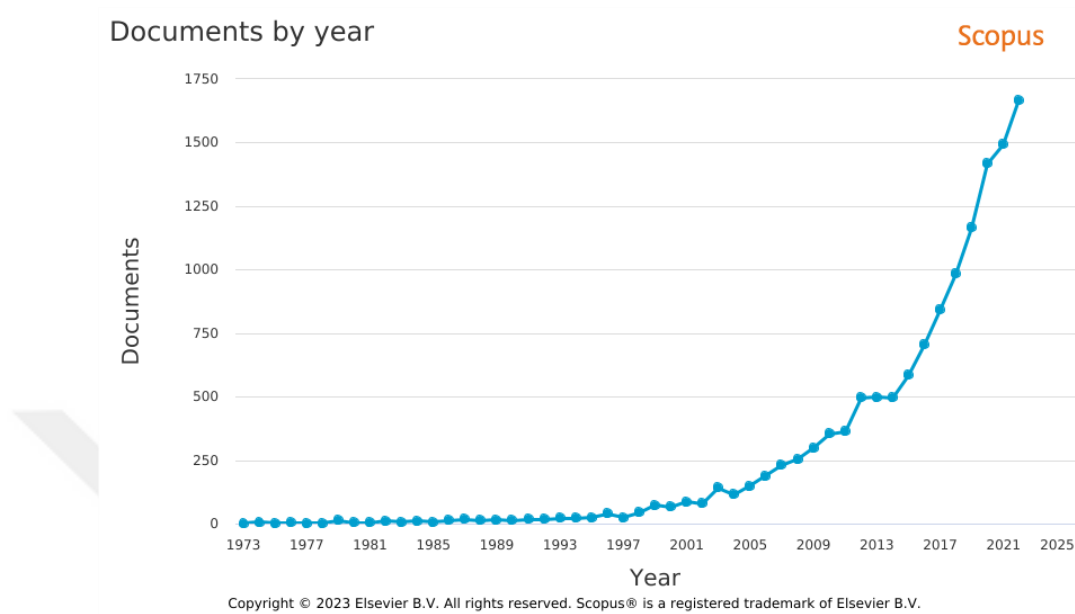


Figure 6. "Tourist experience" Scopus Documents by Year (Source: Scopus, 2023)

Scopus results in "tourist experience" by subject area, as reflected in Figure 7 the distribution of studies in different areas, % 30 rated social science and %5.3 arts and humanities subject areas.

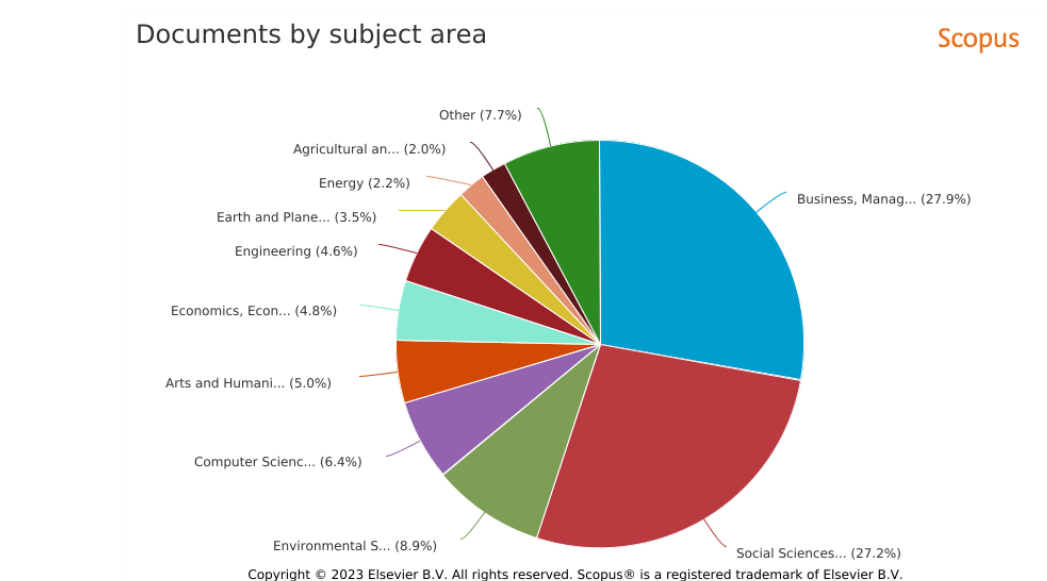


Figure 7. "Tourist Experience" Scopus Documents by Subject Area (Source: Scopus, 2023)

Furthermore, as can be seen in Figure 8 based on the experience process, the role of the atmosphere and its relationship with tourist experience and multi-sensorial in this experience model was investigated (Meacci and Liberatore, 2015).

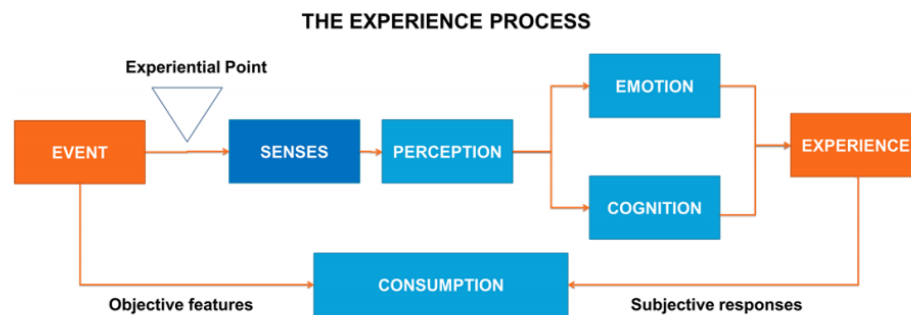


Figure 8. The experience process in tourism (Source: Meacci and Liberatore 2015)

2.1.1. *The Senses in Neuroscience*

In the daily life, as an intense multi-sensory world where there are constantly bombarded in terms of information transmitted through different sensory modalities. The important and often role of the brain is to synthesize this mix of sensory information into an adaptive and coherent perceptual Gestalt. Simply put, information from different senses associated with a single object or event (for example, the sight and sound of a car) can be interpreted in this way, as well as an object or event. Information from different senses that are not related to the event can also be interpreted in different ways (Calvert, Spence and Stein, 2004). The sequential process from sense input to response clarifies how all these competing effects interact and how the human brain tries to make optimal decisions among alternatives. These environmental sensory inputs are collected as raw data and then enter the orbitofrontal cortex of our brain where the value of the environmental stimulus is evaluated. This appears through a pattern-matching process against alternative neuronal association sequences that are generated and progressively updated, which are then transmitted to the amygdala. From that point, information is transmitted to the basal ganglia, where inputs from various parts of the brain that call for action are weighed. These result in signals to motor areas and thus behavior (Barrett and Barrett, 2010).

When input from different sensory receptors involved in multi-sensory processing converge on a single neuron (i.e., multi-sensory convergence), the receiving neuron becomes multi-sensory and as a result, multisensory neurons are described as multisensory integration (also called multisensory interaction) as described in Figure

9. The importance of knowing multi-sensory interactions is that they affect human's behavior, perception, and memory (Lim, Keniston and Cios, 2011). Several studies have indicated that it is more likely for multisensory integration to occur when stimuli from multiple modalities are presented simultaneously, when we are examining the integration of multisensory modalities with spatial and temporal factors. When multisensory laboratory studies were conducted, perception and semantic coherence effects were typically observed to have coherence effects when matching and matching with pictures of objects and their environments in the laboratory environment (Spence, 2011).

Considering that people's sensory organs are constantly stimulated by sensory stimuli, it is essential that multisensory information from the environment is integrated in a way that is appropriate, and these multisensory perceptions have a direct impact on behavior (Frings and Spence, 2010). This multisensory representation can play an important role in influencing the behavior of users as these sensory stimulations are transformed into a multisensory perception.

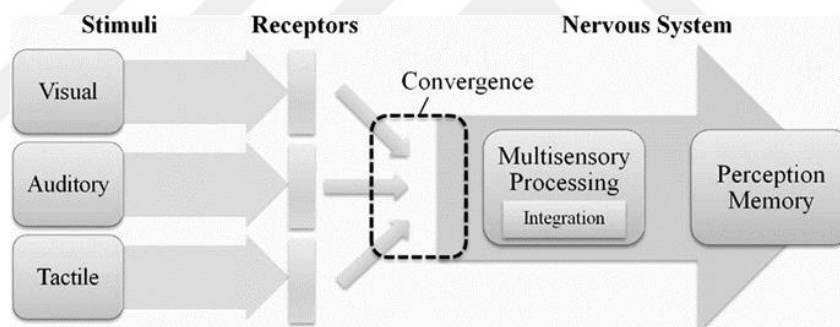


Figure 9. Sequence of Events Leading to Multisensory Processing (Source: Lim, Keniston and Cios, 2011)

People often know what they are doing and the experience of controlling their own actions and the course of events is called 'sense of agency' and this pattern of experience forms a central feature of human experience. Sense of agency ensure that improved design of cognitive and behavioral experiments, a growing understanding of the brain circuits that has been explored recently for better measurement and development of experience yet. Hence has led to better analysis of the brain processes that produce the elusive experience (Haggard, 2017).

Behavioral neuroscientists link perceptions to action and behavior through the complex and dynamic ways in which human consciousness

receives information about their environment. Sensory perceptions are intricately linked to memory based on some type of mapping and recognition of sensory information circuits so when experienced a new sense, while all senses try to associate the new sensation with the memory set and that point the designer can then work to provide that gaps and thus its process can be associated with a more positive and pleasant experience (Barrett and Barrett, 2010). Neuroscience studies reveal that there are three different and complementary systems in the way-finding process of the brain. These are: reading and interpreting signs; remembering routes as part of habitual behavior, which can be part of our familiarity and attachment to a place (and using the Brain's own mapping system, body-related (egocentric) or is to follow (allocentric) landmarks relative to other landmarks. For any space or atmosphere, individuals bring unique background experiences, and the design of certain spaces may not always send consistent messages across the three mechanisms (Barrett and Barrett, 2010).

In fact, both scientific perspectives understand that experience interacts with sensory inputs, and at the end of this process, people interact with multi-sensory inputs while experiencing a space or environment. However, behavioral or reactive development may not be the same for everyone, and at this point, neuroscientific and past experiences accumulated in our memory can cause behavior or reaction. The resulting stimuli or implicit reactions form the behavior of the and this creates a series of sensory experience inputs. The human mind actually compares the inputs from the senses with the messages sent to the brain, and sometimes it may interpret it differently, inspired by a past experience. Since another individual has no memory of it, it interprets the signals going directly to the brain. For this reason, the perception of each user in a space or atmosphere may not always be the same or may remain implicit; which needs to be considered by designers.

Accordingly, human receives various senses from our environment and this information is processed in various ways in the brain and this is broadly categorized as reflexes/autonomous, implicit or explicit actions. It leads to behavior based on a mix of responses (Barrett and Barrett, 2010). A multisensory integration center is formed to provide continuous and simultaneous various sensory inputs, making sense of the environment, decision making, and motor movements. The brain goes through a multi-input process to deal with multi-sensory stimuli (Simon, 2008). Combining sensory information is a logical strategy, as the senses provide complementary

information. After the multi-sensory inputs are coded at the sensory level, they can be used to understand and interpret the environment (Alais, Newell and Mamassian, 2010)

In the research to know the relationship is important between sense and experience, and the pattern in the brain, because they are successive processes. Analyzing these processes well and benefiting as much as possible from the studies in this field is precious for understanding and analyzing experience and sensory experience. In addition, this study, which will be conducted in this field, aims to be a study that receives support from many fields because of its multidisciplinary basis.

It has been realized that in order to understand sensory perception, a multi-sensory perspective must first be understood. Many studies have been published and many scientists have adopted a different research strategy in recent years thusly, the International Forum for Multisensory Research (IMRF), an international organization, was established (Calvert, Spence and Stein, 2004).

Multiple Cognitive scientists have investigated the “mental modules,” that refer different purpose computing systems that respond to specific environmental cues and solving different level problems (Fodor 1998). Pinker (1997) explained four mental modules defining experience; sensory perception, feelings and emotions, creativity and reasoning, and social relationships (Brakus, Schmitt and Zarantonell, 2009).

2.1.2. The Sensory Somatotopic Map of the Human

Sensory map, which is one of the contributions of this research, is actually a concept that is found in the human brain and is closely related to the five senses. Sensory maps are regions of the brain that respond to the feedback received from the environment with the senses and are mapped spatially in this process. This mapping is called somatotopic mapping, and it appears in the literature as the mapping of responses to stimuli in the environment.

This mapping in the brain takes place through the connections in the brain. The result of our interaction with the environment is transmitted to different parts of the brain through the senses, and each sensory area is further divided. For example, our field of vision is mapped point by point to the visual cortex. The notes of the musical scale are mapped across the auditory cortex. Sensory pathways that provide information about pain, temperature and touch through the skin are mapped somatosensory. Cortical

sensory maps Contribute to the human brain based on experience. Creating behavioral responses based on sensory input takes place through sensory maps with signals and readings from the motor regions of the brain (Groh et al., 1997).

Sensory perception and responses of sensory neurons are related to sensory input history. In behavioral experiments, specifically, prolonged exposure to a visual stimulus of a particular orientation, opposition or direction of movement can cause a systematic bias in orientation estimation, contrast or the direction of subsequent stimuli may also be effective (Seriès et al., 2009).

2.1.3. Motivation (Tourist Decision)

According to motivation, for instance, depending on the starvation state, taste can turn into an important detail in the motivational experience (Stevenson and Boakes, 2004). In this case, if the tourists have different motivations, for instance, hunger, motivation can be a very important and effective criterion as their taste and smell experiences can affect them more easily. Therefore, tourist motivations should be taken into consideration and evaluated in terms of criteria that will affect the experience.

The sensory experience is processed by the limbic system to process the first sensory interaction, associate with later experiences, so that the function of memory and recall is completed. Our most effective psychological experience has been shown in research that scent has a much longer-term accuracy in memories and previous experiences than visual memory (Henshaw et al. 2016).

However, there may be some changes during the formation of sensory experiences and their transfer to the brain, for instance, the different motivation or hunger states of the users mentioned in the previous section may have affected their taste and smell experiences differently. Moreover, as stated in previous chapters, the lack of visual or a sense of taste in that area or environment tends to complement itself by getting clues from other senses.

The evidence of this situation is our most effective experience is known sight, but studies have shown that the most effective experience in long-term memory, namely the scent in our memory remains longer (Henshaw et al. 2016). Therefore, sensory experiences may change their places over time, or they may influence the input or interaction of that time. Therefore, how the effects of COVID-19 will affect sensory experiences can provide an important basis for future studies.

2.1.4. Short-Term, Long-Term Memory

In the literature memory coding, memory storage, experience as well as processing of memories terms tend to be used to refer for user behavior. Sensory, short exponential and long-term memory significantly affects user behavior and preferences. Therefore, much more academic knowledge is needed to determine user needs on this subject, their effects on memory, and to determine these needs. For instance, how can companies or local stakeholders use these memory schemes in the long term and evaluate these encodings on these atmospheres? (Puccinelli et al. 2009).

Memory and emotion are associated with memories and emotions, especially sensory stimuli to the sensory notification process. Sensory feedback is processed in the brain's limbic system, as well as activating the amygdale and hippocampus, which processes long-term declarative memories. In other words, senses are preserved for a long or short term in the brain. It also creates "good" or "bad" "beautiful" or "ugly" emotions in relation to sensations, memories, and emotions. These statements are not based on science because it can be associated with previous experience or learned (Davis and Şenocak, 2017).

Using the senses in heritage and cultural studies not only helps to connect people in the past, and the present also contributes to a wide variety of unique knowledge, a more complete understanding of the lived heritage of people and places. All of our experiences are built on and around a range of sensory memories. If try to define these sensory experiences in cultural spaces such as Spice Bazaar, and the changes followed and discovered values can be enable in-depth access to cultural heritages and remember important memories.

Peak-end theory is used to understand and explain how people made retrospective hedonic evaluations. Fredrickson, Kahneman (1993), in a series of experiments, tried to examine how people with different hedonic values and developed retrospective hedonic assessments when exposed to various situations for different periods of time. People show that the average value of an experience predicts retrospective evaluations at the extreme (the moment when it receives the greatest impact) and the end (the moment it experiences the final effect) (Fredrickson and Kahneman, 1993; Geng et al. 2013).

2.2. Sensory Experience

Most studies on sensory experience in the field of user experience are focused on experience is a subjective phenomenon and it is a subjective phenomenon people who have experienced it can feel that. It exists for a very short time means it is stimuli and also very effective. Battarbee (2004) states that experience is constantly developing and this development process stems from a socially interactive process. Coxon (2007) classified the experience in four stages in his phenomenological study. When examined, it is seen that the researchers deal with the subject from different angles (Sanders, 2001; Battarbee, 2004; Coxon, 2007).

The first is the sensory field created by physical interaction, the second is the emotional state created by this interaction, the third is the mental area where cognitive activities take place, and finally, contextual factors are considered as one of the stages of the experience. Desmet and Hekkert (2007) divided the user experience into three components; aesthetic experience, semantic experience, and emotional experience. At the aesthetic level, experience is judged by the pleasure or enjoyment of one or more sensory patterns (Desmet and Hekkert, 2007). Schmitt (2010) gave examples of company experiences in his book and discussed the experience approach, companies and sample applications. As a result of this discussion, he expressed the sensory experience as a new and exciting concept (Schmitt, 2010). Experience is a situation that takes place subjective within a stimulus, product or atmosphere with the current user, because of that each experience is unique for each user. User experience reviews in places are a subject that needs to be researched in multiple ways. Terblanche (2018) stated that user experience is difficult to measure for the retail industry because it can be easily affected by factors beyond the retailer's control (Terblanche, 2018). These elements may consist of many components such as store atmosphere, product variety, personnel, and store location. Many inputs can affect user perception during this experience. There are many experiences and perception attempt during, before and after the user's experience. This process is multidimensional and consists of a combination of various factors (Paul et al. 2016). The study by Nghiem-Phu (2017) provided that the information about sensory inputs could be used by researchers with the following statements: People have five senses: sight, hearing, smell, touch and taste. Designers and marketers use the information encoded by these senses to communicate with target users (Nghiem-Phu, 2017).

The five senses have an important outcome on experiences for consumers (Schmitt, Simonson, 1997). Importance of five senses sight, sound, taste, touch and smell have shown to enhance user experiences sensory marketing, solution perception and behavior filtering products and services (Hultén, 2012).

A strong relationship between five senses and user experience has been reported in the literature in the atmosphere, for instance; Scent: can be used to encourage customers to shop. Casinos use “scent” to get their customers to spend money. For example, a study in the Montreal shopping center, which has a pleasant citrus flavor, found that 14 percent more was spent. An electronics store on the west side of Manhattan has also used an effective fruit fragrance to attract customers and encourage product purchases. The study highlights fragrance as one of the top ten trends to follow by Advertising Age (Soars, 2009). Sight; vision, color is an integral part of products, services, designs.

The colors of the brand and accurate images formed in the minds of customers and environmental views are very important. The images they create in their minds can match the visuals (Madden, Hewett and Roth, 2000). Taste; It is a sense that has emerged as a result of researches showing that consuming sweets makes people feel good. Thus, offering dessert at the entrance of a store can provide customers with a positive experience. The dessert experience offered by Helm bank in Colombia has been successfully tried as part of a sensory marketing strategy (Spence et al. 2014). Sound; since it provides multi-source and various data input, especially in crowded environments, it may cause the users who shop in the store to be less aware of where and when the acoustics are transmitted. However, users may find the music is too loud or annoying. Researchers have shown that tempo and rhythm characteristics of music are effective for spending time for customers in the places or atmospheres (Soars, 2009). Touch; in the last two decades, it has been the subject of a significant number of studies to explore user behavior and experience within the atmosphere. These studies on the behavior and experiences of users in the atmospheric places have proven that the sense of touch and other senses associated with it are highly effective in user behavior and experiences. It has been revealed that the users feel comfortable and safe by touching the products (Terblanche, 2018).

For instance, wooden tables are often used as display items because users are asked to touch things and thus increase the likelihood of purchasing. Therefore, the sense of touch of the users plays a crucial role in decision making and behavior in the

environment (Soars, 2009). The existence of different types of tactile receptors in the skin has been well established for decades, and there are also brain regions that are believed to respond to tactile sensations that are particularly pleasant. The sensation of stroking velvet on the skin, for example, indicates that tactile contact mediates oxytocin release and is associated with "bonding" behavior.

The sense, however, also has a lower bandwidth than the other senses (Gallace and Spence 2014). According to the study conducted by Hultén, (2012), it has been revealed that the sense of touch has a significant effect on the product shopping experience of users who shop at the Ikea store. The study findings showed that sensory visual and scent cues have a positive effect on the tactile behavior and purchasing behavior of the users (Hulten, 2012). In this context, it can give significant information to analyze how tourists communicate with the touristic environments in which they interact in terms of five senses (Krishna, 2011).

2.2.1. Tourist Behavior

As a global average, tourists spend about a third of their budget shopping (Evans 2000). The potential for tourism development in Türkiye located. Resources for shopping tourism in Turkey, focuses on three types of shopping: traditional markets and handicraft shops (preferred by western tourists), shopping malls and other modern shopping centers (the developing world, the Middle East and South) and whole salers and cheap local markets limit shoppers). For instance, mostly Western tourists prefer to buy souvenirs in traditional markets. Developing countries will prefer shopping centers and other modern shopping centers, and cross-border shoppers are trying to find bargains in wholesaler or neighborhood markets. Thus, there are differences in preference among tourists (Egresi and Arslan, 2016).

2.2.2. The Effects of the Sense on the Touristic Experience

The term, Sensescape is a term in cities shaped by Porteous and states that it is intended to emphasize the sensory encounter of users in cities, and that it creates experiences such as stratification, overlapping, and simultaneous display of sensory images such as smells, visual impressions. They describe their character as "character" or "atmosphere". These sensory experiences enable us to form the "vision city in of a city or atmosphere and to interact with all the senses of most people in our daily perception (Degen, 2008). One of the main purposes of sensory experience is to send a direct message of interest to users' brain, encouraging the customer to purchase

this product, which forms a link between the customer and the product (Dissabandara, 2019). Creating brands of great importance is a key factor in the growing brands in the market. Sensory brands help build a strong sensory relationship with the customer. The literature on sensory marketing suggests 5 different elements in which sensory stimuli are generated and tourists may be affected. They are defined as Visual (Visual), Atmospheric (Odor), Auditory (Hearing), Tactile (Touch) and Stimulating (Taste). Sensory elements create sensory expressions and affect cognition and finally affect consumer behavior.

Emotions are sensitive to different stimulation because each sensory method is considered being a separate knowledge-based message, and these messages can have different meanings for everyone. For instance, some messages can be used to achieve the goal for a product, while other objects can cause other messages to be delivered. It should also be noted that all messages transmitted through the brain are based on sensory information (Schifferstein and Spence, 2008). For most people, stimuli in a certain sense provide a unique and distinctive perceptual experience. For example, the appearance, smell, taste, and texture of a banana can trigger and influence sensory experiences with various characteristics of stimulus even in one method (Mattingley et al., 2001).

2.2.3. Modes of Tourist Experience

Tourists can be in different modes and motivations during their travel. While some make a shopping-oriented travel, others give importance to cultural and authentic values, or they may be a tourist group traveling only for entertainment and food.

It is seen that there are different tourist typologies and demographic differences. For example, Cohen (1979) outlined five modes of tourist experience in his work; Entertainment, orientation, experiential, experimental, and existential. “Furthermore, Valene Smith (1977) identified the demographic aspects of tourism, in several levels as: explorer: elite: off- beat: the desire to get away from the crowds, unusual: incipient mass: mass: charter: Further, the author mentioned defined five destination interests and motivations: ethnic, cultural, historical, environmental and recreational.

During 1980s typologies extended and included historic types such as the Spice Tour, north-south tourism, and long-term youth and budget travel, some of which is self-testing (Riley, 1988). Graburn (1983) differentiated two types of contemporary tourism, as the annual vacation or holiday break and the rites of passage tourism

associated with major changes in status such as adulthood or career changes (Graburn, 1983; Żegleń and Grzywacz, 2016).

In the age of connectivity, online social communication has become a norm among travelers and has greatly influenced tourists' travel experiences and behavior. Tourists now have the ability to make individual decisions and manage how, when and how to reach them. Mostly effective with online connections and interactions Travel behaviors, experiences and goals have become faster and easier to reach. This phenomenon opens up a new era for tourism and it deserves a serious and in-depth research in this field (Fan, Buhalis and Lin, 2019). Tourist behavior and experience subject become necessary to adapt to this situation and to develop new strategies.

2.3. Sensory Experience and Design

Schmitt (2010) gives examples of company experiences in his book. Schmitt disclaimer that the experience approach, companies, and sample practices. Schmitt (2010) mentions that, experience is a new and remarkable field of marketing, design academia and practice (Schmitt, 2010). Hence, common spatial origin and temporal adaptation play a particularly important role in the integrating sound, sight and tactile (Schifferstein and Spence, 2008). Sensory inputs could be used by the researchers with the following statements: human beings have five senses: seeing, hearing, smelling, touching and tasting. The information encoded by these senses can be used by designers or marketers to communicate with target users (Lee, Gretzel and Law 2010; Krishna and Schwarz, 2014; Nghiem-Phu, 2020).

Krishna (2011) and Hulten (2009) have important new studies in this field and they discussed sensory marketing with different frameworks. In Hulten's study (2009), he mentions that the concept of experience is shaped by the environmental sensations of the individual. Meetings and services in this sensory experience process are considered as perceptions (Krishna, 2011; Hulten, 2009).

Each experience in the atmospheres in terms of sensory; and examining and measuring with scale, eye, ear, nose, skin tongue, skeleton and muscle. Existential experiences create and strengthen the atmosphere, in fact one's sense of being in the world, and this actually creates a self experience. Along with only sight or five classical senses, design and architecture involve and interact with these various sensory experiences (Pallasma, 2012).

The human determines the atmosphere, and objects outside his body primarily based on sight, touch and hearing. If an input is missing in the process, it gets clues from other senses and tries to complete the deficiency. For instance, smells like “flower”, “fruity”, “musty” or “bitter” can make some definitions in our sense of taste or the visual of the environment (Stevenson and Boakes, 2004). Fragrance-taste mixtures should be considered as a whole, not as separate perceptual values (Stevenson and Boakes, 2004). Sense modalities not only mediate information for assessing the environment, but also serve as channels for igniting imagination. The senses, which trigger the body, stimulate thought and experience, which are, in turn, stimulated by our surroundings and ourselves. For instance, when designing a building, it is important to shape the space together with its architecture (Croome, 2006).

2.3.1. Studies On Sensory Experience

Degen and Rose (2012) predicted that sensory urban experience should address diversity better and explored paradoxes of different experiences and perceptual memories of the environment or atmosphere. In his study, Bedford (town) and Milton Keynes (shopping center) in different areas of the study has made sensory research. For instance, Bedford had a wonderful smell of a traditional coffee shop that has been strong since many years ago, and the whole town smelled of this aroma. The memory of this fragrance was a memorable experience for many people. One participant said that he liked to look at old buildings and think of people who used these places in ancient times and that he could not forget the experience of the smell. Experiences are very sensitive to these encounters. Sight, touch, sound and smell have been powerful tools to experience the atmosphere, in particular. In addition, these experiences of place are varying considerably from one place to another (Degen and Rose, 2012).

2.3.2. Sensory Experiences and Design

It has been revealed by psychological research that the five senses for users have a very strong influence on physical, cognitive, social and emotional effects. Sensory stimuli within the atmosphere can affect and enhance the user experience. People perceive the events around them with all their senses simultaneously and therefore their experiences will be the more emotional and more interesting. Correct sensory stimuli, if appropriately administered, can calm down in decision-making, relax, relieve stress, energize, improve mood, and be effective in decision-making.

The customer reaching a certain level of mind and mission during shopping a particular state of mind and the purpose of shopping with a mission. There are different client mission types: The task/need exchange is, because of this mentality need and therefore needs a way of buying and perhaps some inspiration along the way. Decision-making is guided by purchasing frequency and/or complexity of the purchase, for example, milk is a frequent purchase, requiring little decision-making. External stimuli can still affect the behavior of shoppers in some modes (Pentz and Gerber, 2013).

The entertainment exchange mindset wants to be actively inspired; the orientation is not that big, and there is a great opportunity to provide the right atmosphere to convince the customer to rest and buy. Browsers have no real value for retailers, but browsing has proven to be an important form of consumer behavior and a great opportunity for retailers (Soars, 2009). As seen in the Soar's study, the experience and trust-based shopping experience, but the external stimuli for customers can be decisive for the shop atmosphere.

2.3.3. Sensory Mapping on Touristic Atmosphere

Senses are responses to various phenomena that affect sensory cells and have connections with different brain regions where cells receive signals. Human has five basic senses, and the brain perceives these five senses in the brain's neocortex part. Sensory maps can be thought of as a representation of information passing through the sensory cortex. Sensory maps are a technique that visually emphasizes the sensory inputs people gain from the environment. Sensory maps are similar to mind maps, but they are special because they are graphic tools that make up each person's concepts and propositions made up of concepts (Manolica et al., 2020).

In an atmosphere or in a place, the senses have an important effect while walking or while other actions. Different scientific fields obtain information by examining the senses through different channels to obtain different information. In the study conducted in England to investigate the spatial and sensory experiences of people, interactive representation of sensory experiences of people is presented by interactive representation of sensory intensive experiences, mapping and notation (Vasilikou, 2016). Observations and interviews in Barer Strasse in Munich suggest that the interplay of multiple sensory stimuli as well as small businesses on ground floors are creating a lively atmosphere, thereby enhancing social interaction.

As shown in the following Figure 10, despite the vision dominating the perception,

this thesis argues for a multisensory approach, including smelling, feeling and hearing within the urban planning and design discipline to create lively cities by strengthening the social function of streets through creating atmospheres that enhance social interaction (Hierl, 2019).

JOHANNESBURG, 1972		VANCOUVER, 1969	
Type of noise	Complaints	Type of noise	Complaints
Animals and birds	322	Trucks	312
Amplifiers/radios	37	Motorcycles	298
Construction	32	Radios	230
People	34	Horns and whistles	166
Machinery, etc.	29	Power saws	184
Home workshop	25	Power lawnmowers	175
Air conditioning	19	Sirens	174
Traffic	18	Animals	155
Musical instruments	15	Construction	151
Sirens	9	Automobiles	138
Milk deliveries	5	Jet aircraft	136
Mowers	2	Small aircraft	130
Buses	1	Industrial noise	120
Refuse collection	1	Hovercraft	120
Vendors	1	Domestic noise	95
		Foghorns	88
		Trains	86
		Children	86
		Office noise	81

PARIS, 1972		MUNICH, 1972	
Type of noise	Complaints	Type of noise	Complaints
Domestic and neighbourhood noise	1,599	Noisy restaurants	391
Construction and road works	1,090	Industrial noise	250
Industrial and commercial noise	1,040	Construction	87
Restaurants and cabarets	553	Traffic	29
Miscellaneous	90	Domestic noise	27
		Aircraft noise	11
		Miscellaneous	2

Figure 10. Different Sources of Noise in the City (Source: Hierl, 2019).

For instance, tastescapes, which increases important sensory experiences and effectiveness and importance day by day, plays an increasingly larger role in its emotional fields and offers the possibility of experience. It is an important sensory experience that depicts the identity of the place and its gastronomic reputation has an important place in the city culture and feeds the symbolic culture (Degen, 2008).” Of course, in any atmosphere or city, bodies and age, disability / talent, ethnicity and gender are very different, and this age, disability / talent, ethnicity and gender deeply affects howbodies are perceived and perceived and differentiated on the differentiated sensory spatiality’s of spaces and atmospheres (Degen, 2008). In 2003, both Milton Keynes and Bedford decided to intensify design renovation projects in both city centers by the UK government and set them as planned Growth Areas. The study briefly outlines the main strategies that have shaped touristcity centers in recent years, as well as the expectations of planners and designers from their impact (Degen and Rose 2012) “We want people to come and spend more time and more money. As a designer, you are trying to make things more attractive. If you improve the vibrancy



Figure 12. Participant's Blindfolded Scent Walk (Source: Davis and Şenocak, 2017).

From the results of the study “Scent Maps” appeared of cities shown that the how urban scents change in time and space, what emotions are connected to smells, and map the related relationships between smell and color. The study conducted in Spice Bazaar uses the type of data collection on scent and sensory perceptions on documentation methodology. They have also provided data for future restoration projects to the Council on Monuments and Sites (ICOMOS) in Turkey. In the results of the study, for Spice Bazaar, *“A whole segment of a society's imaginative world is revealed in the odor of its environment”* (Davis and Şenocak, 2017). Henshaw (2013) participated in the study of the local people for sensory walking in Amsterdam as indicated in Figure 13. Participants identified different odors and recorded their locations. By creating scent descriptors in the context of these odors, expectation, intensity, personal relationship and hedonic scale, they mapped the scent walk on the city map of Amsterdam (Henshaw, 2013).

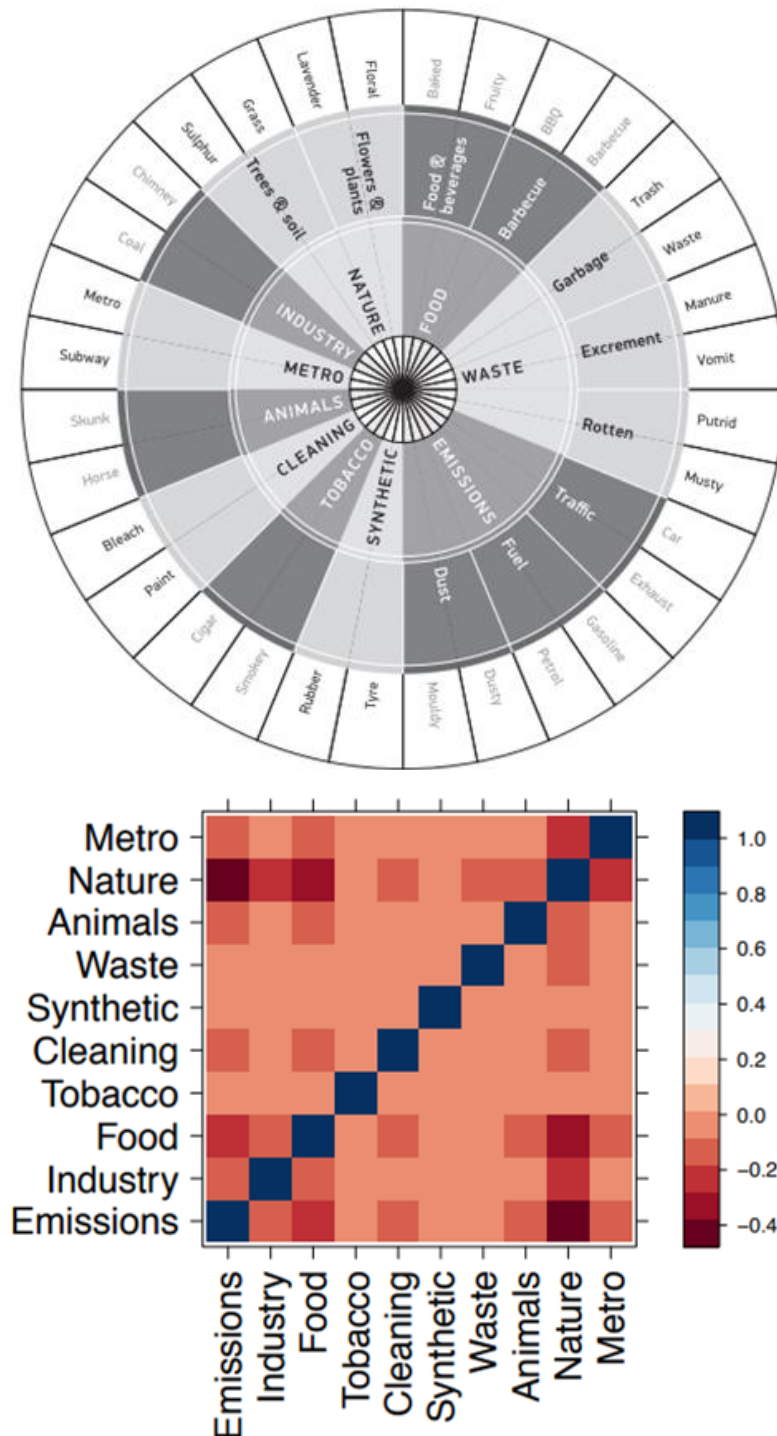


Figure 13. Visualization of the Hand-written Annotations Taken by Participants of the Smellwalk in Amsterdam (Source: Henshaw, 2013).

Henshaw (2013) explained the ways of perception, the individual characteristics of the participant who perceives it, the environmental conditions and variants in the smell interaction of the participant in order to perceive and recognize the sense of smell

(Henshaw, 2013).

Given the studies done in this area, it can be seen that there are sensory experience studies and sensory mapping studies for many touristic cities and tourist. In some touristic cities, only a team is working to analyze these experiences. Thus, they try to make experiences efficient by following and analyzing the process. From this point of view, it is possible to first map the sensory experience and to explore the tourist experiences in the Spice Bazaar and this can make touristic behavior and experience efficient. Revealing the factors that make up the sensory experiences with the phenomenological method will reveal data that can be used in activities such as design improvement and improvement in any changes that can be made in this environment. Therefore, a data that can be compared before and after will emerge. This mapping can reveal which senses are predominantly around the touristic atmosphere.

In terms of contemporary art, design and philosophy, with a phenomenological understanding, analyzing our sense of exploration of the environment and areas we are in, analyzing deep analysis, obtaining sensory data with sensory walks and mapping them can be studied (Quercia et al., 2015).

2.3.3.1. Place

Lynch (1960) mentions three components for an environmental identity these are; identity, meaning and structure. Lynch states that to analyze these three requires an intangible analysis and first to define the object and the environment. He stands apart from the others and has an identity. At the same time, this object must have a meaning, be it practical or sensory, so that a spatial relationship can be mentioned (Lynch, 1960)

The research to date has tended to focus on place, has seen that thought as a certain position since the 1970s and produced a sense. The synthesis of the concept of place, buildings, streets, streets can perceive the environment of that place, but the sense of place actually means more. The emotions that a place evokes and the messages and feelings that it evokes represent the sensory meanings of that place. For example, when the location of a place is given, when a market is taken as a basis, its location is located on the map. However, that place definitely has feelings and meaning along with the place, the location and meaning of the place; it is thought that the place actually has a place in space. When researchers experience space and space, they also consider what a human feel with the five senses they feel and experience. From Heidegger's point of

view, we see the limiting and exclusionary way of thinking evoked by Heidegger's concept of dwelling. It advocates a very ecological way of thinking about place and adopts it as a natural phenomenon like human nature (Cresswell, 2009)

2.3.3.2. *Touristic Atmosphere*

It can be seen that Kotler studied the "atmosphere" of the market. He discussed the importance of the atmosphere of the store reached up to ancient times (Kotler, 1974). After, Kotler's study Tall and Rosnow (1984), Lindquist (1974), Zimmer and Golden (1988) this study and more like this came in the continuation of the studies. Studies have shown that the store atmosphere has a great impact on cognitive, emotional and behavioral decision (Lindquist 1974; Tall and Rosnow 1984; Zimmer and Golden, 1988; Helme Falk and Hulten, 2017). Sensorial experience is not limited to a product or services before or after, it is a very broad concept with products and atmospheric presentations and store environment (Nghie^m-Phu, 2017). In broad range approach to developing more sensory contact points with the customer is, in principle, an excellent idea, to create differentiation in the market. However, the environments and our perception, by nature, are very sensitive (Spence et al., 2014). The store atmosphere can affect the preferences and behaviors of the customers within the store. Customers need a store layout that maximizes the number of products seen in the customer's context's need for the product. Customers who experience a personal check-out form often feel good about the store, whether they want to direct them to the store, go to or find the products they want. Good emotions lead to more purchases, especially if the products are offered within a screen showing the potential benefit of the product for them. Due to Rodaway (1994), there is senses based geographic places and this places through the sense can be perceived with places, location and time. Senses, most of the time can be interaction implement to understand the environment or atmosphere (Rodaway, 1994; Agapito, Valle and Mendes, 2013; Bartos, 2013).

Store, store atmosphere and the environmental factors are that it can be seen in the studies for the retailers have an impact role and they separate a huge budget for designing and merchandising of the store and its atmosphere. In this process while store designing and designing environmental factors that can take a long time. Designing the properly store atmosphere and the environmental factors and also the management the user experience properly can provide positive experience and competitive differences.

2.4. Effects of the COVID-19

One of the scopes of this study is to explore the tourist's experiences at the Spice Bazaar Atmosphere in terms of the sensorial experiences with like touch, smell, taste senses but while this pandemic situation the mostly affected that senses like touch, smell, taste. Before the pandemic, in daily life people were using their senses especially like touch sense has turned into an alarming action by people. Shaking hands, hugging each other, touching a product has become one of the most feared behaviors. These new experiences can be related to the sensorial experiences in the new normalization process, and it is can be an important issue in which direction and how the sensory experience will be affected in this process. With the prolongation of the process of this pandemic situation, it can be predicted that some sensorial experiences that can be lose their interaction power and maybe it can be replaced by different sensorial experiences. Changing values of those experiences should be aware of that how this process will affect such touristic atmospheres and the sensorial experiences of the users in this atmospheric environment.

In the new global world one of the most significant current situation that named COVID-19 Pandemic as well as can be seen COVID-19 effects on the global scale. More recently, in daily life, it can be experienced social distance restrictions and also effects on city's life, cities dynamic stabilization. Pandemic situation's results are multi directional occurs social, economics, psychological with sensorial experiences changes. With the consequence of planned thesis, the continuity or uncertainty of the COVID-19 situations and its effects, should be aware how can affect the purpose or method of the study and also can it affect the process of the study. The current researches are not specially designed to evaluate factors that store atmosphere and user experience relations. Notwithstanding these limitations, a study may suggest that relations and COVID-19 interaction during this pandemic situation or afterwards pandemic situation.

2.4.1. COVID-19 Effects on Travel

As shown on the Figure 14 below, many habits and routine changes and serious proportional differences can be seen in the user experiences. It is possible to see the change and severe decline in traveling habit and shopping behavior.

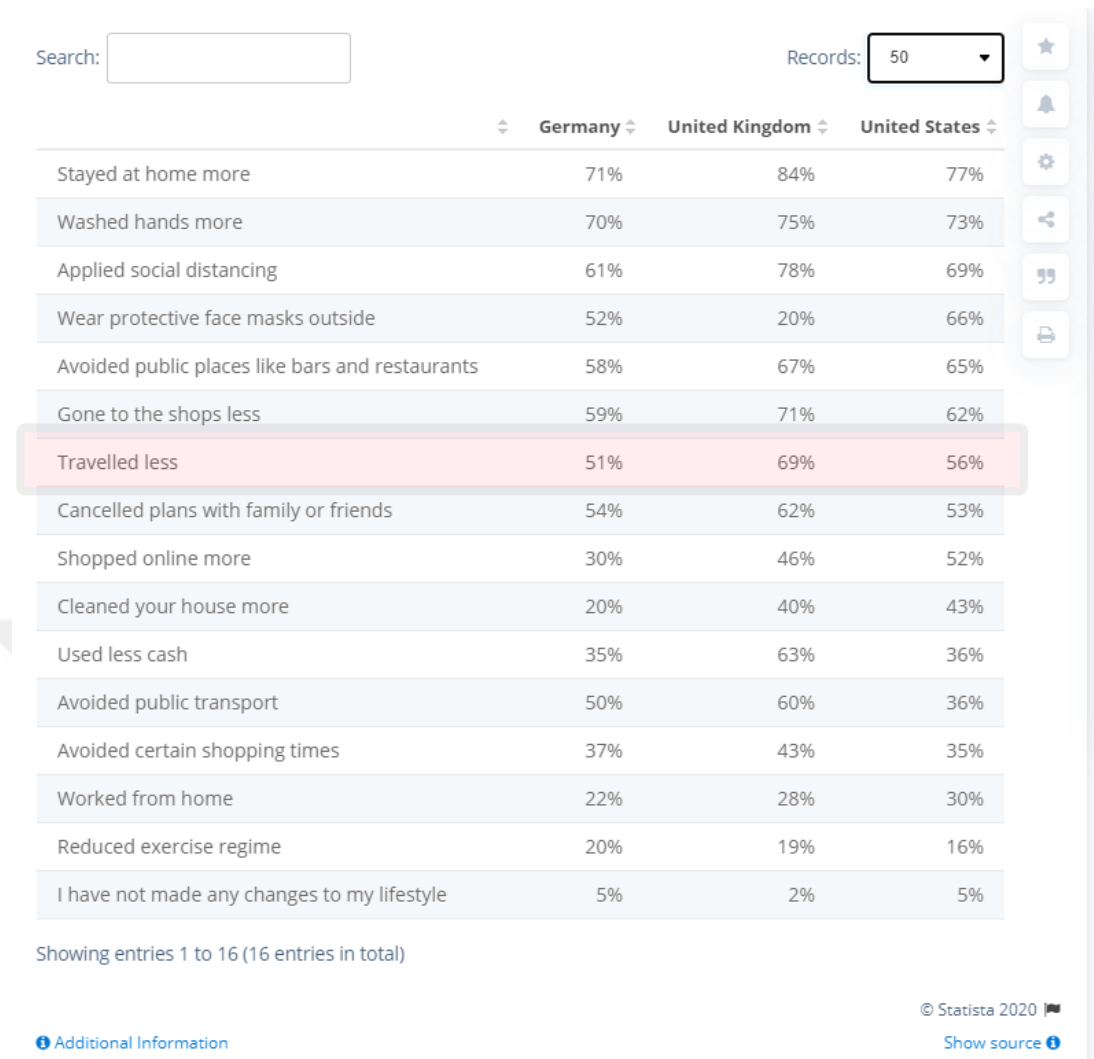


Figure 14. Habits and Behavior Changes (Source: Arora et al., 2020).

The COVID-19 pandemic process has created fundamental changes in our country and also at global scale. With these phenomenon's, experience and behaviors changing, purchasing preferences, user experiences and atmosphere phenomenon issue will become more important. At this point, what should be done, how to keep up with this change and how to move on to the next step subjects are going to be more critical.

It is possible to see the decrease in travel values at the last part of this Figure 15, European Commission has carried out a study on expected spending category issue and they have developed some strategies that to plan to be realized and to provide sustaining of this process.



Figure 15. Global Consumers Spending Categories (Source: Arora et al., 2020).

In the article that published by European Commission, it has stated that tourist arrivals in the USA decreased between 38% and 68% in 2020. European Commission stated that they are trying to bring new digital and green solutions in order to ensure the Reshaping Smart Specialization Strategies. It can be seen that they focus on short, medium and long-term improvement studies by diversifying tourism value chains and less dependent on tourism, increasing resilience during the COVID-19 process (Arora et al., 2020).

2.4.2. *Consumer Behavior during COVID-19*

Researches show that pandemics are now quite likely to be recurrent global epidemics. While this pandemic process, it is possible to see that the countries have closed their borders and the movements of people are restricted as much as possible and even the quarantine of some majorities continues (Donthu and Gustafsson, 2020).

According to a study published in the Journal of business research, consumption for shopping is time and space dependent. In spite of the fact that consumption is habitual, it is also contextual. Consumer behavior is heavily influenced by context, and habits are one of these contexts (Sheth, 2020). This change in consumption habits, in particular in the wake of the Covid-19 pandemic, has affected the formation of new habits and the formation of new consumer behavior, which has begun to replace old habits. Globally, the impact of this purchasing behavior has led to a decline in dynamic purchasing behavior, but it has also led to a sharp decline in product preferences and a change in market dynamics (Mehta, Saxena and Purohit, 2020). In order to design products and services that will better meet the needs of consumers, companies are focusing on understanding consumer behavior and tracking customer behavior and preferences. As a result of this change in strategy, companies have been able to remain competitive in changing markets. It can thus be suggested that a viral threat is ubiquitous and the uncertainty and fear accompanying it will lead to new user trends and norms. People can become both more suspicious and more sensitive. These data must be interpreted with a combination of entrepreneurial orientation and market orientation, together with possible expected changes in this process, can lead to lean and flexible design efforts that are valuable especially in times of crisis (Donthu and Gustafsson, 2020).

As was started out the epidemic until today, consumers' stocking behavior has become the usual shopping behavior and has led to differences in retail behavior and experiences. For instance, in Italy exhaustion of hand sanitizers and surgical masks within a few days, the rapid depletion of toilet paper in the UK and other countries, and the long-term out of stock of basic products such as yeast, pasta and detergents has been some abnormal consumer stocking behaviors (Pantano et al., 2020).

The evidence from these results suggests that changing and developing new norms can affect user behavior directly or indirectly. Likewise, the crises expected to develop in the world and the continuation of the next process is just a few of the important points

of how the stakeholder will develop methods to differentiate. Some rapid and recent studies have made some predictions about this process.

A systematic literature review was conducted of studies on COVID-19 effects on user behavior, Kirk and Rifkin (2020) has published an article “Consumer Response Behaviors in the COVID-19 Pandemic” they conducted a numerous user behavior. From this point essentially, they examined user behavior in three stages: responsiveness (eg, stacking and rejection), coping (eg, maintaining social connectedness, do-it-yourself behaviors and changing the opinions of brands) and long-term adaptation (eg, potential consumption and individual and social transformative changes in identity). The authors also identified several downsides of the pandemic that would likely affect consumer behavior (Kirk and Rifkin, 2020; Donthu and Gustafsson, 2020).

According to a study provided by Wang and coworkers examined an exploratory study on Marketing Innovation Strategies in China and how companies in China work to make their marketing strategies more successful due to that Pandemic situation. They classified the typology of the strategy innovations of the companies based on two dimensions: motivation for innovations and level of cooperation in innovations. Regarding authors outlined four innovative strategies for dealing with crises for stakeholders. They stated that the responsive strategy might be beneficial for companies that mainly involve physical contact. They stated that a collective strategy can be implemented by companies that need to develop new business by collaborating with other companies most affected by the crisis. Companies less affected by the COVID-19 crisis can adopt a partnership strategy as an alternative approach and have stated that they can develop new offers by collaborating with other companies (Donthu and Gustafsson, 2020).

Up to now one of the studies about tourism is published by Sigala (2020) “Tourism and COVID-19: Implications and Implications for Advancing and Rebooting Industry and Research” named article. She stated in her study that during the COVID-19 epidemic, tourism and demand experienced a rapid and sharp decline. Despite the tourism industry’s unprecedented resistance, the impact of the current outbreak has predicted that it will last longer for international tourism than other affected industries. However, the tourism industry has stated that it must not only improve but also redesign and reform the next new normal situation. She pointed that it is clear that

there is currently lack of research on how crises can change the industry, how the industry can adapt to the process with new techniques, and how research can be carried out in later norms. Past and emerging and future literature should be reviewed for some ideas from different research areas that will allow tourism to grow and develop (Donthu and Gustafsson, 2020).

“Thus, consumers might react differently to waiting times in retail even after the emergency period, because of their shopping experiences during the pandemic (Pantano et al., 2020).”

With the COVID-19 pandemic, people’s lifestyle, behavior and preferences, even way of working, took a very different shape. The fact that do not know whether these changes are temporary or how long they will last can actually create process differences in the long run. However, changing user habits and behaviors have spawned in a highly productive and highly researchable area. It can be predicted that the economic difficulties that develop with the process will affect the user behaviors, preferences and even travel restrictions from now and on. In the new normal life, possible to frequently encounter both psychological and economic constraints. There have been several investigations about epidemic as well as it can come to the fore in the competition between institutions in innovative and rational solutions.

2.4.3. A New Role for Retailers in Society

Pantano and coworkers (2020) identified that, after this epidemic or during this epidemic, retailers should be aware of the safety and health gap during the shopping trips of consumers and that subject should be taken seriously. Retailers’ priority will not be for profit but the safety and health of consumers while providing the products they need. Therefore, implementation of the suggestions and improvements to be made in this regard, can create a new sense of trust in consumers against retailers (Pantano et al., 2020). It would not be wrong to think that there are fundamental changes in the retail industry along with the pandemic process and that this change may will be continue. Changing consumer behavior is actually creating a new user role in society, and this new perception may be a different experience process for the retail sector.

2.4.4. Changing Sensorial Experience of People during COVID-19

COVID-19 has disrupted and affected daily life, businesses, national and global trade on a massive scale. Most Countries have slowed down their product manufacturing, various industries and sectors are trying to combat the epidemic by reducing their

capacities to a certain extent. Haleem, Javaid, Vaishya (2020) divided the effects of COVID-19 on daily life into 3 categories (Haleem, Javaid and Vaishya, 2020).

- Healthcare
- Challenges in the diagnosis, quarantine and treatment of suspected or confirmed cases
- High burden of the functioning of the existing medical system
- Patients with other disease and health problems are getting neglected
- Economic
- Slowing of the manufacturing of essential goods
- Disrupt the supply chain of products
- Losses in national and international business
- Poor cash flow in the market
- Significant slowing down in the revenue growth
- Service sector is not being able to provide their proper service
- Avoiding the national and international travelling and cancellation of services
- Disruption of celebration of cultural, religious and festive events
- Undue stress among the population
- Social distancing with our peers and family members
- Closure of the hotels, restaurants and religious places
- Closure of places for entertainment such as movie and play theatres, sports clubs, gymnasiums, swimming pools, and so on (Haleem, Javaid, Vaishya 2020).

These three different categories seem to be consistent with other researches which done on similar issues. Within the scope of this study, the effects of COVID-19 are seen in social interaction, which is one of the most important factors. The minimization of socialization, travel limitations and the decrease in new experiences have significantly affected sensory experiences and touristic activities. For instance, Michel

Aubanel Global Flavor Ingredients Manager, in one of his speeches, stated that the global taste experience was affected by this process and that different perspectives have now emerged. It drew attention to the changes that more natural and products are now being preferred and this situation will bring about changes in sectoral and global dimensions.

The human in their daily lives, move with their senses on a daily basis, the senses are built for use in all situations of life. Therefore, it has a significant influence in deciding and making choices. However, the current state of isolation deprives us of our senses as we are not exposed to the stimulus as before. Thus, we can be deprived of daily stimulation and sensory experiences. It is also strongly emphasized by the authorities that we should not use our senses, likewise we should touch nothing, must wear a mask or even interact with people in any way. From that point, what will happen when the societies return to old daily life is a big wonder. It is in great uncertainty how long the fear of using these senses will last, and how much more we will be overly cautious in this way. Will we be able to compensate for this, for being so deprived of our senses? Donthu and Gustafsson (2020) states that these are only some aspects of consumer behavior; they stated in their study that there is much more subject to be researched and studied (Donthu and Gustafsson, 2020).

In addition, not enough research has been found on the subject tourist behavior, environmental or atmospheric effects and sensorial experience changes with COVID-19. One of the questions that needs to be asked, “How will be the senses after the pandemic or during the pandemic? or “which were the senses that developed or changed with COVID-19”. Because our sensorial experiences in environment and also user experience is actually significantly affected. The most affected senses are taste, smell and touch. With this new process, it will be one of the important points that the decrease in the effectiveness of these senses will create a prediction and how it will create differences in procedural experiences. Afterwards, the senses that lost this effectiveness after the pandemic may turn into a more negative experience, as they may remind the pandemic. For example, the smell of hygiene, cologne or disinfection may be associated with the pandemic and remembered as a negative experience.

2.4.5. Tourism and COVID-19

Sigala (2020)’s argument relies that in the study, an overview of the tourism affects and scale of COVID-19 for tourism researches. COVID-19 has declared an epidemic

by Who (World Health Organisation) that has significantly affected the global economic, political, socio-cultural systems. This pandemic situation has stopped the travel, tourism and activities on a global scale in that process. A lot of industries get enormous economic effects from that pandemic and epidemic duration (Sigala, 2020). Global crises can often be the trigger of a change. Deeper scrutiny and research should be provided to understand the behavioral, cognitive, emotional, psychological behavior and experiences of tourism stakeholders in COVID-19 research (Sigala, 2020). Therefore, it should be considered that the COVID-19 process and subsequent behavioral, cognitive, emotional, psychological behavior and experiences may change. At the same time, changing behaviors and experiences can be very important and effective in people's behaviors and experiences in the place and touristic atmosphere. Tourists have gained some experiences in this process, for instance, the information they have gained on social media or their surroundings and their impact on travel goals and future behaviors. The impact of online shopping and virtual entertainment experienced in this process on tourists' behavior may be one of the important points. The impact of COVID-19 on daily life conditions and how it will change the tourism preferences and attitudes of tourists are also an important issue. It is possible to see that the social distance imposed by COVID-19 significantly affects user' and tourist's experiences, such as reducing social contact, avoiding crowded places, minimizing hiking, outdoor activities or travel. Social distance or a better physical distance can affect tourists' perceptions of health hazards, insecurity and unpleasant tourism experiences (Sigala, 2020). Tourism is a large scale hedonic and sensorial experience process. However, COVID-19 operating standards require a redesign of service environments; it is necessary to be able to redesign the experience without eliminating the sensory elements, for example: cleaning scent rather than smell; social distance and the number of customers' coexistence at restaurants, festivals, and other tourism environments will affect new standards of psychological comfort and acceptable levels of perceived crowd (Sigala, 2020).

Recent developments in the COVID-19 studies heightened the need for the process and individual differences that these new norms will trigger which hedonic and psychological experiences will affect are quite significant topics from the perspective of tourism and user experience. One of the most potential analyzes the extent to which changing cities, changing habits and personal experiences are triggered and which

dynamics they change as reflected in Figure 16 (Arora et al., 2020).

Paradox Research: advancing and transforming COVID-19 tourism research.

Paradoxes	Examples of fields for applying paradox research in COVID-19 tourism research
privacy and obscurity	<ul style="list-style-type: none"> Technology adoption by tourists (e.g. mobility tracking applications and other surveillance systems) Design and ethics of tourism technology applications
novelty and usefulness	<ul style="list-style-type: none"> Innovating from necessity: types, processes, capabilities, facilitators and/or inhibitors of 'innovation' adopted by tourism firms to ensure business continuity and survival during COVID-19
cooperation and competition	<ul style="list-style-type: none"> Practices and strategies of destinations and policy makers to combat and re-open their economies, e.g. Inter-governmental and destinations initiatives and bilateral, multilateral (biosecurity) agreements to create 'travel bubbles' for re-opening tourism across countries (e.g. Australia-NZ, China-Taiwan-S.Korea, HK, Greece-Cyprus, Baltic States)
global and local	<ul style="list-style-type: none"> Configuration of tourism supply chains (e.g. local Vs global sourcing of food supplies, human resources, capital resources) design of transportation – travel mobilities: e.g. airport and destination hubs, airline route design
self-focus and other-focus	<ul style="list-style-type: none"> Tourism policies and strategies, e.g. allocation of governmental interventions and subsidies between national and international firms to enable them to survive the COVID-19
stability and change	<ul style="list-style-type: none"> Tourists' decision-making, quality evaluations and satisfaction from destinations and tourism providers under COVID-19 settings and conditions whereby self-presentation and self-safety may prevail over others' and common good Type and processes of change (of tourism firms, destinations and tourists) supported and led by the COVID-19
self-preservation and self-actualisation	<ul style="list-style-type: none"> Factors inhibiting and / or facilitating change due to COVID-19 motivations driving tourists' / human motivation and behaviour tourists' engagement with local communities and employees within a COVID-19 setting
high-tech and high-touch tourism services and experiences,	<ul style="list-style-type: none"> employees' engagement and behaviour towards tourists and organisations within a COVID-19 setting Re-engineering of service delivery operations to make them touch free but highly personalised and human-centred experiences
profits and purpose	<ul style="list-style-type: none"> re-design of travellers' journeys and experiences aims and scope of response and recovery strategies of tourism operators and destinations within COVID-19 Social Corporate Responsibility of tourism operators and destinations within COVID-19 settings Resetting of tourism strategies in the post COVID-19 era Tourism sustainability policies, strategies and practices in the post COVID-19 era

Figure 16. COVID-19 Tourism Research Paradox (Source: Arora et al., 2020).

Business standards, city policies and government decisions will be one of the factors that will certainly affect these experiences, as well as sufficient and necessary effort to be made in this regard. The new policies, measures and efforts that some countries and cities are already taking and implementing can be an example of that new dynamic change. At the same time, it can be predicted that creating a fast action plan and managing the process correctly will definitely create competitive differences in the upcoming process.

2.4.6. COVID-19 Effects on Cities

Since World War II with the COVID-19 pandemic, there have not been such drastic restrictions on the freedom of individuals. The measures taken in this process have seriously affected the daily life of consumers and businesses, and significantly reduced on tourism (World Tourism Organization, 2020).

These restrictions have led to emergency situations (EPS) (Somason and Voyer, 2014) and have led to unprecedented challenges to retail management (Pantano et al., 2020). Especially since the tourism sector has been one of the most affected sectors, such as many similar sectors and industries. The Figure 17 shows that there is a possible tourist scenario made by the European Commission, it is possible to see changes in the number of tourists, rates and probabilities.

	Confidence to travel scenario	Fear to travel scenario	Second wave scenario
Key features	<p>"Extended long hot summer"</p> <ul style="list-style-type: none"> - Open borders in & outside EU - Rising trust to travel - Moderate change in destination preferences - Isolated new COVID-19 cases - Most companies survived 	<p>"Escape to wherever"</p> <ul style="list-style-type: none"> - Semi-controlled outbreaks - Most borders still open - Travel confidence drops - Domestic travel is preferred - More companies out of business, lowering supply 	<p>"Islands of tourism"</p> <ul style="list-style-type: none"> - Few outbreaks spread further - Most borders closed - Travel confidence very low - Limited domestic travel - Many business out, lowering supply and employment
Change in tourist arrivals (2019/2020)	-38%	-52%	-68%
Jobs at risk (2020)	6,5 Million	8,9 Million	11,7 Million
% Active pop	3,2%	4,3%	5,6%

Figure 17. Estimated Change in Tourist Arrivals (Source: Arora et al., 2020).

European Commission has already drawn attention to the paradox in tourism during the epidemic and afterwards epidemic, employees will be first interaction with tourism sector and tourists, a key aspect of that situation employees throughout will be important than before experience. In addition, this process can affect the satisfaction and experience of tourists. Croatia, Cyprus, Malta, Greece, Slovenia, Spain and Austria are the countries that are heavily dependent on the tourism sector and most affected by the international tourism market. At the regional level, preferences will be predominant in open areas and forest areas, which are considered being safer away than the crowded places. The observed decrease in tourism sector prompt the European Union commission and they have shaped their tourism actions as short-term actions and medium and long-term interventions. With the revitalization of demand and supply to ease the negativities of regional actors, new forms of tourism with development are continuing to diversify and re-identify the use of Europe's regional and cultural diversity, as shown in the Figure 18 below (Arora et al., 2020).

Dimension	Short-term	Medium-term	Long-term
Maximise the use of existing policy initiatives	<ul style="list-style-type: none"> - EC Communication on Tourism and Transport in 2020 and beyond - Guidance for resumption of tourism service - Solvency Support Instrument (Pillar 2 of the EC Recovery Plan) - REACT-EU - RE-OPEN platform 	<ul style="list-style-type: none"> - Recovery and Resilience Facility (Pillar 1 of the EC Recovery Plan) - Strategic Investment Facility - Upgraded InvestEU, Just Transition Fund, EAFRD, and upgraded Cohesion policy programmes - National, regional, local support programmes 	<ul style="list-style-type: none"> - Recovery and Resilience Facility (Pillar 1 of the EC Recovery Plan) - Strategic Investment Facility - Upgraded InvestEU, Just Transition Fund, EAFRD, and upgraded Cohesion policy programmes - National, regional, local support programmes
Implications of changing consumer preferences for the tourism R&I agenda	<ul style="list-style-type: none"> - Innovative approaches to safety and healthy tourism - Increasing role for consumer preferences and of behavioural science in sustainable tourism 	<ul style="list-style-type: none"> - Novel forms of alternative and sustainable tourism, near-by tourism, and remote tourism - Match tourism better with the UN SGDs 	<ul style="list-style-type: none"> - Increase resilience of tourism in facing possible future pandemics
Increasing resilience through diversification	<ul style="list-style-type: none"> - Build even more on unique European territorial and cultural diversity 	<ul style="list-style-type: none"> - Connect better seemingly disconnected value chains (digital content, industrial tourism,...) 	<ul style="list-style-type: none"> - Diversifying places highly dependent on tourism - Strategic role for Sustainable Smart Specialisation Strategies (S4)
Implications for R&I governance	<ul style="list-style-type: none"> - Explore how S4 can be implemented using funding synergies - Coordinated communication and training funding options - Connect better communities of actors at EU, national, regional, local level 	<ul style="list-style-type: none"> - Build local capacity to understand and optimise the potential funding and financing sources - Optimise synergies between ERDF and EAFRD - Increase citizens' participation in localised solutions for tourism 	<ul style="list-style-type: none"> - Efficient multi-level governance for sustainable tourism

Figure 18. Policy Actions by Phases (Source: Arora et al., 2020)

These findings may further support or affect thesis likewise changes in people's sensorial experiences before and after epidemic process. These factors may influence upon the relatively significant relation between COVID-19 situation and thesis, and also necessary to think in terms of the environment and atmospheres that the study serves or will serve and examine it in this context. It seems possible to clarify which parameters should be based on sensory experience research and how to determine these parameters. The graph shows that there has been a strategy based on tourism, it may be necessary to consider this process in the short, medium and long term in the study of the European Union. Because it may not be a very realistic approach to think the effects of the global crisis will pass in the short term or the norms will return to normal. Prior studies that have noted the importance of the process, necessary to handle that process both nationally and based on cities and stakeholders, and to shape new policies based on this. Another important finding may consider how a change in the actors of this study, which is planned to be done on the Spice Bazaar environment and user-tourist experiences, and the effect of the process on the parametric values of the study.

2.5. Effects of the COVID-19

Emotions such as restrictions and anxiety imposed by COVID-19 can cause significant changes in the context of people's reactions to the environment they interact with. These restrictions and mood states are thought to affect especially sensory interactions. Since it is not known how long the pandemic will last, it is possible that different sensory experience data may emerge, considering that these effects may disappear in the case of normalization after the pandemic process. Since the research focuses on sensory interactions, it is important to reveal these effects in a study to be carried out during the pandemic process and to determine how much differentiation there is from pre-pandemic experiences in order to overcome this problem. In this context, experiences in the COVID-19 pandemic situation and past experiences before COVID-19 can be determined on different sample groups. Different sample groups can provide a further understanding of the sensory experience effects of COVID-19 and reveal the temporal dynamics of sensory experiences. The temporal dynamics of the hegemonic senses can be examined within the scope of Kahneman's Peak and End Theory. The theory argues that positive or negative peak emotions during interaction and the last stage of the interaction reveals the memorable self-state.

2.6. Discussion of the Literature

Agapito et al. (2013) have done literature study on the tourist experience from this study's one of the consequences has been observed that not only one sense is not effective or dominant, different senses come together to shape and thematize the tourist experience. Different sensory experiences caused by tourists with different socio-cultural and profiles were also reported in the findings. In addition, it has been seen in the research that it is effective in making sense of a historical, cultural and touristic environment. Since tourist travels and tourist experiences have multiple sensory inputs, Son and Pearce (2005) propose a conceptual framework based on cognitive, affective and multi-sensory components (Son and Pearce, 2005; Agapito, Valle and Mendes, 2013).

In recent years, there has an increasing interest in tourist experience and an empirical perspective on the role of the five senses targeting tourist experiences requires a holistic approach to the subject, and studies haveshown that there is a lack of empirical work on this topic, although there are many theoretical studies. Insights influencing

the multi-stage perception process of the tourist experience, innovative marketing, and design fields towards expected goals are crucial to guiding experience management efforts, as this is considered fundamental to ensuring a tourist experience and is highly important for the competitiveness of touristic environments (Agapito, Valle and Mendes, 2013).

Although experimental studies in sensory reveal the effect of sensory stimuli on consumer behavior (Krishna, 2010), experimental studies are needed to understand the role of human senses in tourist behavior and how individual characteristics affect responses (Krishna, 2011). Insights into atmospheric factors affecting the multi-stage perception process of the overall tourist experience are crucial to guiding innovative efforts towards desired goals, capturing changing stimuli sensory experiential differences can contribute to the sustainability of the process.

CHAPTER 3: HISTORY OF SPICE BAZAARS AROUND THE WORLD

The term bazar is also associated with the Turkish term *Badistan*, which is located in the center of the commercial center of a town where valuable goods are stored and sold, sometimes defined as a domed building. This Turkish term also means the same as *Gaysariya*, which means ‘warehouse complex’ in Arabic (Gharipour, 2012).

For centuries, people around the world have gathered in bazaars to trade goods, to buy and sell products in their common and commercial centers. These market places often served as an integral part of the community and were referred to by many names with their own cultural meanings. Bazaar refers to a bazaar or community of shops where various goods and services are bought and sold. The word bazaar has its roots in Middle Persian (*vazar*) and Armenian (*vačar*) (Gharipour, 2012). As a reflection of the traditions, the bazaars also allow an excellent fieldwork under their macro-historical structure. Anthropologists, architects, or geographers often draw inferences from hermeneutical in these areas (Keshavarzian, 2007).

For this reason, it is not right to see the bazaars only as a traditional trade center or shopping area. These bazaars, which are home to many traditional and modern commercial buildings that include this Bazaars system and area, many shops and small stalls, are very important areas.

There are many definitions for bazaars. For Orientalists, the bazaar has been seen as the main distinguishing feature between Islamic and European cities. Although these bazaars are activity areas with semantic qualities rather than a physical area, they are a part of the development process. It can be said that the market is as valuable as a literary address because it has the potential to tell the developments in society, temporal changes and even the history of revolution (Gharipour, 2012). One major issue that it has the feature of leaving traces and remnants of the next period, all sensory experiences of this period carry an important information value. From this point of view, the study planned to be carried out in this area, which has an effective and versatile historical importance like Spice bazaar, can provide valuable data for future studies.

3.1. History of Spice Bazaars Around the World

Pre-Islamic bazaars existed in two forms: permanent urban markets and seasonal or temporary markets appear in the literature. Although the bazaar exists as a concept in Rome and Parthian Cities, it has been further developed by Muslims to regulate trade in safe Islamic lands stretching from China to Spain, and have been made important trade points. The hierarchy within the bazaar was generally based on the experiences of vendors and users. The bazaar police, called muhtasib, were responsible for maintaining order in the bazaar. Muhtasib also controlled the cleanliness, noise, crowds and even the circulation of animals in the bazaar (Gharipour, 2012).

The market, known as the Spice Bazaar in Turkish, was famous for its sharp spice aroma in the market in the past, but it still maintains its charm with the spices and many local products, colored powders and spices, although not that intense now (Taylor, 1998).

- **Bazaar Goods Organization**

There were many factors affecting the distribution of guilds in the markets, the most important of which was the attractiveness of the products. For example, the most preferred and many tourists prefer are the artists guilds were in the first place. As security is also an important issue, the jewelery areas are strategically located close to the mosque districts in the central parts of the city to ensure the best security. Some craft shops, such as grain and spice shops, were located close to each other, while fewer compatible guilds were placed in separate areas (e.g. blacksmiths and pharmacists) (Gharipour, 2012).

Urban markets, like the Grand Bazaar in Istanbul, are spread throughout the city or concentrated in a single area. Topography, urban form and population growth patterns generally determined the structure of a bazaar. Morphologically, bases can be divided into four categories: linear, radial, condensed and cross-shaped. In linear bazaars, the shopping street was developed over time without a master plan and positioned as inns along the axis (Gharipour, 2012).

- **Climate**

The construction techniques and designs in the bazaar are suitable for microclimatic conditions. For example, in the Grand Bazaar, the high walls and the surrounding gardens and streets all form part of an integrated urban fabric. Domed roofs capture

the sun's rays, creating a microclimate that makes the bazaar relatively cool in the summer, thus creating cavernous streets that are cool and shaded by light, but there is a hole in the dome that allows some light to enter and also allows fresh air to enter. The walls of the narrow passage keep the sun and dust out (Gharipour, 2012).

Fariba Adelkhah, in her otherwise nuanced and revisionist work, does not define the bazaar or bazaari, terms that frequently appear in her anthropological study of post-revolutionary urban society (Gharipour, 2012).

There are many spice markets in the world. Spice markets are seen as a reflection of cities and cultures and are frequently visited by tourists. These market areas as can be seen as Figure 19, 20, 21, which are usually full of local and rich spices, also display many local products and cultural values. Although there are many Spice Bazaars in the world, there are certain Spice Bazaars that are very popular.



Figure 19. Rahba Kedima, Marrakesh, Morocco (Source: localadventurer.com, 2022)



Figure 20. Dubai Spike Souk, Deira, Dubai (Source: aroundtheworldl, 2023)



Figure 21. Benito Juarez Market, Oaxaca, Mexico (Source: culturalfoodies, 2021)

3.2. History of Spice Bazaars in Turkey

The Spice Bazaar, built in the 17th century, the oldest settlement in Istanbul, between the historical peninsula Eminönü and the New Mosque. It is located in a location surrounded by structures such as historical inns, tombs, and mosques. Eminönü has been an active trade and port area since the Byzantine period. The place known today as Spice Bazaar was built in 1664 as Ottoman cities, bazaars and bazaars were located in dense areas and cities. Established as an herb and spice bazaar built 400 years ago, the market mainly sold medicinal products, herbs and spices, preserved its originality until the middle of the twentieth century. The name Spice Bazaar got this name because the goods and spices sold in the shops of the bazaars were brought to Istanbul from

Arabia and India through Egypt. Some European travelers also called it a pharmacy place (Özgüven and Durhan, 2010). The Ottomans established first bazaars in their capital Bursa, as well as in big cities such as Istanbul, to export silk and wool products. Bazaars became a part of an urban design in the late Ottoman period. Caravanserais began to serve as hostels and became a part of culture included in the urban environment (Gharipour, 2012)

3.3. Spice Bazaar

The L-shaped bazaar is divided into two different places. The part parallel to the sea belonged to cotton sellers and the other perpendicular part belonged to herbs and spice sellers. Three of the six gates of the bazaar dedicated to herbs and spices (Balık Pazarı, Hasırcılar, Ketenciler) and the other three (Yeni Cami, Haseki and Çiçek Pazarı) were allocated to cotton sellers. The main entrances of the two major branches of the bazaar are arched and two-story. These parts were used as commercial courts in the past, and the courts were used as commercial courts. The bazaar consists of 106 shops. The building went through two major fires at the end of the 17th century and was partially damaged, and the 1894 earthquake also caused great damage (Özgüven and Durhan, 2010).

In the 1940s the touristic place went through another major fire. As a result, major repair work had to be done. Although it is on the exterior during the repair process; The basic features of the complex have been preserved, some changes have been made to the interior design. For instance, the old benches in the original building have been removed and shops have been combined. The arched unit emphasizing the main entrance of the building has been partially covered. Today, in the courtyard surrounded by the L-shaped body of the bazaar, there is a small area with a flower market and small shops. Apart from the L-shaped body, the bazaar building where street vendors operate has also been included in the bazaar. In this context, the Spice Bazaar is a great example of functional, environmental, cultural, social and economic features. The Spice Bazaar is still the only Spice Bazaar in Istanbul. Today, tourists from all over the world prefer to visit the bazaar to buy spice and also for the historical features of the building. Spice Bazaar the social and cultural and physical identity of the public environment are in direct interaction with each other. Certain meanings are attributed to historical urban identification.

As was pointed out in the chapter introduction Spice Bazaar's contribution to social and social areas is crucial in terms of cultural and historical continuity. On the other hand, it is obvious that cultural knowledge will be transferred to the future, but the destruction of buildings due to neglect means that modern life, unconsciousness and cultural under threat due to the inability to preserve culture. For this reason, the value of the cultural property should be ensured that history is exposed and made readable, visible. The harmony that has been tried to be preserved over time, the use of air conditioners to reduce the height, and the showcases surrounded by spot lights face the risk of losing the originality of the bazaar. The common areas of a city are not only belonging to the city with their physical features but also reflected in its culture and soul and bear the traces of different representations. The Spice Bazaar is also a cultural heritage in the heart of the city with these features. The spice bazaar provides examples of elements that may appear to be incompatible and complex, but each of these elements has its own integrity despite their perceived incompatibilities. Although, it has the unique feature of being an object that can be experienced through sight, hearing, smelling, touching, and tasting (Özgüven and Durhan, 2010).

The various data of the Spice Bazaar for this study is that it has the above cultural heritage and is a historical architecture, as well as a very rich data in terms of experience of five senses. This touristic place, which has a wealth of data that can feed every sense, offers many opportunities to research on sensory experience. For instance, the presence of birders and the other animals at the entrance of the bazaar enriches the sense of sound, spices and herbs fragrance and visual sense, touristy and historical décor can contribute the visual sense, treats and all kinds of product options enhance taste and touch sense. It can also contribute to the richness of the data of the study by hosting a very intense and very different socio-cultural tourist visit.

Istanbul Spice Bazaar, which is the essence of Istanbul, is a cultural heritage basement that appeals to the senses, the vibrant spice colors mixed with the sound of the bazaar, the exquisite taste of the desserts and the cultural heritage appealing to the eye. The bazaar is surrounded by a large square and is intertwined with the experiences of the historical city (Cains and Davies, 2012).

3.4. Spice Bazaars as Sensory Environments

The movement of the body alone does not make sense, together with the five senses we perceive the movements and sense the environment. The things seen and experienced around us are there to position us in a community, and everything is related to one another in it (Pierre, 1990). The most likely experiencing the place or atmosphere is a part of that culture, a representation of that area. All items in these fields contain a meaning and sensing. People who travel or experience that area gain multi-sensory experience from each point physically and cognitively.

It is also necessary to think about the architectural spaces or atmospheres, there is an integrated slice or space gap in front of them and in the spaces. In these sections, the parts found according to preferences and tasks are defined and assigned according to tastes, technical skills, ideas and also preferences (Leach, 1997). Sections assigned to these spaces contain many meanings, skills, experiences and interests. Witnessing these multi-sensory experiences can be much more intense, especially in these atmospheres with cultural values.

The flags in the Spice Bazaar symbolize a national matter, and they also affect the sense of sight as shown in the Figure 22. Red flags, which are noticeable by tourists visiting the bazaar, also contain national and sensory messages. A wide selection of sweets and spices are available at the bazaar, as shown in the Figure 23 below, appealing to all senses of the customer. It is an extremely exciting experience because of the colors, shapes, and fragrances of the items.



Figure 22. Flags of the Spice Bazaar (Source: Author's Archive, 2023)



Figure 23. Multi choices of the Spices and Delights in the Spice Bazaar (Source: Author's Archive, 2022)

It has been done some changes in the Spice Market within the scope of the European Union (EU) standards studies in 2010, in order to provide more hygienic food safety for tourists, many of the open spice stalls were covered with plastic or glass covers. These transparent covers have been a method developed to preserve the spirit and aromatic appearance of colored spices such as cardamom, pepper and saffron (Davis and Şenocak, 2017). This design development has an impact in terms of the visual sensory experiences of the tourists, which we consider in terms of sensory experience. In this situation, which is tried to be controlled in terms of hygiene, transparent designs prevented the interaction of colored spices and desserts with tourists, but on the other hand, it may have affected the intense spice smell in the market.

Some products of a Turkish culture that are frequently encountered in the Spice bazaar have been included in the UNESCO's Intangible Cultural Heritage List in 2013, for instance: Turkish coffee has added to this heritage list. Although Turkish coffee has a special importance for Turkish culture, these products with powerful smell, coffee brand's picture can be seen in the Figure 24 (Davis and Şenocak, 2017).



Figure 24. Most known Turkish Coffee Brand in the Spice Bazaar

It is apparent from the studies, shows that effect of the scent of Turkish coffee on tourists, it has been a frequently used aroma in the bazaar. At the same time, rose water is used in the bazaar in the ventilation system from time to time, but spice sellers have complained about this situation because they have stated that they are suppressing spice scents (Davis and Şenocak, 2017).

One of the areas that appeal too many senses, located in the interior of the L form with the entrance of the Spice Bazaar, is the section where bird and plant vendors are located. It is possible to see a variety of plants with an incredible variety of birds, with intense bird sounds, and regaining colorful fishes as refer in Figure 25. Spice Bazaar's has become an integral part of this area, which has an intense sensory interaction.



Figure 25. Flower and Animal Market, Spice Bazaar (Source: Author's Archive, 2023)

To reveal conceptual knowledge in which an empirical approach to analyze a particular process, a dialectical dynamic is possible, is necessary for a field study. For example, cultural consumption in historical places, houses, palaces, 'culture itself' and may disappear or degenerate from time to time with the expectations of the tourism and leisure industries (Leach, 1997). Therefore, in the Spice Bazaar, which is the proposed the field study for this study, the sensory experiences of tourists and the change of these experiences can reveal important information. So far, this changed sensory experiences that may disappear over time or exist later may be discovered.



CHAPTER 4: LITERATURE ON STUDY METHODOLOGY

Schmitt (1999) argues that user experience can be characterized by five strategic experience modules. These are sensory (sensory), sensory (feeling), creative cognitive (thinking), physical / behaviors and lifestyles (movement) and social identity (social) as we can see previous research. In addition, he argued that users and the atmosphere are experienced not only through visual experiences, but also in a multidimensional way, such as sound, smell, touch (Agapito, Valle and Mendes, 2013). Phenomenology focuses on individual experiences. Experiences with cognitive processes they tend to match their environments with mental processes that are often described. Images that we spatially combine, understand, remember and use for environmental and atmospheric information. Cognitive mapping is not only a subjective activity but also meanings are experienced by groups of people as these cognitive structures (Degen, 2008). In this study, the subjective experiences of the participants (tourist) will be revealed with the phenomenological reduction approach and theming with the method of thematic analysis. It was planned to develop a measurement system in which the participants' data could be collected on a larger scale with quantitative methods to reveal generalizable information by using the themes obtained. It is thought that this system will help to gather stimuli data (e.g. data entry of active tourists with a mobile application) so that stimuli sensory experience differences or similarities will be seen on sensory mapping. The aim of phenomenology, the philosophical approach developed by Edmund Husserl "deepening and expanding the boundaries of our stimuli experiences" (Paterson, 2007). Phenomenology philosophy of experience and how phenomena are prevented by theoretical concepts when dealing with how it transforms into consciousness (Merriam and Tisdell, 2015). Husserl planned phenomenology as the science of pure experiences of human consciousness. These cores, described as subjective phenomena phenomenological reduction method they can be captured and analyzed (Küçükalp, 2010; Paterson, 2007). However, in his recent works, the objects of experience and adopt an embodiment-centered approach (Petit, 2003; Paterson 2007). Analyze sensory interaction the use of phenomenological methods developed by Merleau- Ponty and Husserl it can give explanations to the contents of sensory experiences (Paterson, 2007). Analysis of sensory tourist experiences transmitted by tourists in selected locations or locations will provide and their experiences can be epistemological information about the study. It was wanted

to analyze the sensory-based themes / motivations and the link between the experiences and the motivations of tourists in the tourist atmosphere.

With the “think aloud protocol”, participants will be recorded with a sense walk, and their momentary thoughts will be recorded. Thus, it is aimed to breach the stimuli sensory experiences of the participants. When the sensory walk is over, the participants will be interviewed.

4.1. Discussion of Method

Throughout this study, it is aimed to investigate the sensory experiences of the tourists that whom come to visit that the cultural and ethnic atmosphere such as Spice Bazaar, as mentioned in the previous sections and in the literature to reveal an intensity or regional sensory map. With the research questions developed to achieve this aim, the maintenance of the study was directed and needed to understand the tourist experiences in depth. The study is based on interaction design, and by using sensory walks in the method part, it provides the opportunity to obtain information about their sensory experiences with the experiential feedback got from the tourists in Spice Bazaar and it is the representation of the information over a sensory map. In the part up to this section, it is aimed to create a fictional framework on the multi-sensory experiences and atmospheric relationship of tourists. In this methodology section, the methodological approaches to be adopted in the study, the proposed structure of the research, the research of tourists' tourist experiences with planned methods and the discussion of the methods. Preliminary to determine priorities for the adoption of a target to be associated with a methodological approach refining the purpose of the study is fundamental (Venkatesh, Brown and Sullivan, 2016). At this point when examined the expectations of the research, it is a useful criterion for municipalities, architectural projects and designers to search for similar multi-sensory experiences in many touristic atmospheres, to develop these experiences and also which experience is more effective on a map, by using the sensory/tourist interaction dimensions or in the light of the data to be obtained from this study for ensure that. Thus, sensory experience measurement and evaluation within the proposed tourist atmosphere, in line with the expected results of the investigation and address methodological research. Stating the aim of the research and its contribution to describe the touristic atmosphere of Spice Bazaar, how tourists experience that atmosphere in terms of five senses,

which experience is effective in the bazaar and the regions where they have the most intense sensory experience on a sensory map. There are various reasons for that study have chosen the Spice Bazaar because of the Spice Bazaar has an ethnic and cultural history likewise has been one of the Central points of trade and Spice trade throughout history. For the sake of reason Spice Bazaar has rich cultural and ethnic values, as well as a very rich Spice and other gastronomic flavors, and therewithal the presentation of these different cultural tastes has taken a unique shape and gained importance value. Therefore, Spice Bazaar has the feature of being a common destination for most tourists from different demographic or different cultures, which is preferred by tourists too often. In the literature part of the research, initially, the concept of sense and the five senses' pattern and roadmap in the brain were examined. Then, the concept of sensory experience and its effects on the atmosphere, the sensory experiences of the tourists, were tried to be analyzed. The relationship between sensory experience and design has been examined and a conceptual framework has been tried to be identified with the literature discussion. In this context, it was desired to choose the most relevant and efficient method for this study based on the sections examined, and many methods were tried to be researched. The concept of human and experience in the social order contains a fundamental context.

The words 'lived' and 'order', which are defined by experience, definitions, explanations and evaluations of the social life constructed and used within these tangible contexts and activities that make up the society, are built on various theoretical, methodological and foundations (Charmaz and Mitchell, 2001). In addition, in most of the empirical researches conducted in recent years and literature studies in this field, there are concerns about whether it is related to human's emotional associations or direct insight (Spence, 2020).

In broad range, when the experiences of tourists are investigated, it has been reported that the experiential cognitive deficit is mostly because of the inability to understand the nature of the tourists' experiences. Gretzel and Fesenmaier (2003) mentioned the importance of examining destinations and travels based on tourist experience and examining complex experience structures that include cognitive and sensory stimuli as well as emotional responses (Gretzel and Fesenmaier, 2003). Existing measurement approaches seem to be extremely limited in their ability to capture the sensory aspects of experiences, as the role of sensory stimuli is not recognized not only for the tourism

experience but also in the construction of user experiences (Gretzel and Fesenmaier, 2010). It has been decided that it would be more accurate to direct the study by integrating several methods and similar approaches in similar studies due to the fact that more research has been started in this field in recent years and the number of studies in this field has increased. by reason of the fact that sensory experience is multi dimensional and its measurement may not be accurate with a single method or method, as guided by the research subject of the research, creating a method setup from the eclectic combination of qualitative and quantitative studies can provide more reliable data. Along with the qualitative and quantitative data to be obtained throughout the researched, inputs based on sensory experience will also enable us to reach qualitative data regarding the measurement of sensory experience and analysis of sensory experience, Quantitative Descriptive Analysis (QDA) was developed in the mid-1970s by Tragon Corporation in 1974 to determine and address sensory measurement problems (Gacula, 2008). Schmitt (1999) SEMs sensory experience module examined under the title of theoretical framework Experiential modules for use in experiential research include sensory experiences (Sense), emotional experiences (Emotion), creative cognitive experiences (Thinking), physical experiences, behaviors and lifestyles (Act), and it enables to understand the experiences of people through a reference group (Rhea, 2014). Although it seems quite suitable to be used in this research, this module is based on providing customer satisfaction in terms of experiential marketing. The restricted use of SEMs could not use for the sensory experience research targeted in this study is planned to be design- oriented, not marketing based.

4.1.1. Interactive Methods

Interaction Design Method is the procedural version of interaction design, although there is not accepted definition of interaction design, its essence is that it can be examined and developed according to user experience and its characteristics. User experience is a method that helps to better understand the relationship between physical, sensory, cognitive, emotional and form, function and content, and the role of user experience in the design of this interactive system (Fallman, 2008). The interaction design is influenced by the user's behavior, psychological characteristics and experience environment, while the discovery and stimulation of the user's subconscious and behavioral habits, while keeping the basis of meeting functional

needs unchanged. Everything is about the user, which ensures that the user is satisfied when using the product or to achieve a harmonious interaction between people and objects or places in the system (Sun, 2019). Söderlund (2003) points out two behavioral theories in his study; He presented the theory of reasoned action (TRA) and the theory of planned behavior (TPB) models in his study for the results and justified actions expected by the user in a causal relationship in the future.

Purposeful behavior model developed by Richard Bagozzi and researchers, there is a different perspective and reaction to these two models. It proposes a theoretical approach that includes expected evaluations as influencers of future intentions and focuses on the sensory aspect. This theoretical model focuses densely on the emotional side of evaluations and outcomes, postulating evaluations of the consequences of achieving or not achieving an ambition to elicit expected emotions. (Bagozzi et al., 1998; Bagozzi and Edwards, 1998; Bagozzi and Dholakia, 1999) It is proposed current attempts to treat user experience in empirical terms are concerned with increasing the level of satisfaction of the current experience (current customer satisfaction (CCS) (Söderlund, 2003). Gretzel and Fesenmaier (2003) provide a powerful methodology that aims to reveal the advantages of sensory experience in terms of laddering method, especially to reveal the sensory association networks in the minds of users. The methodology is ensured the Sensory Experience Embodiment Protocol (SEEP) and it was developed with the aim of delving deeper into the consumer mind with step questions and allowing them to access even greater concepts of abstraction.

The present findings have important implications for this method and was applied to a sample of 1,436 participants who were asked to describe relationships with people in travel destinations in the Midwest United States. Accordingly, SEEP is currently adopted towards eliciting sensory associations with people in certain destinations, but can certainly be modified to suit other tourism experiences. For instance, discovering what sensory experiences are desired in a luxury city hotel room can be applied to explore the sensory experiences and emotions encountered while visiting a tour (Gretzel and Fesenmaier, 2010).

4.1.2. Sensory Analysis Method

The main principle of the study is to find answers to research questions that are crucial issue, the sensory analysis and evaluation methods which was carried out to find. When undertook the studies at the basis and origin of the subject of sensory

evaluation, it is seen that it comes from physiology and psychology. The data obtained from the evaluations and studies made with the five senses of the users are closely related to the tendency of the behavioral aspects of the perceptual process (Sidel and Stone 1985). The concept of sensory analysis and experience are interrelated and contextual issues. While experience is a much older and more established field with further work, sensory is a much newer and under-researched subject in experience. According to the sensory modality data obtained from the physiology and anatomy studies of the human sense and system have receptors and complex neural pathways in the human brain. The sensory modality of each of the studies of the physiology and anatomy of the system has its own receptors and neural pathways to higher and should be known. Understanding how sensory information and inputs are processed in the human brain and evaluating the process are very important for understanding the process, but if it is not sufficient to understand all the steps in the process, it may lead to an inability to evaluate the sensory experience rightly (Sidel and Stone, 1985).

The senses can be assumed as a whole that constitutes cognitive activities such as “our bodily states, actions, attitudes and behaviors, memory. In the context of tourism, when tourists discover a place, the senses are thought to be quite intense, and together with their previous experiences, sensory experiences such as smell, touch and taste are emotional and cognitive responses can be explained by embodied experiences (Gibson, 1966). Understanding this process is the key to designing a meaningful tourist experience (Gibson, 1966; Kim and Fesenmaier, 2017). As stated in the title of the research, as also explained in the literature and the theoretical framework, and in line with the purpose of the study, the starting point of the touristic experience design is to correctly analyze the sensory experiences of the tourists during their travels. Along with the importance of providing a strong theoretical basis for tourism experience design, it is important to measure cognitive processes and these processes with the suitable methods.

The senses are a sloppy, heterogeneous, complex confusion of different interactions at many levels of experience and explanation, but depending on our purposes it can isolate the patterns of unity and coherence that are characteristic of our intuitive notion of sense. Understanding sensory experience requires that can take a closer look at specific (and common) interactions between the senses, while keeping in mind what makes individual senses important and interesting (Fulkerson, 2014). In order to

determine their applicability for sensory assessment and tests, it is necessary to have sufficient interest in the disciplines of psychology, medicine and physiology, mathematics and statistics. Sensory assessment methods are important for determining the interaction of the user and sensory properties because it is essential for accurate and sensible measurement to follow systematic and professional developments for sensory evaluation and measurement of sensory values (Sidel and Stone, 1985).

In addition, sensory analysis methods have been made ISO standards in many countries around the world. There are 64 standards in the UK only under the heading of sensory analysis. Moreover, it is possible to see sensory analysis standards in TSE in Turkey, but when all standards and sensory understanding methods are examined, most of them consist of analyzes applied in the food industry and controlled and trained supervisors and laboratories. Many studies have been carried out on the potential of experience, considered to be the primary factor that provides tourist satisfaction and affects long-term memory. Recognition of the important role of experience in tourism in the last decade has been an important research area, with studies on many interpretations and definitions of the term “experience” (Kim and Fesenmaier, 2017). A growing body of literature has examined to re- conceptualize the tourist experience. It is seen that besides a standard definition of tourist and tourist experience are now defined temporally and spatially. Sociologist researchers examining the use of time have reported that they attach importance to places in the study of tourist experience, and therefore atmospheric environments are closely related to tourist experience (Volo, 2013). Kim and Fesenmaier (2017) draw the attention to the basis of the concept of experience on several counts, while the measurement of experience has been the focus of many discussions. From a psychological, geographical and design research fields have focused mainly on stimulus- response relationships and on experience processing and decision-making processes (Kim and Fesenmaier, 2017). Since the nature of the tourist experience is temporal and psychological, the relationship of the tourism experience with internal factors, needs, motivations, previous experiences and external factors, such as physical environment, social environment, satisfaction with the continuation or results of the research, provided important data in terms of analyzing future behavioral situations. In other words, the tourism experience is understood to be part of a continuous creative process in which travels create (share or reshape) meaningful experiences (Arnould and Price, 1993;

Aho 2001) (Kim and Fesenmaier, 2017). Therefore, it is necessary to be very transparent and careful when analyzing the sensory experiences of tourists. There are many methods and procedures used to reach self-knowledge and self-sensory experience. It was obtained from traditional research methods; it is seen that independent verbal or written reports of tourists, surveys or interviews observe to a certain protocol. It can be seen that tourists refer to the terms “visiting a place” and or “seeing a natural attraction” as “experiencing”.

Some recent criticisms of the tourism literature, word meaning of the experience often becomes synonymous with visit, activity, motivation, trip, escape, behavior, emotion, perception, event, reaction to a stimulus, consumption, cognitive or emotional process (Volo, 2013). As in a product user experience or in an atmosphere, ethnic and cultural, touristic place, the experience begins to be affected by non-directional and many sensory stimuli. Some recent criticisms of the tourism literature, word meaning of the experience often becomes synonymous with visit, activity, motivation, trip, escape, behavior, emotion, perception, event, reaction to a stimulus, consumption, cognitive or emotional process (Volo, 2013). As in a product user experience or in an atmosphere, ethnic and cultural, touristic place, the experience begins to be affected by non-directional and many sensory stimuli.

Tourist experience is both an individual phenomenon marked by cognitive factors and a social phenomenon that includes interaction between people (Jennings and Nickerson, 2006). As a subjective experience, accessible only through introspection is the phenomenological approach proposed by Cohen (1979), which proposes the most appropriate qualitative methods for analyzing the tourist experience (Hayllar and Griffin, 2005). This is quite important to reach deep self-knowledge and self-experience in order to learn and analyze the experience. It can be seen that the phenomenological approach is highly preferred especially in sensory field studies. Max Scheler (1928) recognized in his work that the phenomenological approach ‘is an attitude and perspective rather than a method in the sense of a set of mental predictions (Scheler, 1924)

Martin Heidegger (1976) states that he was very much inspired by Husserl and was not concerned with consciousness, but with the meaning of being (Charmaz and Mitchell, 2001). It aims to reveal the meaning of existence, to reach the deep ontological knowledge and to help make sense of deep knowledge. The aim of this

research is to examine a qualitative research is predicting at this stage and to reach the sensory experiences obtained from the natural atmosphere as much as possible from the tourists and to make sense of them. Some open-ended parts in the phenomenological approach and the suspicion of not being able to reach the experience naturally or not understanding this self-knowledge correctly may cause the reliability of the study to be questioned.

It aims to examine in many ways, to analyze opinions and to find deviations, together with the ethnomethodology approach preferred in sensory research based on phenomenological and hermeneutic approaches in philosophy. Phenomenological approach and ethnography methodology difference between naturalism and constructionism has taken a middle position on the difference between naturalism and constructionism (Charmaz and Mitchell, 2001). As others methods, ethnomethodology developed by Garfinkel (1974) to describe the 'methods of knowledge and practices', avoiding comparison with the scientific understanding of knowledge in accordance with the traditional anthropological style. The knowledge and methods in which this method was used constituted the infrastructure of social life. Thus, ethnomethodology maintains a stance of indifference to the ultimate value or validity of similar methods as the study of ethnomethodology (Charmaz and Mitchell, 2001). Within the framework of this method, ethnomethodological considers all the characteristics of all research and social life, it provides to reach the essence based on phenomenology by getting support from phenomenology. Moreover, researches have analyzed on sensory experience analysis in this field, it is possible to see that each research is conducted with a different model and method. Kevin Connolly underlines that a limited sensory conservatism for cross-modal (but not multimodal) experiences. The concept of sensory conservatism states that most of our perceptual experiences are connected with our multi-sensory experiences (Fulkerson, 2014).

Quantitative Descriptive Analysis (QDA) is used as a sensory analysis and evaluation method. It was developed by Targon in the mid-1970s to solve and address sensory measurement problems. One of the ways to measure sensory perception is to use a graphical tool to evaluate the results. Although each sense appears independently during the tests or in the sensory perception processes of tourists, all senses interact after inserting the brain and nerves, they travel in different parts of the brain throughout this journey, and eventually a cognitive integration takes place, so all sensory

responses are interrelated. To sum it up a descriptive sensory experience analysis of a product should be a sensory process involving all the senses (Gacula, 2008). In “Quantitative Descriptive Analysis” (QDA), multidimensional models of data in a quantitative approach are provided to analyze sensory experience according to the order of occurrence of sensory experiences, according to the content of a sensory experience of a product or place. The key features of this technique include formal statistical tests and procedures necessary for the reliability of the test to improve the perceived sensory qualities (Gacula, 2008). In sensory experience research, Kim and Fesenmaier (2017) draw the attention to focus that experience studies must first be understood as a physiological process that should be captured (i.e., measured) in the human body using various new technologies and can be used to capture the participant’s sensory experiences and other experiences, and that real-time responses mentioned that sensory experience is an important point from measurement (Kim and Fesenmaier, 2017). Pink (2006) outlines for sensory experience research while taking the video tours, she saw the users conceptualized the house as an atmosphere that includes emotions rather than just a physical and visual environment (Pink, 2006). Kastenholz (2012), on the other hand, in his study examining the tourist experience, documentary analysis and on-site observation. Semi- structured interviews were conducted with the participant tourists, especially for their behavioral options, sensory thoughts and attitudes, based on the literature review and integrated into the study, and group discussions were made among the researchers (Kastenholz, 2012).

Several researches expressed that although sensory experience research is a multi-way field, the dynamic nature of sensory and tourist experience and individual and situational differences also bring some biases (Kim and Fesenmaier, 2017). There is a considerable number of researches on the implementation and evaluation of the research, as mentioned above if any biases arise a should be taken into consideration and awareness of a situation that will affect the nature and reliability of the study.

Science researchers are researching sensory experience using sensory walks methodology to get better experience senses. Sensory walk, performed a sensory walk by Southworth in 1967, focusing on the sound environments of cities. By understanding sensory walks methodology in 2011, in Vienna, the philosopher Madalina Diacon frightened to find meanings and associations, and they conducted scent walks with a group of students (Quercia et al., 2015). Experience Sampling

Method ESM, which is another experience research method, allows to capture real-time experiential data from individuals in daily life during their daily natural activities with stimuli evaluation techniques. This method also allows to evaluate the experiences and behaviors of individuals embedded in daily life, as well as rapid changes in mental states. As a method, it focuses on symptoms and adaptive functionality, aiming to map (normal) daily psychological functioning (Verhagen et al., 2016). It is rarely used as a way of collecting data about immediate conscious experiences.

Quinlan, Doherty and Carmichael (2018) suggests that the use of ESM in relation to tourist experience research. Guided as a roughly qualitative procedure using audio recording software to examine the experiences oftourists in Peru with the application of this method to emerging smartphone technology, the study employs a research approach involving the use of a digital ESM. The method is in line with an essentially of this approach was analyzed to examine the practical and operational aspects of ESM and addressed the methodological implications of this research method by presenting findings about the length of qualitative discussions, the qualitative content of ESM procedures, and retrospective experiences of the ESM (Quinlan, Doherty and Carmichael, 2018). Based on the aim of the study, in order to reach the objective step by step and to guide this process correctly, many research setups, several methods and procedures in this field have been carried out and analyzed and the most relevant methods were tried to be selected for this study. In the following section, the selected methods and the planned structure of the study will be discussed.

4.2. Design of the Study

As mentioned by researchers to understand multi-sensory experience, be able to measure various human experiences and also be able to understand experience. Some recent criticisms of critical comments on multi-sensory experience and experience measurement evaluation is versatile and open to discussion is that the experience that may seem the same from the outside can be very different for each user and individual. Several researchers have expressed doubts about to explain physiologically and still have open doors. In addition, since previous experiences are different for each individual, the current stimuli may directly or indirectly affect the experience. Likewise, that and the other physiological, psychological and cognitive processes

directly or indirectly affect multisensory experiences. This research is carrying out to include all sensory experience processes such as examining the sensory experiences of the tourists visiting the Spice Bazaar during the Bazaar, finding out where they concentrate or which experience is unique for them, or whether they have left with some disturbing sensory in the Spice Bazaar. An important issue to understand sensory experiences in a traditional Bazaars, and how and where we evaluate this knowledge. The most reliable method should be preferred in order to analyze the sensory experiences in the natural environment as much as possible during the tours of the tourists and to reach the reliable information. As explained above, there are methods and approaches of research in this area especially for the tourist experience, one or two analyzes may remain open to analyze the sensory experiences of tourists or leave interpretive gaps. Further the research intends to use more than one method in our study and it was requested to continue with the verification of the information within itself. In this research just carrying out an interview or just observing methods may have considered insufficient. For this reason, in the study, it was desired to make the study aim by considering many methods to be in interaction with each other.

During the study period, it is expected that the three major areas will support each other by providing feedback within each other. Reviewing subsequent of the literature of review on the role of the five senses in human perception, the roadmap and behavior of the brain, and the discussion of the theoretical foundations, a research setup of sensory experience has been tried to be formed. Nonetheless, the observer/researcher can follow the tourist/participant while the travel and can follow their stimuli mimics or reactions. Thereby, the observer/researcher takes pictures of the tourist/participant and tries to capture their instantaneous reactions. This sets of the stage, it is not possible to see or overlook the sensory experiences they forgot or unconsciously gave during the think aloud protocol. Walking to achieve this sensory experience is also referred to as a sensory walk in the literature.

McLean, K. (2017), findings support the data and conversations obtained during the Sense walk are “analyzed” and a representative view of that atmosphere is visualized as a map. During the sense walk, a combined study of sensory experience was conducted with visualization to emphasize human interaction in order to see unknown or unexpected sensory experiences also on a map, to create a sense of meaning and place (McLean, 2017). During the sensory walks, the participants engaged in more and

more focused, mindful listening tasks. Likewise urban scent walks are designed similarly. They consist of experiences that gradually expand to encompass the broader olfactory environment. Several researchers participated in this kind of multi-sensory walking. In 2011, in Vienna, the philosopher Madalina Diaconu conducted a project investigating the meanings and connotations of the tactile and olfactory qualities of the city by a group of students (Diaconu, 2011). Meanwhile, Victoria Henshaw conducted her fragrance walks in Doncaster, England (Henshaw, 2013). Much of our work is based on his research findings. The problem is that the sensory gait methodology collects fine-grained data, but is not scalable. A remarkable study was individual sensory walks lasted three months without Henshaw, involved six a participant, and covered approximately 160 km². To summarize, previous odor collection methodologies are not scalable. Web-based methodologies would only be under the unrealistic assumption of mass public participation. In contrast, sensory walks successfully engage a person at the moment, but when conducted over several years, they only result in data about limited geographic areas. Therefore, it is a need for a new way of collecting odor information on a large scale without requiring large public participation. However, sensory walk alone is not sufficient. Quercia (2015) has attempted to define that needed a new method to collect sensory experience data. For this reason, in his studies, he supported his work not only with a quantitative measurement but also with a definition and classification by using the fragrance word data obtained indirectly by social media users (Quercia et al., 2015). In order to capture the purely sensory experience instantly, the data to be obtained from the instantaneous sensory responses to be obtained during this sensory walk are recorded by a tracking map with real location tracking, and accessing the sensory experience maps of all tourists helps to analyze the sensory experience changes. The results can help to the intensities or deficiencies in the bazaar, and thus enrich the tourist experience.

4.2.1. Mixed methods

People accept sensory information as a fact because it provides a level of evidence one can rely on or challenge. All sensory information is classified as empirical or a posteriori information. Concurrently non-empirical or a priori knowledge has also been widely accepted by philosophical approaches to knowledge creation, where it explains knowledge independent of sensory experience. The basic principles for achieving this knowledge are the theoretical foundations of quantitative and qualitative

research methods. Each research method is designed to explore the identified research questions and tries to be addressed with a post-positivist approach that challenges the traditional belief in absolute truth. Searching for information and conducting research involves the systematization of data collection, analysis, and interpretation to understand a phenomenon (Williams, 2007). There are three approaches used to manage and guide the research process; qualitative, quantitative, and mixed methods. The researchers who conducted the research prefer the mix method, which uses one or both two common methods while managing this process. For instance, is it need numeric, textural, or both numeric and textural data? Based on this assessment, the researcher chooses one of the three abovementioned approaches to conduct research. Researchers generally choose the quantitative approach to answer research questions that require numerical data, the qualitative approach to research questions that require textural data, and the mixed-method approach to research questions that require both numerical and textural data (Williams, 2007).

Many hypotheses built on qualitative research, but what they all have in common is the systematic investigation or detailing of something. We are talking about “doing research” to provide information in daily life. Qualitative researchers are concerned with how people interpret their experiences, what they think about in their own world, how the people experience it, and how they make sense of everything. Qualitative researchers are concerned with how people interpret their experiences, drawing on the philosophies of constructivism, phenomenology, and symbolic interactionism. The typically aims of qualitative research are to understand how people make sense of themselves and their experiences, to describe the meaning-making process and what and how they interpret it (Merriam and Tisdell, 2015). In qualitative research, the theory of work is used in a variety of ways, for instance, as in quantitative research it is used as a broad explanation for behavior and attitudes and may be complemented by variables, constructs, and hypotheses. In this context, themes provide a ready-made set of hypotheses from the literature to be tested. Although researchers do not refer to them as theories, they provide broad explanations that anthropologists used to study people’s culture sharing behaviors, experiences, and attitudes (Creswell, 2014).

In quantitative research, theory is used deductively, and by placing it at the beginning of the study, the researcher develops a theory to test or verify rather than develop a theory, collects data to test it, then considers whether the theory is confirmed based. A

researcher tests or verifies a theory by examining hypotheses, or questions derived from it. These hypotheses or questions have variables (or constructs) that the researcher must identify. The method used for the researcher finds a tool to use to measure or observe the attitudes or behaviors of participants in a study. Then, the researcher collects reach from these tools to confirm or disprove the theory (Creswell, 2014).

Mixed-method studies, on the other hand, may involve using theory deductively, as in quantitative theory testing and validity, or inductively as with an emerging qualitative theory or model. This mixed method study, in which researchers collect, analyze and integrate both quantitative and qualitative data using various mixed method designs, is called mix methods (Creswell, 2014). The theoretical framework of this study and the literature research, as well as the data collection and fictional structure study, guided the study with research questions. The experiences of the tourists in Spice Bazaar, which is a research touristic place, will be obtained during (stimuli) and after (retrospective) their visits, and will be tried to be verified by gradual methods. Measuring or evaluating the sensory experiences of tourists in the field study designed in the research may be the most difficult or open to interpretation part of the study, so it is very important to establish the reliable method correctly. Evaluation and measurement of experience is concerned, the approach can vary and often structured, quantitative criteria or include qualitative methodologies aimed at revealing deeper meaning. In general, concepts that are not easily accessible in the mind of the user, such as sensory experiences, cannot be utilized with quantitative measurements, while in qualitative studies, it can be difficult to use for larger scale studies to reveal the dominant experience dimensions. In order to close these gaps in the literature for researching tourism experiences, Gretzel and Fesenmaier (2010) have been widely investigated tourism experiences and they propose a mixed methods approach to examine the sensory components of tourism experiences (Gretzel and Fesenmaier, 2010). Therefore, eliciting responses to the sensory dimensions of experiences requires deep attendance and careful research, which is also usually possible through qualitative research (Gretzel and Fesenmaier, 2010). While trying to control, practice and research the senses, researchers have always mentioned the known difficulties in recording, measuring, defining and classifying senses such as smell, taste, touch (Quercia et al, 2015). When measuring the senses, they do not easily fit into quantitative

measurement. Therefore, research is desired to incorporate a variety of methods related to one and another and also thus want to verify the data in its own right. The research provides a method steps in this phase, primary, sensory experiences from tourists/participants will be recorded through the think a loud protocol and then context analysis will be made. Therewithal, tourists/participants will continue their visits with the sensory walk method in this process. All processes up to this stage will be qualitative studies. However, by using the QDA method, the research becomes quantitative and processing the data to come out of it on a digital map will make the process quantitatively. In addition, when the data to be taken during the interview is analyzed again, it is expected that the structured and statistical data to be obtained will be quantitative data. Quantitative study requirements are expected to perform testing, measurement procedures or statistical analysis and it is aimed to make a statistical analysis on the expected results of this study. Mix methods will be used in this study, which is planned to be conducted by making use of both qualitative and quantitative data, as seen in previous tourist experience studies examined in this section.

4.2.2. Sensory Walk (Sensewalking)

Within the next few years there has been an increasing interest in the relationships between people and places and the role of the senses while experiencing them, and how we ‘feel’ physically and emotionally, and studies have been conducted in this direction. Sensewalking is defined by Adams and Askins (2009) as a method that can “explore and analyze how researchers understand and experience space, and usually involves a researcher with one or more participants walking in urban settings. Thus, it is ensured that the participants in that environment or atmosphere are included in the sensory environment and focus on one or more sensory experiences (Adams and Askins, 2009). Sensewalking (Sensory walking) is defined by the late 1960s and early 1970s (Bruce et al. 2015). Sensory walks have generally developed as a qualitative method for exploring aspects of physical and/or cognitive experience in an environment or atmosphere (Henshaw, Adams and Fox, 2009).

Sensory walking involves some type of sensory experience, such as focusing on the multi-sensory experience of being in a place, using walking to focus on specific sensory experiences, or allowing participants to express personal and individual relationships with a place. Researchers from different disciplines have worked with the concept of ‘sensory walking’, using sensory walks, sound walks, listening walks

and scent walks to engage participants in the discussion interview photo survey, mapping and audio recording, among other innovations/adaptations. Sensory walks as a method, researchers working with the extra-visual senses, sociologists, artists, anthropologists, planners, landscape architects and designers welcome their work and acknowledge the multidisciplinary nature of much of the work in this field (Adams and Askins, 2009). The majority of these sensory walks are performed with individuals on a predetermined route, and participants are asked to focus on 5 sensory experiences, respectively. Each of the walks takes about forty-five to ninety minutes and includes stopping points, according to the study. During the whole walk, including these stopping points, the participants are asked about their perceived sensory experiences (Bruce et al., 2015). Fifty-two participants who participated in the scent walking study conducted in Doncaster and the other researchers 2015 were asked to rate their liking of each of the stopping point areas on a five-point scale and were asked to rate their liking of the scents or scent combinations they detected, including the reasons for the scans, through a qualitative interview (Bruce et al., 2015). The use of sensory experience walks as a method is expected to have a very positive contribution to the process by creating experiences and providing an immersive and participatory approach (Bruce et al. 2015). An emerging development of such studies is the innovative use of sensory walking as a research method to explore and analyze how we understand, experience and use space (Adams et al., 2007).

One problem in sensory walk methodology is that data can be collected but not scalable. In the process of sensory experience gathering methodologies, during the sensory walk, a person's sensory experience is successfully obtained at that moment, but the data may change or disappear when performed for several years (Quercia, 2015). And also in their study they mention that there are two important prejudices that should not be forgotten when making sensory walks; these are sample bias: (participants may not represent the general population)

Response bias: during this sensory walk, participants may consider this process as a task and give different responses with this effect (of the Hawthorne effect) (Quercia et al., 2015). Sensewalking, which is efficient and positive may have some biases as mentioned above, as in many methods. For the research will be directed by taking these situations into consideration.

4.2.3. *Think Aloud Protocol (Stimuli)*

Think Aloud Protocol (TAP) is a commonly used verbal protocol method to gather experiences during system evaluation by asking users to simultaneously voice their thoughts, feelings and opinions while interacting with the system (Chandrashekar et al., 2006). TAP protocol analysis involves participants performing a task or set of tasks and verbally expressing their thoughts (“talking out loud”) while doing the tasks or walking. The basic assumption of oral protocol analysis is that when participants speak aloud while performing a task, the verbal flow effectively functions as a breakdown of the content of working memory (Ericsson and Simon, 1993). According to the verbal protocol, the verbal flow can actually be taken as a reflection of the cognitive processes used and, after analysis, can give the researcher valuable information not only about these processes but also about the representations they are working on. In addition, verbal protocol can be a very explanatory method about misconceptions and conceptual change, strategy acquisition, use and mastery, task performance, sensory responses (Trickett and Trafton, 2009). Although TAP protocol analysis is generally accepted to provide valid verbal expressions of thought processes information about explanations and cognitive processes may sometimes cannot provide detailed information (Simon and Kaplan, 1989). Therefore, researchers are also involved in the process to produce more detailed description of the types of alternative verbal reports. These alternative reporting methods provide more detailed information than is spontaneously expressed during ‘think-aloud’ protocol (Ericsson, 2006). The verbal protocol method planned in the research to enable the tourists/participants visiting to the Bazaar to express their sensory experiences that they are impressed, intense or disturbed during their sensory walks with the help of a device (such as a recording device or smart phone). Thus, the resulting verbal report will be included in the research process, so that all sensory experience will be included and more details will be reached. In order to increase and intensify the tourist experience, this study is intended to be useful data for local managers, local shops, and designers. In addition, with such studies, tourists can stay longer in the bazaar and have a positive experience of the process.

4.2.4. *Observation*

Outwardly projected ideas and actions also reflect the more abstract aspects of human experience and processes of social change, because the mind leaves the body and is 'a

mind journey into the environment along many sensory pathways. The idea of sensory 'paths' is the reality that perception and sensory experience are in a dynamic interaction between cultural beliefs and values, perceptual processes and external stimuli. Suggesting and embodying sensory experience, researchers interested in understanding sensory experience have emphasized the importance of sensory abilities in various contexts (Strang, 2005). For this reason, a common method used to reach deep knowledge and experiences is in-depth interview and participant observation methods (Lam, 2001). Ericsson and Larsson (2011) are consistent with observed the behavior of the users, followed by the control group, and also observed the behavior of the users by using the observational chart and manipulation-control questions (Ericsson and Larsson, 2011). Especially in the last decade, the recursive nature of human- environment relations has been an area that has been increasingly researched and studied with some theoretical models. It has been observed that human-environment relations are effective in the interaction of humans with a sociocultural and physical environment (Strang, 2005). With the correct application of the method during the observation, participant-environment relations and sensory experience processes are understood. The information they give during the audio protocol they will perform at that time also helps to understand the mental projection of the participant. When participants encounter an environmental sensory stimulus, they often give automatic bodily responses that are partially (or largely) beyond the individual's control. In addition, physiological measures complement self-report methods in that they can provide systematic and moment-to-moment information about useful relationships between specific stimuli (e.g., place, event, or food) and responses to varying aspects of emotions on different timescales (Kim and Fesenmaier, 2017).

Observing experience in the field, which is an important step in determining many users focused design methods and design goals, is of great importance in discovering user needs. When the observation records are examined later, it is seen that each user's environmental interaction steps and experiences provide a detailed separation and also it helps to investigate how people sense or experience the environmental places, thanks to the contextual inquiries obtained by observing the participants and their behaviors, watching them visually or recording the process with auxiliary equipment (Wang and Huang, 2014). This observation phase, which is planned in the study, will take place

during the sensory walk, during which the participants/tourists express their experiences with verbal protocol. In the meantime, while the tourists convey information about their sensory experiences, the researcher will make observations and during this observation, the unconscious or automatic bodily reactions and sensory responses of the participants, which may occur instantly as mentioned above, going to be photographed. Thus, when this stage is analyzed together with sensory walk and verbal protocol, some complementary and successive sensory experience points may emerge. In order to capture these, the observer must carefully observe the tourist behavior during the entire sensory walk. In addition, it should not disturb the participant and it should be ensured that the sensory walk continues in its most natural state by not appearing too much.

4.2.5. Interview (*Retrospective*)

Examples of researches has shown that when people place an experience in the past, it has been shown in experimental studies that it takes the same event and places it in the future much more richly and in detail (Söderlund, 2003). Theoretical studies on collective memory suggest that remembering is not just an individual mental function locked in the human brain. It is stated in studies that what is remembered goes beyond individual experiences.

Most of what is remembered is because memories are recorded through memory and it is preserved because we can preserve it, expanding his theoretical argument about the memory of the senses, the cultural heritage of an ethnic past can be conceptualized as a tangible recollection of sensory experiences (Chronis, 2006). Episodic memories, which involve individuals' long-term retention of accurate memories of individual experiences, are the type of long-term memory that is thought to be the most interesting to examine in relation to tourist experiences. Lived experiences gain meaning as we think about them and give them memory (Curtin, 2005; Larsen, 2007; Agapito, Pinto and Mendes, 2017). By introducing a theory of behavior guidance, Vallagher and Wegner (1985) suggest that it is a common human trait to always prefer an intangible representation of a tangible representation of a behavior (for example, a choice task) (Vallagher and Wegner, 1985; Larsen and Nielsen 1999). Thus, it is expected that both the stimuli data and the retrospective experience after visiting the bazaar will create a very rich data. At this stage of the study, it is aimed that the participants/tourists who have completed their sensory walk will reveal the direct sensory experience with the

help of laddering technique at the end of the Bazaar.

Indeed, tourist experiences involve complex psychological processes with a special focus on memory (Larsen, 2007). Despite the existence of various definitions in the literature, tourist experiences can be considered as subjective and individual evaluations of events related to touristic activities that result in certain results and include the expectation and recall stages in addition to the activity in the destination (Quinlan and Carmichael, 2010; Tung and Ritchie, 2011). Larsen (2007) confirms that tourist experiences are strong enough to enter long-term memory of past, individual, travel related events. Considering the planning and design of environments where positive and memorable tourist experiences are more likely to arise, the concept of positive memorable experiences has been discussed and empirically studied (Tung and Ritchie, 2011). Therefore, efforts to facilitate the emergence of touristic experiences, which are described as positive recall and recall after the event arises (Kim, Ritchie and Tung, 2010), are undertaken by destination management design or event design organizations in order to be more competitive (Agapito, Pinto and Mendes, 2017).

In an area that can provide destination management design or event design can develop such a competitive place and also in the touristic places and atmosphere are an area quite impressive and obtaining positive results. Because if the experience is positive, it turns into an unforgettable value for years and when tourists return to their country, they will have shared this perfect experience with many people. The SEEP protocol intended for use in the research is based on elicitation of direct experience and asks participants to find the sensory attributes most relevant to the environment, an example of SEEP protocol can be seen Figure 26. The protocol using existing laddering techniques; it begins with a memorable imaging task as a start and warm-up. This first question is assumed to reveal more tangible concepts that are easily accessible in memory and easily communicated. To explore less accessible and more intangible associations of sensory experience the technique also includes narrative transfer (Green and Brock, 2002; Gretzel and Fesenmaier, 2010).

We would like to learn about the way you think and feel about pleasure trips to Destination X

When you think about Destination X, what are the **three things or feelings** that **first come to your mind**?

1. 2. 3.

Imagine that you have just arrived at Destination X. You walk inside your hotel room, and you open the window...what do you see?

Now imagine that you have finished unpacking. What are you going to do next?

You are ready for dinner. The waitress comes to your table to take your order. What are you going to order?

Close your eyes and think about a vacation to Destination X. What color dominates your mental image?

What kinds of scents do you smell during this pleasure trip to Destination X?

What sounds do you hear?

Figure 26. SEEP Model Question Examples

From the answers to the questions asked to the participants in this protocol, with their travels are asked to find the most relevant and effective sensory features. This protocol, which makes use of existing laddering techniques, it begins with a memorable imaging task as a warm-up step. Hence the first question is more tangible, easily accessible and it is assumed to reveal concepts that can be easily communicated. To explore less accessible and more intangible associations of sensory experience, the technique also conveys narrative transmission through the use of a metaphor (Green and Brock 2002).

Encouraging real mental imagery by asking respondents to simply imagine what they are experiencing. Therefore, this technique relies on a piece of story as the stimulus rather than relying on an actual image. This is then followed by a series of semi-structured questions addressing the different sensory attributes of imaginary experience (Gretzel and Fesenmaier, 2010). Thus, it is ensured that the hard to reach or forgotten experiences in more detail can be accessed by laddering and imagination.

Because with the laddering technique, questions begin with visual experiences, and then pass on to more specific sensory concepts such as taste, certain colors that dominate mental images, smell and sound. Therefore, in accordance with the

laddering techniques, the level of intangible increases in each question. For instance, when touch is an important sensory dimension to capture or when social dimensions of experience are important to research contains six additional research questions that can be easily expanded. The purpose of technique is to produce responses that can be coded based on content analysis and analyzed further according to structural features (Gretzel and Fesenmaier, 2010).

Indeed, the methods constructed in the study combine a kind of successive method, one after the other, which seeks to verify or to reach deep knowledge. While each method alone may not be sufficient or objective, the probability of reaching every detail of sensory experience will increase when successive methods are used sequentially. The handling of sensory domains and travel experiences creates complex combinations of various sensory inputs (Gretzel and Fesenmaier, 2003). Gretzel and Fesenmaier (2010) used the SEEP protocol in their study to test the data and assumptions they obtained, to provide useful sensory combinations on which development and design can be based conducted a hierarchical cluster analysis with the aim of transforming the dimensions of the participants into coherent bundles of experiences (Gretzel and Fesenmaier, 2010).

In this research, it can be constructed according to the study with support from the laddering technique, it can also be constructed with some methods such as hedonic facial scale. Thus, sensory data to be obtained from retrospective experiences after Spice Bazaar visits will be evaluated by performing cluster analysis or tematical analyzes as above, with the data to be obtained from here, it is aimed to reach the deepest sensory experience in the minds of tourists. Analysis of all sensory processes up to the following section and in order to obtain the data, a research method was set up. In the next stage, one of the most important points is to evaluate these data very accurately and objectively.

4.2.6. Sensory Mapping of the Spice Bazaar

Multisensory integration involves several cognitive processes that occur at different stages of sensory processing. Talsma (2015) argues that sensory integration is not limited to sensory inputs, but internal cognitive processes also shape the process and he discussed this process from the perspective of coding (Talsma, 2015). Emotional pictures formed by sensory perceptions during the cognitive process with a wide variety of arousal. Liang and the other colleagues (2021) in their study confirmed that

especially with the systematic mapping of that variety of arousal (Liang, et al. 2021). Spence (2020) also conducted sensory mediation technique and different sensory values together with taste words and created a mapping model of excitations represented by visual images. Different sensory processing mapping can also support emotion mediation. It has been reported that the mapping of broad emotional values with visual picture is very suitable for observing complex stimuli (Spence, 2021). Various approaches have been put forward to show multisensory issue links between environmental conditions are undoubtedly important in every aspect, and changing the atmosphere or even a simple element in the atmospheric environment matches the music that accompanied it while tasting a glass of drink. The design or personalization of the multi-sensory environment for the most effective experience to be obtained from the users is directly related to the sensory experience (Spence, 2021). The mapping method that will be preferred in the research will be an important input for the design of the multi-sensory environment in the atmosphere. In fact, maps are a physical representation of a geography, as it is more commonly known.

Besides these physical maps, it is also a social, personal and psychological representation of the physical environment there, as a methodological tool, mapping has taken many forms. Geographical and architectural planning, sociology, anthropology and education, socio- and psychogeography mapping method is used to document and analyze social relations and/or cognitive processes in that region (Powell, 2010). Also, as a comparison argument, mapping empirical material, in particular that the visual of that region and atmosphere, evokes multi-sensory and thus contributes to an embodied experience. Thus, it helps to get out of the traditional use of maps on the representation of that place and reach the sensory experiences and the stories embedded there. The inputs of stimuli and simultaneous experiences are followed and analyzed as a graphical representation on the map (Powell, 2010).

While physical maps consider all the physical information of that region, they also give mental clues about that region, and seeing this representation on a physical map can have a precious function to dominate all the physical and cognitive processes in that atmosphere and environment.

As a general physical maps are known and used as a visual representation of that region, but in this research, these maps are used as a method and a visual image that will allow us to see all the sensory experience intensities of the tourists in that region, which is obtained from stimuli experiences, throughout the map and to reach the sensory and dynamic experiences embedded on this touristic atmosphere. It is aimed to be used as an empirical material. Thus, it is aimed to be a data that can be learned through the sensory experience map of these stimuli changes on the Spice Bazaar or that will help to create an original description. For this reason, it is aimed to create a sensory visual map of the environment and atmosphere of Spice Bazaar thus, it will be possible for us to see the five senses from a stimuli state to an embodied experience with a visual map representation as an example of Figure 27.

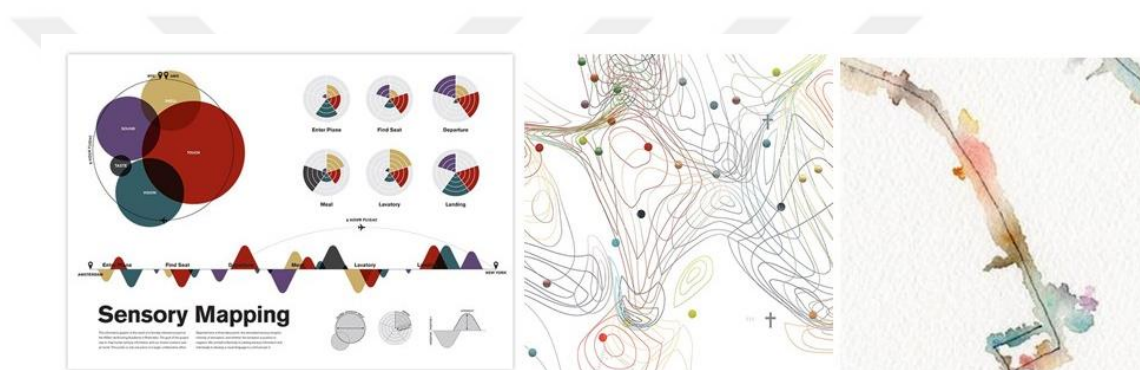


Figure 27. Estimated Sensory Maps of the Spice Bazaar

In addition, the fact that this map can be constantly differentiated by periodic, cultural and demographic variables in future studies and making comparisons is very effective in terms of the richness of the study output.

4.3. Methods Used in Sensory Experience Research

The Source of Adams et al. (2008) wanted to identify that the participants feel which aspects of their environment have an effect on the soundscape, which aspects make the soundscape better or worse, how the participant values the space and who they think is using the space. These questions were asked as structured interviews so that the researcher could ask for more detailed explanations when believed necessary. During these sound walks, participants were asked to rethink the five places they stopped, as well as some of the other places they passed along the sound passage route.

They were then asked whether they said they had experienced a range of different

soundscapes or an urban soundscape. If they said they had experienced more than one, they were asked to describe these soundscapes and try to classify the different soundscapes they experienced. Finally, each participant was asked which of the soundscapes they experienced during the walk worked and why they thought it worked (Adams et al., 2008). Looking at a similar sensory experience study, he conducted walk interviews as part of an 18-month ethnographic study in Ostrava, Czech Republic. Structured interviews were conducted to investigate how people interact with the urban spaces they live in, each individual's specific movements, memories, emotional experiences, interactions with others, as well as the experience of spaces.

The walk-through interviews were videotaped so that it was then possible to analyze how informants moved in their environment and which gestures they used when interacting with their environment. Combining walking with interviews has given richer data collection that goes beyond verbal and visual data. Sensory experiences play an important role in people's interaction with the built spaces, and these embodied interactions contribute to how public spaces are co-constructed, owned, and made familiar. Walking can be an effective method for examining the close relationship between people and built space or atmospheres (Tiainen, Aula and Järviluoma, 2019).

Sensory walk draws on the scientific tradition of collecting qualitative research data. This ethnographic method is used to examine embodied and site-specific sensory experiences and recall. The walk provides access to experiences in a shared situation and, when done with an aging and young participant, as in the SENSOTRA project, walks enable a form of intergenerational research. Couples walk with one or more researchers, and one participant takes the lead in each walk. The walks are documented with a digital recorder and a video camera attached to the clothes of the study participants. A short reflective interview is held after the walk, and approximately one-third of the couples are selected for a dialogical in-depth discussion. Videotaped walks were then presented to participant's in-depth interviews after the walks, which were used to give them the opportunity to comment further and contribute to data collection (Uimonen, 2020). For instance, pedagogical philosopher Mark Zuss used to mean the relationships between sensory stimulation and curiosity, which he defines as freedom of thought, and stated that for the liberation of thought, in a certain spirit that revolves around it rather than questioning it. He

advocated one should be free, adventurous, playful and uninhibited. Thanks to sensory simulation, the non-locality of those who experience that atmosphere can help to gain intense experience from fieldwork (Phillips, 2015). For this reason, one of the criteria determined in the study was the selection of users who come to the Spice Bazaar for the first time and will experience atmosphere for the first time, so that they can experience and express their first sensory experiences more intensely.

Walking methodologies are not just a movement from one place to another, but also a practice of interacting with the environment powerful at communicating. Walking is also for necessarily multi-sensory experiences (Irving, 2013; Tiainen, Aula and Järviluoma, 2019). Low (2015) in the thorough analysis for sensory methodologies to be used for the city's analysis, experience makes more sense than taking into account the ethnographer's responses to smell, taste and other senses. Carrying out these sensory walks with participants allows for a closer look at how social bonds, daily activities, and meanings of place emerge through the lens of sensory experience and analysis (Low, 2015). Sensory walks areas that cannot be seen from the major tasks of walking shows a basic form of experiencing a city or atmosphere and creating representations with a versatile story shaped by changes in space (De Certeau, 1984). There is an obvious attempt to change the way the body is treated as a form with a kinetic understanding during walks (Harrison, 2000). Degen and Rose (2012)'s article used the sensory walk method in the method part of his study on understanding the design features of the sensory encounters experienced in individuals and the built environment in the UK. The researchers asked participants what three words they would use if they had to describe this place. Meanwhile, they photographed the memorable moments so that these data were later used for comparison (Degen and Rose, 2012). This method can be stopped momentarily by being represented in more permanent forms of communication, such as speech, written text, or by using other platforms that preserve sensory information (Uimonen, 2020). The act of remembering the past during walks becomes dynamic and situational. Sensobiography was inspired by the concept of topobiography, which refers to the definition of a life course and its relationship with places lived (Karjalainen et al., 2019). Remembering is thinking, at the same time it is "movement in time and space" where the inner and outer worlds are in constant dialogue (Uimonen, 2020).

Turley and Milliman (2000) have defined compendium focusing on that the

atmosphere is stimulating and people who visit that atmosphere are affected by cognitive and physical stimuli. The number of atmospheric stimuli, such as colors, music and crowd, stimulates the time spent in that atmosphere and the reactions and their study they categorized the effects of different designs, independent variables and sensory variables (Turley and Milliman, 2000).

While it is seen in research that the concept of atmosphere is evaluated as in-store, the research planned in an ethnic bazaar atmosphere in this study includes both physical stores and many sensory and ethnic atmospheric features. For this reason, the Spice bazaar, where the fieldwork will be carried out, has great potential and the area where the interaction will take place is single and quite large, so that it will be considered as a whole covering the entire environment and atmosphere. Since atmosphere research will be done through sensory experience, it is necessary to determine the concept of sensory experience and should be focused correctly. In user research, some programs and apps are used in the light of technological developments. In recent years, researchers have investigated a variety of approaches on sensory experience. Up to now it can be seen that sensory experience researches have been done some classic methods and researches however in the study one of the major aim is to use some of the benefits brought by technology. Central to entire, these technological changes have brought along some interaction differences on sensory experiences and atmospheres. It is an undeniable fact that technologies and processes that will develop in the near future will affect these sensory experience factors.

Considering the research of Latham and McCormack (2009) on multi-sensory exploration and multi-sensory phenomenology of rail travel research, during a European train journey, which not only reads sensory experience but is embodied in terms of technologically mediated rhythms, sonic fields, and thermal atmospheres (Latham and McCormack, 2009). Netnographic citations have been used to nuance impressionist stories and provide an emerging example of how the new integration of methods can contribute to understandings of tourism mobilities and beyond (Jensen, Scarles and Cohen, 2015).

4.4. Methods Used in This Research

In the light of this information and the literature, theoretical and conceptual framework, the methods to be used in the field study of the research are discussed in

this section.

Agapito et al. (2014) used the sensory impression theory in their study and emphasized that individuals perceive the world through the senses and that long-term memories of physical experiences directly affect people's attitudes and behaviors. Thus, these sensory inputs obtained through stimuli enable us to perceive the entire atmosphere and, thanks to these stimuli, our experience becomes a memory by internalizing it cognitively (Agapito et al., 2014). In fact, the five senses interact with each other to form the sensory experience. Therefore, the mechanism by which sensory cues influence behavior is multifaceted and it is important to review multi-sensory approaches (Spence et al., 2014). However, should be attempt that the characteristics of the study area or atmosphere can also change many sensory experience generalizations. Multi-sensory experience and intensity points of that space and atmosphere, focal points during the walk, shop window designs or intense odor or sound elements there may differ or their intensity may change with the characteristics of that atmosphere. Data that gathered from multiple writers Agapito et al. (2020) rated each of the senses as important or very important in terms of the intensity of the overall experience for at least 80% of the participants and underlined the coexistence of the senses and researchers defined that other sensory modalities should be present to thoroughly perceive the environment (Agapito et al., 2020). Following these studies, the research did not focus on a single sensory modality and wanted to examine how multi-sensory interactions and experiences affect human behavior, perception, preferences, and memory. Understanding the user experience correctly, managing the process, is one of the cornerstones of the study, as it is closely related to the users' positive experiences, their positive recall of that experience in their memories, and their willingness to choose them again.

Retrospective sensory experience research and discussions with multi-sensory experience and stimuli sensory experience, which are also reviewed in the literature chapter of the study, should definitely be done because findings in previous similar studies were also available and as in this study it is open to discussion.

To date, the studies have shown that the sense of sight is the most effective sensory experience, but the most memorable sensory experience in our memory is the smell. This study can be best dealt with, that odor recognition in participants was 70% versus 65% after a 1-year delay when tested immediately after Scent, compared to 99% versus

58% when measured immediately after exposure. However, empirical results suggest that, if product scent enhances consumer memory for product information, its effects may persist for long periods of time (Krishna et al., 2010). Most studies in the field focus, the senses can be triggered by changes and a sensory stimulation is at its strongest immediately after stimulation (Elvekrok and Gulbrandsøy, 2021). Thus, the stimulus momentary sensory experience can actually reach a peak in one's memory of the experience at that moment and thus be quite effective. In addition, it should not be forgotten that, while having a sensory experience, it should not be thought that sensory inputs alone are effective and shape an experience.

The analyses based on studies by tourism experience and experience researchers focusing on the design of tourist sites have recently become quite evident in the importance of addressing the multi-sensory aspects. It is apparent from the experimental data Multi-sensory tourist experience research follows a human-centered mindset that bridges design science and tourism in contemporary socio-cultural and technological contexts (Agapito, 2020; Brochado, Stoleriu and Lupu, 2021).

Pine and Gilmore (1998) argue that the more senses an experience engages, the more effective and memorable it can be,' pointing to the senses as a tool and memorability as an important definition of success at the same time (Pine and Gillmore, 1998).

Adams et al. (2008)'s article references reflect that, more in-depth and meaningful interviews can be made with the participants than open-ended, structured (retrospective) questions. Accompanying and observing the participants during their bazaar tours, being able to catch the points where they pause or want to stop, and at the same time receiving all the statements of the participants via voice protocol, will provide meaningful data in the research. Future research can be therefore concentrating on the research that will be a tool for the design understanding of that region and the restructuring of the experience, improvement, or discovery. The sensory walking method, which will be used in the study, is a technique that has been used and developed in various sources, as discussed in previous chapters, and is used for experience research. Data were gathered from multiple sources at various time points and it is seen that most of the sensory walks or sensobiographic walks are focused on a sense (especially smell) or the experiences of the predominantly senses are focused. One of the reason for the one of the most memorable sensory experiences for which our olfactory memory is quite strong. Far apart from a single sense study, which was

frequently focused on in previous studies, this study aimed to focus on the multisensory experience. Thus, the participants were asked to experience all their senses in the bazaar and to report which sense was concentrated in which region of the bazaar as a positive or negative experience. With significant discussions and deductions from the participant, from stimuli and retrospective experiences, in which senses or senses are effective, together with the interactions that may occur within one or more sensory experiences, will provide more reliable data.

The sensory walk is accompanied by the researcher, and the walk begins, during the walk, the participants identify their sensory experiences with the verbal protocol method. Participants will be informed that they can stop at the points they like or are uncomfortable with and that they can comment on the points. Participants will be informed that the moments of intense experience that attracts their attention during the walk can be recorded with photographs or videos. In this case, it is aimed to enable them to concentrate on the sense they want in their natural environment without directing them. In terms of the discussed in the previous chapters of information, the field study will be carried out in 3 stages. However, within these 3 stages, different methods and methods will be preferred. By adopting the concept of interaction design in this study, which is design and experience oriented, can state that a design approach has been determined for the multi-sensory experience of tourists in order to investigate and examine the stimuli and retrospective sensory experience stimuli in the tourist atmosphere. The proposed design approach models suggests that to ensure the reliability of the information by bringing together different methods, a fictional holistic approach of several methods was tried to be established for experience research, not just one method. The use of open-ended questions allows for the extraction and categorization of sensory impressions that can be used quantitatively in multiple relevance analysis, which suffices to identify meaningful sensory- based themes through the intersection of sensory interaction and taking into account the phenomenological nature of tourist experiences (Agapito, 2013).

Designing and researching the sensory experience in a touristic atmosphere such as the Spice Bazaar will actually enable us to witness all aspects of the multi-sensory experience, its extensions, and even its sensory traces on a map. From that point, it is requested to ensure the establishment of design strategies for designing experiences here and in similar touristic atmospheres.

CHAPTER 5: FIELD STUDY: SPICE BAZAAR, ISTANBUL

When environmental scientists, designers, or researchers are going to conduct new research on the senses, they need analyze that environment. For instance, in that environment, some odors that participants are exposed the out-of-control odors may be involved in the process. Fragrances are acceptable to a certain level and may not affect the effectiveness of the study. This problem may be more common in busy streets or rural areas. There are a number of assessment approaches developed by environmental scientists to decide whether this situation in the study environment is acceptable (Henshaw et al., 2017)

The data wants to collect as of the time will be sensory data specific to that time. The change of these sensory data over time can be demonstrated by making measurements at certain periods. The scope of the study, it not only aimed to reveal this change, but also to catch clues about the causes of these changes.

Two different user types and methods will be used in the study. The first is to detect stimuli sensory experiences in the Spice Bazaar, the second is to determine the reflection of previous sensory experiences with people who have previously come from spice bazaars with a retrospective method. Then, by comparing these two data, it is aimed to reveal the stimuli absorbed sensory experiences. While the output motivation of the study, the sense of smell, scent may be a hegemonic experience of the past experience of the participant, but while looking at the stimuli experience it can be seen that the sight experience is hegemonic experience.

The tourist travels are with different motivations and preferences focus on or motivation may also can be differ. At the same time, the correct categorization of the region which is a multicultural tourist travel region like the Spice Bazaar, can provide the targeted results. With this categorization, how the sensory experience changes in different motivations and different cultures can be seen. Thus, by conducting an exploratory study, explore the sensory experiences of tourists and reveal the results in terms of a sensory mapping. In the region to be selected, tourists who have spent at least one day between certain dates can be surveyed or interviewed. The set of questions may include open-ended questions that rely on direct inference. The impression of five senses of tourists, experience in the touristic atmosphere as well

as the sensitivity of each individual's contribution to the intensity of the experience may measure by asking individuals to respond (Agapito, Valle and Mendes, 2013).

A key aspect of the study at the Spice Bazaar, in order to ensure the of tourism, sensory experiences and preferences of the tourists can be understood correctly and different segments can be compared and the design criteria can be designed.

The following chapter introduces, it cannot be said that it is not right to examine or limit the tourist experiences with the design of a visual displays or only atmosphere. Therefore, it may be right to conceptually strengthen the basis of the research through multiple sensorial studies. It is necessary to explore and discuss the theoretical foundations that it helps to examine and conceptualize the sensory dimension of tourist experiences. It is also necessary to examine the role or modes of tourist experiences in touristic place to ensure the formation of sensory themed tourist experiences, and to reveal the sensory dimension of tourist experiences. From that point giving encoding the tourist sensory experiences and designing sensory stimuli map of Spice Bazaar.

5.1. Setting: Spice Bazaar, Istanbul, Turkey

The aim of the study is to comprehend an inclusive method of sensory tourism with an end view of emphasizing its significance to the travel experiences of the global tourists in Spice Bazaar. Touristic experiences and sensations in touristic atmospheres should be made with an empirical study.

To understand the importance of the five senses for individuals to have a positive tourist experience, during and after the visit to the touristic atmosphere like Spice Bazaar. The aim of this study is to examine the touristic experiences obtained during and after the touristic visits with sensory modalities and to manage the process to bring the tourist experiences to the most positive point possible.

At first, in the present situation, negative and positive factors will be revealed in terms of sensory experience. It is envisaged that these factors and trends can be used in the development stages or technological innovations that may occur over time, for instance in the application stages of augmented reality. Sensorial experiences should be updated in various periods in the process when it is thought that they can be differentiated or enriched with their technological innovations. Therefore, sensory experience measurements are planned to be more interactive and technologically based than the

traditional research methods. From the point of view of design, it is aimed to be a work that will be the basis of sensory experience research, which is also the subject of interaction design with the product digital systems becoming digital.

5.1.1. Outline Of the Study

One of the most significant aims of the study is to create a sensory experience map of the Spice Bazaar atmosphere and to reveal the Sensory experience of the Spice Bazaar. Another major issue that the study aims to contribute to is the design discipline by exploring how the touristic atmosphere is perceived by the five senses. In this context, the research has tended to explore the tourist experience and the sensory experience aspects of tourist preference and to bring new insights into the design and improvement studies for touristic atmospheres and their environments.

The study attempts to plan an application of approximately 30-60 minutes in total with the tourists visiting the Spice Bazaar. In order to achieve the intended results in the thesis, a three-stage study was designed with voluntary participant tourists. A variety of methods are planned for the research and for the participants to interview a group of 18+ and heterogeneous adult participants. Since the research has qualitative content, it is desired to perform a detailed analysis of the data, and the sample size is foreseen as 10 people within the framework of the possibility of a repetition of the data.

In the first phase of the study, 15 questions asked and the process would be completed within about 5 minutes as shown in Table 1. The second phase of the study involved a Sensory Experience-oriented walk in the Spice Bazaar during which the researcher accompanied the participants on their walk and recorded their voice thoughts as they walked. In order to proceed to this stage, the participants have given their explicit consent. As part of the walking route, the start and end points are the same for each participant, but if there are certain routes in the bazaar where participants want to stop, the observer was adjusted accordingly. Recording and application managed from the researcher's phone and recording device. After the walk, 38 number open-ended questions asked and the study have been concluded in order to reach the participants' retrospective sensory experiences at the last stage. At the end of the study, small souvenirs represented İstanbul and Turkish delight were presented to the participants who take the time to research.

Table 1. Framework of the Field Study Stages

Field Study Stages	METHOD	Instruments	Where to Apply	Duration
STAGE 1	Interview Questions (15 questions)	A4 paper, Pen	At the entrance of the Spice Bazaar	Approximately 5 Minutes
STAGE 2	Sensory Oriented Sensory Experience Walk	Sound Recorder Device	In the Spice Bazaar	Approximately 20 Minutes
	Observation	A4 paper, Pen		
	Think Aloud Protocol	Sound Recorder Device		
STAGE 3	Interview Questions (38 questions)	A4 paper, Pen	At the Spice Bazaar Exit	Approximately 15 Minutes

5.2. Instruments

The procedure of the research will be explained to the visiting tourists at the place where the research will be conducted by the researcher herself, and the study will continue with the participating tourists.

In order to achieve the intended results in the thesis, a three-stage was designed. For

the field study, it is planned to interview a heterogeneous adult group of participants aged 18+ group is targeted. The research has a qualitative content, so that it is desired to perform a detailed analysis of the data; the sample size is foreseen as 10 people within the framework of the possibility of a repetition of the data. In the first stage, demographic information from the participants will be obtained with structured questions. In the second stage of the fieldwork, a two-stage plan will be implemented in order to reach the stimuli sensory experiences with the participants. First, participants will perform a sensory-focused sensory walk. During this walk, the think aloud protocol method will be used to reach stimuli sensory experiences and enable us to transcribe this information. For this reason, the participants will be given a recording device so that the participants can express their thoughts aloud during the sensory walk. And subsequently, while the observer observing this process wants to take a photograph of the participant's sensory experience reactions during the walk.

At the end of the third stage, from the participants are going to take deep retrospective sensory experience in terms of laddering technique.

So that from the results it can be seen one result of the thesis taking stimuli and retrospective sensory experience information and its correlation inside. With the development of Hinkle's (1965) laddering method, it allowed reaching this in-depth information during a single interview. Thus, allows researchers to explore the relationship between value priorities of organizational actors and other interesting phenomena (Hinkle, 1965; Bourne and Jenkins, 2005). Laddering technique uses a one-on-one interview technique using a series of directed questions to reveal how users relate product/service attributes to their core values. The purpose of ladder interviews is to identify the "ladder" of connections between attributes, consequences, and values in relation to the image of the store or that space (Thompson and Chen, 1998). Among the personal motivations of the participants, the analysis of Laddering data first involves summarizing the key elements with standard content analysis procedures, considering levels of abstraction, A-C-V, conceptualization. It then created a pivot table, representing the number of links between items (Reynolds and Gutman, 1988). In the procedural process supporting the study, it is aimed to reach the data by asking the personal demographic information and motivations of the participants in the first stage of the field study. In the second stage, it is tried to reach stimuli sensory experiences with the planned sensory walking and think aloud protocol technique, and

in the meantime, the walking and observation notes of the participants are noted while sensory walking.

As a result, stimuli and retrospective sensory experience map will be created with the creation of codes between the connections as a result of the analysis of these data. This sensory experience map will represent the connections or relationships between intangible-tangible- values based on the laddering technique with expressions.

With this research, tourists visiting the Spice Bazaar will perform a sensory-oriented bazaar visit and experience a touristic atmosphere in which they focus on sensory experience. It is aimed to contribute to the field of multidisciplinary design, one of the important contributions of this study. It is aimed at contributing too many design fields, such as interior design, product design, packaging design, window display and store design, architecture, experience design, sensory design and interaction design.

The results of the research will be used in the doctoral thesis and in the publications to be made within the scope of the doctoral thesis. In order to protect the privacy rights of the participants in the study, the information will not be shared with third parties, and in the study it will not require the use of names or other private information.

5.2.1. Procedure Of the Study

In this part of the thesis, the data and instruments for the planned field study of the thesis will be discussed and given. At this stage, a field study in which research methodologies are used over more than one method and theory, as discussed in the theoretical framework, epistemology and literature.

Central to entire discipline of atmosphere and the social interactions that occur in the environment are investigated in terms of atmosphere. The framework of empirical research on the multisensory experience of an atmosphere is by the phenomenological research approach, qualitative research design, and the boundaries of a single case study. In addition, it is based on the auditory, visual, olfactory and tactical experiences of individuals (Hierl, 2019).

So far, there have been done studies in that field, but, in this study, it was desired to examine multi-dimensional studies with a multi-sensory methodological approach. It is envisaged that the necessary data will be obtained for the understanding and development of the sensory experience with empirical data, together with the verbal protocol, observation and retrospective interview techniques to be made with the users.

The participants' sensory walks were also observed using the observation method, including the gaze points, the points of interest during the walk, the products, and the sensory experience points. The Figure 28 illustrates an example of the gaze points of the participants during this follow-up. The gaze points of the participants were recorded in order to gain insight into their behavior and preferences. Through this method allowed the researchers to gain an understanding of the participants' preferences and emotional reactions during the walk. This information was then used to further analyze the results of the study.



Figure 28: The Interaction Points of the People in the Spice Bazaar

Toward research questions, research questions were created after the literature research to understand the tourist experience and the multi- sensory experiences of the participants during the stimuli Spice bazaar trips. In order to determine this sensory experience situation expressed here, a sample of participants was selected, a preliminary draft verbal protocol ground was prepared through methods and tools, and questions were formed in order to reach the retrospective experience at the exit of the market. The sensory experience that will be expressed with these conceptual models will be compared with the verbal protocol data and the sensory experience data that will be obtained from the participants after the interview will be interpreted and coded according to the hypothetical experience synthesis outline and on a map.

5.3. Methods and Tools

A key priority the data collection process of the study is constructed and framed according to the different sensory hierarchies of the participants' sensory hierarchies, the material, social and cultural characteristics of a place and the way these possibilities are perceived, or how different places are designed to activate different senses. From that point, the ambiance of a place transforms depending on how

different elements are connected at a particular time and place (Uimonen, 2020). While carrying out the fieldwork, the stimuli sensory experiences of the participant tourists and the selection and experience of certain routes and sensory experience intensities will form the milestone of the thesis.

It is aimed to explain how the interaction factors in the field study and in each other will be mentioned from the context of sensory experience with a Table 2. The diagram presents the information targeted in the study and the qualitative significance of this information is shown.

Table 2. The Characteristics Of the Experience Process

EXPERIENCE	AIM	INSTRUMENTS	METHOD
BEFORE	<ul style="list-style-type: none"> • DETERMINING EXPECTATIONS BEFORE FIELD STUDY • ACCESSING BASIC INFORMATION BEFORE FIELD STUDY • GIVING INFORMATION BEFORE FIELD STUDY 	SEMI-STRUCTURED QUESTIONS	INTERVIEW
STIMULI	• TAKING A SENSORY WALK TO TAKE A SENSORY EXPERIENCE-FOCUSED WALK	PARTICIPANT	SENSORY WALK
	• RECORDING STIMULI EXPERIENCES DURING THE SENSORY WALK THROUGH THE THINK A LOUD PROTOCOL	SOUND RECORDER	THINK A LOUD
	• MONITORING THE PARTICIPANT AND RECORDING STIMULI INFORMATION BY OBSERVATION	OBSERVATION	OBSERVATION SENSORY MAP
RETROSPECTIVE	• CREATING SENSORY MAP THROUGH THE APP DURING THE WALK		
	• TAKING PAST SENSORY EXPERIENCES AFTER THE BAZAAR WALK	OPEN-ENDED QUESTIONS	INTERVIEW

The diagram below illustrates some of the key characteristics of the experience process. The experience is planned to be divided into 3 main parts as illustrated in Table 2. In the pre-experience segment specified in the first part, basic demographic information such as the selection of the users, the reading of the ethical forms, the information required for the study, and the basic information of the participant (age, race, gender, country, or city of origin) will be taken before the fieldwork. The answers to these questions will be reached by structured questions and interview technique. By answering these questions and giving the necessary information to the participant, it is aimed to move on to the second stage of the study and the stimuli part of the experience.

The diagrams above show the aim and the process of this second part is to use four methods and to be able to dominate all the stimuli experiences of the participant during

the sensory walk performed by the participant in the bazaar and to ensure the consistency and accuracy of the data within itself. In the first stage, the sensory walk method will be used with the participation of the participants. There is a contrast between the temporality and permanence of sensations, as immediate sensory experiences depend on a particular moment that will never be repeated.

If experiences are to be shared, it must be done through concepts expressed in words (Ingold, 2000). During the sensory walk, users will be asked to express their audio-sensory experiences by the think aloud protocol by the recorder. Thus, all instantaneous focus of sensory experience will be tried to be approached with the transcription that will be made by the researcher.

However, although sensory experiences do not always have to be merely verbal or literally represented; they can also be transmitted through facial expressions or other bodily movements. Based on these insights, individual perception and its public and social representations are always intertwined (Uimonen, 2020). As is pointed out, the observer, who will be able to verify the information again with verbal protocol analysis, will be with the participant. Thus, the observer will be able to photograph important and effective moments, as well as witness the entire sensory experience process of the participant. At the same time, participants' stimuli walk will be recorded via an app, and their walks will be represented on a map.

The last part of the research focuses on learning the sensory experiences that are especially memorable in the retrospective experience and short-term memory. In this section, open-ended questions and as well as laddering technique will be used, and it is aimed to reach the sensory experiences of the participant with the laddering technique.

For the relevance of the thesis, one or more methods were used to reveal the data collection tools, the behaviors and experiences of the participant, and their expressions. Although there are advantages to using more than one data collection method, discussed that there are some disadvantages as in every method discussion. One of the significant disadvantages of multiple data collection methods are that there is conflict during the weighing and interpretation of the data obtained, or that the data collection methods are not done to a professional standard. For this reason, it is very important to report the analysis strategies in order to ensure data collection clearly (Robson and McCartan, 2016). Critiques have also debated that the participant's

experiences and the meanings they attribute to them and the qualitative and next step are based on the researcher's comments, namely the coding of the data, the description from the codes, thematic analysis, and the expression of the findings with tables, graphs, and figures. In this form, it can be seen holistically and is reflective, both inductive and deductive. Finally, Creswell mentions the importance of talking about the strategies to be used for verification, which is an additional important step in planning (Creswell, 2014).

5.3.1. Sampling

It was determined that the participants would be selected on a voluntary basis and that they would have to be first-time attendees of the bazaar in order to be considered for participation. The sampling group varies from one qualitative study to another based on the nature of the sampled person and the field, as the researcher's ability to present an in-depth picture decreases with each new individual or field that is added. It is important to note that an aim of qualitative research is to present information obtained in a simple and easy-to-understand manner (Creswell, 2002). There is much more value in 2 or 3 method studies with 5 users per study when it comes to user experience research than there is in a single study with 10 participants. It has been found that even 3 users can be enough to get an idea of the variation in user behavior in order to know what is unique and what can be generalized (Nielsen and Landauer, 1993). Neuman (2013) stated that as pointed out that it is necessary to be meticulous and careful in the sample's selection (Neuman, 2013). At the end of the study, when it is desired to use content analysis to study representation, for example, it is decisive for the creation of themes through the results (Robson and McCartan, 2016). An implication of these findings purposive sampling was adopted in the research. Since a case for sensory experience and exploratory purposes was determined in the field study, it was requested to select a heterogeneous population sample group for this purpose.

During the sample selection of the field study and the preparation of the questions, demographic questions to be asked before the field study should be grouped and scaled according to demographic criteria, since gender, age and demographic differences from the participants may be in question. As discussed in the methodological discussion of ethnomethodology, firstly the human (participant), second, the meaning of such things derives from or arises from one's social interaction with one's fellows, and third, meanings are handled in an interpretative process. Therefore, the meaning it

is a field that is a product of social interaction but requires active interpretation to act on (Dennis, 2011). Regarding the thesis is focused on tourist and user sensory experience and at the same time, it is aimed to provide a different perspective in terms of tourist and tourism experience research, which has a significant impact on the socio-economic development of cities and countries and wants to provide benefits for tourism development to increase tourist experience. It is obvious that the approach advocated in the thesis can be enriched with different combinations of richer different agents and actors in these and similar areas and there is a need for more in-depth research. Therefore, the ethnomethodology approach has been adopted to understand the tourist experience and sensory experience in depth. Taken together, the findings want to support and answers to the questions sought in the research questions of the study in the most appropriate way, field study questions were created. The questions and experience research were structured in three stages and to answer four fundamental questions. Sample selection allows us to select a population and a heterogeneous selection within that population, and the participants with whom will conduct our field study. Sample selection is one of the crucial parts of the field study. Neuman (2013) stated in his book that two types of sampling should be avoided. The first is to avoid samples chosen carelessly, on the other hand, is to choose the trustworthy species because our sample group is going to represent the population. As pointed out that it is necessary to be meticulous and careful in the sample's selection (Neuman, 2013). Purposive sampling (also known as judgmental sampling) is a valuable type of sampling for special situations. In exploratory research or field research, the case of an expert choosing cases or selecting a particular case. At the end of the study, when it is desired to use content analysis to study representation, for example, it is decisive for the creation of themes through the results (Robson and McCartan, 2016).

An implication of these findings purposive sampling was adopted in the thesis. Since a case for sensory experience and exploratory purposes was determined in our field study, it was requested to select a heterogeneous population sample group for this purpose. Returning to the perspective and framework of the thesis, it has been tried to be based on a conceptual and theoretical framework as discussed in the previous chapters. Accordingly, it was desired to present inferences or inferences from causal inference and experimental research perspective. The thesis should be provided to verify and reliability in studies. The findings of the thesis and its reliability can be

ensured by performing a subpopulation analysis or a pilot study. Developing one or more drafts or preliminary preparations for the pilot study and making it the final version by making trials before implementation is an element that will increase reliability (Lawrence and Neuman, 2014). Randomly selected participants participated on a voluntary basis for the study. In spite of this, one of the criteria of the study is that it is limited to participants who are visiting Spice Bazaar for the first time. It is imperative to note that any tourist preference was made, and that all foreign or local tourists who visited the bazaar for the first time were included in the study.

5.4. Field Study Stages

It is planned to take stimuli and retrospective experience of the participants. Therefore, to take the stimuli experience gives us to stimuli sensory experience by sensory walk and think-aloud protocols with observation.

In retrospective interview part from the sampling, what did they remember about retrospective sensory experience? Which sensory experience was remarkable? The setup of the fieldwork is designed to be done in 3 stages, as seen in the Figure 29. Thus, the experience can be shaped into three major categories.

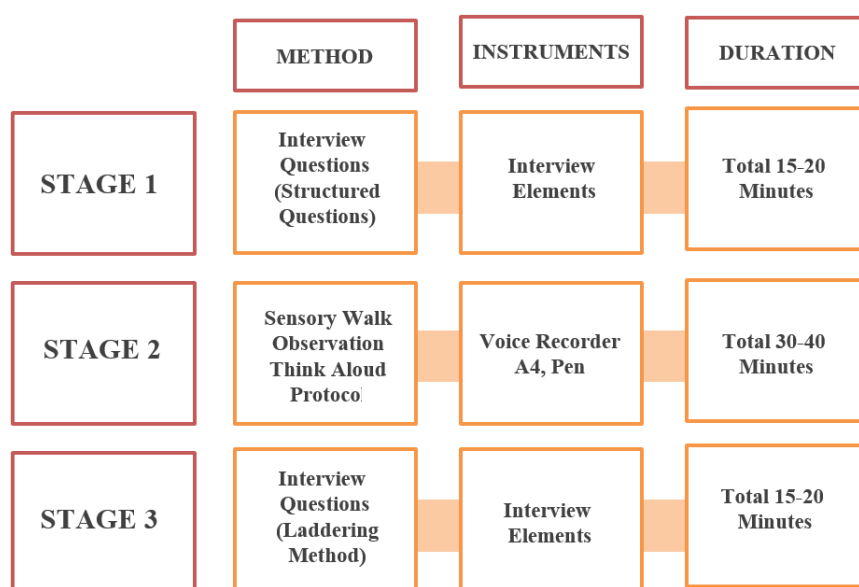


Figure 29. Stages Involved in Conducting for the Thesis Field Study

The reason for doing this research stages when many sensory information inputs are unconsciously processed by studies, capturing perceptions and memories of

experiences can be quite difficult. Sensory descriptions or depictions of experiences are critical in contexts in experiential marketing, design, and interaction, and may not be easily captured by traditional research approaches or difficult to formulate knowledge.

To date, there have been agreement at the expected results of these three-stage field studies created, it is aimed to determine the expectations before the experience and at the same time, demographic information will be obtained.

At the stage of reflections of experience, it is aimed to reveal stimuli sensory experiences and reactions. In the next stage, it is aimed to identify the remembered sensory experiences.

In this manner, participants will be able to express their stimuli sensory experiences while performing a sensory-focused walk and then thematic analysis of these data will be provided via transcription. Meanwhile, the observer will be next to the participant and will photograph the moments that the participant can capture at possible remarkable or important points. By choosing the participants who visit the bazaar for the first time, it will help to get their first experience instantaneously. By way of, it is aimed to ensure that the experience differences between the first encounter and the second encounter of the users who have visited the bazaar before are not manipulated by the conditioned experience and the perceptual dimension of the experience. It is planned that this sensory walk with the participants will take approximately 20-50 minutes. The retrospective interview part, which will be held at the exit of the bazaar, is planned to be approximately 15-20 minutes. Throughout the thesis's field study, permission will be obtained from Fatih District Governorship, Spice Bazaar General Headquarters. The fact that the Bazaar track, where fieldwork will be conducted, has a closed atmosphere prevents possible experience differences because of external factors. Therefore, purposed minimizing possible external factors in order to reach the targeted sensory experiences, providing working conditions, and minimizing the points.

5.4.1. Interview Questions

With the fieldwork of a well-designed interview questions and subsequent transcription of research questions and questions including what was going on in the interview throughout the entire process, analysis and reporting, it divides the process into four common steps so that this process includes Preparation, interview, analysis

and reporting (Brinkmann, 2013).

Certainly, the most effective question or questions do not have a recipe, but the process is also very important, as well as asking really effective questions. It is necessary to listen carefully to the interviewer, and from time to time to proceed or proceed from what was said. Effective inquiry is closely related to the relationship and context that develops between the interviewer and the participant (Seidman, 2006). Although these steps appear as separate phases, they should not be considered separately because they often overlap in themselves and represent a cyclical process. The preparatory phase and research approach, which includes many assessments on the subject (induction, deduction, evasion), as well as a review of the existing literature, the interview details and the interview protocol, are created (Brinkmann, 2013). Thus, the formation of the planned interview questions, starting from the research questions, provides an inductive literature research infrastructure to shed light on the sensory experiences of the participants before and after the bazaar.

The interview questions were always conducted with the following principle in mind. The purpose of the study and research questions, which information and why it is desired to be reached in all three stages, were tried to be prepared for the field study stages of this study as reflected Figure 30.

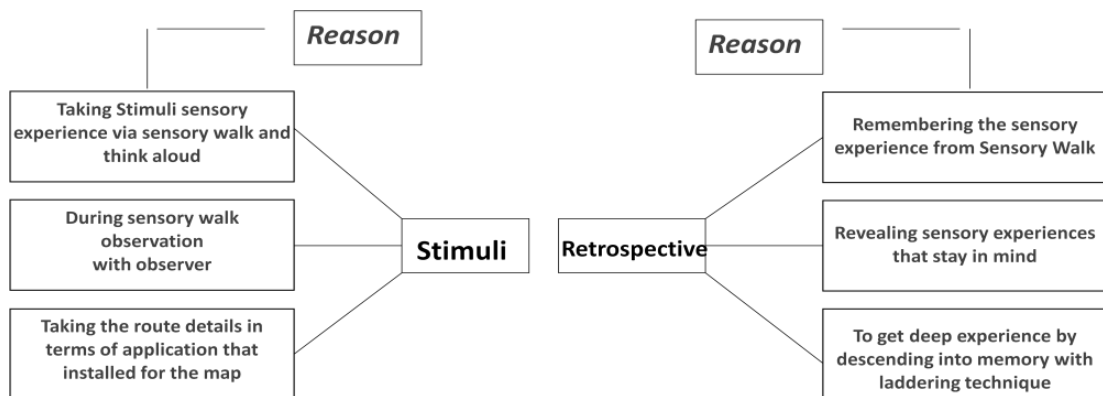


Figure 30. Motivation to Gather Information from Participants with Retrospective and Stimuli

Thus, in this ensured process, it was aimed to establish the field study framework without deviating from the subject and purpose and to carry out the stages without moving away from research questions.

The relevance of this Figure 31 can be seen matching with to understand research

questions and interview questions relation and to answer our research questions with the field study questions.

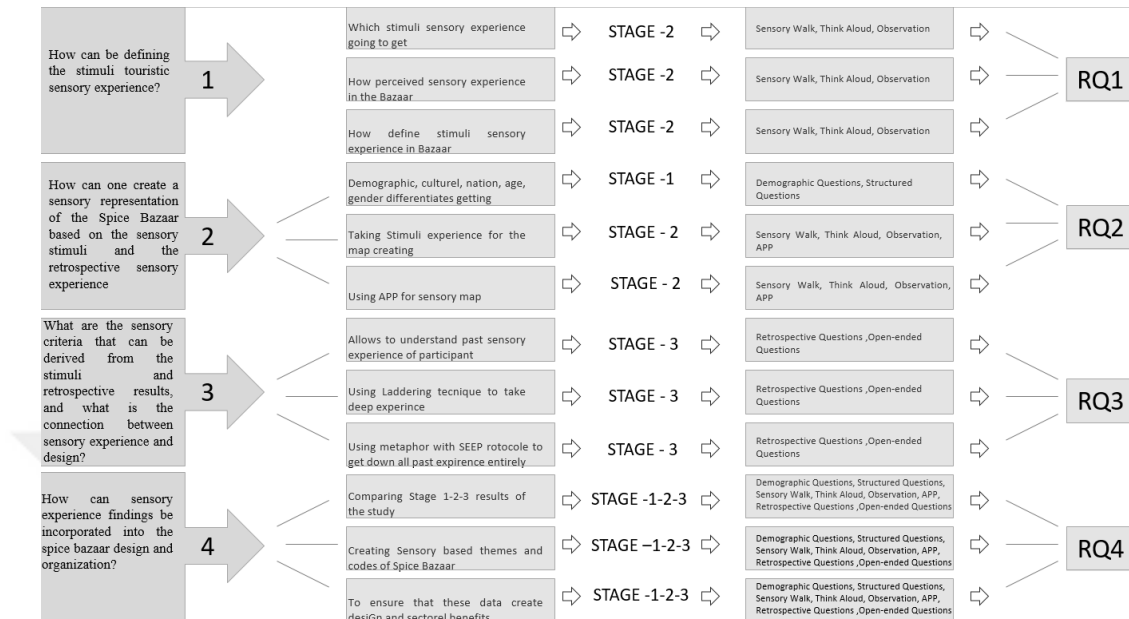


Figure 31. Relationship Between Research Questions and Interview Questions

In the meantime, there are four major research questions, and with these questions, the purpose of the study that is stated in line with the stages of the field study. For these purposes, it is possible to see which of the three stages will be met and represented in the fieldwork. And finally, it is desired to specify which of the research questions exactly targets.

5.5. Analysis of The Data

5.5.1. Thematic Analysis (Stimuli Sensory Experience)

Data management and analysis have been done via thematic analysis, from a set of texts, which aims to revisit and organize multiple themes and texts, themes, and to uncover a coherent set of themes that characterize some key features of the Collection (Cooper et al., 2012). Methods such as these are frequently used to search and examine the differences between subsets in a text. The act of attempting to synthesize qualitative research is suggested, not generalizable, and allows analysis over a specific context, time, and a group of participants. As well as the importance of qualitative research, it should be acknowledged that methods are necessary to reveal its findings.

The thematic approach seeks to theorize contexts in a constructivist framework with a thematic analysis of the fundamental relationship between meaning and experience and language in order to theorize motivations, experience, and meaning straightforwardly. Other stages of thematic analysis are similar to the stages of other qualitative research. Firstly, it starts with the creation of meaning patterns of the data, so that potential issues and meaningful concepts attract attention, and at the last stage comes the meaningful reporting of the patterns and codes created (Thomas and Harden, 2008; Braun and Clarke, 2006). The goal is to determine whether an inductive approach to thematic analysis should include accessing subsets of sections of coded text. In this way, it allows the researcher to access the latent experiences and structure underlying the text and to reframe the text as well as to reveal the salient, common or important aspects of the repetitive intangible/tangible themes.

The possible interference of identifying themes requires a lot of interpretive work, bringing together data into similar, consistent groupings, and decisions about how to group themes will be made on content and, where appropriate, theoretical grounds (Stirling, 2001). Several sources mention that there is no single way of doing thematic analysis, there is no single set of guidelines, however, all verbal (and sometimes non-verbal) statements are recorded for a rigorous and comprehensive “Orthographic” transcript (Braun and Clarke, 2006). The coding method in qualitative research consists of categorized and thematically ordered processes that bring together the collected data (Williams and Moser, 2019). The main issues addressed in the study, this situation, were taken into consideration when transcription was made, and there were cases where transcription was compared with observer notes. These and similar situations are examined under the heading of observer notes.

Subcategories or subthemes start when all data is transcribed, collated and a long list is formed, and the management of this list is analyzed by creating subsets and encoding that set. Thus, potential themes are created and a collection of all relevant coded data summaries is created within the determined themes.

The final stage includes two levels of reviewing and improving your themes and it includes a first-level review. Each theme is reviewed and considered whether they form a coherent pattern (Braun and Clarke, 2006). Stimuli and retrospective interviews are recorded with a voice recorder. In order to obtain the data of the study, the voice thoughts of the participants were completely converted into written text using the

transcription method. Transcription is very necessary for the analysis of oral expressions and interviews. As you carefully examine the transcripts, the characteristics and frequencies of the discourses will emerge (Riessman, 1993). Due to the content of the study, the formation of the data related to the sensory experience requires the data to be coded in a controlled and understandable way. Thematic analysis was carried out in order to carry out meaningful and accurate data analysis of the study data. Key characteristics of that approach, which is used to access the embedded data, include a parallel approach to phenomenological theory. Thus, embedded deep sensory experience codes, repeated codes, and data were obtained.

An analytical approach is used to construct meaning from experimental data. A gradual coding process is used, and the researcher develops a theory from the data. The coding method is used to build deeper theoretical meaning from the data obtained, so that participants' thoughts, perspectives, experiences, and reactions can be accessed (Williams and Moser, 2019). According to this study, the participants used some word groups dominantly and frequently. With this thematic analysis, dominant words and word groups, and which word groups are dominant for which sensory experience, were analyzed as can be seen Figure 32. The audio recordings of the participants were carefully examined, and it was aimed to reach all the data in full by turning them into literature together with the notes of the observers.

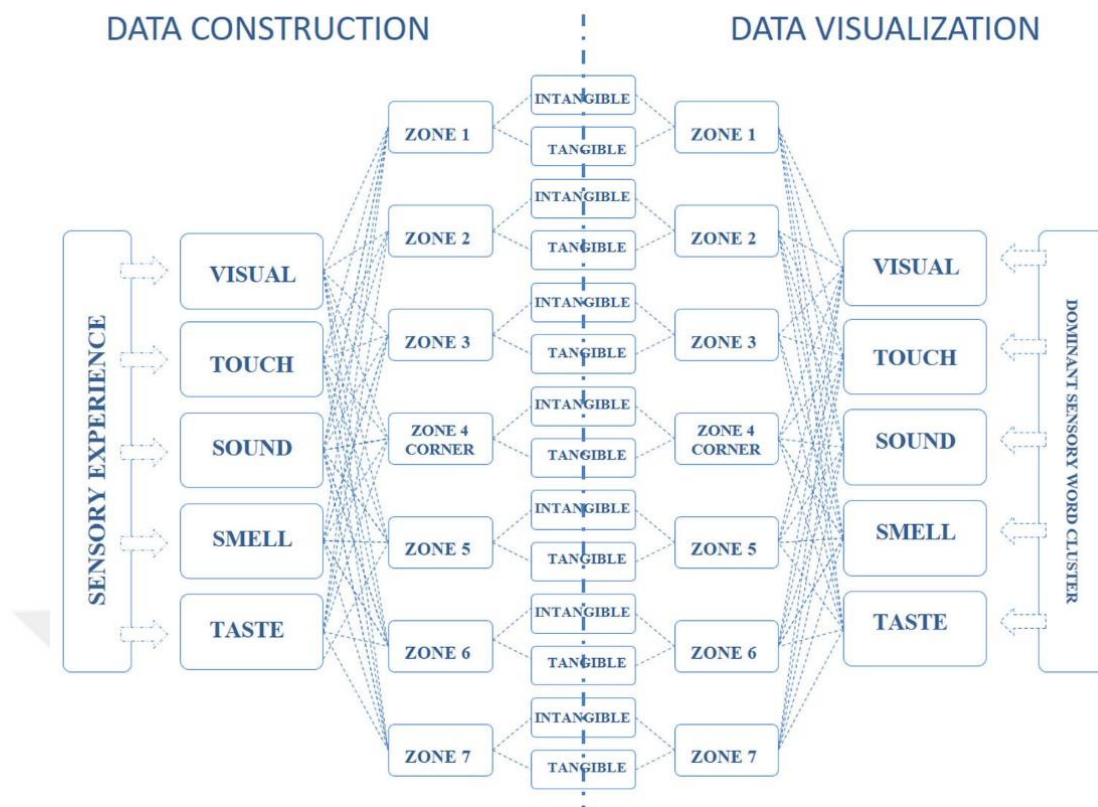


Figure 32. Framework of the Thematic Analysis

The synthesis of the data of the study was tried to be coded in a certain hierarchy in the below stages. The results are consistent with the results that categorized the five major themes (sight, smell, taste, touch, and sound) into two sub-themes, intangible and tangible, over seven different zones. To date, all transcriptions of the participants have been analyzed and synthesized by combining five sensory experiences, which are the basic components of the study. The study was able to thematize with open coding and was assigned as a subtitle. The first thema was to create the five sense categories and themes. That stage seeks to improve, the data for each sensory experience in each zone were analyzed under two subsets, intangible and tangible. The reason for this is that while each sensory experience of the participants was verbally expressed during the sensory walk, it was observed that the participants expressed their sensory experiences with intangible and tangible expressions.

It was observed that while participants described the spices, they saw tangible the sensory stimuli and interpreted them in terms such as “colorful, vivid, and impressive”. Here, while the participants expressed the objects of the sense of sight tangible, they also reinforced that experience with intangible expressions such as feeling, adjective,

and vitalization, and observed that they expressed the intangible and tangible sensory intensities of that sensory experience. For instance, the participants described the spices as "colorful, vivid, and impressive" while interpreting the sensory stimuli as "tangible". As participants expressed the objects of sight as tangible, they reinforced this experience with intangible expressions such as feeling, adjective, and vitalization, and observed that these expressions also conveyed the sensory intensity of that sensory experience in both intangible and tangible ways. In the given expressions, for example: "The smell coming from the spices, all colors, air, lights, crowds, and the loud noises, it is a very colourful atmosphere, resembling a fairytale" and that it is like a wonderful synthesis of European and Asian synthesis, as if it were a fairy tale like an Aladdin cartoon" which is again an example where tangible and intangible expressions are reinforced from each other.

In the last stage, by comparing these intangible and tangible expressions, the dominant intangible and tangible expressions were formed and the dominant sensory experience codes were created for the five senses of the bazaar in seven different zones. Consequently, this aims to establish a meaningful and consistent relationship between the data reduced to the lowest cluster.

The term "intangible" was introduced at the UNESCO meeting held in Paris in late 2001. This term should be applied instead of its other equivalents, such as intangible or invisible. Oral traditions and expressions have been suggested to be used as a tool to experience values, including language as an intangible tool (Esfehni, 2019). Since intangible expressions are not measurable or calculable data, it may be a more accurate approach to consider tangible expressions as supporting or reinforcing elements.

Finally, the purpose of selecting and categorizing intangible and tangible expressions, when the data of the study was analyzed, it was observed that the participants used intangible expressions as much as they included tangible expressions in their expressions of sensory experience. By expressing intangible ideas, participants actually strengthen and justify the tangible inputs. By expressing sensory inputs, the participants employed tangible expressions; they strengthened them with intangible expressions, for example. In expressing that they can see the colors of spices in a visual sensory experience, they reinforce these colors with words such as; very vivid, very exotic, or incredible.

As a result, the most appropriate way to categorize these verbal expressions in a meaningful way is to group them into intangible and tangible expressions. The goal is then to reveal the intensity or dominance of that sensory experience, so that the tangible expression is simultaneously said with the intangible expression. Afterward, the part of the stimuli sensory experience has been categorized under the headings of five sensory experiences and seven separate zones since the bazaar is divided into seven separate zones. Then, the analysis and synthesis of transcription data were decomposed for the entire sensory experience for each zone in two stages.

5.5.2. *Sensory Wheel (Stimuli Sensory Experience)*

On close analysis and appraisal of meaningful and accurate data, thematic analysis was performed on the transcription data of the participants' think aloud protocol expressions. A systematic review of the data showed that the participants used some word groups dominantly and frequently. Developing an illustration of the data was described with the sensory wheel, while the sensory wheel was utilized. To analyse the sensory attributes, cluster characterisation is fundamentally used as one of the fundamental methods of analyzing sensory perception (Silvello et al., 2020). In addition to the Geneva Emotion Wheel used to categorize and understand the dimensional order of emotional attributes (Scherer, 2005), sensory wheels show the qualitative relationships between words (Lawless, Hottenstein, and Ellingsworth, 2012). To analyse the sensory attributes, cluster characterisation is fundamentally used as one of the fundamental methods of analyzing sensory perception (Silvello et al., 2020). While sensory wheel is used for one sense, it was adapted to this study and incorporated with a focus on the five senses.

5.5.3. *Laddering Technique (Retrospective Sensory Experience)*

As part of the retrospective interview section of the study, participants were asked to close their eyes to think back to their experience at Spice Bazaar and describe their most and least memorable sensory experiences there.

The laddering is a technique that aims to reach the cognitive thinking structure or thoughts in the user's mind or consumer. The most typical method of obtaining information is to delve deep into the mind of the participant with a series of directed questions (Sørensen and Askegaard, 2007). The aim is to derive association networks called ladders, which represent the perceptual orientations of participant's and show the meaningful associations made by participants at different levels of abstraction.

Thus, laddering relies on asking respondents to associate word with polls. This in-depth technique is often used in a strict sequence that leads consumers to think from more tangible to more intangible concepts (Gretzel and Fesenmaier, 2010).

A laddering technique, described in the methods section, aims to define sensory experience by going down step by step to recall a deep memory. Laddering technique is a qualitative research method that consumers use to reveal the underlying reasons for their acquiring behavior (Kangal, 2013). As part of the study, this laddering technique was used to construct the questions and link them to the study relation in order to reach the hidden sensory experiences within participant minds. As a first step, their previous experiences of the atmosphere were learned, then they were asked to close their eyes and share their sensory experiences of the five senses with open-ended questions. This process enabled the researcher to examine which sensory experiences remained in their minds permanently or which sensory experiences they remembered negatively. According to the theoretical framework of the study, this research may have significant implications for achieving retrospective sensory experiences. The laddering technique is also compelling because it allows the user to reach the sensory experience they have in mind more directly, and in greater detail. Participants to be interviewed do not need to be large enough to generalize the results, unlike quantitative studies. In studies, the number of participants varies depending on the objectives and scope of the study. These studies have between 10 and 15 participants (Kangal, 2013). Participants are asked to highlight, analyze, and interpret the distinctive features of the general atmosphere of the Spice Bazaar, as shown by several findings of the study. On the ground, the questions asked in this section will be examined under the heading of five sensory experiences and codes will be created under these headings.

5.6. Expected Results

As part of the study, the goal was to have a chance to compare and observe the tourist experience during the pre-experience stage using the Interview protocol, so that while the stimulus experiences are taken, the perception and interaction points of stimulus experiences during the sensory walk were observed using thinking aloud, sensory walking, and observation protocols.

In the final stage, it was planned to use the interview protocol in the retrospective experiences and to determine passive impressions and thoughts about the sensory

experience of the bazaar after the trip as can be seen with Figure 31. Using the findings, sensory-based themes will be created for the Spice Bazaar, which will serve as a sensory map for the bazaar. Comparing the study's results with the target results and the actual results will show that the study met all the objectives.



CHAPTER 6: FINDINGS AND INTERPRETATIONS

Before the Spice Bazaar visits, the participants were informed about the three stages of the study and the necessary permits. In the light of these briefings, the participants' signatures were obtained with the signature that the voices would be recorded within the scope of the think aloud protocol, and the field study was started from the starting point with each participant. The study was focused on giving an account of the study to reach stimuli and retrospective sensory experience maps. Then, the codes expected coming out of this will be analyzed with thematic analysis method and visual representations will be created on a map. The demographic question stage of the study, which is the first stage of the study, lasted approximately 5-7 minutes. Afterwards, the sensory walk and think aloud protocol carried out in the bazaar changed between 18-35 minutes on average. During this period, the participants were freed, stopped by the stores they wanted and examined or tasted the products they desired. Meanwhile, the whole process was followed by the observer and observed by taking notes. During this period, all participants were asked to express all their experiences and thoughts within the scope of the think-aloud protocol during the sensory walk they performed during their visit to the Spice Bazaar, and these data were recorded for transcription. 38 retrospective sensory experience questions were asked by closing their eyes in some parts and asking them to think about the bazaar in order to reach the most effective sensory experience they remember at the exit of the bazaar, with the participants expressing all their stimuli sensory experiences after their visit of the bazaar. Thus, the aim is to ensure that we have the opportunity to examine the stimuli and retrospective sensory experiences of the participants.

6.1. Phase 1: Interview with Demographic Questions Results

The participants were selected on a voluntary basis, with the requirement that they visit the bazaar for the first time as a criterion for participation. In light of the qualitative nature of the research and the desire to analyze the data in detail, a sample size of ten participants was determined and used for the study. In qualitative research, it is important to ensure that the results obtained are clear and understandable (Creswell, 2002). As a researcher of user experience, you need to keep in mind that there are two- or three-method studies with five participants, as well as single-method studies with 15 participants, in which much more data may be obtained. It has been reported by

Nielsen and Landauer (1993) that even three users may be sufficient for some studies in order to obtain an understanding of the diversity of user behavior (Nielsen and Landauer, 1993). To ensure a successful study, Neuman (2014) emphasizes the importance of being meticulous and careful when selecting samples (Neuman, 2014). As a result of the study, when content analysis was determined to be an important component of studying sample representativeness, it was believed that the results would be decisive in establishing themes (Robson and McCartan, 2016). Taking into account the fact that a sensory experience and exploration situation was identified in the field study, it was desirable to select a population sample group that was heterogeneous in composition (Altıparmakogulları and Hasırcı, 2023).

A study of ten participants over the age of 18 who visited the Spice Bazaar for the first time was conducted. There were five female participants and five male participants, with ages ranging from 34 to 62. The Table 3 below shows the codes assigned to the participants as well as other demographic characteristics.

Table 3. Containing the Age, Gender, Country of Residence, City, And Profession of All Participants

Participant Number	Participant Country	Participant City	Participant Age	Participant Gender	Participant Profession
P01	Madrid	Spain	52	Female	Nurse
P02	Austria	Graz	34	Female	Owner
P03	Holland	Eindhoven	40	Male	Engineer
P04	Australia	Sydney	55	Female	Teacher
P05	Turkey	Ankara	62	Female	Retired
P06	Turkey	Ordu	43	Male	Teacher
P07	Turkey	Bursa	45	Male	Lecturer
P08	England	London	43	Female	Director
P09	England	London	48	Male	Engineer
P10	Turkey	Tekirdağ	47	Male	Engineer

Participants, one of whom was under 40 and six of whom were under 50, shared demographic information. Among the participants, 2 were over 60, and the highest age range was 62 as illustrated in Figure 33. A total of nine participants have bachelor's degrees, while three have master's degrees. Spain, Austria, the Netherlands, Australia and Turkey were the countries of residence of the participants, and all had a touristic purpose for visiting the Spice Bazaar.

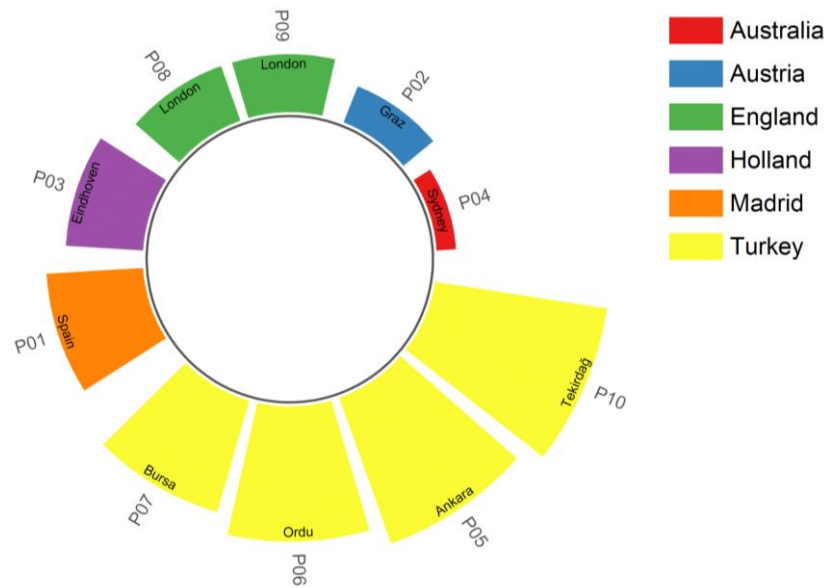


Figure 33. Country-specific Demographics of Participants

Before visiting the Spice Bazaar, participants were informed about the stages of the research as well as provided with a copy of the ethical report and permission documents signed by the bazaar's management. The participants' signatures were obtained for their consent to be recorded of their think aloud as part of the thinking aloud protocol, and the fieldwork started from the same starting point with all participants. The following is a Figure 34 of a sensory walk that was conducted. The sensory walk was designed to help participants observe and appreciate the environment around them. It encouraged them to be mindful of their surroundings and to pay attention to all the sights, smells, and sounds.



Figure 34. Scenes from the Sensory Walk

The participants' sensory experiences were revealed during the sensory walk through the use of the think-aloud protocol. A recorder was used to record the verbal expressions of the participants. Furthermore, the observer also took pictures of the participants' sensory experience reactions, as well as particular moments and places that caught their attention during the experience. Observations were also taken with regard to important points that were pointed out by the observer.

6.2. Phase 2: Sensory Walk, Think Aloud, and Observation Results for Zone's

The Spice Bazaar based on its L-shaped shape, the Spice Bazaar appears to be divided into two branches at the second stage. This is the reason why the Spice Bazaar was divided into seven distinct zones taking into consideration its topography and architectural design, and in order to reach the data within an area of approximately similar square meters. The distance between the corner of the building and the exit gate (Haseki Gate) is 144 metres, and the distance between the corner of the building and the entrance gate (Fish Market Gate) is 114 metres. In equal proportions, the distances between the exit gate (Haseki Gate) and the entry gate (Balk Pazar Gate) are measured. Reference points were determined at the beginning of each zone in order to apply this in the study, and data were recorded according to those reference points. By measuring the distances between these points, the researcher was able to accurately map out the area and determine the distances between each point.

Besides the sensory richness of the interior space, which is the study area of the Spice

Bazaar, the external space of the bazaar around the L-form also appeals to several senses. There are bird and plant sellers outside the bazaar, which have a significant visual and auditory impact. There is a rich sensory environment that has been created in this space by the Spice Bazaars, which have become the exterior parts of this space.

One significant point to consider is that the study was carried out only in the interior part of the Spice Bazaar, not the exterior part. As the purpose of the study was to analyze the area through seven zones and to map these zones, the interior of the bazaar was analyzed. Nevertheless, since bazaar's external part is large and unlimited, the study was limited to the interior, due to the possibility of too many sensory inputs, which may manipulate the analysis.

The Spice Bazaar, an L-shaped structure, was divided into seven zones as seen in Figure 35, to map the sensory experiences associated with the stimuli. By separating the sensory experiences by zone rather than examining the whole bazaar, able to study the sensory experiences in each zone individually.



Figure 35. An Overview of Spice Bazaar's Seven Zones

Zone 1:

In the study, three of the participants reported that the “very intense jewellery” was very striking and attracted the eye at the first entrance. Two participants reported that they found the lights, especially the lights of the jewellery shops artificial and one participant thought that the daylight was missing because the bazaar was very closed. Two participants also described the bazaar as “decoration very beautiful, successful

exhibition". Three participants also mentioned "really mix of complexity" for bazaar. The colours expressed by the participants can be seen Figure 36 for Zone 1 were orange, brown, red dominant, blue dominant, yellow. At the entrance of the bazaar, the participants expressed the bazaar with intangible adjectives such as "exotic, enthusiastic, beautiful, incredible, very authentic". It was observed that one participant expressed "atmosphere is like a picture" for the atmosphere of the bazaar. Further, in the first entrance part, the crowd intensified and three participants stated that the people in the bazaar bumped into them. One participant described this bumping and touching experience as "disturbing".

One participant declared feeling "felt uneasy" because of this intensity. Three participants stated that people hit them, especially by saying "everyone crashing". Likewise, with this intensity, two participants stated that they were disturbed by the intensity of the sound. Especially at the entrance point, one of the participants stated that the employees shouted intensely. Especially at the entrance of the bazaar, the variety of teas was found remarkable by eight participants, and six participants described the colours of the spices as "so colorful". One of the participant set forth that the bazaar was in "spice colours", which was interesting to him. For smell, one of the sensory experiences belonging to Zone 1, the participants said that the smells "make very hungry, curious about the scents and remind delicious". One participant described his odour sensory experience as "Anatolian experience". Another participant used the expression "odour bombardment" for the odours he sensed. Participants stated that in this Zone, they smelled spices and especially cumin, smelled tea varieties and finally smelled herbs. Three participants tasted at this point, two participants tasted the herbal tea offering and one participant tried a Turkish delight. Two participants used the expressions "delicious tea", "tasted mixed fruit tea", "fruit flavoured" for tasting the tea. One participant used the expressions "sweet", "different", "chocolate", "very good", "almond flavour" for the Turkish delight tasted.

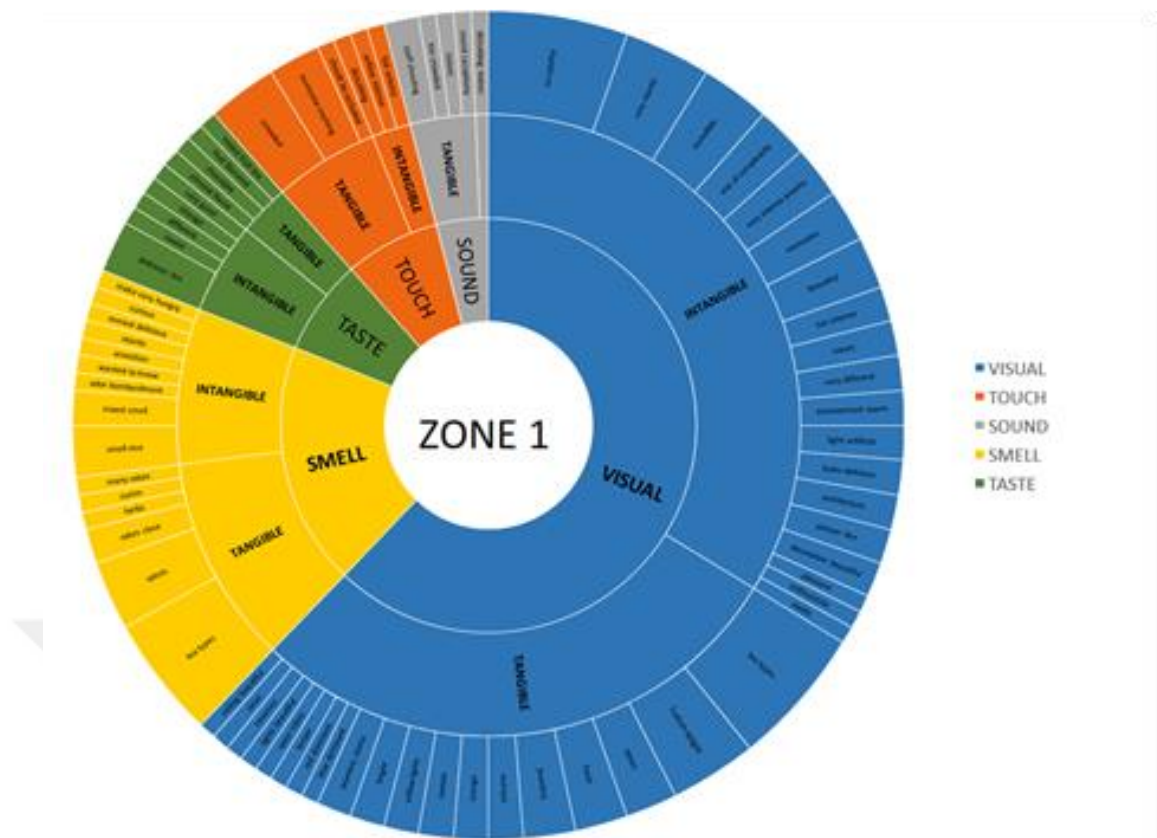


Figure 36. Zone 1 Stimuli Sensory Experience Codes

Zone 2:

While continuing the sensory walk with the participants, when moved on to the second part, at this point, two participants stated that the jewellery and the bazaar did not match much, but both participants stated they liked this colour tone visually as reflected in the Figure 37. Two participants again stated that they were impressed by the soap shops and the vivid colours of the soaps they encountered, at this point, especially one participant stated that was exposed to an intense light sensory experience due to the jewellery shops. A participant who found the glass products encountered in this section very colourful stated that the ceiling texture was also very nice and attracted his attention. While one participant stated that felt “living Ottomans” for the bazaar when moved to this section, two other participants used the expression “historical bazaar” for the bazaar. Five participants used the expressions “so colourful” and “vibrant colours” for this part of the bazaar. The smell of spices was reported to be particularly intense by seven participants and a dominant odour “spice” was reported. Two participants stated that they smelled especially cumin and one participant stated that smelled curry. One participant also stated that smelled a faint

leather odour when passing by a leather shop. The Turkish delight and sweets in this section were liked by the participants, especially one participant wanted to taste them, but they were not offered. One participant tasted a Turkish delight with orange and vanilla flavours. One participant found the peach soap's texture interesting, took the product in hand, and stated that the texture of the peach grains inside was interesting. Another participant found the evil eye beads sold in a store here interesting and stated that he wanted to get rid of negative energy by touching them. Three participants stated that the crowd disturbed them and that they found this part of the bazaar so crowded. One participant stated that there were “a lot of noises” in this part of the bazaar, but neither they were “not disturbing”.

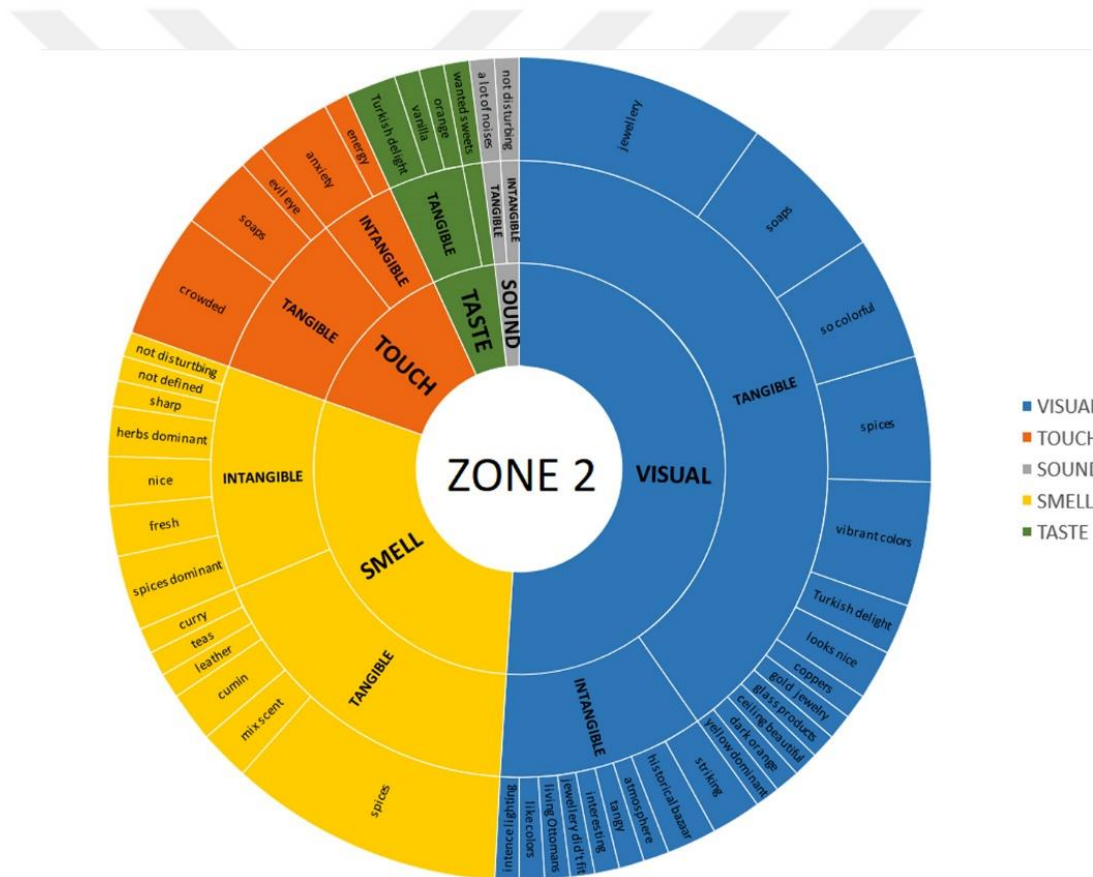


Figure 37. Zone 2 Stimuli Sensory Experience Codes

Zone 3:

In the third part, four participants used the expression “colourful” and two participants used the expression “colour festival” as illustrated Figure 38. Four participants stated they liked the glass products very much and found them colourful, especially one

participant claimed, “I dreamed of drinking Turkish tea with these glasses in my country”. Another participant said that the rosaries attracted attention, especially the colourful ones, and that he expected them to be natural stones. Another participant stated that the Turkish delights attracted his/her attention and that “they are very lively and tempting, one feels like tasting them”. A participant who drew attention to the architecture of the bazaar stated that realised that it had been restored and that the architecture attracted his attention. One of the participant clearly stated that both visual and flavour texture intensified in this part of the bazaar. “The exposed spice colours give a very attractive feeling of cooking, one feels like tasting or drinking them all” “arouses curiosity”. One participant saw dried aubergine peppers hanging while walking in this section and stated that they fit the texture of this place and liked it. Two participants informed that they were surprised to see a delicatessen and that sausage and pastrami attracted their attention.

In addition, four participants were attracted to the lighting products while continuing their walk and noted the beauty of the colours and textures of the tiled plates, especially the glass tea cups. One participant stated that he was disturbed by the intense noise in this part as “I am aware of noisy and loud speaking; noises are heavy”. In this part of the bazaar, three participants found the bazaar noisy. Another participant stated that smelled intense odours from everywhere at this point, and four participants stated that they smelled the smell of spices predominantly. One participant expressed “amazing scents” for the odours. One participant stated that although wanted to try Turkish delight, unfortunately could not try it because of afraid Covid.

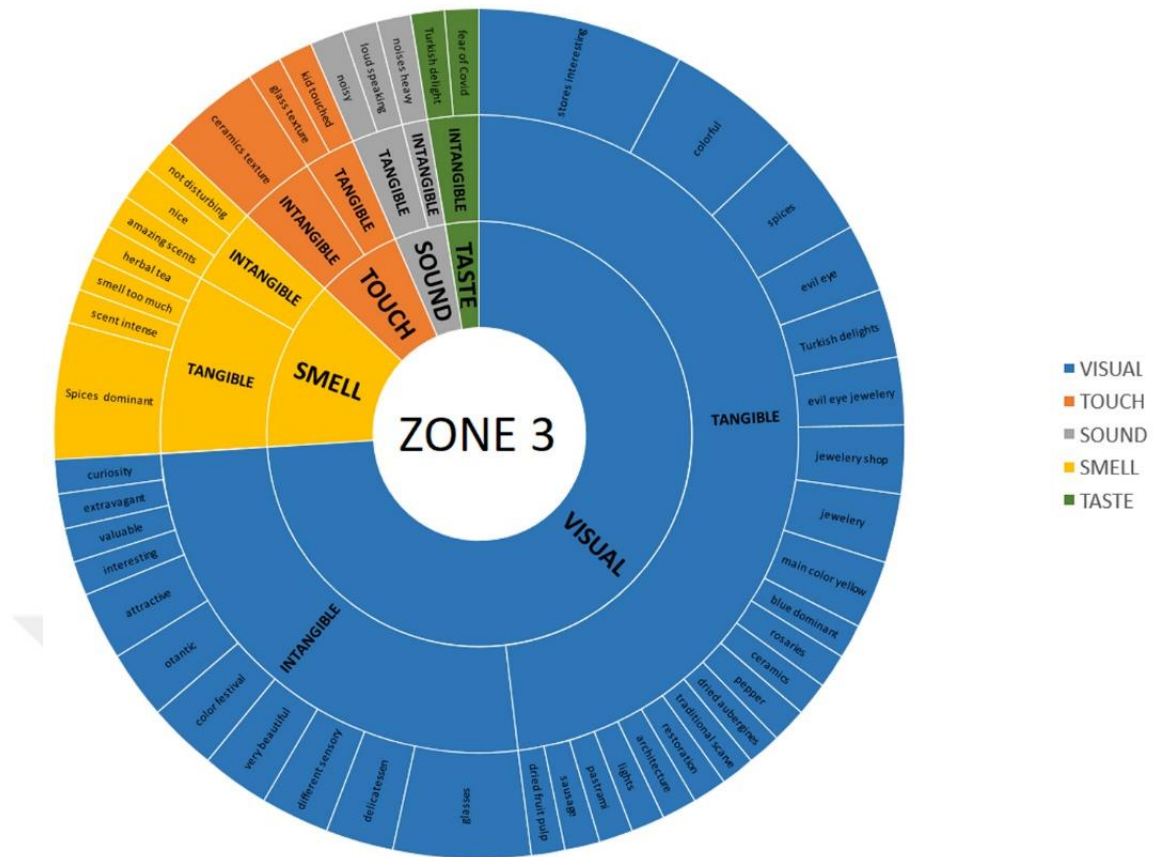


Figure 38. Zone 3 Stimuli Sensory Experience Codes

Zone 4 (Corner):

One participant stated that “people do not know which direction to go here, I get confused about my direction”. “At this point, the visual intensity is very high because I can see both sides of the bazaar at the same time, it has a nice depth, I control everywhere as a point of view”, the participant stated that could clearly see the “L form” of the bazaar. On the other participant, stated that could clearly see the “long corridor” (Figure 39). Three participants used the expressions “ethnic stair, the place where the balcony is interesting, the balcony part is interesting” for the balcony part in Zone 4, and one participant said “ethnic stair I think it is having a special feature”. Significantly, the ceiling was remarkable for two users and they said “the heading is calm ethnic, symmetric. The heading is giving calm and relax, there are very beautiful patterns and motifs on the ceilings and I thought that this structure was much more exotic” “atmosphere authentic”. One participant liked the general lighting, but one participant stated that, felt the lack of daylight as lighting and that emerge not fully feel the natural texture due to artificial light. One participant reported that felt in the

Ottomans time. At this point, “Atatürk flag” was remarkable for both participants. One participant emphasised that the bazaar was “well designed” and “so in line”. One participant said that this part of the bazaar “looks ancient”, while another participant reported that could read “remind history” and “Turkish history”.

One participant stated that the colours of the sweets attracted his/her attention the most in this part and said “I was interested in whether or not the colourful sweets were natural. I wonder if they are natural or coloured with food colouring?”. Then products with glass or plastic lids attracted the attention of the participant and the dirtiness of these lids disturbed the participant and stated that would prefer them to be open. At this point, two of the participants were attracted by the backgammon seller and wanted to buy backgammon and stated that they liked the wooden texture of the backgammon. However, in this section, one participant stated that was disturbed by the sound and that this may be due to acoustics. At the moment, the participants stated that they smelled spice odour, especially hot pepper scent, and cumin and tea flavours and smells are mixing and spice has been dominant and can not smell some teas because of the spice dominant odour. One participant stated that there was a very clear smell of freshly ground coffee in the middle and that this smell was very nice and even searched for the coffee shop in the bazaar but could not find it. At this point, none of the participants did any tasting.

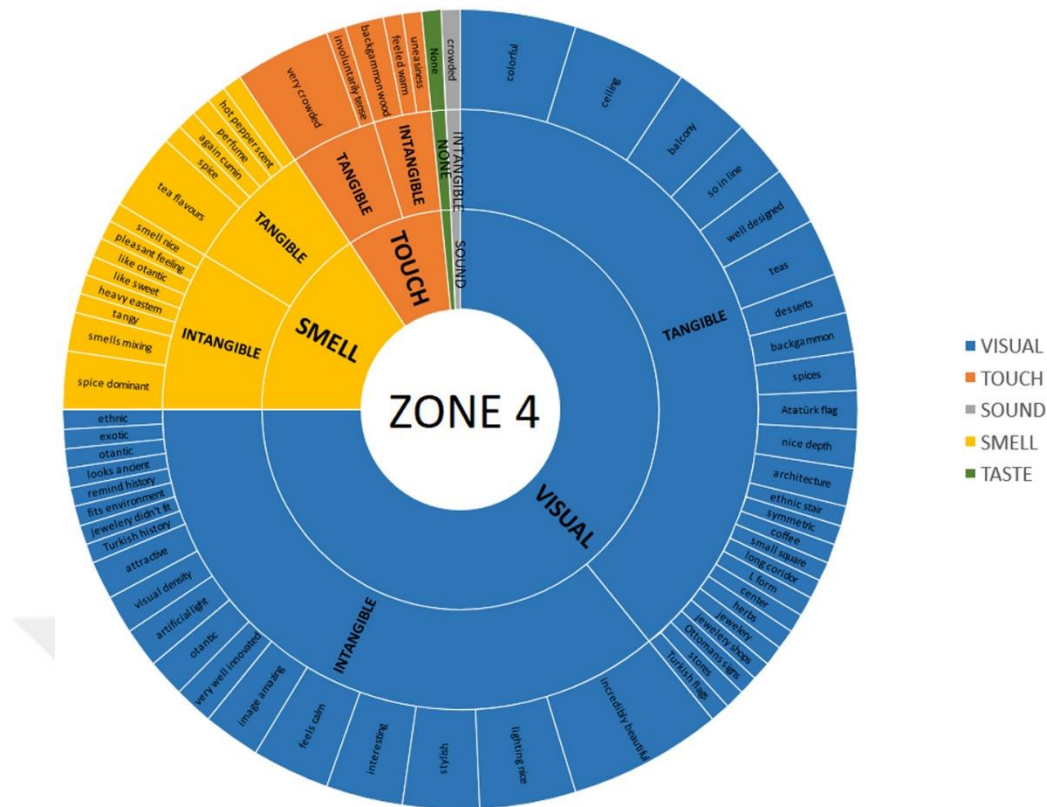


Figure 39. Zone 4-Corner Stimuli Sensory Experience Codes

Zone 5:

In the fifth zone shown in Figure 40, three participants mentioned “colourful” and six participants specifically mentioned “colours are amazing”. For five participants, the evil eye beads were interesting and one participant stated that the blue colours made feel “peaceful”. In this region, the participants liked the variety of teas the most and found it remarkable, “make me curious”. After that, “Turkish delights” and their colours were very interesting and three participants found them “appealing”. Again, the variety and colours of baklavas were found “so nice” by the participants.

One of the participant stated that there was a wide variety of colognes and saw very nice teapots, hookahs and tea sets, but could not buy them because the prices were too high, but said that liked the ethnic texture of these products and that they reminded of their grandmother’s antiques. Six participants also used the expression “unique” for the stores. One participant stated the stores were generally standardised, especially the signboards were all in the same pattern and this situation was expressed with the expressions “signboards same, same line, same text fond” and instead stated that they could all be unique. For Zone 5, participants reported the colours purple, spice colours,

Zone 6:

In this section, some cotton products and textile products took the attention of the participants. One participant stated that “imitation products”, “watches”, “bags” attracted attention in this region, and that there are authentic products for dowry, especially “carpets are very beautiful” and that really liked the cotton shawls and blouses. One participant stated that there were “different types of teas”, one participant stated that there were very nice teas and that thought of drinking rose teas and hibiscus because their country is very cold. Two participants said that all the teas looked “fresh” and “attractive”. One participant set forth the dowry shop does not fit the bazaar and added that the “Trabzonspor flag” took attention and also continued that it does not fit the texture of the bazaar. Nine participants stated baklavas attracted their attention and looked very delicious. 10 participants used the expression “colourful” for this part of the bazaar. One participant stated that felt “Ottoman times feel” during the walk and said “So authentic”. One participant touched the “local clothes” and three participants touched the “cotton products” and described them as “silk” and “very nice”. Two participants tried “evil eye jewelery” bracelets from a shop. One of the participant told “Smell of the soap coming from corner shop, but in that place, I think soap smell and spices are mixing”. Also stated that especially the smells of teas are very nice. At this point, the participant stated that the odours are very dominant in general, even “honey”, “tea”, “baklava”. Again, another participant explained that the smell is very dominant at this point, especially the smell of spices is very dominant, but the smell of “perfume” also comes from time to time, but in general, the smell is predominant in this region. Three participants also stated “less odour compared entrance” for this part of the bazaar. Two participants tried baklava “very nice” and one participant reported a “chocolate taste”. three participants tried Turkish delight and one participant said that it is cream inside there are some “peanut” inside “very very sweet” by the way”, another participant tasted a Turkish delight that was offered to participant and tasted “very very sweet” very delicious, very delicious very beautiful vibrant colours have a vivid taste”. One participant stated that the hospitality is so nice but it would be better if it was like wine tasting.

mentioned the big “Atatürk flag” that saw at the end of the bazaar. The same participant expressed opinion about the flags as “In general atmosphere when I looked I saw the flats I see that see a reminder of the internationality of the bazaar kind of nice”. One participant said that the fact that the end of the bazaar was a “jewelery shop” bothered him “we enter the spice bazaar with spices and I would want to leave by seeing spice products again”. Four participants saw and handled “loincloths” and reported that their textures were “rich high quality”, “very soft”, “smooth”, “bamboo”, “silk”, “cotton”. One participant touched “dress” and said “really like it”. Four participants said that this area was “too crowded” and that people bumped into them. In this section, four participants also mentioned “noisy” and “sound reverberant”. One participant specifically called this area “the soundest sensory part”. All four participants stated that they heard these sounds but as “not disturbing sound”. Two participants smelled “incense” just towards the exit and one participant said “atmosphere suddenly translated to Indian ambiance”. Another participant stated that this smell took to “memories”. Two participants stated that they smelled “spice types” and other participants described the odours at this point as “tangy” and “smell makes curious”, “wants to try new things”. Another participant reported smelling “cosmetics” and another participant reported smelling “perfume”. One participant tasted baklava at this point and expressed his tasting as “baklava is very dense” and “perfect for my taste”.

zone, especially cumin, curry and even mix scents. Some participants also reported that they were unable to identify some odors. This may be because the spice and tea odors, which were very intense at times, started to mix in some areas. The third most effective sensory experience was touch. The reason for this is that the evil-eyes in this area attracted a lot of attention and the participants touched these evil-eyes, and one participant even reported that it helped me get rid of my negative energy. In addition, the soap shops concentrated in this area also attracted attention and some of the participants smelled these soaps. The fourth effective sensory experience was taste. One of the participant tried the Turkish delight offered and liked the taste. The least effective sensory experience was sound. One participant reported that he heard a lot of noise in this part of the bazaar but it did not bother.

As a result, it is clear that the sensory experience of smell is concentrated in this part of the bazaar. This was seen to come from a wide variety of spices, teas, herbs and soaps. At the same time, visual sensory experience is also very effective.

Zone 3: The most effective sensory experience in the third zone was visual sensory experience. The visual sensory experience at this point was also the area where the most intense visual proportions of the bazaar appeared. At this point, the participants reported that they saw very colorful, very vivid, and overwhelming colors and that they were impressed. Some participants even reported that especially the Turkish delights and spices that were in the open looked very compelling and that they wanted to taste them all. The second most prominent sensory experience was smell. This was due to the intense spice odors coming from every point, and this was also expressed by the participants. The third most effective sensory experience was touch. Some of the participants found the lighting and ceramic products interesting and reported the texture details with tactile experience. They reported the textures of the glass and ceramic products. The fourth sensory experience was sound. However, the sound was disturbing for three participants. In particular, they reported hearing loud shouting and described this point as noisy. The last predominate sensory experience was taste, this was due to the fact that the owners in this area were not very insistent about the treats, although one participant stated that although he wanted to try Turkish delight, he could not try it because he was afraid of COVID-19. At this point, most of the participants drew attention to the ceiling and the texture of the ceiling, which was also found remarkable by the participants.

Zone 4: The most effective sensory experience for the participants was visual in this section, which is the corner of the L section, right in the middle of the bazaar. Mostly, the participants knew that this area was the corner that had numbers of visual depth. Particularly, the balcony part was very attractive by most of the participants. In addition, the Atatürk flag, influenced from this point, became a visual element that the participants paid attention to and also stated. At the same time, the stairs connecting the balcony were quite interesting. Six participants reported that there were beautiful patterns and motifs on the ceilings and said that they felt calm and relaxed. The second most influential sensory experience has been smell. One participant stated that there was a smell of freshly ground coffee in this very middle part, and reported that this smell was very nice, and even searched for the coffee shop in the bazaar but could not find it. At this point, the participants said that they heard spice scent, especially hot pepper scent, and cumin, and tea flavors and smells are mixing and spice has been dominant and can not smell some teas because of the spice dominant smell. The third sensory experience has been touched. At this point, the attention of two of the participants was attracted by the backgammon seller and wanted to buy backgammon because of the wooden texture of the backgammon. The fourth sensory experience was sound because one participant reported that was uncomfortable with the sound, which could be a question about acoustics. The least effective sensory experience was taste, as none of the participants tasted at this point.

Zone 5: The most effective sensory experience in Zone 5 was visual. In this zone, participations especially liked the variety of tea, which was concentrated and diversified, and found it quite colorful. Then “Turkish delights” and its colors were very interesting and three participants found it “appealing”. Pointing out on the shops, some of the participants found that shops are unique, while others liked the design of the shops. However, one participant stated that the stores were generally standardized, especially the signboards were all in the same pattern and this situation was described as “signboards same, same line, same text fond” and instead they could all be unique. The second most significant sensory experience was smell. Participants reported smelling intense spice. However, one participant reported getting used to the smell. Five participants reported smelling spices and described them as “nature, aromatic smell, cumin, pepper”. One participant also tried the cologne from the merchant and said that it smelled very fresh. The third most dominant sensory experience was

touched by a very small margin of participant. The reason for this is that the increasing number of evil eyes and their jewelery products, especially in this region, were found interesting and tried, especially by female participants. One participant also reported that the textures were charming. For this reason, the evil eye texture in this zone emphasized the sense of touch. On the contrary, a group of participants who found the bazaar very crowded and reported that there were people who bumped into them. The third experience was taste, with little difference between touch and taste. Because of that, participants were offered baklava and Turkish delight in this area and they tasted it and expressed that they liked the taste. The least prominent sensory experience at this point was sound. Three participants reported hearing “kinds of voices”, which they described as “sound disturbing”, “children’s voices” and “acoustic problems”.

Zone 6: When looking at the most effective sensory experience in this zone, the most effective sensory experience was visual. In particular, it is seen that the participants frequently used tangible expressions for zone 6. One of the reasons for this may be that especially tangible products are settled in this region and the participants interact with these products much more. Especially, it can be seen that stores trading textile products became frequently. This was also expressed by the participants so that they expressed that they liked these textile products and also carpet products, ceramic objects and plates. However, one participant stated that the dowry store here does not fit the atmosphere of the place. Ten participants also mentioned the frequency of textile products at this point. Nine participants stated that the baklavas were attractive and looked very delicious. 10 participants described this part of the bazaar as “colorful”. One participant reported having an “Ottoman times feel” during the walk and said “So authentic”. The second most influential affective experience for this zone was taste, by a small group of participant. One of the most important factors to explain this is the increased offerings and insistence of the vendors in this zone. Five participants tasted the Turkish delicacies offered and expressed that they liked them very much. Two participants also tasted baklava. Therefore, it was observed that the most intense taste experience among all zones of the bazaar was made in this zone. The third most effective sensory experience was smell, which was very close to the sensory experience of taste and slightly different. One participant said “Smell of the soap coming from corner shop, but in that place, I think soap smell and spices are mixing”. One group of the participant especially stated the smells of teas are very nice. At this

point, the participant stated that the smells were very dominant in general, but they could not fully express that they mixed some smells with each other. The fourth sensory experience was touch. This was due to the fact that, as mentioned above, especially at this point in the bazaar, textile products are dense and most of the participants handled the products and reported their textures. The most ineffective sensory experience was sound, both for this area and for the bazaar as a whole, as no participant reported any sensory experience related to sound at this point. At this point in particular, one participant reported that there was less smell, especially compared to the entrance point, and that the sensory experience here was purely visual.

Zone 7: As for the thoughts about the zone 7 as also the last part of the bazaar, the most effective sensory experience was visual. Textile products continued to be found in Zone 6. In addition, dry fruits, which increase the visual richness, were found to be very colorful by the participants. In this zone, it was seen that souvenirs and ceramic products were predominantly sold. Participants also noted the beautiful colors of the soaps and wanted to touch and smell some of the soaps. One participant noted the large “Atatürk flag” at the end of the bazaar and said that he felt a sense of Turkish culture. However, one participant said that the “jewelery shop” at the end of the bazaar bothered him, “we enter the spice market with spices and I would want to leave by seeing spice products again”. The second most effective sensory experience and the most intense touch sensory experience in the bazaar was in this area. In this area, participants handled and touched cotton textiles, souvenirs, plates and soaps. Therefore, this area was the area where the most intense touch sensory experience took place. The third most influential sensory experience was smell. In particular, the incense burnt on the last research day turned into an unforgettable experience for two participants. One participant reported that the smell took him back to all his memories. Two participants reported smelling “spice types” and other participants described the smells at this point as “tangy” and “smell makes curious”, “wants to try new things”. Another participant reported smelling “cosmetics” and another participant reported smelling “perfume”. The fourth sensory experience was sound. In this section, all four participants reported “noisy” and “sound reverberant”. One participant specifically called this area “the soundest sensory part”. All four participants stated that they heard these sounds but as “not disturbing sound”. The least effective sensory experience was taste, as only one participant tasted baklava and described it as “baklava very dense”

and “perfect for my taste”.

6.4. Phase 2 Findings Stimuli Experience for All Zones and Observation Notes

The sensory experiment results of the participants were examined, it was stated that especially the jewelry shops were remarkable at the entrance of the bazaar and their lights were interesting, but one participant was not satisfied with this situation. In addition, as stated by the participants at the first entrance of the bazaar took place with a dense crowd and especially with this crowd, people bumped into each other and it was quite noisy. One of the participant explained that the narrow focus of smell of soap, spices and tea intensified towards the middle of the bazaar. One of the most striking points is that the most intense olfactory sensory experience of the bazaar takes place in this area. Participators have identified that reasons why dominant olfactory that is, especially a wide variety of spices and tea, and sometimes soap scents can smell in this region. Thus, the most effective olfactory sensory experience of the bazaar was Zone 2. As a move towards the middle part Zone 3, it was observed that the visual sensory experience intensified considerably. Especially in this region, participants also used visual tangible expressions intensively. It was stated by the participants that at the corner part of the bazaar, Zone 4, it was quite crowded again, but it was also very rich in terms of visual sensory experience as it dominated the entire bazaar. Moreover, according to the participators, the balcony was found interesting and the ethnic texture on the ceiling was found interesting by almost every participant.

At the corner part of the bazaar, one of the participant realized freshly ground coffee olfactory. Thus, a striking consideration was observed that this participant smelled spices more dominant than other participants rest of the bazaar so may be one of reasons that occur, participant’s olfactory sensory experience was reset with coffee olfactory. Also one of the reasons why the participant smelled freshly ground coffee, there is a store of the most well-known Turkish coffee shop in Turkey and also they produce Turkish coffee with mill, thence there is occur an intense smell of coffee. But also interestingly, despite the presence of such an intense smell of coffee in that area, nine participants could not sense smell. In the fact that reasonably accurately, the smell of coffee may have been suppressed by the dominance of intense spice and tea odors.

Passing through zone 5, one participant stated that spice scents and tea scents and even the smell of soap were mixed together and disturbed them, since they were side by side

in a stand. However, another participant smelled this mixture in the same way, but stated that liked this mixture of tea and spice odors. From the middle section onwards, it was observed that the vendors were more insistent about the treats than at the entrance of the bazaar, and to the participants were offered Turkish delight, baklava and herbal tea. One of the most important proofs of that is the most intense taste sensory experience taking place in Zone 6. After tasting, it was observed that the participants generally liked the treats. It was observed that Turkish delight was predominantly offered, baklava was offered much less and only offered to visitors who spent more time, and even Turkish coffee was offered to some visitors.

From this point on, especially the colors of spices, Turkish delight and baklava were expressed by the participants as very colorful and eye-catching. Anew, the smells were very intense and one participant said that, could smell everything now, even baklava's too.

Another participant stated that get used to smell, because smelled very intense odors. Towards the last zones, it was observed that textile products such as t-shirts, bags and bathrobes, especially textiles, were concentrated. However, it was observed that these cotton products were found most striking by the female participants and that they interacted with these products by touching them.

One of the most important evidences of this situation was the most intense touch sensory experience started from zone 6 and reached the top point in zone 7. The least effective sensory experience was the sound sensory experience in zone 6, have identified important reason for this may be that zone 6 has a very intense visual, smell and taste sensory experience, which may have made the sound sensory experience unnoticed or unremarkable by the participants. Increases and decreases in stimuli sensory expressions according to regions can be seen in Figure 43.

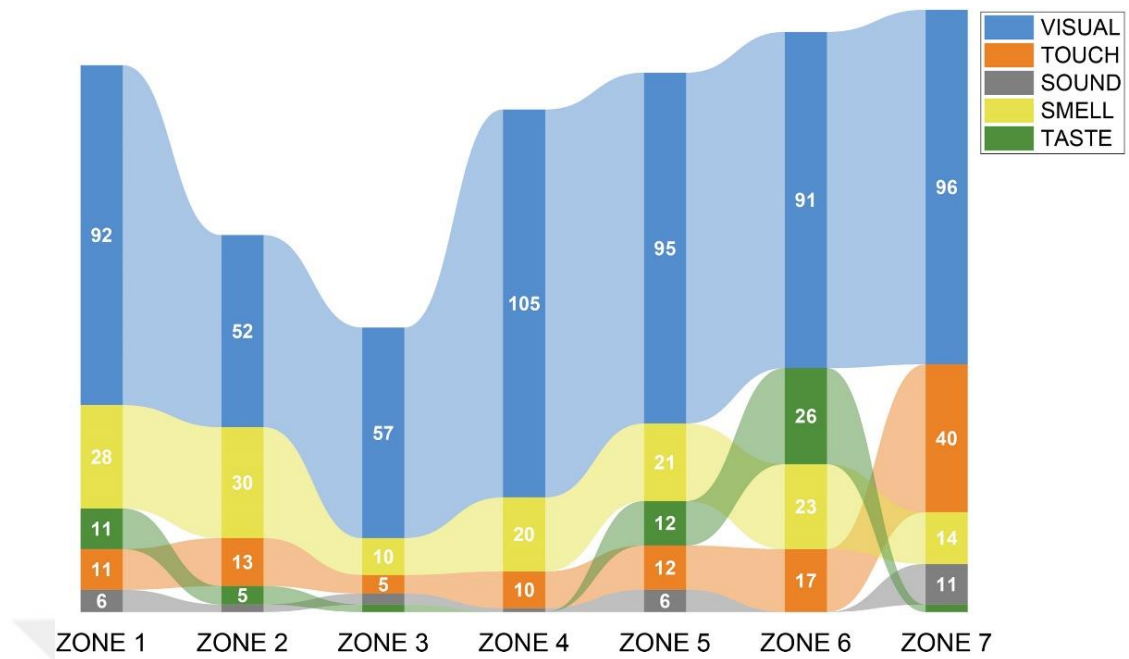


Figure 43. Density Chart of the Spice Bazar Sensory Experience

6.5. Phase 2 Discussion Stimuli Experience for All Zones and Observation Notes

Data were gathered from participant's answers jewellery shops in the bazaar are seen very remarkable in general, but also three of participants specified that these jewellery shops do not match the general atmosphere of the bazaar. The participants thought that they expected to see spice or food-oriented products in the Spice bazaar and that the atmosphere of the store did not match these products. Interestingly, this correlation is may be related to the participants who focus on spices may suddenly encounter a jewellery store in the following stores. Only a small number of respondents indicated that they found some of the stores incompatible and wrong, and while they should be food-oriented, jewellery and clothes affected their experience in the opposite direction. Other stimuli responses stated that non-spice shops spoil the aura, the fact that the signboards were too standardized.

The mostly response of that the bazaar was restored and as well designed, although some participants thought that mostly store and especially the signboards were the same did not reflect its old ethnic state. A majority of participants indicated the Turkish flags in every store and stated that could not understand why they are in front of stores.

One individual stated that "store owners are disturbing when I touch them they bother me with their eyes, I feel uncomfortable". One of the individual expressed the sellers

shouted with a loud voice and they were uncomfortable because of that loud noise. However, two participants thought that the sellers were generous and helpful.

Two of the responder didn't want to do taste anything because they were afraid of COVID-19. In addition, it was observed that the participants generally had a close relationship with the vendors and that the vendors had a high level of interaction with the participants. Reported observations generally the stakeholders had a positive interaction with the participants, but instead of taking care of some of the participants or offering those treats, they were interested in other tourists and offered them treats. A minority of participants argued that some food products were covered with glass or plastic covers, but they looked very dirty and gave the feeling that they were not clean, so they would prefer spices and Turkish delight to be open. On the other hand, another participant group, stated that doubted the expiry dates of open spices and especially teas and some mixed teas, because of not understanding ingredients and have suspects of whether it was fresh or not, and that it looked very nice visually, but hesitated it's hygienically and hesitated to buy.

In fact, in 2010, within the scope of European Union (EU) standards studies, some changes were made in the Egyptian Bazaar and many of the open spice stalls were closed with plastic or glass covers in order to provide more hygienic food safety for tourists (Davis and Şenocak, 2017). Recently, observed that most of the food products in the bazaar are mostly open without any covers. A few participants have seen a few stores that sell with plastic or glass lids. However, this point can be considered being open to discussion because there are participants who prefer these products closed, but it was also observed that there are participants who like the fact that these products are open and dominated by vibrant colours. Considering that the bazaar is very rich in terms of sensory experience, especially in terms of olfactory sensory experience, it should be take in consideration that such a hygiene measure may negatively affect the olfactory sensory experience. Repeatedly, almost the majority of the participants stated that during their sensory walks in the bazaar, they went to some of their memories and sensed them out loud, and this situation was quite interesting. Most of the products in the bazaar evoked memories for the participants and caused them to reminisce about their memories. During the sensory experience walk in the bazaar, one participant commented, "I feel like I am in the garden, the environment feels so fresh and so natural," while another participant commented, "There are colours that are inviting,

invigorating and stimulate to buy”. According to a participant, the bazaar’s visual colors are similar to spice colors, so perhaps it can be remarked that the bazaar appeals both to the visual senses and to the olfactory senses. Other visitor added that the general colours of the bazaar were associated with the colours of spices. This interesting data may indicate that the bazaar matches both visual and olfactory sensory data. Because visitors may have felt that the odours were identified with the spice odours. Similarly, a participant reported that he analysed and matched the smells better when the name of the spice was written. Thus, it can be assumed that participants’ sense of sight and olfactory sensory experiences can be greatly enhanced. Therefore, it is thought that when the sense of smell and visual sense are used in design and arrangements in a way that supports each other, it can create a more effective sensory interaction process. It has been observed that sometimes the visual sense and sometimes the olfactory sense can support each other. As Agapito, Valle and Mendes et al. According to Agapito, Valle and Mendes (2013) in their study on the tourist experience, not only a single sense is relevant for sensory experience, but also a variety of senses work together to create and shape the visitor experience (Agapito, Valle and Mendes, 2013). The finding of this study provide the Agapito et al. investigation within the scope of that all senses had their own intensities and values within them.

Another participant said, “The incredible smells and colours and images drew me in”. One of the participators added, “I definitely come again. I definitely exactly it looks like eye festival every colour too many different kinds of smells, you feel in hammam with soaps and at the one point you feel in kitchen with spices”. A strong relationship may have caused that result because of the participants had visual and olfactory sensory interaction with loincloths and soaps sold at the end of the bazaar, which triggered this situation.

Consequently, these sensory experiences, which also stimulate or affect the participants’ thoughts and memories, may not be sufficient to be evaluated exclusively with tangible expressions as was stated in the section of the analysis of data on categorisation, so stimuli expressions were also categorised and used for data analysis. Each participant stated that the bazaar reminded them of something or took them somewhere. This finding was unexpected and interesting in terms of the data in the study. It would be interesting to consider the impact of the results of this study on aspects such as feelings and triggering factors, and also to determine which products

or product groups cause participants to conceptualize these stimuli expressions. Clearly, the visual impact of colors and the olfactory experience have a positive impact on participants. This is particularly important for their purchasing status.

Accordingly, it would not be wrong to say that the sensory experience of stimuli is predominantly visual and olfactory. However, the least effective sensory experience at the beginning, middle and end of the bazaar was sound. Generally, the participants found this sound very intense, but they stated that they heard a continuous sound, but not very disturbing. Upon leaving the bazaar, one participant commented that “maybe in this atmosphere, I would like to see ethnic instruments or instruments suited to this ethnic environment”. The participants also reported an impressive experience with sound, but they mostly stated that they did not think it was very positive, but that there was no disturbing sound. One participant stated the opinion about the atmosphere of the bazaar as “if I had a lot of money I would like to buy everything and if I had a chance I would like to stay here, it has a very historical texture” and “The atmosphere of the bazaar aroused very good feelings in me with all its colours, energy and enthusiasm”.

The witness noticed that the colours of the diamonds and gold, which are normally bright and sparkling, were dull compared to this colourful array of spices, which drew the witness's attention. A fascinating result of this study shows that spices, teas and other colourful products can improve the sensory experiences of participants, so that spices colours can be more noticeable despite brightly lit displays such as diamonds and gold.

Three participants also stated that the jewellery shops in the bazaar were not appropriate in terms of content and that they expected to see products suitable for that context in the spice bazaar. The comments of the participants suggest that both the artificial light colours and the products sold do not have much overlap in the general context of the bazaar, which may be a result of the artificiality of the light colors. In addition, another major finding has been observed that spice, tea, and soap products generally provide more stimulation to the participant in terms of sensory experience than jewellery stores, and are generally considered to be much more memorable by the participants as a sensory experience.

One of the most interesting points was the smell of coffee. At the corner of the bazaar, there is a factory of Turkey's most famous Turkish coffee. However, only one

participant could smell freshly ground coffee at this point. None of the other 9 participants could identify the odour of coffee; instead, they constantly and sharply smelled spices, tea, or soap. This might be due to the fact that the participant reset the odour sensory experience with coffee at the midpoint and continued to receive the spice odour dominantly in the following zones. At this point, as stated by many participants, it is thought that perhaps the smell of coffee may have lagged behind the sharp and intense smell of spices. Thus, the smell of Turkish coffee, which is normally intense and dominant, may have become ineffective or ineffective against the intense spice odours in the bazaar. According to one participant, “I smell everything now, even baklava smells,” while another participant said their nose had become accustomed to this smell experience because they smelled extremely powerful scents.

The sense of smell and some molecules associated with coffee's odour signal have been shown to form strong contact with the olfactory receptors. Therefore, this kind of movement and vibration of the coffee can send a signal to the brain and stimulate the olfactory receptors and stimulate the olfactory receptors to differentiate it from the other odours (Dorri, Sabeghi, and Kurien 2007). Especially after the middle part, some participants reported that spice odours and tea odours and even the smell of soap were mixed together and disturbed them because they were side by side. As discussed above, if the intense and dominant odour experience could be reset towards the middle with a coffee scent, perhaps participants could minimise the mixing of spices or other odours thanks to the resetting feature of coffee odour. However, another participant smelled this mixture in the same way, but stated that liked this mixture of tea and spice odours.

There were a few participants who reported intense spice smells at the entrance part of the bazaar, and gradually the smell was replaced by visuality in the following parts of the bazaar. According to observations, there has been seen a shift in the sensory experiences of participants in the bazaar.

Textile products are primarily concentrated in the last part of the bazaar, including t-shirts, bags, and bathrobes. One participant stated that “the colours are very beautiful in these parts, a wide variety of colour scale, I did not start the day well, but the colours increased my energy.”

Several participants expressed disappointment about the end of the bazaar with the jewellery store, surprising all of them, and that they had entered the spice bazaar with spices and wished to see spices end of the bazaar. On texture products in the last part

of the bazaar, one of the most obvious findings was that male participants did not interact much with the tactile sensory experience. In contrast, female participants had a more active sensory experience in this regard. Furthermore, in terms of the tactile sensory experience, most participants saw the collisions, particularly those in the crowd, negatively.

One of the most noticeable observation was that one participant took notes after the bazaar visit and found the experience unforgettable. And also added that this study will also guide the participant's future travel experiences. The situation this participant encountered also turned out to be an interesting and unforgettable experience. It was thought that perhaps the data of this study could cause or enable the participants to have a different sensory experience on their future trips. The most effective psychological experience, odour, has been shown to have a much longer-term accuracy in memories and previous experiences than visual memory (Henshaw et al. 2016). This study confirms that on the data of this stimuli sensory experience, odour was the second most effective sensory experience, followed by visual. However, as mentioned in the source above, as discussed in the literature section of the study, the most memorable sensory experience is usually odour. The retrospective sensory experiences of the participants should also be asked in the following phases of the study, along with the most memorable sensory experiences. In this way, changes in both immediate and retrospective sensory experience inputs can be analysed and turned into usable data.

6.6. Phase 3 Retrospective Interview

Towards the end of the study, participants were asked to answer questions about their sensory experiences in order to conduct a retrospective sensory interview. Following their sensory walk, the researchers take the participants to a café close to the Spice Bazaar that is quiet and close to the bazaar. During this phase, 38 questions were asked of the participants in each of the three subcategories. In the first category of questions, the participants were asked to consider their feelings and general impressions about Spice Bazaar, and from there to recall their sensory walk memories. Afterwards, moved on to the second and third category of questions as discussed in the method part of the mentioned laddering technique and were asked to the participants to close their eyes to concentrate on their retrospective memory. At this stage of the interview,

participants were asked to remember five sensory experiences and the most rememberable and unrememberable sensory experience about The Spice bazaar. As expected outcomes of the interview were, rather than directing take the sensory experience, it is preferred to go deep step by step by asking a series of questions to gain a thorough take of the sensory experience.

6.7. Phase 3 Retrospective Interview Findings for Five Sense

At the interview stage of the study, the first question asked to the participants was, “Which category of products do you mostly like?” The answer to the first question was almost nine out of ten participants were spices, followed by Turkish delight, soaps, and souvenir goods. When the second question was asked to the interview that “Did you visit any bazaars and atmosphere like Spice Bazaar?” As one respondent stated, “Not really, it is very unique” and as another respondent noted, “I’ve been to that Spice Bazaar in Marakesh, which is similar, but it was open air.” The other responder stated that “I have visited like that Spice Bazaar in Marakesh which looked like similar however it was open air”. Two of the participants also mentioned that they visited bazaar have similarities in Egypt. Of the ten of the interviewers answered that “Do you want to visit Spice Bazaar again?” question with answer yes and majority also defined definitely. Further question asked to the responder “Can you give information about Spice Bazaar atmosphere? Then answered one of the participants said that “I can still memorize the smell that’s coming from spices and all that color, it is a very colourful atmosphere.” And the other response to this question “It is totally different like environment it is definitely very good air with the spices totally great mixture European and Asian synthesis, it is a like fairytale. I have been in Aladdin cartoon. All air, lights, smell a bit crowded loudly speak a little vivid.”

In this stage of the interview, questions are divided into five categories based on the five senses.

Scent:

"Have you noticed a scent in the bazaar?" was one of the questions asked about the scent. In almost nine out of ten cases, respondents responded with dominant spice smells followed by soap and tea. One responder explained this situation like “Dominant one was spice but also soap was the dominants one.” At the entrance of the bazaar, one participant said that felt the air flow but was unable to detect any smell.

Interestingly, as walked towards the middle, a dominant spice scent emerged, and the smell became stronger. Regarding question, the participant commented that when came to the corner point, there was the smell of freshly ground coffee; however, moved to the other side of the bazaar, there was the smell of other spices, sweat, or different perfumes.

As a follow-up question, "If so, how would you describe this scent?" and one participant responded, "It was like a garden with colors and flowers; it made me hungry. The smell of spices also reminded me of a friend who used incense." Other participants replied, "I sensed very tempting smells that took me back to childhood that took me to childhood memories, took me back to my touristic trips as a child." One of participant added "“Smelling so many types concerning me strong smell was soap; teas they were placed together they could separate that because some where I was seeing teas but I was smelling soap. Things are not placed order in a clever way. When you looked you can see like a fashion festival for eye but for reality smells getting in mix.”"

Sound:

The second sensory experience interview question was, "Have you noticed a sound in the bazaar?". All participants reported hearing sounds, even though eight indicated it was because of the crowd. When asked to describe this sound, one of the respondents replied that "the sound of people, rounded around. Buzzing of the talking." And added the other questionnaire "It was very loud it was continuous but somehow it was not disturbing I didn't hear any music, and also I didn't hear any phone ringing either because of the loud but I like it." One participant reported a situation that particularly bothered that "People were talking to each other, shop owners or workers stuff actually they were inviting loudly, but I noticed that people were communication but in other historical places people supposed to talk but in bazaar on the contrary in the bazaar people were talking and it is ok." Another participant expressed that mostly heard the voices of the sellers, but also heard the sounds of the products, for example, the sound of glass products and that noticed the seller hitting something like a drum from time to time. Another participant expressed the sounds as noise and said that they might be related to the acoustics of the bazaar.

Visual:

Third retrospective sensory experience question was asked “What are your thoughts about the bazaar visual?” and one of such descriptions outlined that “I love it because I like history a lot and the bazaar building telling history.” and being mentioned by other participants “It was a very beautiful, peaceful architecture.” “The colour was effective in every sense, the architecture of the bazaar was effective in general.” In the words of the interviewer, “the bazaar is very exotic and evokes a lot of memories. At the same time, it evokes different emotions”.

A participant does assess “the balcony in the corner and when I looked at the ceiling, it was actually quite beautiful on the ceiling of the bazaar and even created a desire to stay overnight if I had the opportunity.” Another colleague noted that the appearance of the bazaar is well-maintained, and the buildings of the ceiling give the feeling of being well-kept and protected. However, the Trabzonspor flag at the end of the bazaar remains unrelated. On the other hand, Atatürk’s flag is beautiful on the way out because it is a person who has a place in Turkey’s culture and it integrates with it.

Within the question based on “What are your thoughts about stores or window displays?” Statements of witnesses “The showcases of the spice and Turkish delight shops are beautiful, all the spices are open, all the colours are vivid, they attract people, they make you want to cook and eat.” “It was good very good designed, well designed I think, lighted enough it was very authentic in general. I remember some stores it was so nice, in lined.” Of the one participant mentioned that “The shops were colourful, impressive, colourful, the arrangement of the Turkish delights was beautiful, design was good” “It is light, doors, windows, stores and displays are fresh, airy. And stores are just absolutely beautiful.” Regarding the question about showcases and stores, the participant commented that there were often too many items in limited or small spaces. In addition, if you missed a corner of the showcase, the details would be lost. It was conspired that saw embroidered stalactites and lamps, which were found beautiful in some showcases, and observed that some of them were decorated with their own unique decorative flowers. However, a window towards the exit part of the bazaar reported “the store was selling dowry stuff as very bad, sloppy, and disconnected from the others.”

Touch:

Interview questionnaire was contained “*Did you notice any texture details or did you touch anything?*” out of the two responses, remained eight participants confirmed that they sensed touch sensory experience. Other responses to this question included “I touched silk, cotton hammam bathing towels they were soft and very nice color. As mentioned by the other participant, “I touched a towel so nicely, very good quality cotton rich product, making me feel fresh, clean, and luxurious.” “The carpets were incredibly beautiful, I realized that the texture mixed with silk was very soft. I felt the oily structure of the soaps and the beautiful slippery structure it can give to the skin. I actually tried the evil eye beads to get rid of the negative energy on me.” One of the answer set out “I actually wanting touch and try more things but workers were coming immediately and didn’t let to free walk. So, my touching sense was the least one.” The following question was “If so, how would you describe this haptic?” and one of the participants wanted to explain what "haptics" means. Hence, the haptic's meaning explained to the participants after this warning.

Taste:

The final retrospective sensory experience question asked participants whether they received any treats during the sensory walk in the bazaar. Except for two participants, the remaining eight participants gave answers in the direction of the treats that were offered. Based on one of the interviewers “yes, every shop stopped that I, they are generous of offering.” “Yes, I ate very different Turkish delights. They made various kinds of Turkish delights from products.” The other participant also assessed that “I tasted Turkish delight purple full of nuts I really like it, it was so nice, I’ve never tasted anything like this.” The participant who tried it said, “It was so colorful I couldn’t resist eating it.” Besides the taste, I also tasted the expectation in those colors, and this appeased me.” Reported that the taste was not like jelly-like sugar, but like honey, and it was quite good. A participant who participated in the study tasted Turkish delight and said it was “sweet, nice, and very delicious, and they also were fresh and soft”. Another participant reported, felt a lot of sugar in the taste of Turkish Delight, tasted more sugar than the taste of Turkish delight, but liked the taste of Baklava very much, especially pistachio, and had less syrup.

In the last stage of this retrospective interview questions relating to the general atmosphere as reflected in Figure 44, the first question was “*If you had a few words, which words could you use to describe the Spice Bazaar?*” and the participants

responded in a wide variety of ways.

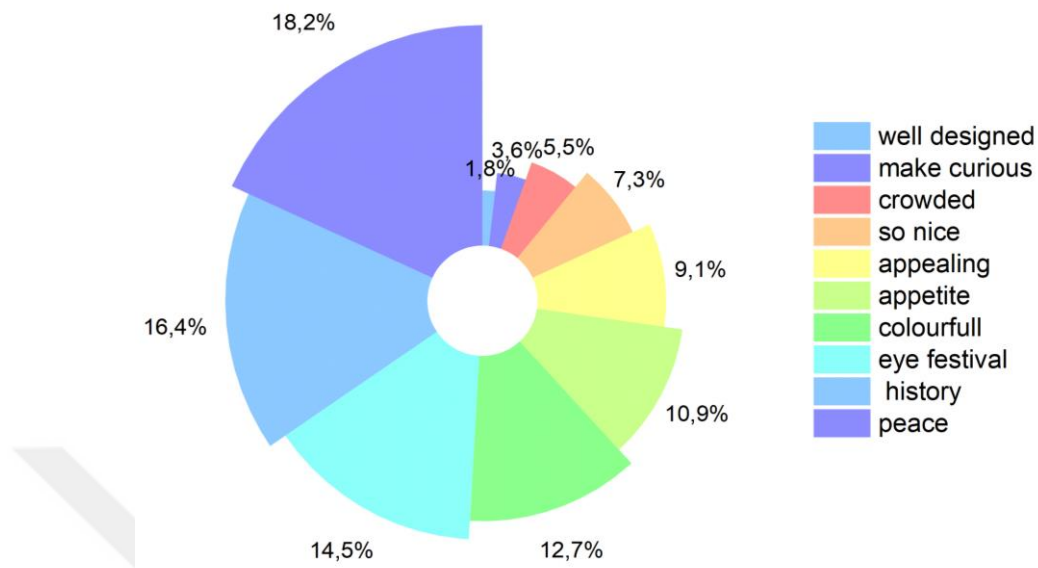


Figure 44. Words Used by Participants to Describe the Spice Bazaar

Furthermore, another question regarding Spice Bazaar was “*Where have you had the most intense sensory experience in the bazaar?*” and the results of this question were intended to present retrospective sensory experiences that the participants remembered. The results of the study indicated that one participant thought the corner of the bazaar was its heart while the other stated, “The most memorable moment in my memory was the panoramic view of the bazaar with color and perspective that I saw two extensions of the bazaar at that central point, I saw the entire bazaar, and I smelled coffee, which was an extremely distinctive smell”. In spite of the fact that half of the respondents identified the corner of the bazaar as the answer, in addition to this, half of the respondents also agreed that the first part of the bazaar (Zone 1) was also memorable. The following are some observations regarding Zone 6 from two interviewees: “Toward the end of the bazaar, I smoked camel milk soap and ate baklava.” Another participant noted, “I was struck by the smell of incense towards the end of the bazaar.”

The following graph represents above the results of comparing the results. The corner part of the bazaar at the first entrance and Zone 1 were striking for participants, as can be seen Figure 45.

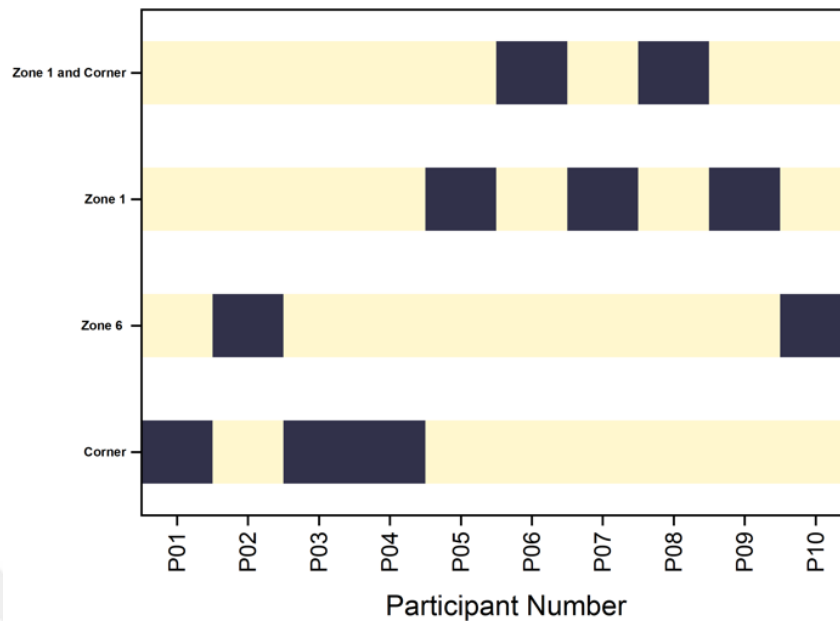


Figure 45: Sensory Zones Where Participants are Experienced to the Most Intense Senses

Several participants responded to the question “*If you could change Spice bazaar atmosphere, what would you change?*” by stating uncomfortable situations, for instance, one participant stated that candies are easily found in all countries and bazaars, and therefore cannot be associated with Spice bazaars. As another participant pointed out, that could not reconcile the existence of jewelers, bags, and dowry shops, particularly in the spice bazaar and also added did not find the designs of these shops to be particularly appealing. When asked “*Which sensory aspects of the bazaar's atmosphere would you like to change or improve?*” According to one participant, the bazaar could be integrated into the development of technology and this kind of innovation could be implemented.

In responses to questions of the retrospective data collection process, they were analyzed through participant statements, and determined that the results of the analysis were compatible with the answers given to the last question as demonstrated in Figure 46, “*Can you list the sensory experience density of the Spice Bazaar?*”. As a result of the Spice Bazaar experience, the participants' sensory intensities are schematically summarized below. As indicated in the graphic, it is a representation of the density given to ten participants. Participants' data appears on the graph since some of them

rank the sensory experiences, as noted in the question above.

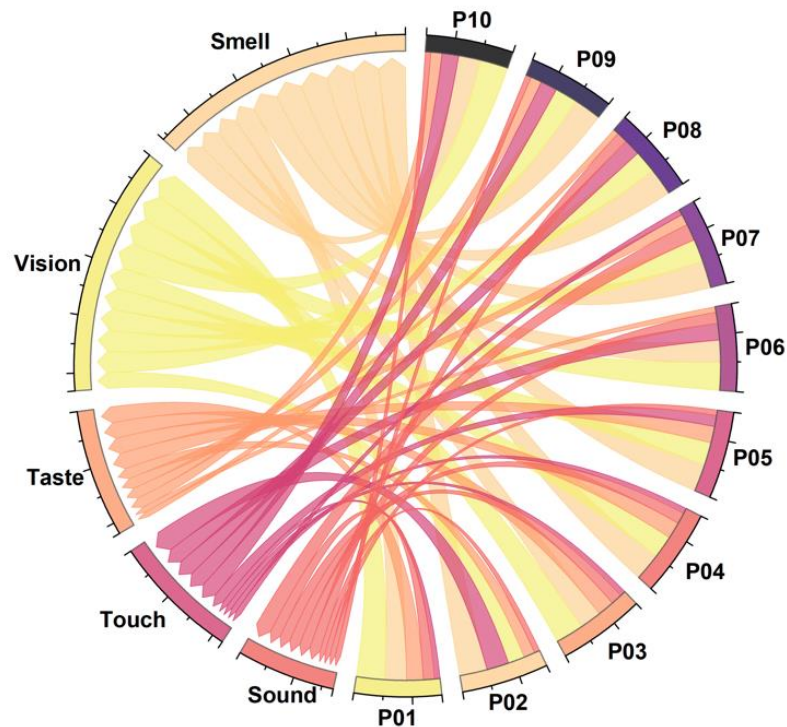


Figure 46. Participants' Sensory Experience Intensity Graph

6.8. Discussion of Retrospective Interview

Upon examining and analyzing 38 open-ended questions concerning participants' retrospective sensory experiences, the results were categorized into five sensory experiences as described above. Researchers found that the participants' retrospective sensory experiences were also comparable to their stimulus sensory experiences in the study. As a result of retrospective sensory experiences, it can be concluded that the participants' stimuli sensory experiences were confirmed.

Scent:

It is possible to see that the odour sensory experiences of the participants were again quite dominant in the stimuli sensory experience, along with the intense smell of spices, which they heard intensely. However, it was discovered that this odor sensory experience elicited more emotions and situation awareness in participants than average. There were participants who flashed back to their childhood, those who remembered their friends with the smell of incense, and those who felt themselves in

an Aladdin cartoon, those who imagined themselves in a painting, and even those who said that they felt themselves in a Turkish bath. One of the compelling points is that one of the participants stated that the smell of spices made hungry, it is crucial to remind that the fact that before the sensory walk asked to the participant about participants' hungry status. This facilitates the possibility of establishing a correlation relationship between the sensory experiences of smell and taste in the bazaar and the hunger status of the participants. And the other insightful finding in this study was that one participant said that some odors were confused with each other, especially when their images or display shapes didn't match. In this case, the participant mentioned that smelled soap while looking at tea. However, this data shows that the display shapes and the design proposals for these products need to be more accurate and stable.

Sound:

Almost all participants reported that they heard a sound and almost the majority associated this sound with the dense crowd. In spite of this, even though they found the bazaar noisy, they stated that they were not disturbed. A significant finding was that the sound sensory experience was not remembered as one of the most negative sensory experiences by the participants. However, it had a negative impact on the sound sensory experience of the bazaar. The participants were asked to describe this sound, they generally reported the sounds of people communicating among themselves. However, two participants reported that they especially heard the voices of the sellers and that this disturbed them. Nevertheless, reported that there are noisy but fascinating sounds that bring back memories of the bazaar and that can describe the sounds as enthusiastic and energy-boosting sounds.

Visual:

Especially in terms of visibility, the participants reported they found the architectural structure and ceilings of the bazaar impressive. Participants, however, recalled the staircase in the corner section particularly well. Almost all participants made a comment about the ethnic structure of the bazaar and expressed that they liked it. It was especially pleasing to one participant to experience the vibe of this bazaar, and he would like to stay here if given the chance. Therefore, it can be interpreted that the participant wants to continue his intensive and effective experience, perhaps by wanting to stay, and that this is a positive experience process.

One participant reported that saw the Trabzon flag but could not understand it, and when learnt that it belonged to a Turkish football team, reported that it did not match the atmosphere of the bazaar. However, two participants saw the Atatürk flag in the bazaar and mentioned that they found it compatible with the ethnic culture of the bazaar. When asked about the shop windows, it was observed that almost all participants liked the shop windows. However, one participant stated that the shop windows were very busy and crowded.

Touch:

Despite the fact that nine participants reported having a tactile sensory experience, one participant did not. A participant's note revealed that textile products were particularly effective at reviving their sensory memories, which are frequent and dense near the end of the bazaar.

Most of the participants in this area, while tactile sensory interaction often took place, also shared the tactile experience with the crowd. More than most, participants felt victimized by too much contact from the crowd. They also stated that they were often bumped into by other bazaar visitors and that this had a very negative effect on their haptic sensory experience.

Consequently, participants who interacted with tactile experiences, especially with textile products, were often female participants. Contrary to this, male participants who were disturbed by the continuous impact of crowded people often expressed their distress to researchers. Additionally, two of the participants were disturbed by some employees when participants handled the products, and they later reported to the researcher that the participant was disturbed. Additionally, one of the witnesses said the evil eye beads helped remove negative energy, felt the texture of the glass, and enjoyed. The other participant claimed that did not understand any texture details, but that too many people were bumped into and received blows from right to left.

Taste:

Two participants stated that they were not served and one participant stated that they did not taste even though they were served. The products served to the participants were Turkish delights, mixed fruit tea, and baklava. In general, participants expressed satisfaction with the abundance and variety of treats. The data gathered in these interview has been subjected to describe the flavours, the tasting participants stated

that they liked almost all the products they tasted, that they found them delicious and that the flavours were natural.

It appears from the findings that the correlation between sound and sensory experiences can be disturbing in retrospective, as it is the least effective sensory experience in relation to various demands. It is believed, however, that based on the feedback provided, that changes could be implemented that could result in a memorable or effective sound sensory experience. The fact that one participant stated that expected to hear ethnic or local music in the bazaar suggests that perhaps some changes may be made to the bazaar to enhance the quality of the sensory experience. In reflection on their sensory experiences at the Spice Bazaar, two participants commented specifically on the smell of soap, while one participant stated that the combination of these smells disturbed them. Those participants who reported that the smells were mixed reported that they occasionally smelled soap when viewing the tea label. It has been demonstrated in the literature that colour and visual interactions in an atmosphere directly influence the actual images and views formed in the minds of visitors, which are closely matched with visuals (Madden, Hewett, Roth, 2000).

With regard to this, it is important to consider that some confusion should be avoided in the design sense and with regard to the window arrangements. A number of attendees observed some of the product displays with coverings and felt the coverings were quite dirty, which led them to suggest that the products might be better displayed openly. The open display of the products was appreciated by another participant, however the lack of information regarding the contents and expiration dates of the products made them feel uncomfortable. As depicted in Figure 47, this diagram illustrates the relationship and output of the network phrases derived from the retrospective codes of the five senses within themselves and with the five senses.

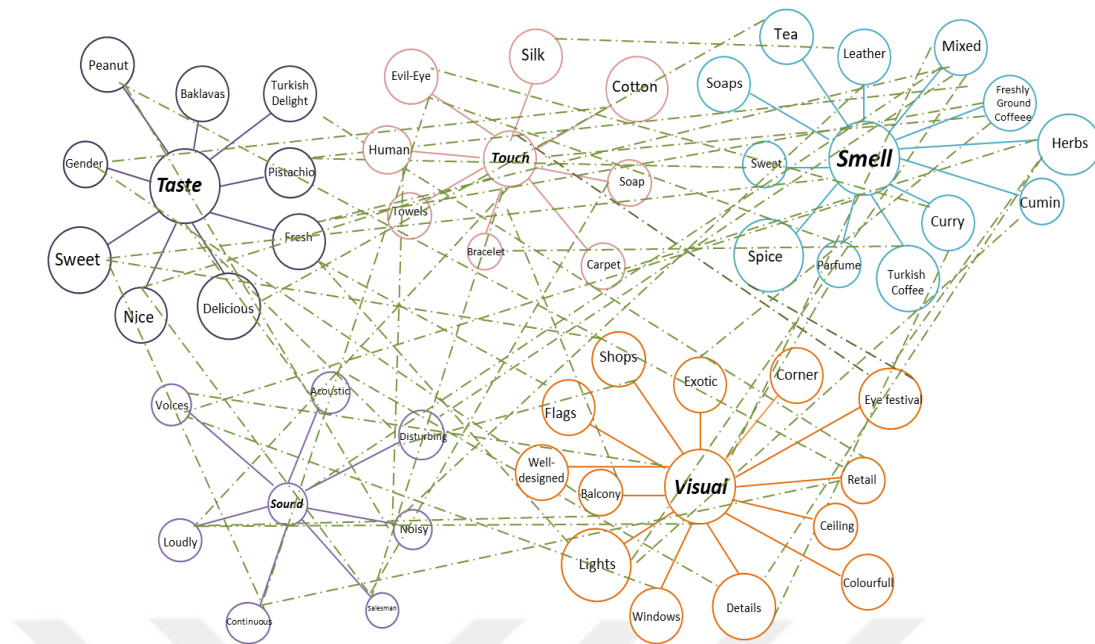


Figure 47. An overview of the Five Senses and Their Subcategories

As seen in Figure 48, the participants of the Spice bazaar have stated “make curious” more often and repeatedly when describing the Spice bazaar than the other ways in which they describe the bazaar. Aside from this, another word that was frequently used by tourists who were frequently using this situation in order to express their sensory experiences of stimuli when expressing their sensory experiences of stimuli was the phrase “well designed”. There was a great deal of positive feedback expressed in the comments of the participants about the bazaar, so this shows that the participants had very positive perceptions of the bazaar in their comments.

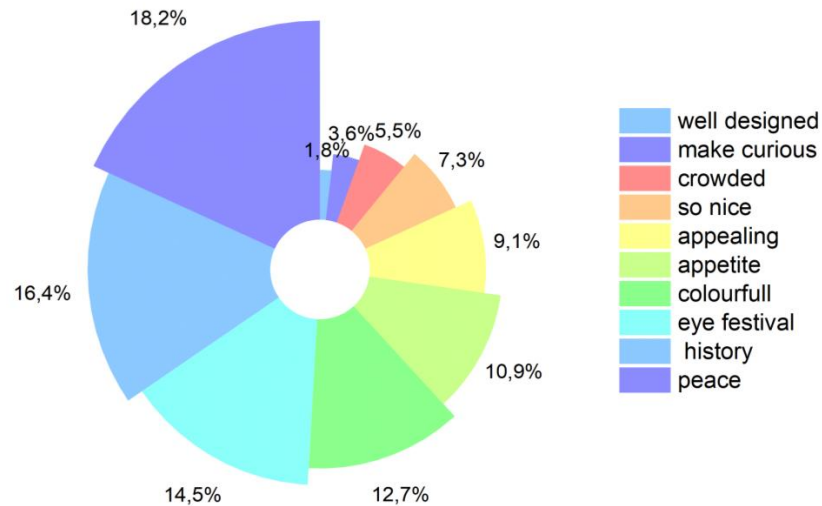


Figure 48: The Word Groups for Spice Bazaar Most Commonly is Used

This is important, as it suggests that the participants had a very positive experience at the bazaar. It was however observed that, although they made some negative comments regarding the sensory experience of sound and touch, this situation remained in the minority among participants throughout the study. As an additional point, it is also important to note that upon analyzing these words, it becomes evident that they frequently refer to intangible expressions in relation to retrospective sensory experience. Moreover, these words are based on visual sensory experiences.

The participants were asked to rank their most intense sensory experiences, which were ranked by the amount of intensity they remembered. Odour was found to be the most effective sensory experience, by a very small margin. Odor sensory experience was followed by visual sensory experience with a tiny difference.

Consequently, odour was most memorable as a sensory experience for the retrospective sensory experience. To date, odour has proven to be the most memorable sensory experience, although vision is the most effective sensory experience. The results of experimental studies indicate, however, that if product odor enhances consumer memory for product information, these effects can persist for a long period of time (Krishna et al., 2010). Hence, when the study is repeated with some additional details in the further study section, detailed information about the retention time of this odour sensory experience can be obtained.

An important point to emphasize is that some odours in the bazaar may affect the hunger level of participants. In one instance, a participant expressed that some of the

odors in the bazaar caused him/her to be hungry, and when asked about the status of his/her hunger before the visit to the bazaar, the participant stated that he/she was hungry. Therefore, it was observed that some smells in the bazaar caused participants to experience hunger. Stevenson and Boakes (2004) contend that taste can play a significant role in motivational experiences depending on motivation, such as the state of hunger levels (Stevenson and Boakes, 2004). According to the findings of the study, the situation described in the source is consistent with the results of the study. Observing the results of the study, it is possible to determine that they are consistent with the situation stated in the source. The feedback received from the participants can provide valuable insights into the development or improvement of the bazaar.

6.9. Discussion of Retrospective and Stimuli Sensory Experience

According to the literature section, when examining the mapping of sensory experience in the brain, visual experiences are mapped point-by-point to the visual cortex, whereas auditory experiences are mapped along the auditory cortex. Sensory pathways that deliver pain, temperature, and touch information to the brain are called somatosensory pathways. Cortical sensory maps in the human brain are developed as a result of experience. During the process of experiencing, behavioral responses are generated based on sensory input (Groh et al. 1997). Throughout the study, the information about the five sensory experiences was analyzed both simultaneously and retrospectively. Participants' immediate sensory behavioral responses and most memorable sensory experiences were considered as part of the analysis of their sensory experience. In order to process the first sensory interaction, associate it with intangible experiences, and therefore complete the memory and recall function, the limbic system processes sensory experiences (Henshaw et al., 2016).

The stimuli of the study were therefore designed to be analyzed in terms of intangible and tangible sensory experiences. According to the responses provided by the participants, visual and primarily olfactory sensory experiences were the most memorable sensory experiences, as well as the stimulus sensory experiences. Especially in the corner section of the bazaar, where the most striking sensory experience takes place, the visual intensity of the bazaar atmosphere increases significantly. As stated by the majority of participants, the corner section provided the most memorable sensory experience, and the intense visual sensory experience,

combined with freshly ground coffee, provided a unique sensory experience. Furthermore, half of the participants commented on how impressed they were with the intense visual impact and strong scent of spices which was present at the entrance to the bazaar, as well as how impressive the entrance was. Despite the vast amount of data associated with odour in the stimuli sensory experience, it was observed that intangible expressions were particularly prevalent, and in the retrospective sensory experience part, it was evident that the participants expressed intense emotion and that the odour sensory experience triggers this emotion. A number of different hormones have been identified in the literature discussion as being released as a response to the experience of touch, and that fabrics such as velvet, for instance, respond to different tactile sensations as well. It can be said that the sense of touch appeals to very pleasant emotions and creates a different sensory experience, but as Gallace and Spence (2014) point out, this has a lower bandwidth than other senses. It can be seen from the results of this study that touch is a ranking before the lowest in terms of the results related to the stimuli, thus it can be assumed that a result that confirms the data of this study has been accomplished.

A key finding of this study is that while the stimuli sensory experience was dominated by visual sensations, the retrospective sensory experience was dominated by odour sensations with only a slight difference. In the literature section as well as at the beginning of the study, this clearly demonstrates the differences between stimuli and retrospective sensory experiences. As such, one of the recommendations of this study is that when analyzing sensory experience, stimuli results should not be considered alone and retrospective access to one of the most memorable sensory experiences should also be considered.

A number of studies have shown that odour, which is our most effective sensory experience, is in some cases may be much more effective at recalling memories and previous experiences than visual memory (Henshaw et al., 2016). Participants in the study perceived different odours and odour codes, which caused them to have different sensory experiences and also triggered different memories and recollections. There is another point that should be taken into account, as mentioned in the literature section, for example, odours such as "floral", "fruity", "mouldy", or "bitter" can be defined in terms of the sense of taste or the visual appeal of an environment. It is essential that odor-taste mixtures be considered as a whole and not as separate perceptions

(Stevenson and Boakes, 2004).

The Turkish coffee which is frequently encountered in the Spice Bazaar and has been included on UNESCO's Intangible Cultural Heritage List since 2013 has strong odours and is important for Turkish culture, but it was not noticed by other participants except for one participant in the bazaar. The participants, who were exposed to the intense spice odors of the bazaar, are believed to have been unable to detect the smell coming from the production facility located outside the corner of the bazaar due to this situation.

Taking a look at both a stimuli sensory experience and a retrospective sensory experience, it was observed that almost all participants found the spice colors very impressive. On the other hand, they talked about the spice colors as well as the general atmosphere in their retrospective sensory experience. Additionally, the general architectural structure of the bazaar, especially the heights of the stairs, ceilings, and arches, was the most memorable sensory experience.

Based on the evaluations and results related to the tactile sensory experience, three participants complained about the crowded bazaar, especially because they were uncomfortable with it. One interesting part of this data is that a participant said he or she had incomplete sensory experiences because of the crowd. For example, the crowd kept them from focusing on scent or visual sensory experiences at certain points or spending more time, even though they wanted to do so.

Further, as discussed in the literature, touch and other senses have been shown to have a lot of impact on how users behave and interact in atmospheric spaces, and that they feel safe and comfortable when touching products (Terblanche, 2018). Based on the results of this study, this crowd, which causes people to have a negative tactile sensory experience, is something that needs to be addressed and maybe evaluated at the architectural level. Also, as discussed in the retrospective discussion section, especially male participants experienced this. One of the fascinating aspects of the study deals with the sensory experience of hearing. While there is a large bird market at the entrance of the Spice bazaar, none of the participants found it noteworthy and it was not heard inside the bazaar. It was also observed that due to architectural acoustics, the participants heard the sounds much louder in intensity, but still, for the sound sensory experience, all participants found it not disturbing even if the sound was very loud. The report says this may cause users in the store to not be aware of when and

where acoustics are transmitted because it provides multi-source and diverse data input, especially in crowded environments. Again, when analyzing stimuli and retrospectively, the results of the study showed that this is the case, even if users find it too loud. Research has shown that tempo and rhythm characteristics of music influence how customers spend time in places (Soars, 2009). As an example, a participant had a suggestion regarding this issue and stated that he expected to hear a sound or music, perhaps live music, that was suitable for the bazaar's atmosphere. At this point, an improvement to be made in the sound sensory experience can again enable tourists to have a more positive sound sensory experience in that atmosphere, thus making the process more enjoyable and positive for tourists, which is one of the most ineffective sensory experiences that can be provided to tourists. The stimuli and retrospective results of studies related to the sensory experience of taste demonstrate that products that appeal to the sense of food and taste evoke a more intense emotional response in these participants who may express this without even being aware of it. In such studies, especially sensory experience studies, it is important to keep in mind that the modalities of the participants may also affect the study, as well as the information obtained from the study. A sensory marketing strategy was used to promote a dessert experience in a store in Colombia (Spence et al., 2014). Therefore, as noted in the literature review part of the study, it can be argued that an appropriate questions and analyses were made in the study's data at this point. In addition, it was interesting to discover that some participants recalled specific memories in connection with the products they saw and felt. The source and other studies indicate, however, that participants are more likely to recall this moment positively when they taste, but Spice Bazaar's taste sensory experience was rated as the least memorable sensory experience because four participants did not taste, despite the intensive tasting.

Through all the discussions, it has been evident that the bazaar provides a very effective sensory experience for all five senses. As a result of both stimulating and retrospective sensory experiences, these five senses have observed that the intensity of the Spice Bazaar environment varies from time to time. Overall, the bazaar exerts a considerable influence over all five senses. Similarly, it has been argued in the literature that users and the atmosphere are not only experienced through visual experiences, but also through sound, smell, and touch (Agapito, Valle and Mendes, 2013).

Based on a sensory experience analysis of the Spice Bazaar, which should be discussed in terms of tourist experience, significant aspects that will contribute to the design and development of the bazaar were identified. As discussed in the literature section, when evaluating this situation in terms of sustainable tourism and tourist experiences, it is important to recognize that when tourists discover a place, their senses are very intense and sensory experiences such as smell, touch, and taste, combined with their previous experiences, can be very powerful. When participants return to their countries with embodied experiences, these sensory experiences will be transferred to their emotional and cognitive reactions (Gibson, 1966). It is therefore crucial to note that one of the most noteworthy findings of this study is that the results of both stimuli and retrospective sensory experiences confirm each other and demonstrate that the participants' sensory experiences dominate the entire process. In addition to demonstrating that the study's objective was met, this study also indicates that the proposed method can be tested in similar atmospheres as well.

The purpose of this study is to develop visual representations of numerical data resulting from the sensory experience research in order to facilitate better comprehension of the results. This goal was achieved by assigning color codes representing the five senses to Photoshop's gradient feature and corresponding numerical data to these color codes. In other words, while visualizing the data of the study, a unique visual representation was created, and it is believed that this application may be useful for future research.

CHAPTER 7: CONCLUSION

Studying the concept of tourist and tourist sensory experience is the main starting point. The study's intensity is centered on the sensory and atmospheric aspects of the Spice Bazaar. Thus, the study's focus points have been ensured to be concentrated on the four main bases described at the beginning of the study. The work contributes to existing knowledge by showing that a wide range of data has been obtained under these main headings of the literature. The study's rich data needed to be analyzed in an accurate and relevant way. It has been observed that when the results and answers are evaluated within themselves, they confirm each other as indicated in Figure 49.

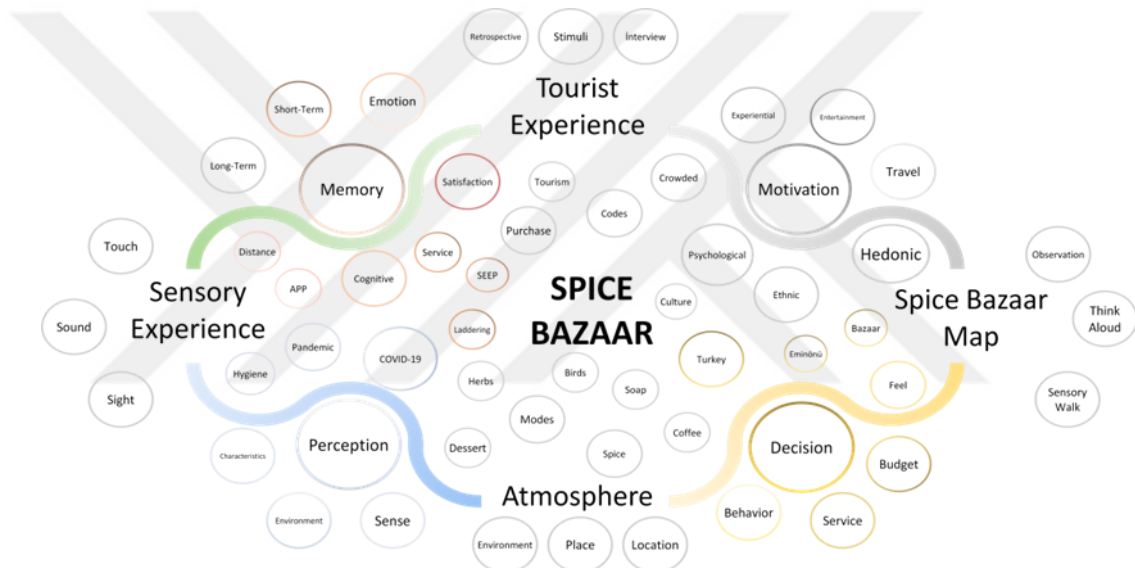


Figure 49. A Summary of the Thesis, the Literature, and the Main Topics

The study's results have been discussed in target-oriented titles that have been put forward since the study's inception. In addition to the discussion of the literature and methodology of the study, a field study in accordance with these goals was conducted.

Considering the phenomenological approach used to reach deep knowledge as a means to reach the data of the study, the following conclusions can be drawn from it. In the study, participants were asked questions and asked to express their thoughts aloud during a sensory walk, which resulted in data.

Thematic codes were created from these data, and key themes were constructed by working with these codes. When these themes and codes were examined, it was observed that some themes, titles, and experiences were repeated. According to this,

themes created within the theoretical framework provide access to data in an inductive manner in the study. Thus, the themes were matched throughout the discussion part of the study with reference numbers for the intensity map, derived from the stimuli and retrospective sensory experience codes.

Research has shown a strong correlation between literature reviews and fieldwork. The study concludes with a discussion of what kind of contributions were made and in which design field. As can be seen from the results, it is expected to contribute multidisciplinary to the field of design. The expected contribution in terms of sensory experience is to improve sensory experience and provide a positive experience.

The study was conducted in two phases in order to gain a comprehensive understanding of Spice Bazaar's sensory experience. Participants were asked to provide stimuli sensory experiences in the first stage, and participants were asked to provide retrospective sensory experiences in the second stage. The goal was to observe differences in participants' reactions to stimuli and retrospective experiences. Furthermore, the purpose was to examine how these experiences were expressed in detail, as well as how they differed from zone to zone in terms of stimuli sensory experiences. In terms of sensory experiences, visuals were the most effective, followed by smell, touch, and taste. Sound ranked lowest.

In this context, both methods have been observed to complement one another and facilitate the flow of information. Furthermore, the researcher observed and recorded the participants' reactions and interactions as they participated in the bazaar and took notes accordingly. The researcher was therefore able to identify points that participants overlooked or did not express at the time of the sensory experience walk, or that their reactions and behaviors indicated. It is due to the sensory experience having multiple inputs that each of these stages provides full access to the data within each of them.

In the retrospective one of the objectives was to obtain recollections of the participants' sensory experiences following a sensory walk in the bazaar as part of the retrospective phase of the study. In order to achieve this goal, three stages of open-ended questionnaires were used to conduct interviews with the participants. Using the laddering technique, the participants were asked general questions about the atmosphere and then sensory experience questions by closing their eyes and asking them to recall their Spice Bazaar experiences in chronological order. As a result of the

retrospective sensory experience, smell was the most effective sensory experience, followed by visual as the second most effective sensory experience. According to the retrospective sensory experience, taste was the third most effective sensory experience followed by touch, while sound was the least effective sensory experience.

It has been shown that sensory experience analysis can be influenced by stimuli and retrospective changes, which supports the argument that sensory experience analysis should take sensory experience into account. By conducting an in-depth investigation into the spice bazaar's sensory experience, the research results will aid in elucidating the meanings and contents formed in tourists' minds as a result of their immediate and retrospective sensory experiences.

In spite of the fact that our sensory experiences are based on the information supplied by the atmosphere we are in, they do not only represent this process but are also a tangible expression of these sensory feedbacks and serve as important representations for understanding those sensory experiences.

A key contribution of this study is the ability to examine and observe how tourists' sensory experiences interact and intensify in the spatial atmosphere, a technique that is important to understanding spatial distributions of tourists' sensory experiences and their relationships. The Spice Bazaar is used in this study as a case study to demonstrate the spatial distribution and relationship of the sensory experiences of tourists. The findings of this study indicate that tourists' sensory experiences vary by region and are characterized by different intensities as reflected in Figure 50. Moreover, the results suggest that combining various sensory experiences is important for gaining a deeper understanding of the spatial atmosphere of tourist destinations, based on the combinations of various sensory experiences. According to the analysis, tourists are more likely to form their own unique perception of the Spice Bazaar when they combine sensory experiences from the bazaar in order to form their own unique perception of the venue. Furthermore, the study showed that sensory experiences can have a significant impact on how tourists perceive and experience a destination in terms of its perception and experience in general.

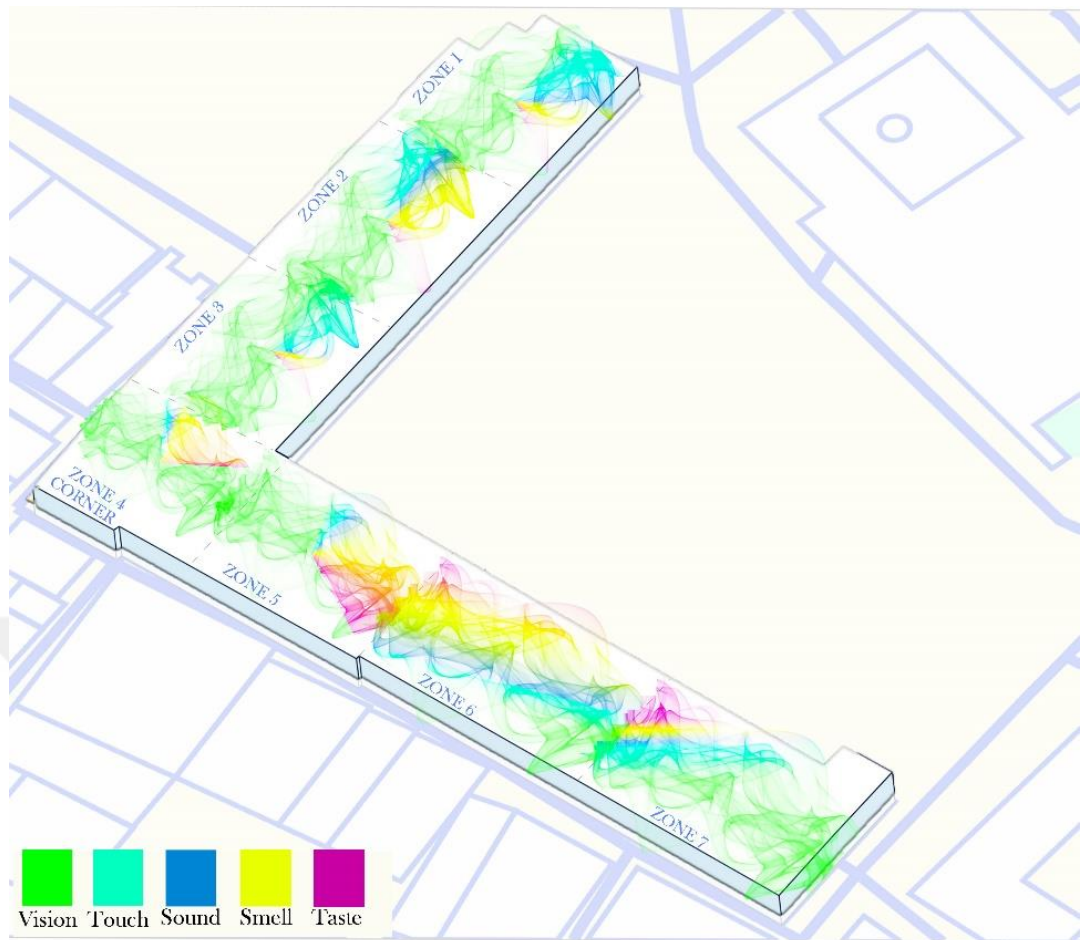


Figure 50. Sensory Map of Spice Bazaar

Using thematic analysis, this sensory map was created by calculating the intensity created by the frequency of usage of the determined word groups for five sensory titles for each zone. In order to calculate the percentage of each sensory experience, these percentages were divided into zones. Each of these percentages was entered into the Photoshop programme for each of the codes given in the gradient option. Percentage values were entered into a spreadsheet to create colour-coded representations of each zone's sensory experience.

Colour-coded representations were then used to compare the different zones' sensory experiences. This allowed to see which zones had the most or least sensory experience. The results of this analysis were then used to inform decisions on how to optimize the experience in each zone and also allowed us to develop strategies for increasing the sensory experience in the zones.

The contribution of sensory experience to heritage contributes to the understanding and development of all the experiences of the bazaar atmosphere by documenting the

experiences of tourists visiting the bazaar or tourists planning to visit the bazaar, contributing to urban culture and identity.

On the basis of the results of the study, it is possible to evaluate this sensory experience, in which participants were able to experience an in-depth sensory experience, particularly regarding smell and vision, in many different ways. In order to preserve the heritage of the corn bazaar, urban planning studies on multifaceted sensory experiences are important, such as smelling, seeing and feeling. This interaction should be protected by the state and the ministry of tourism. Additionally, a sensory map of a cultural and touristic area is an important representation of the interaction between visitors and the place in which sensory interaction is so intense. As well as a valuable contribution to heritage, as well as the development of touristic environments that will contribute to the built environment and tourist experience. From this point on, a number of architectural aspects of the building design have been reviewed, and units such as furniture, display units, and showcases that influence tourist behavior have also been considered for improvement.

The study is therefore expected to inspire and guide future multisensory research, heritage studies, and design. According to the findings of this study, participants experienced a variety of stimuli sensory experiences. The reinforcement of their intangible and tangible expressions during the in-depth examination provided a detailed understanding of their sensory experiences and opened up a new area for developing strategies to improve their negative experiences. The contribution of the results obtained to stakeholders, contributions to the design discipline, and contributions to the literature are also concluded under three headings. As a result, the study was categorized in this manner, which provided to be a base for its contributions to related fields and also may support future research into methodologic approaches and literature on design.

7.1. Findings Contribution for Designers

The design of a touristic environment such as a spice bazaar can be greatly enhanced by understanding the sensory experience of tourists both in the stimuli and retrospectively, and analyzing it in a multidimensional manner. As discussed extensively in the literature section, sensory experiences play an important role in user and tourist behavior as well as purchasing processes and preferences. Therefore, the

design of an atmosphere is closely related to the sensory experience and is used to stimulate sensory perception. During their trip, tourists are more likely to have positive sensory experiences, which will result in a more lasting and positive memory of all the experiences they had in that atmosphere, thus contributing to the sustainability of tourism. As such, retail design, furniture, and all display elements of the bazaar, showcase designs, architectural structure and form of the bazaar, lighting arrangements, sound, touch and taste may directly affect the sensory experience. Based on the results of the study, all of the findings and discussed data emphasized important points towards improving the design, which were consistent with the findings and discussed data. A multisensory experience analysis, which is one of the objectives of the study, is intended to identify all the aspects of the bazaar that may be developed with the five senses.

If this study is viewed within the context of the contributions of sensory experience analysis to the related design disciplines, it can be categorized under four general headings listed in the table below. This example illustrates what the sensory experience criteria can be based upon an evaluation of 5 main sensory experiences within example the context of their sensory experience outcomes and their relationship to the related design discipline as depicted in Figure 51. Visualizing these results under these headings may allow one to observe which sensory experience contributes to what design discipline and what it determines.

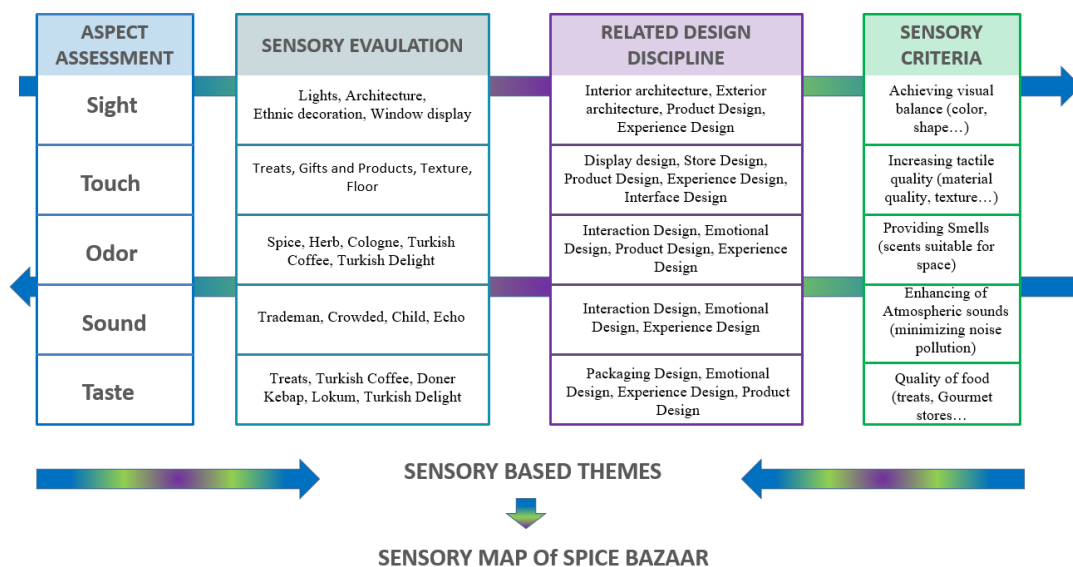


Figure 51. The Visual Representation of Sensory Evaluation in Accordance

Accordingly, the following analysis and categorization of the atmosphere and environment was made based on statements and observations from the participants. It is intended that by combining these suggestions and conclusions and contributing them to the organization, it will contribute to enhancing and sustaining a touristic atmosphere in Spice bazaar that is conducive to tourism.

Store: While some stores were highly appreciated for their design, some stores were not, with the trousseau, souvenir or jewelry store situated at the entrance of the bazaar receiving the most criticism (Figure 52). As a result, it was reported that the design was very weak, the spatial relationship and context were disconnected, and the products sold and displayed were in direct contradiction to the concept of the bazaar. Additionally, it was observed that the participants did not prefer to go inside the store, and that all interaction occurred in front of the shop window and around the display of products. Especially through the display and showcase of products, it is apparent how important it is to continue design improvements.

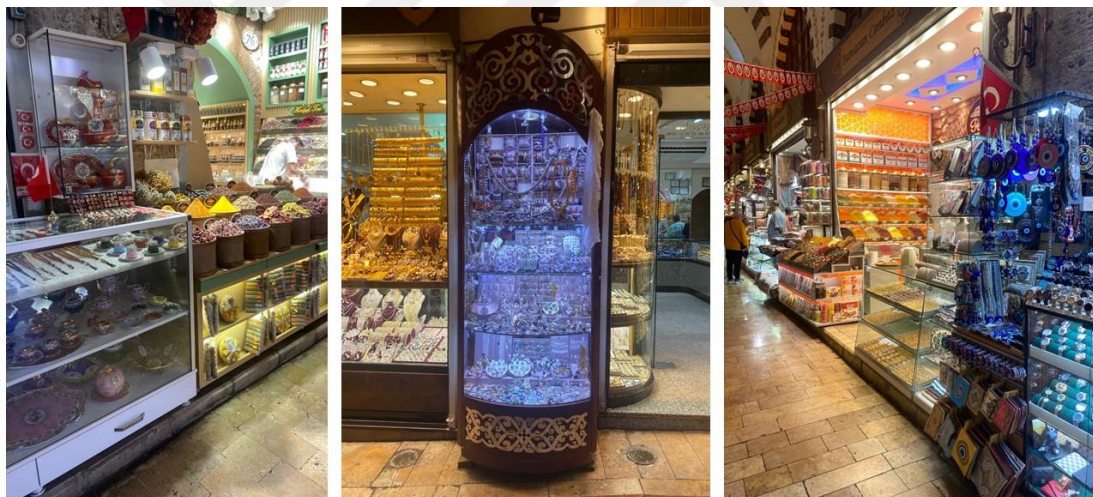


Figure 52. View of Jewelry and Souvenir Stores (Source: Author's Archive 2023)

Window Display: A number of participants reported that window displays were among their highlights, however, it was observed that participants frequently interacted with the products displayed in the windows. Some participants appreciated the addition of ethnic details to their stores and shop windows as well as the design of some of the stores and shop windows they reported. However, the showcase design of the trousseau stores in Zone 7 as well as the showcase area created with glass windows was found to be quite disturbing (Figure 53). The dowry products displayed in the showcase were also observed to be quite disconnected in terms of color and product context from the

general bazaar. In spite of this, one of the points that was questioned concerned one of the few stores in the bazaar that disrupted the harmony that almost all of the stores attempted to achieve within themselves or that made a significant difference in this harmonious relationship. In addition, it appears that the general design category of stores and bazaars is imperative to the management and organization of the design of the interiors and exteriors of the stores.



Figure 53. Store window display with dowry products (Source: Author's Archive 2023)

Signboard: In regards to signboard designs, a small percentage of respondents reported that they are very uniform and look the same as can be seen Figure 54, which implies that the designs of signboards are uniform and there is no difference between them.



Figure 54. An Overview of Spice Bazaar's Signboards (Source: Author's Archive 2023)

Architecture: There was a high level of appreciation for the architecture of the bazaar,

but most participants were interested in the long corridor and arches, as well as the balcony and stairs clearly visible at Figure 55. There was, however, a report that participants were exposed to a considerable amount of artificial light due to the lack of windows and daylight in the bazaar.



Figure 55. Spice Bazaar Overview and Architecture Details (Source: Author's Archive 2023)

Space: One of the points that the participants often and frequently mentioned was that they experienced congestion in the spaces and remembered this situation negatively, particularly in relation to the sensory experience of touch. One of the participant stated that if the space were not so crowded and cramped, they would be able to analyze the sensory experience more effectively, however, the congestion and crowding negatively impacted sensory experiences. Additionally, the scarcity and narrowness of these areas directly affected the visual and sound sensory experiences, along with the crowd, in addition to affecting the tactile sensory experience. Further, due to the possibility that the participants' movements and perceptual processes may be affected in this situation, it has been suggested that the bazaar's space areas should be better designed, perhaps all participants should move in one direction, restricting the number of tourists at the entrance of the bazaar or the arrangement of exhibit areas in front of the showcase should be rethought.

Display Products: Most of the participants appreciated the display units and were able to easily access and experience all of the products through the display units. A participant commented that the spice, soap, and tea stands were arranged very closely together and that the odors were often mixed together. In light of this, it is important

to note that the categorization of products should be more clearly defined and product-based, as well as avoiding too close proximity to soaps, which can be chemical products, and food products. As shown in Figure 56, this product's display organization is an example. It is also noteworthy that some display products are frequently used without any product differentiation. While some participants expressed discomfort with these products being so open, the majority of participants were pleased that the displays were open. In order to ensure that the display products will not change their appearance or prevent their odors, some design changes may also be required at this point. Consequently, the products' openness facilitates an objective, original interaction, allowing the products' colors and smells to be perceived directly. This facilitates the development of an organic relationship with the atmosphere. Due to the environmental factors (dust, bad odor, particles) to which the user is exposed to open products, they may have negative thoughts in terms of hygiene, so there is a contradiction. As a result, it is actually an opportunity for design solutions that eliminate the contradiction in the sense of design.



Figure 56. Display Examples for the Different Product Groups (Source: Author's Archive 2023)

Lighting: Almost all participants were attracted to the lighting fixtures used at the bazaar, although some participants considered them to be quite artificial. While some participants reported yellow lights, especially the window lights, a significant group expressed displeasure with this color and that the spice colors were much more dominant and contextually relevant. The customers also noted that the lighting inside was artificial and that the upper windows were expected to provide daylight to the

store. Instead of giving store lighting and bazaar lighting directly through, there is seems to be need for a design solution for indirect ways of lighting. Since the bazaar is a historical side, a solution should be implemented throughout the entire bazaar.

Lighting Elements: A standard arrangement of lighting elements appears to be used in the bazaar with one in front of each store. It was observed, however, that participants did not provide any feedback regarding the lighting elements design. However, it has been observed that certain areas of the bazaar are illuminated at a certain frequency by lighting units. It has been observed that these lighting elements provide much more intense and localized white light than other lighting products. It is believed that the feedbacks about light intensity and artificial light above may be due to this lighting elements. While the light tone it produces is intense and artificial, it contrasts with the lighting design that is used in front of the store, which is also artificial. Due to this, it is believed that in lighting elements, tonal proximity and naturalness should be achieved, as well as making sure that the same design language is used.

Consequently, it is necessary for common solutions to be developed throughout the bazaar, what needs to be done based on the cultural structure of the store, as well as what is needed for stores that are appropriate for their cultural identity, and the need for a common and special solution in order to meet a common denominator has been identified as can be seen below Figure 57.

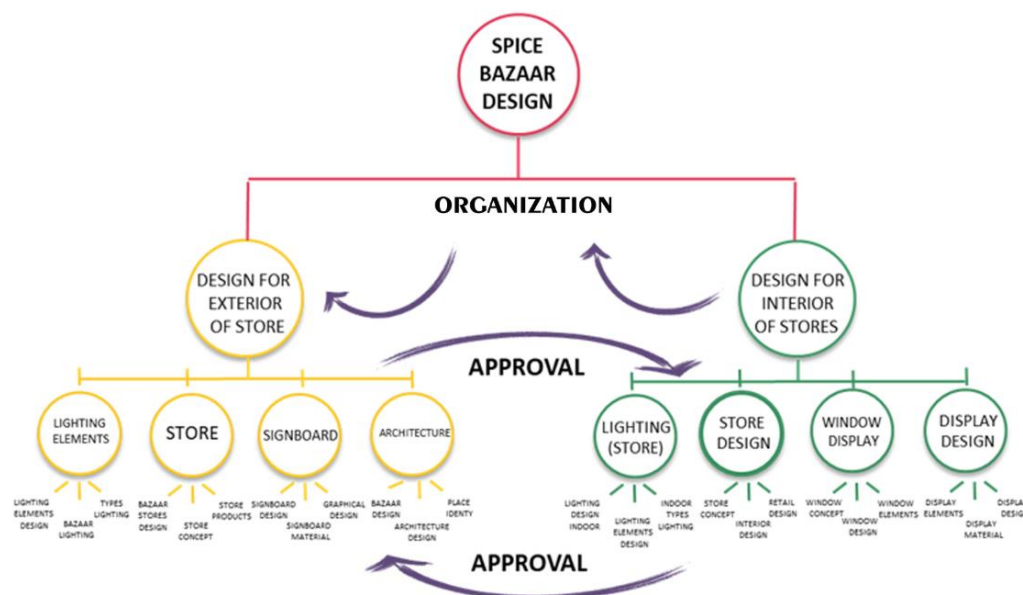


Figure 57. A scheme for the Design of the Spice Bazaar

As a result of these proposed design interventions, this atmosphere will be enhanced,

which will contribute to the built environment's context and ensure the sustainain of tourism. As of this point, many aspects of building design have been examined from an architectural perspective, as well as units that influence tourist behavior in the context of design, such as furniture, display units, and showcases. Through the analysis of tourist sensory experiences at Spice Bazaar, and the inclusion of these analyses as part of the design process and practice, a design regulation can be formulated for the bazaar.

7.2. Findings Contribution for Stakeholders

One of the issues to be considered and considered in terms of the tourist experience is the management and organization of the crowd. To make the bazaar more enjoyable and sustainable, it may be necessary to limit the number of visitors, to provide controlled entry, or to change the layout and design of the bazaar. Nevertheless, it would be beneficial if the design regulations and the design organization infrastructure developed within the design discipline discussed in the design section were used to create an infrastructure for stakeholders. A useful model would be to establish this design organization within a framework, create a basement design organization plan, and integrate this design organization into a sustainable framework.

7.3. Findings Contribution for Literature and Fields

An exploratory and experiential field study was conducted in order to contribute to the sensory experience and design literature, especially since there have been very few studies and research examining the five senses in touristic environments and also there is not enough research on sensory mapping for touristic places in Turkey.

Tourist senses were discussed on the scale of Spice Bazaar and their contribution to design practice was considered. While notifications and feedbacks in this area and in the retail and managerial sense contribute to the development of Spice Bazaar, another aim of the study is to present a model for touristic atmospheres similar to Spice Bazaar. The findings of the study indicate that sensory experience contributes to tourists' experience and can contribute to the improvement of sensory experience and contribute to the study's objectives. As a result, its contribution to the literature includes a method proposal as well as three major titles: design, experience, and tourism. A significant contribution of this research will be to researchers working in

the fields of design, tourist experience, and tourism. In addition to making a prospective contribution to the field, this method proposal is intended to be used in other similar tourist environments and that results are for stimuli as well as retrospective sensory experience.

This study indicates the consistency or differences of user experiences with respect to the temporal dimension with respect to different types of data. In addition to contributing to the literature, it discusses the contribution that improvements need to be made to the bazaar within this experiential context. Due to this, it is essential to analyze whether the resulting design improvements are effective from an experiential perspective. At this point, the procedural method proposal can be used to ensure the continuity of the experience, if it is desired to make it permanent at this point and also can be found in Figure 58. It is also possible for this to affect design strategies as well. The integration of more creative techniques and the enhancement of touristic areas can be strengthened with these strategies, particularly with the design effect, and the continuity of cultural identity can be ensured.

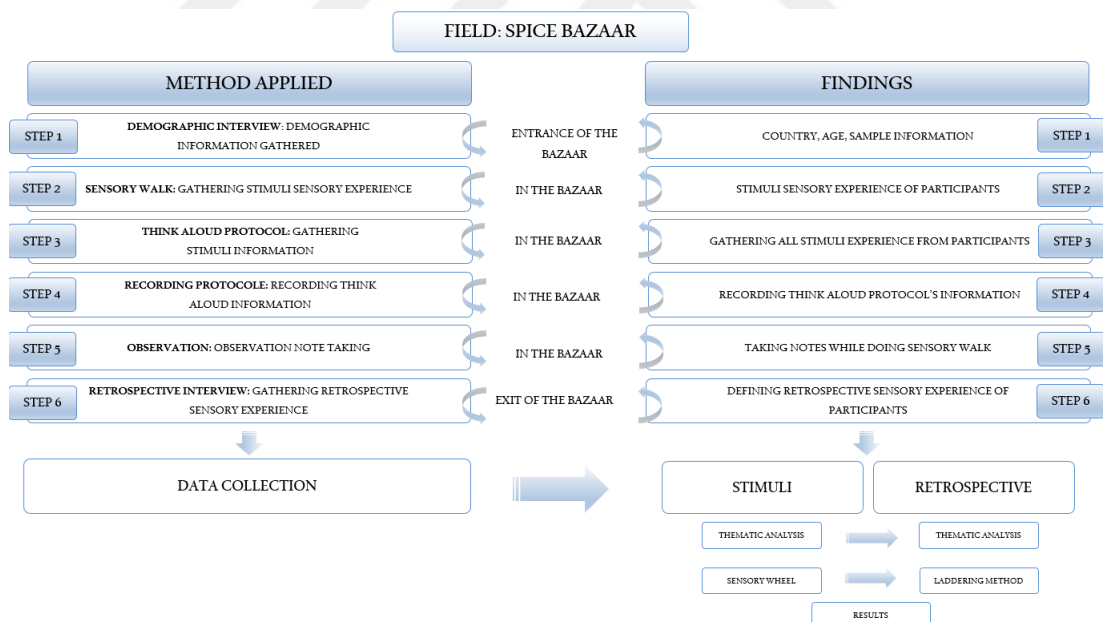


Figure 58. Proposed Method Model of the Research

The results of the study corroborated the argument that retrospective sensory experiences should also be investigated in order to properly comprehend the sensory experience, which is discussed in the literature and one of the primary objectives of this study. In the study, multiple findings were outlined. The first is that when studying

and researching the sensory experience of an atmosphere, it may not be sufficient to evaluate only the immediate sensory experience; retrospective sensory experiences should also be examined and differences noted. While the stimuli sensory experience results expressed the most effective sensory experience was visual, the odor sensory experience was much more easily remembered and expressed in retrospective sensory experiences.

Retrospective research is crucial for uncovering memorable aspects of tourists' experiences. When tourists share this experience with others, they will form expectations and intuitions about a particular region, but since stimuli experiences are different from retrospective experiences, it creates a contradiction that the stimuli experiences of tourists who visit later may differ from what is expected of them. It is predicted that this situation can lead to positive immediate experiences as well as negative experiences and this situation is tried to be visualized in the diagram below. Furthermore, as a result of analyzing the participants' stimuli sensory experiences, it was observed that while they used tangible expressions, they also used intangible expressions frequently and often reinforced these tangible expressions. A majority of participants imagined themselves in a situation and sensory stimuli encouraged this, while sensory inputs triggered some triggering situations and feelings as evidenced in Figure 59.

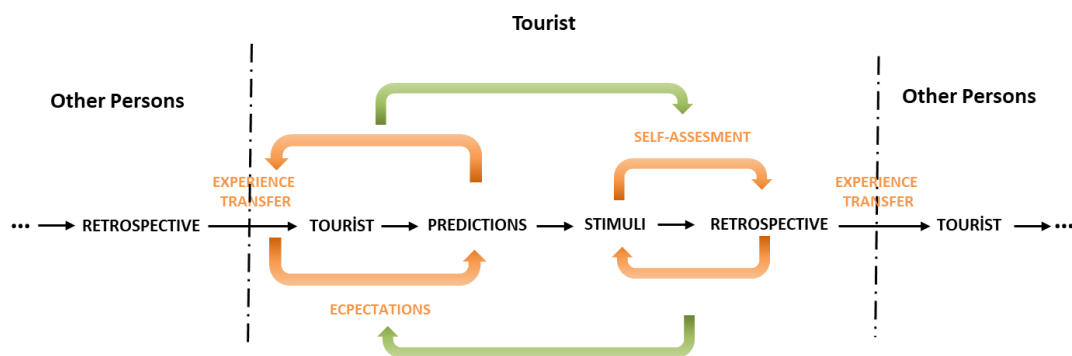


Figure 59. Model of the Tourist's Potential Experience Flow

As discussed in the literature section, Croome (2006) asserts that sensory processes mediate information that enables evaluation of the environment, as well as channels that stimulate the imagination. This source is confirmed by the data of this study, which shows that the participants' sensory inputs created some triggering situations and feelings for them, almost all participants imagined themselves in a given situation and

the sensory stimuli encouraged their imaginations to occur. Additionally, by categorizing the participants' statements and dividing the bazaar into seven distinct zones, a sensory experience map of the bazaar was created in a stimuli and retrospective context. Data continuity and timeliness will also be greatly enhanced by continuously updating and analyzing this map.

7.4. Limitations

It is fair to say, within the limits of the study, that reaching the participants presented some difficulties because tourists who are motivated to visit the bazaar, especially those who will visit it for the first time, prefer not to participate in this study, which makes it difficult to reach the intended number of participants. Again, in the retrospective part of the study, which was planned to be carried out at the end of the study, it was planned to take the participants to a quiet café in order to reach the deep memories of the participants, and at this point, it was observed that some participants had trust problems. Additionally, it was noticed that this study, which was conducted especially in the summer period, coincided with a very crowded period of the bazaar, and perhaps this situation made it difficult at some points to interact with the participants during this period of study. Despite the limitations of the study, it can be said that reaching out to the participants within the parameters of the study can pose some limitations since tourists who are motivated to visit the Spice Bazaar, particularly tourists that are going to the Spice Bazaar for the first time, prefer to participate in this study, which can be characterized as causing a number of difficulties in reaching the study's maximum number of participants.

At the beginning of the study, it was anticipated that the study would be able to obtain all Spice Bazaar routes through an app from participants, either by having the participant install the app with the participants or by having the observer install the app. In several pilot studies, it was observed that the Spice Bazaar app experienced internet interruptions due to the fact that it is a closed bazaar or because of security reasons, and that the map data generated was not accurate and reliable. In light of this, the planned route creation feature of the app has been removed from the thesis.

7.5. Future Studies

Sensory experiences discovered with targeted results in Spice Bazaar enable us to

obtain data that will permit us to grasp all the experience processes in Spice Bazaar's touristic environment. Thus, the infrastructure that may be used in future studies will provide an important source of data. Therefore, it plans to provide methodological, qualitative and visual information for designers, researchers, city-urban planners and administrators to study the role and impact of sensory experience on that touristic environment and place. By evaluating the results in this field at advanced stages, new design possibilities can be provided by using or developing these results through social media and applications, and more interaction with local or foreign tourists and for tourism.

While a specific time period or period was not chosen within the scope of the study, there are concerns that seasonal changes, daily rhythmic intensity variations of the bazaar, the use of heaters on cold days or air conditioners in the summer months may affect sensory experience as a result of temporal changes in temperature.

The total number of participants was limited to ten, and ten participants' stimuli and retrospective sensory experiences were evaluated in depth. It is foreseen that the number of participants can be increased in future studies, the preferences of users from different cultures and regions can be examined, only foreign tourists or local tourists and their comparison, seasonal differences can be taken into account, and the data in the study can be enhanced with repeated experiences of these participants.

As well, the integration of technology into the bazaar was one of the issues that was suggested by a participant. Technological changes also affect user perception in the design field. With the cultural tourism approach, the acceptance of technology and the integration of digitalisation will not be very distant concepts in the near future, and the integration of these two concepts in an ethnic bazaar such as Spice bazaar may be a consideration for future research.

Throughout the study, participants perceived a variety of scents and scent codes, resulting in a variety of sensory experiences and even triggering recollections and imaginations. In addition, as discussed in the literature section, some of the odors can be explained based on the visual appeal of the surrounding environment. This guideline could be used to conduct in-depth analyses of these odor codes in order to determine whether these odors are positive or negative, appetizing or emotionally triggering.

As a result, the odor code in Spice Bazaar can be determined to trigger that sensory state. Furthermore, the tangible and intangible aspects of visual experiences can be analyzed more thoroughly in order to determine which sensory state is triggered or the emotional state caused by a combination of olfactory and visual sensory experiences. Moreover, as stated in the conclusion of the study, the bazaar was examined over seven different zones, but it would be extremely useful to conduct this study with a much larger number of participants in different periods of tourism density in order to maintain and update the map created. It is also believed that this experience map can be updated according to ethnic, cultural, and tourist regions within the study and may provide insight into future studies.

In the following steps of the study, during the sensory walk with the participants, it can be ensured that the sensory walk is conducted through an application based on LBS (location-based services), accessible and easy to use for the participants through an appropriate application. In the literature section, it is discussed that applications using the ESM method, such as Lumivu, PSYT and Mappiness App, may be used if they are directed according to the study's findings. By allowing participants to access their stimuli experiences faster and through an app, the number of participants can be increased.

It can be used to transform this information into concrete data in the later stages of the study, using a map-oriented application which participants will add to their mobile phones when visiting the Spice Bazaar. During sensory walks while touring the bazaar, participants can focus on sensory points in the atmosphere and express them aloud. LBS can also be used to create a bazaar route that belongs to each participant, by utilizing LBS technology.

REFERENCES

- Adams, M. and Askins, K. (2009) *Sensewalking: sensory walking methods for social scientists*. In Proceeding of the RGSIBG Annual Conference 2009, 26–28 August 2009.
- Adams, M. D., Bruce, N. S., Davies, W. J., Cain, R., Jennings, P., Carlyle, A. and Plack, C. (2008) *Soundwalking as a methodology for understanding soundscapes*.
- Alais, D., Newell, F. and Mamassian, P. (2010). Multisensory processing in review: from physiology to behaviour. *Seeing and perceiving*, Vol. 23(1), pp. 3-38.
- Altıparmakogullari, C. and Hasirci, D. (2023) *Exploring Tourists' Sensory Experiences in Istanbul's Spice Bazaar Atmosphere*, *New Design Journal*, Vol.7 No:2, pp. 265-285
- Ajzen, I. and Fishbein, M. (1975) *A Bayesian analysis of attribution processes*. *Psychological bulletin*, Vol. 82(2), pp. 261.
- Arnould, E. J. and Price, L. L. (1993) *River magic: Extraordinary experience and the extended service encounter*. *Journal of consumer Research*, Vol. 20(1), pp. 24-45.
- Arnold, M. J., Reynolds, K. E., Ponder, N. and Lueg, J. E. (2005) *Customer delight in a retail context: investigating delightful and terrible shopping experiences*. *Journal of Business Research*, Vol. 58(8), pp. 1132-1145.
- Arora, N., Charm, T., Grimmelt, A., Ortega, M., Robinson, K., Sexauer, C. and Yamakawa, N. (2020) *A global view of how consumer behavior is changing amid COVID-19*. Mcknsey and Company.
- Andrews, L., Drennan, J. and Russell-Bennett, R. (2012) *Linking perceived value of mobile marketing with the experiential consumption of mobile phones*. *European Journal of Marketing*.
- Agapito, D., Pinto, P. and Mendes, J. (2012) *Sensory marketing and tourist experiences*. *Spatial and Organizational Dynamics Discussions Papers*, Vol. 10, pp 7-19.
- Agapito, D. L. M. (2013) *The role of Sensescaapes in Tourist experiences in rural areas*.
- Agapito, D., Mendes, J. and Valle, P. (2013) *Exploring the conceptualization of the sensory dimension of tourist experiences*. *Journal of Destination Marketing & Management*, Vol. 2(2), pp. 62-73.
- Agapito, D., Valle, P. and Mendes, J. (2014) *The sensory dimension of tourist experiences: Capturing meaningful sensory-informed themes in Southwest Portugal*.

Tourism Management, Vol. 42, pp. 224-237.

Agapito, D., Pinto, P. and Mendes, J. (2017) *Tourists' memories, sensory impressions and loyalty: In loco and post-visit study in Southwest Portugal*. Tourism Management, Vol. 58, pp. 108-118.

Agapito, D. (2020) *The senses in tourism design: A bibliometric review*. Annals of Tourism Research, Vol. 83, 102934.

Akgöz, E., Göral, R. and Tengilimoğlu, E. (2016) *Turistik Ürün Çeşitlendirmenin Sürdürülebilir Destinasyonlari Açısından Önemi*. Akademik Bakış Uluslararası Hakemli Sosyal Bilimler Dergisi, Vol. 55, pp. 397-407.

aroundtheworldl (2023) *The Gold and Spice Souks of Deira, Dubai* [Online] Available at: <https://www.aroundtheworldl.com/dubai-gold-spice/> (Accessed 12.06.2022).

Avcı, C. and Hassan, A. (2019) *Turistlerin mekânsal tercihleri ve mekânsal deneyimleri üzerine bir araştırma: İstanbul tarihi yarımada örneği*. Turizm Akademik Dergisi.

Bagozzi, R. P. and Pieters, R. (1998) *Goal-directed emotions*. Cognition & Emotion, Vol. 12(1), pp. 1-26.

Bagozzi, R. P. and Edwards, J. R. (1998) *A general approach for representing constructs in organizational research*. Organizational research methods, Vol. 1(1), pp. 45-87.

Bagozzi, R. P. and Dholakia, U. (1999) *Goal setting and goal striving in consumer behavior*. Journal of marketing, Vol. 63, pp. 19-32.

Baker, J., Levy, M. and Grewal, D. (1992) *An experimental approach to making retail store environmental decisions*. Journal of Retailing, Vol. 68(4), pp. 445-460.

Bakker, I., Van der Voordt, T., Vink, P. and Boon, J. (2014) *Pleasure, arousal, dominance: Mehrabian and Russell revisited*. Current Psychology, Vol. 33(3), pp. 405-421.

Barrett, P. and Barrett, L. (2010) *The potential of positive places: Senses, brain and spaces*. Intelligent Buildings International, Vol. 2(3), pp. 218-228.

Barry, J. and Proops, J. L. (2000) *Citizenship, sustainability and environmental research: Q methodology and local exchange trading systems*. Edward Elgar Publishing.

Bartos, A. E. (2013) *Children sensing place*. Emotion, Space and Society, Vol. 9, pp. 89-98.

Battarbee, K. (2004) *Defining Co-experience*. proceedings of Conference on

Designing Pleasurable Products and Interfaces, pp: 109-113, Pittsburgh

Bech-Larsen, T. and Nielsen, N. A. (1999) *A comparison of five elicitation techniques for elicitation of attributes of low involvement products*. Journal of Economic Psychology, Vol. 20(3), pp. 315-341.

Berry, L. L., Parasuraman, A. and Zeithaml, V. A. (1988) *The service-quality puzzle*. Business horizons, Vol. 31(5), pp. 35-43.

Berry, L. L., Zeithaml, V. A. and Parasuraman, A. C. S. Q. (1990) *Five imperatives for improving service quality*. MIT Sloan Management Review, Vol.31(4), pp. 29.

Bitner, M. J. (1992) *Servicescapes: The impact of physical surroundings on customers and employees*. Journal of marketing, Vol. 56(2), pp. 57-71.

Bourne, H. and Jenkins, M. (2005) *Eliciting managers' personal values: An adaptation of the laddering interview method*. Organizational Research Methods, Vol. 8(4), pp. 410-428.

Böhme, G. (2013) *The art of the stage set as a paradigm for an aesthetics of atmospheres*. Ambiances. Environnement sensible, architecture et espace urbain.

Böhme, G., (2016) *The Aesthetics of Atmospheres*. Taylor & Francis.

Brand, R. R., Cronin, J. J. and Routledge, J. B. (1998) *Marketing to older patients: perceptions of service quality*. Health Marketing Quarterly, Vol. 15(2), pp. 1-31.

Brakus, J. J., Schmitt, B. H. and Zarantonello, L. (2009) *Brand experience: what is it? How is it measured? Does it affect loyalty?* Journal of marketing, Vol. 73(3), pp. 52-68.

Braun, V. and Clarke, V. (2006) *Using thematic analysis in psychology*. Qualitative research in psychology, Vol. 3(2), pp. 77-101.

Brinkmann, S. (2013) *Qualitative interviewing*. Oxford university press.

Brochado, A., Stoleriu, O. and Lupu, C. (2021) *Wine tourism: a multisensory experience*. Current Issues in Tourism, Vol. 24(5), pp. 597-615.

Bruce, N., Condie, J., Henshaw, V. and Payne, S. R. (2015) *Analysing olfactory and auditory senses in English cities: Sensory expectation and urban environmental perception*. Ambiances. Environnement sensible, architecture et espace urbain.

Buzova, D., Cervera-Taulet, A. and Sanz-Blas, S. (2020) *Exploring multisensory place experiences through cruise blog analysis*. Psychology & Marketing, Vol. 37(1), pp. 131-140.

Cains, M. and Davies, J. (2012) *Reading Istanbul Reading Istanbul*, Journal of the Department of Planning and Architecture, Vol. 4, pp. 48-51

- Calvert, G., Spence, C. and Stein, B. E. (Eds.). (2004) *The handbook of multisensory processes*. MIT press.
- Cains, M. and Davies, J. (2012) *Reading Istanbul*. Journal of the Department of Planning and Architecture, Vol. 48.
- Chandrashekar, S., Stockman, T., Fels, D. and Benedyk, R. (2006) *Using think aloud protocol with blind users: a case for inclusive usability evaluation methods*. In Proceedings of the 8th international ACM SIGACCESS conference on Computers and accessibility. pp. 251-252.
- Charmaz, K. and Mitchell, R. G. (2001) *Handbook of Ethnography*. edited by Paul Atkinson, Amanda Coffey, Sara Delamont, John Lofland, and Lyn Lofland.
- Chebat, J. C. and Michon, R. (2003) *Impact of ambient odors on mall shoppers' emotions, cognition, and spending: a test of competitive causal theories*. Journal of Business Research, Vol. 56, pp. 529–539.
- Chronis, A. (2006) *Heritage of the senses: Collective remembering as an embodied praxis*. Tourist Studies, Vol. 6(3), pp. 267-296.
- Cleave, E. and Arku, G., 2020. *Immigrant attraction through place branding? Evidence of city-level effectiveness from Canada's London*. Cities Vol. 97, 102502
- Cooper, H. E., Camic, P. M., Long, D. L., Panter, A. T., Rindskopf, D. E. and Sher, K. J. (2012) *APA handbook of research methods in psychology, Research designs: Quantitative, qualitative, neuropsychological, and biological* Vol. 2, pp. x-701. American Psychological Association.
- Connelly, L. M. (2010) *What is phenomenology?* Medsurg Nursing, Vol. 19(2), pp. 127-129.
- Coxon, I. (2007) *Designing (Researching) Lived Experience*. Sydney & Cologne: PHD - Philosophy of Design University of Western Sydney & University of Applied Sciences Cologne
- culturalfoodies.com (2021) *Must-Visit Markets in Oaxaca* [Online] Available at: <https://culturalfoodies.com/2021/03/03/6-must-visit-markets-in-oaxaca/> (Accessed 16.06.2022).
- Curtin, S. (2005) *Nature, wild animals and tourism: An experiential view*. Journal of ecotourism, Vol. 4(1), pp. 1-15.
- Croome, C, D. (2006) *Creating the productive workplace*. Taylor & Francis.
- Creswell, J.W. (2002) *Educational research: Planning, conducting, and evaluating quantitative*, Vol. 7. Prentice Hall Upper Saddle River, NJ.

- Cresswell, T. (2009) *Geographies of poetry/poetries of geography*. Cultural geographies, Vol. 21(1), pp. 141-146.
- Creswell, J. W. (2014) *Qualitative inquiry & research design: Choosing among five approaches* (4th ed.). Sage Publications.
- Dai, T. and Zheng, X. (2021) *Understanding how multi-sensory spatial experience influences atmosphere, affective city image and behavioural intention*. Environmental Impact Assessment Review, Vol. 89, 106595.
- Davis, L. and Thys-Şenocak, L. (2017) *Heritage and scent: research and exhibition of Istanbul's changing smellscape*s. International Journal of Heritage Studies, Vol. 23(8), pp. 723-741.
- De Certeau, M. (1984) *The practice of everyday life*, trans. Steven Rendall (Berkeley: University of California Press, 1984), pp. 117.
- Degen, M. M. (2008) *Sensing cities: regenerating public life in Barcelona and Manchester*. Routledge.
- Degen, M. M. and Rose, G. (2012) *The sensory experiencing of urban design: The role of walking and perceptual memory*. Urban Studies, Vol. 49(15), pp. 3271-3287.
- Dennis, A. (2011) *Symbolic interactionism and ethnomethodology*. Symbolic Interaction, Vol. 34(3), pp: 349-356.
- Desmet, P. M. A. and Hekkert, P. (2007) *Framework of product experience*. International Journal of Design, Vol. 1, pp. 57–66.
- Dewey, J. (1925) *The historic background of corporate legal personality*. Yale LJ, 35, pp. 655.
- Dorri, Y., Sabeghi, M. and Kurien, B. T. (2007) *Awaken olfactory receptors of humans and experimental animals by coffee odourants to induce appetite*. Medical hypotheses, Vol: 69(3), pp. 508-509.
- Donthu, N. and Gustafsson, A. (2020) *Effects of COVID-19 on business and research*. Journal of business research, pp. 117, 284.
- Diaconu, M. (Ed.). (2011) *Senses and the city: an interdisciplinary approach to urban sensescape*s. Vol: 4. LIT Verlag Münster.
- Dissabandara, D. R. (2019) *Theoretical Overview on Sensory Marketing*. International Journal of Current Research Vol. 11, Issue, 07, pp.5361-5364
- Egresi, I. and Arslan, S. (2016) *Shopping and tourism in Turkey: The perfect combination*. In Alternative Tourism in Turkey. pp. 211-228. Springer, Cham.
- Ekinci, Y. and Hosany, S., (2006) *Destination personality: an application of brand*

personality to tourism destinations. J. Travel Res. Vol: 45 (2), pp. 127–139.

Elvekrok, I. and Gulbrandsøy, P. (2021) *Creating positive memory in staged experiences through sensory tools*. Current Issues in Tourism, pp. 1-14.

Ericsson, K. A. and Simon, H. A. (1998) *How to study thinking in everyday life: Contrasting think-aloud protocols with descriptions and explanations of thinking*. Mind, Culture, and Activity, Vol: 5(3), pp. 178-186.

Ericsson, K. A. (2006) *Protocol analysis and expert thought: Concurrent verbalizations of thinking during experts' performance on representative tasks*. The Cambridge handbook of expertise and expert performance, pp. 223-241.

Ericsson, E. and Larsson, N. (2011) *A Multi-Sensory Brand-Experience: Sensorial interplay and its impact on consumers' touch behaviour*.

Esfehani, M. H. (2019) *Intangible Cultural Heritage in Tourism Strategy*. In Experiencing Persian Heritage. Emerald Publishing Limited.

Evans, G. (2000) *Planning for urban tourism: A critique of borough development plans and tourism policy in London*. International Journal of Tourism Research, Vol. 2(5), pp. 307-326.

Hasse, J., (2016) *Traffic architecture: hidden affections*. In: Bille, M., Sorensen, T.F. (Eds.), Elements of Architecture: Assembling Archaeology, Atmosphere and the Performance of Building Spaces. Routledge, Oxon.

Fallman, D. (2008) *The interaction design research triangle of design practice, design studies, and design exploration*. Design issues, Vol. 24(3), pp. 4-18.

Fan, D. X., Buhalis, D. and Lin, B. (2019) *A tourist typology of online and face-to-face social contact: Destination immersion and tourism encapsulation/decapsulation*. Annals of Tourism Research, Vol. 78, 102757.

Fredrickson, B. L. and Kahneman, D. (1993) *Duration neglect in retrospective evaluations of affective episodes*. Journal of personality and social psychology, Vol. 65(1), pp. 45.

Fernández, R. S. and Bonillo, M. A. I. (2007) *La creación de valor en el establecimiento minorista: un análisis de los factores emocionales o afectivos*. In XIX Encuentro de profesores universitarios de marketing [Recurso electrónico] Vigo. 19, 20 y 21 de septiembre de 2007. pp. 37. Escuela Superior de Gestión Comercial y Marketing, ESIC.

Frings, C. and Spence, C. (2010) *Crossmodal congruency effects based on stimulus identity*. Brain Research, No: 1354, pp. 113-122

- Fulkerson, M. (2014) *Explaining multisensory experience. In Consciousness inside and out: Phenomenology, neuroscience, and the nature of experience.* pp. 365-373. Springer, Dordrecht.
- Gacula Jr, M. C. (2008) *Descriptvie Sensory Analysis in Practice.* John Wiley & Sons.
- Gallace, A. and Spence, C. (2014) *In touch with the future: The sense of touch from cognitive neuroscience to virtual reality.* OUP Oxford.
- Geng, X., Chen, Z., Lam, W. and Zheng, Q. (2013) *Hedonic evaluation over short and long retention intervals: The mechanism of the peak–end rule.* Journal of Behavioral Decision Making, Vol. 26(3), pp. 225-236.
- Gharipour, M. (Ed.). (2012) *The bazaar in the Islamic city: design, culture, and history.* Oxford University Press.
- Glynn Mangold, W. and Babakus, E. (1991) *Service Quality: The Front-stage vs. the Back-stagePerspective.* Journal of Services Marketing, Vol. 5(4), pp. 59-70.
- Gibson, J. J. (1966) *The senses considered as perceptual systems.*
- Gifford, R. (2001) *Environmental psychology, principles and practice* (3rd ed.). Boston: Allyn and Bacon
- Goh, D. P. (2014) *Walking the global city: The politics of rhythm and memory in Singapore.* Space and Culture, Vol. 17(1), pp.16-28.
- Graburn, N. H. (1983) *The anthropology of tourism.* Annals of tourism research, Vol. 10(1), pp. 9-33.
- Green, M. C., Brock, T. C. and Kaufman, G. F. (2004) *Understanding media enjoyment: The role of transportation into narrative worlds.* Communication theory, Vol. 14(4), pp. 311-327.
- Gretzel, U. and Fesenmaier, D. R. (2003) *Experience-based internet marketing: An exploratory study of sensory experiences associated with pleasure travel to the Midwest United States.* In ENTER (pp. 49-57).
- Gretzel, U., Fesenmaier, D. R., Formica, S. and O’Leary, J. T. (2006) *Searching for the future: Challenges faced by destination marketing organizations.* Journal of Travel Research, Vol. 45(2), pp. 116-126.
- Gretzel, U. and Fesenmaier, D. R. (2010) *Capturing sensory experiences through semi-structured elicitation questions. In the Tourism and Leisure Experience.* pp. 137-160. Channel View Publications.
- Groh, J. M., Born, R. T. and Newsome, W. T. (1997) *How is a sensory map read out? Effects of microstimulation in visual area MT on saccades and smooth pursuit eye*

- movements*. Journal of Neuroscience, Vol. 17(11), pp. 4312-4330.
- Haggard, P. (2017) *Sense of agency in the human brain*. Nature Reviews Neuroscience, Vol. 18(4), pp. 196-207.
- Harrison, P. (2000) *Making sense: embodiment and the sensibilities of the everyday*. Environment and Planning. Society and Space, Vol. 18(4), pp. 497-517.
- Hayllar, B. and Griffin, T. (2005) The precinct experience: a phenomenological approach. Tourism Management, Vol. 26(4), pp. 517-528.
- Heide, M. and Grønhaug, K. (2006) *Atmosphere: Conceptual issues and implications for hospitality management*. Scandinavian Journal of hospitality and Tourism, Vol. 6(4), pp. 271-286.
- Haleem, A., Javaid, M. and Vaishya, R. (2020) *Effects of COVID 19 pandemic in daily life*. Current Medicine Research and Practice.
- Helmefalk, M. and Hulten B., (2017) *Multi-sensory congruent cues in designing retail store atmosphere: Effects on shopper's emotions and purchase behavior*. Elsevier Journal of Retailing and Consumer Services
- Henshaw, V. Adams. and M COX, T. J. (2009) *Researching urban olfactory environments and place through sensewalking*.
- Henshaw, V. (2013) *Urban Smellscapes: Understanding and Designing City Smell Environments*. Routledge.
- Henshaw, V., Medway, D., Warnaby, G. and Perkins, C. (2016) *Marketing the 'city of smells'*. Marketing Theory, Vol. 16(2), pp. 153-170.
- Henshaw, V., McLean, K., Medway, D., Perkins, C. and Warnaby, G. (Eds.). (2017) *Designing with Smell: Practices, techniques and challenges*. Routledge.
- Hierl, M. (2019) *Urban Atmospheres: Multisensory Perception as the Linkage between Urban Environment and Social Interaction in Main Streets*.
- Nagasawa, S. Y. and Otsu, S. (2015) *Experience differentiation strategy, Focus on embodied cognition and ACT module*. Science Journal of Business and Management, Vol. 3(2-1), pp. 78-82.
- Hinkle, D. N. (1965) *The change of personal constructs from the viewpoint of a theory of construct implications*. The Ohio State University.
- Holbrook, B.M. and E. Hirschmann (1982) *The Experimental Aspects of Consumption: Consumer Fantasies, Feelings and Fun* Journal of Consumer Research, Vol. 9, pp. 132-140.
- Hultén, B. (2012) *Sensory cues and shoppers' touching behaviour: the case of IKEA*.

- International Journal of Retail & Distribution Management, Vol. 40(4), pp. 273- 289.
- Ingold, T. (2011) *Worlds of sense and sensing the world: a response to Sarah Pink and David Howes*. Social Anthropology/Anthropologie Sociale, Vol. 19(3), pp. 313-317.
- Irving, A. (2013) *Bridges: A new sense of scale*. The Senses and Society, Vol. 8(3), pp. 290-313.
- Janesick, V. J. (2011) *Stretching” exercises for the qualitative researcher* (3rd ed.). Sage.
- Jensen, M. T., Scarles, C. and Cohen, S. A. (2015) *A multisensory phenomenology of interrail mobilities*. Annals of Tourism Research, Vol. 53, pp. 61- 76.
- Kangal, A. (2013) *Neden–Sonuç Zinciri Teorisi ve Basamaklama Yöntemi: Tüketici Davranışı Araştırmalarında Kullanımı*. Business & Economics Research Journal, Vol. 4(2).
- Kastenholz, E., Carneiro, M. J., Marques, C. P. and Lima, J. (2012) *Understanding and managing the rural tourism experience: The case of a historical village in Portugal*. Tourism management perspectives, Vol. 4, pp. 207-214.
- Kervenoael, R. D., Ozturkcan, S., Çetin, S. and Soylu, Y. (2008) *Adopting the Experiential Values Propositions as E-atmospherics: An Illustration through the Case of E-banking*. In 15th International EIRASS Conference on recent advances in Retailing and Services Science, EIRASS.
- Keshavarzian, A. (2007) *Bazaar and state in Iran: The politics of the Tehran marketplace*. Vol. 26. Cambridge University Press.
- Klaus J.H. and Wiedmann P, (2018) *The sensory perception item set (SPI): An exploratory effort to develop a holistic scale for sensory marketing*. Psychol Mark. Vol. 35. Pp. 727–739. Germany.
- Kim, J. J. and Fesenmaier, D. R. (2017) *Tourism experience and tourism design*. In *Design science in tourism*. pp. 17-29. Springer, Cham.
- Kim, J. H., Ritchie, J. R. and Tung, V. W. S. (2010) *The effect of memorable experience on behavioral intentions in tourism: A structural equation modeling approach*. Tourism Analysis, Vol. 15(6), pp. 637-648.
- Kirk, C. P. and Rifkin, L. S. (2020) *I'll trade you diamonds for toilet paper: Consumer reacting, coping and adapting behaviors in the COVID-19 pandemic*. Journal of business research, Vol. 117, pp. 124-131.
- Krishna, A., Lwin, M. O. and Morrin, M. (2010) *Product scent and memory*. Journal

of consumer research, Vol. 37(1), pp. 57-67.

Krishna, A., (2011) *An integrative review of sensory marketing: engaging the senses to affect perception, judgment and behavior*, Journal of Consumer Psychology, Vol. 22 No. 3, pp. 332-351.

Krishna, A. and Schwarz, N. (2014) *Sensory marketing, embodiment, and grounded cognition: a review and introduction*, Journal of Consumer Psychology, Vol. 24 No. 2, pp. 159-168.

Kotler, P. (1974) *Atmospherics as a marketing tool*. Journal of Retailing, Vol. 49, pp.48-64.

Kuppelwieser, V. G. and Klaus, P. (2021) Measuring customer experience quality: the EXQ scale revisited. Journal of Business Research, Vol. 126, pp. 624-633.

Küçükalp, K. (2010) *Husserl fikir mimarları dizisi-9*. Ankara: Say Yayınları.

Lam, S. Y. (2001) *The effects of store environment on shopping behaviors: A critical review*. ACR North American Advances.

Latham, A. and McCormack, D. P. (2009) *Thinking with images in non-representational cities: vignettes from Berlin*. Area, Vol. 41(3), pp. 252-262.

Lawless, L. J., Hottenstein, A. and Ellingsworth, J. (2012) *The McCormick spice wheel: a systematic and visual approach to sensory lexicon development*. Journal of sensory studies, Vol. 27(1), pp. 37-47.

Lawrence Neuman, W. (2014) *Social research methods: Qualitative and quantitative approaches*.

Leach, M. (1997) *Rethinking architecture: a reader in cultural theory*. Psychology Press.

Lee, W., Gretzel, U. and Law, R. (2010) *Quasi-trial experiences through sensory information on destination web sites*, Journal of Travel Research, Vol. 49 No. 3, pp. 310-322

Lengkeek, J. (2001) *Leisure experience and imagination: Rethinking Cohen's modes of tourist experience*. International sociology, Vol. 16(2), pp. 173-184.

Liang, P., Jiang, J., Wei, L. and Ding, Q. (2021) *Direct mapping of affective pictures and taste words*. Food Quality and Preference, Vol. 89, 104151.

Lim, H. K., Keniston, L. P. and Cios, K. J. (2011) Modeling of multisensory convergence with a network of spiking neurons: a reverse engineering approach. IEEE transactions on biomedical engineering, Vol. 58(7), pp. 1940-1949.

Lindquist, J.D., (1974) Meaning of image: survey of empirical and hypothetical

evidence. *Journal of Retailing*, Vol. 50 (4), pp. 29–38.

Lipovetsky, G. (2004) *Les temps hypermodernes*. Paris, Ed Grasset & Fasquelle.

Liu, Z. (2003) *Sustainable tourism development: A critique*. *Journal of sustainable tourism*, Vol. 11(6), pp. 459-475.

localadventurer.com (2022) *The Beautiful Souks of Marrakech Market* [Online] Available at: <https://localadventurer.com/souks-of-marrakech-markets/> (Accessed 05.06.2022).

Loda, M., Norman, W. and Backman, K. (2005) *How potential tourists react to mass media marketing: Advertising versus publicity*. *Journal of Travel and Tourism Marketing*, Vol. 18(3), pp. 63-76.

Low, G. S. and Lichtenstein, D. R. (1993) *Technical research note: The effect of double deals on consumer attitudes*. *Journal of Retailing*, Vol. 69(4), pp. 453-466.

Low, K. E. (2015) *The sensuous city: Sensory methodologies in urban ethnographic research*. *Ethnography*, Vol. 16(3), pp. 295-312.

Lynch, K. (1960) *Reconsidering the image of the city*. In *Cities of the Mind*. pp. 151-161. Springer, Boston, MA.

Madden, T. J., Hewett, K. and Roth, M. S. (2000) *Managing images in different cultures: A cross-national study of color meanings and preferences*. *Journal of international marketing*, Vol. 8(4), pp. 90-107.

Maklan, S. and Klaus, P. (2011) *Customer experience: are we measuring the right things?* *International Journal of Market Research*, Vol. 53(6), pp. 771-772.

Manolica, A., Muntean, E. and Jelea, R. A. (2021) *The Brand Reflected in the Mind of the Consumer. Conceptual Map of the Starbucks Brand*. *Ovidius University Annals, Economic Sciences Series*, Vol. 21(2), pp. 797-806.

Mattingley, J. B., Rich, A. N., Yelland, G. and Bradshaw, J. L. (2001) *Unconscious priming eliminates automatic binding of colour and alphanumeric form in synaesthesia*. *Nature*, 410(6828), pp. 580-582.

McLean, K. (2017) *Smellmap: Amsterdam—olfactory art and smell visualization*. *Leonardo*, Vol. 50(1), pp. 92-93.

Meacci, L. and Liberatore, G. (2015) *Towards a senses-based model for experiential tourism: the youtooscany. com case*. In *International Conference on Experiential Tourism*, Santorini.

Merriam, S. B. and Tisdell, E. J. (2015) *Qualitative research: A guide to design and implementation*. John Wiley & Sons.

- Mehta, S., Saxena, T. and Purohit, N. (2020) *The new consumer behaviour paradigm amid COVID-19: permanent or transient?* Journal of health management, Vol. 22(2), pp. 291-301.
- Meyer, W. L. (2007) *The effects of loyalty programs on customer lifetime duration and share of wallet.* Journal of retailing, Vol. 83(2), pp. 223-236.
- Miles, M. B., Huberman, A. M. and Saldana, J. (2014) *Qualitative data analysis: A methods sourcebook* (3rd ed.). Sage.
- Moore, L. W. and Wilson, L. (2002) *Digital Storytellers: The Art of Communicating the Gospel in Worship.* Nashville: Abingdon.
- Mossberg, L. (2007) *A marketing approach to the tourist experience.* Scandinavian journal of hospitality and tourism. Vol. 7(1), pp. 59-74.
- Murray, L. and Moustakas, C. (1994) *Phenomenological research methods.* Sage Publications.
- Järviluoma, H. (2020) *Walking as transgenerational methodology.* Qualitative Research, Vol. 20(2), pp. 229-238.
- Nagasawa, S. Y. and Otsu, S. (2015) *Experience differentiation strategy (2)—Focus on embodied cognition and ACT module.* Science Journal of Business and Management, Vol. 3(2-1), pp. 78-82.
- Nagasawa, S. and T. Someya (2007) *The Tradition of the Long-established Brand Toraya and its Innovation: Creation of Customer Experiences and Technology Management,* Koyo Shobo, Tokyo (in Japanese).
- Nagasawa, S. and M. Ishikawa (2010), *Kyo-yuzen Chiso: Innovation in the 450-year-old Brand,* Doyukan, Tokyo (in Japanese).
- Nagasawa, S. and Otsu, S. (2015) *Experience differentiation strategy (1): concepts of consumer experiences.* Sci. J. Bus. Manag, Vol. 3(2-1), pp. 73-77.
- Neuman, L.W. (2014) *Social Research Methods: Qualitative and Quantitative Approaches* (Ed: Seventh). Essex.
- Nielsen, J. and Landauer, T. K. (1993) *A mathematical model of the finding of usability problems.* In Proceedings of the INTERACT'93 and CHI'93 conference on Human factors in computing systems. pp. 206-213.
- Nghiêm-Phú B, (2017) *Sensory marketing in an outdoor out-store shopping environment – an exploratory study in Japan,* Asia Pacific Journal of Marketing and Logistics, Vol. 29 Issue: 5, pp.994-1016
- Nghiêm-Phú, B. (2020) *Sensory inputs in tourists' nightlife experiences—a study of*

- Bangkok, Kuala Lumpur and Singapore. *International Journal of Culture, Tourism and Hospitality Research*, Vol. 14(2), pp. 259-272
- Ogilvy, J. A. (1988) *Computer simulation of acoustic wave scattering from rough surfaces*. *Journal of Physics D: Applied Physics*, Vol. 21(2), pp. 260.
- Pallasma, J. (2012) *The eyes of the skin: Architecture and the senses*. John Wiley & Sons.
- Pallasmaa, J., (2016) *The sixth sense: the meaning of atmosphere and mood*. *Archit. Des.* Vol. 86 (6), pp. 126–133.
- Palmer, S. N. (2023) *A Phenomenological Study of Novice Teachers' Experiences with Diverse Classroom Readiness*.
- Pan, S. and Ryan, C. (2009) *Tourism sense-making: The role of the senses and travel journalism*. *Journal of Travel & Tourism Marketing*, Vol. 26(7), pp. 625-639.
- Pantano, E., Pizzi, G., Scarpi, D. and Dennis, C. (2020) *Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak*. *Journal of Business Research*. Vol. 116, pp. 209-213.
- Patton, M. Q. (2015) *Qualitative research & evaluation methods* (4th ed.). Sage
- Paul, J., Sankaranarayanan, K. G. and Mekoth, N. (2016) *Consumer satisfaction in retail stores: Theory and implications*. *International Journal of Consumer Studies*, Vol. 40(6), pp. 635-642.
- Paterson, M. (2007) *The senses of touch: Haptics, affects and technologies*. Berg.
- Pentz, C. and Gerber, C. (2013) *The influence of selected senses on consumer experience: A brandy case*. *Acta Commercii*, Vol. 13(1), pp. 1-7.
- Petit J. L. (2003) *On the relation between recent neurological data on perception (and action) and the Husserlian theory of constitution*, *Phenomenology and the Cognitive Science*. Vol. 2-4. Pp. 281-98
- Phillips, R. (2015) *Playful and multi-sensory fieldwork: seeing, hearing and touching* New York. *Journal of Geography in Higher Education*, Vol. 39(4), pp. 617-629.
- Pine, J. and Gilmore, J. H. (1998) *Welcome to the experience economy*. *Harvard Business Review*, Vol. 76(4), pp. 97–105.
- Pink, S. (2006) *The future of visual anthropology: Engaging the senses*. Taylor & Francis.
- Pink, S. (2007) *Walking with video*. *Visual studies*, Vol. 22(3), pp. 240-252.
- Powell, K. (2010) *Making sense of place: Mapping as a multisensory research method*. *Qualitative Inquiry*, Vol. 16(7), pp. 539-555.

- Puccinelli, N. M., Goodstein, R. C., Grewal, D., Price, R., Raghubir, P. and Stewart, D. (2009) *Customer experience management in retailing: understanding the buying process*. Journal of retailing, Vol. 85(1), pp. 15-30.
- Relph, E. (1976) *Place and placelessness*. Vol. 67. London: Pion.
- Rhea, D. (2014) *Experiential Marketing: A New Framework for Design and Communications by Bernd Schmitt*. Design Management Review, Vol. 25(4), pp. 19-26.
- Richard, M. D. and Allaway, A. W. (1993) *Service quality attributes and choice behaviour*. Journal of Services Marketing, Vol. 7(1), pp. 59-68.
- Riessman, C. K. (1993) *Narrative analysis*. Vol. 30. Sage.
- Riley, D. (1988) *Am I that name?': Feminism and the category of 'women' in history*. Springer.
- Robson, C. and McCartan, K. (2016) *Real world research: a resource for users of social research methods in applied settings*. Wiley.
- Rodaway, P., (1994) *Sensuous Geographies: Body, Sense and Place*. Routledge, London and New York.
- Rosenthal, R. and Rosnow, R. L. (1984) *Applying Hamlet's question to the ethical conduct of research: A conceptual addendum*. American Psychologist, Vol. 39(5), pp. 561.
- Russell, J. A. and Mehrabian, A. (1974) *Distinguishing anger and anxiety in terms of emotional response factors*. Journal of consulting and clinical psychology, Vol. 42(1), pp. 79.
- Osgood, C. E., Suci, G. J. and Tannenbaum, P. H. (1957) *The measurement of meaning*. No. 47. University of Illinois press.
- Özgüven, Y. and Durhan, S. (2010) *A bazaar sustaining the function for 400 years: Spice Bazaar (Egyptian Bazaar) of Istanbul*.
- Durhan, Ö. S. and Özgüven, Y. (2021) *Mısır Çarşısı'nı düşünmek: mekansal pratikler, özneler, gündelik yaşam*. İstanbul Araştırmaları Enstitüsü.
- Quan, S. and Wang, N. (2004) *Towards a structural model of the tourist experience: An illustration from food experiences in tourism*. Tourism management, Vol. 25(3), pp. 297-305.
- Quercia, D., Schifanella, R., Aiello, L. M. and McLean, K. (2015) *Smelly maps: the digital life of urban smellscapes*. In Proceedings of the International AAAI Conference on Web and Social Media. Vol. 9. No. 1.

- Quinlan C, S., Doherty, S. and Carmichael, B. (2018) *The experience sampling method: examining its use and potential in tourist experience research*. Current Issues in Tourism, Vol. 21(9), pp. 1052-1074.
- Samson, A. and Voyer, B. G. (2014) *Emergency purchasing situations: Implications for consumer decision-making*. Journal of Economic Psychology, Vol. 44, pp. 21-33.
- Sasaki, M. and H. Mishima (2001) *Ideas of Affordance*, University of Tokyo Press, Tokyo (in Japanese).
- Sanders E.B.-N., (2001) *Virtuosos of the experience domain*. Proceedings of the 2001 IDSA Education Conference
- Schmitt, B. (1999) *Experiential marketing*. Journal of marketing management, Vol. 15(1-3), pp. 53-67.
- Schwarz, N. and Bohner, G. (2001) *The construction of attitudes*. Blackwell handbook of social psychology: Intraindividual processes, pp. 436-457.
- Seamon, D. and Sowers, J. (2008) *Place and placelessness (1976): Edward relph*. Key texts in human geography, pp. 43-52.
- Seidman, I. (2006) *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. Teachers college press.
- Seriès, P., Stocker, A. A. and Simoncelli, E. P. (2009) *Is the homunculus "aware" of sensory adaptation?* Neural Computation, Vol. 21(12), pp. 3271-3304.
- Scheler, M. (1924) *The Perception of Other Minds. Phenomenology: Critical Concepts in Philosophy*, Vol. 2, pp. 119-42.
- Scherer, K. R. (2005) *What are emotions? And how can they be measured? Social science information*. Vol. 44(4), pp. 695-729.
- Schifferstein, H. N. (2021) *Designing food experiences: A multisensory approach*. In Transdisciplinary Case Studies on Design for Food and Sustainability. pp. 115-130. Woodhead Publishing.
- Schifferstein, H. N. and Spence, C. (2008) *Multisensory product experience*. In *Product experience*. pp. 133-161. Elsevier.
- Schmitt, B. (2010) *Experience Marketing: Concepts, Frameworks and Consumer Insights*. Columbia Business School Columbia University New York, NY 10027 USA
- Product experience. pp. 133-161.
- Sepe, M. (2015) *Improving sustainable enhancement of cultural heritage: Smart placemaking for experiential paths in Pompeii*. International Journal of Sustainable Development and Planning, Vol. 10(5), pp. 713-733.

- Sheth, J. (2020) *Impact of Covid-19 on consumer behavior: Will the old habits return or die?* Journal of business research, Vol. 117, pp. 280-283.,
- Sidel, J. L. and Stone, H. (1993) *The role of sensory evaluation in the food industry.* Food Quality and Preference, Vol. 4(1-2), pp. 65-73.
- Sidel, J. L. and Stone, H. (1985) *Sensory evaluation practices.* Academic Press.
- Sigala, M. (2020) *Tourism and COVID-19: impacts and implications for advancing and resetting industry and research.* Journal of Business Research.
- Silvello, G. C., Bortoletto, A. M. and Alcarde, A. R. (2020) *The barrel aged beer wheel: a tool for sensory assessment.* Journal of the Institute of Brewing, Vol. 126(4), pp. 382-393.
- Simmel, G. (2014) *The Metropolis and Mental Life:(1903). In The People, Place, and Space Reader.* pp. 223-226. Routledge.
- Simon, S. A. (2008) *Merging of the senses.* Front Neurosci, Vol. 2(1), pp. 13-4.
- Simonson, A. and Schmitt, B. H. (1997) *Marketing aesthetics: The strategic management of brands, identity, and image.* Simon and Schuster.
- Small, J., Darcy, S. and Packer, T. (2012) *The embodied tourist experiences of people with vision impairment: Management implications beyond the visual gaze.* Tourism Management, Vol. 33(4), pp. 941-950.
- Soars, B. (2009) *Driving sales through shoppers' sense of sound, sight, smell and touch.* International Journal of Retail & Distribution Management, Vol. 37(3), pp. 286-298.
- Son, A. and Pearce, P. (2005) *Multi-faceted image assessment: International students' views of Australia as a tourist destination.* Journal of Travel & Tourism Marketing, Vol. 18(4), pp. 21-35.
- Söderlund, M. (2003) *The retrospective and the prospective mind and the temporal framing of customer satisfaction.* European Journal of Marketing.
- Spence, C. (2011) *Crossmodal correspondences: A tutorial review.* Attention, Perception, & Psychophysics, Vol. 73, pp. 971-995.
- Spence, C., Puccinelli, N. M., Grewal, D. and Roggeveen, A. L. (2014) *Store atmospherics: A multisensory perspective.* Psychology & Marketing, Vol. 31(7), pp. 472-488.
- Spence, C. (2020) *Assessing the role of emotional mediation in explaining crossmodal correspondences involving musical stimuli.* Multisensory research, Vol. 33(1), pp. 1-29.

- Spence, C. (2021) *Sonic seasoning & other multisensory influences on the coffee drinking experience*. *Frontiers in Computer Science*, Vol. 3, pp. 21.
- Stevenson, R. J. and Boakes, R. A. (2004) *Sweet and Sour Smells: Learned Synesthesia Between the Senses of Taste and Smell*.
- Stirling, J. (2001) *Thematic networks: an analytic tool for qualitative research*. *Qualitative research*, Vol. 1(3), pp. 385-405.
- Strang, V. (2005) *Common senses: Water, sensory experience and the generation of meaning*. *Journal of Material Culture*, Vol. 10(1), pp. 92-120.
- Sun, L. (2019) *Interaction Design Strategy Based on the Consideration of Subconsciousness and Behavioral Habits*. In 2019 International Conference on Smart Grid and Electrical Automation (ICSGEA). pp. 553-557. IEEE.
- Brandi Sørensen, E. and Askegaard, S. (2007) *Laddering: how (not) to do things with words*. *Qualitative Market Research: An International Journal*, Vol. 10(1), pp. 63-77.
- Talsma, D. (2015) *Predictive coding and multisensory integration: an attentional account of the multisensory mind*. *Frontiers in Integrative Neuroscience*, Vol. 9, pp. 19.
- Taylor, J. (1998) *Imperial Istanbul: A Traveler's Guide*, Palgrave Macmillan.
- Terblanche, N. S. (2018) *Revisiting the supermarket in-store customer shopping experience*. *Journal of Retailing and Consumer Services*, Vol. 40, pp. 48-59.
- The European Commission's Science and Knowledge Service, Science for Policy Briefs (2020) "*Covid-19, Tourist Behavior Jobs and Policy Options*" European Union, 2020 – JRC121263
- Thomas, J. and Harden, A. (2008) *Methods for the thematic synthesis of qualitative research in systematic reviews*. *BMC medical research methodology*, Vol. 8(1), No. 1-10.
- Thompson, K. E. and Ling Chen, Y. (1998) *Retail store image: a means-end approach*. *Journal of Marketing Practice: Applied Marketing Science*, Vol. 4(6), pp. 161-173.
- Tiainen, M., Aula, I. and Järviluoma, H. (2019) *Transformations in mediations of lived sonic experience: A sensobiographic approach*. In *Music as Atmosphere*. pp. 238-254. Routledge.
- Trickett, S. B. and Trafton, J. G. (2009) *A primer on verbal protocol analysis*. *The PSI handbook of virtual environments for training and education*, Vol. 1, No. 332-346.
- Tung, V. W. S. and Ritchie, J. B. (2011) *Exploring the essence of memorable tourism*

- experiences*. Annals of tourism research, Vol. 38(4), No. 1367-1386.
- Turley, L. W. and Milliman, R. E. (2000) *Atmospheric effects on shopping behavior: a review of the experimental evidence*. Journal of business research, Vol. 49(2), pp. 193-211.
- Uimonen, H. (2020) *Sensobiography and Tangible Music: Theoretical and Methodological Approaches*. Musiikki-lehti, Vol. 50(4), pp. 43-67.
- Vallagher, R. R. and Wegner, D. M. (1985) *A theory of action identification*. Hillsdale, NJ: Lawrence Erlbaum.
- Vasilikou, C. (2016) *Sensory Navigation in the City Centre. Perceptual paths, sense walks and interactive atmospheres*. In *Ambiances, tomorrow*. Proceedings of 3rd International Congress on Ambiances. Septembre 2016, Volos, Greece. Vol. 1, pp. 559). International Network Ambiances; University of Thessaly.
- Venkatesh, V., Brown, S. A. and Sullivan, Y. W. (2016) *Guidelines for conducting mixed-methods research: An extension and illustration*. Journal of the Association for Information Systems, Vol. 17(7), pp. 2.
- Verhagen, S. J., Hasmi, L., Drukker, M., van Os, J. and Delespaul, P. A. (2016) *Use of the experience sampling method in the context of clinical trials*. Evidence-based mental health, Vol. 19(3), pp. 86-89.
- Verhoef, P. C., Scott A. N. and B. Vroomen (2007) *MultiChannel Customer Management: Understanding the Research Shopper Phenomenon*, International Journal of Research in Marketing, Vol. 24 (2), pp. 129–48.
- Volo, S. (2013) *Conceptualizing experience: A tourist based approach*. Marketing of tourism experiences, pp. 19-34.
- Walter, S., Kessler, H., Gruss, S., Jerg-Bretzke, L., Scheck, A., Ströbel, J., Hoffmann, H. and Traue, C. (2011) *The influence of neuroticism and psychological symptoms on the assessment of images in threedimensional emotion space*. Psychosoc Med Published online 2011 June 6
- Wang, S. M. and Huang, C. J. (2014) *User experience analysis on urban interaction and information service in smart city nodes*. In Proceedings of the Second International Symposium of Chinese CHI. pp. 103-109.
- Williams, C. (2007) *Research methods*. Journal of Business & Economics Research (JBER), 5(3).
- Williams, M. and Moser, T. (2019) *The art of coding and thematic exploration in qualitative research*. International Management Review, Vol. 15(1), pp. 45-55

- WTTC (World Travel & Tourism Council) (2015) *TSA Research. Economic Impact Research*, [http:// https://wttc.org](https://wttc.org), (Accessed: 1 October 2021).
- Wunderlich, M. F. I. L. I. P. A. (2008) *Walking and rhythmicity: Sensing urban space*. Journal of urban design, Vol. 13(1), pp. 125-139
- Mattern, S. (2008) *Silent, invisible city: Mediating urban experience for the other senses. Media City: Situations, Practices, Encounters*. Berlin: Frank & Timme.
- Żegleń, P. and Grzywacz, R. (2016) *Tourism as an economic phenomenon of XXI century*. Scientific Review of Physical Culture, Vol. 6(1), pp. 26-31.
- Zimmer, M. R. and Golden, L. L. (1988) *Impressions of retail stores: A content analysis of consume*. Journal of retailing, Vol. 64(3), pp. 265.



APPENDICES

Appendix A: Ethical Approval



MISIR ÇARŞISI ESNAFLARI
YARDIMLAŞMA VE KORUMA DERNEĞİ

01.04.2022

İZMİR EKONOMİ ÜNİVERSİTESİ


TASARIM ÇALIŞMALARI DOKTORA ÖĞRENCİSİ CEYDA ALTIPARMAKOĞULLARI'NIN
MISIR ÇARŞISINDA DUYUSAL DENEYİM TASARIMI BAŞLIKLİ ÇALIŞMASI
KAPSAMINDA, KONUYLA İLGİLİ ARAŞTIRMA YAPMASI YÖNETİMİMİZCE UYGUN
GÖRÜLMÜŞTÜR.BİLGİLERİNİZE SUNARIZ.

Saygılarımızla,
M.Ç.E.Y.ve KORUMA DERNEĞİ

ÖMER T.BAŞIBÜYÜK Y.RUHİ TUNCER /HACI GÜLÇEK

MISIR ÇARŞISI İÇİ RÜSTEMPAŞA MAHALLESİ ERZAK AMBARI SOKAK NO:92
EMİNÖNÜ/FATİH/İSTANBUL
TEL: 0212 513 65 97 FAX: 0212 513 69 90
www.misircarsisi.org.tr
hoca paşa vergi dairesi 6210002679

Appendix B: Interview Questions

MISIR ÇARŞISINDA DUYUSAL DENEYİM TASARIMI– DESIGNING THE TOURSIT EXPERIENCE in SPICE BAZAAR	
 İZMİR UNIVERSITY OF ECONOMICS	
<p>Bu çalışma, İzmir Ekonomi Üniversitesi, Sosyal Bilimler Enstitüsü, Tasarım Çalışmaları Doktora Programı kapsamında Tez Alan Çalışması soruları olarak hazırlanmıştır. Değerli katkılarınız için teşekkür ederim. –Doktora öğrencisi Ceyda Telek Altıparmakogulları / This study was prepared as thesis Field Study questions within the scope of Izmir University of Economics, Institute of Social Sciences, Design Studies PhD Program. Thank you for your valuable contributions. –PhD student Ceyda Telek Altıparmakogulları</p>	
<p>Aşağıda istenen bilgilerin eksiksiz ve doğru olduğunu, bu başvuruya konu olan araştırmanın İzmir Ekonomi Üniversitesi Bilimsel Araştırma ve Yayın Etiği Yönergesinde belirtilen ilkeler doğrultusunda gerçekleştirileceğini ve bu sorumluluğun tarafıma ait olduğunu beyan ve taahhüt ederim. It can be declare that the information provided is true and correct, that the research subject to this application will be carried out in accordance with the principles stated in the Regulation for Scientific Research and Publication Ethics of Izmir University of Economics, and that I take full responsibility for it.</p>	
Date/ Tarih:	
Participant Code/ Katılımcı Kodu	
Name/ İsim	
Surname/ Soyisim	
Email-Phone/ Telefon:	Email-
District/ Semt	
Cinsiyet / Gender	
Age/ Yaş:	
Profession/ Meslek:	
<p>Lütfen gelecek soruları cevaplayınız. Sağlanan alanlarda tüm soruları cevapladığınızdan emin olunuz ve çoktan seçmeli sorulardaki uygun cevapları işaretleyiniz./ Please answer the following questions. Make sure you answer all the questions in the spaces provided and tick on the appropriate answers in the multiple choice questions.</p>	
<p>Demografik Sorular (Bölüm 1) (Duyusal Yürüyüşten Önce) (Yapılandırılmış Sorular) - Demographic Questions (Section 1) (Before the Sensory Walk) (Structured Questions)</p>	
<p>1. Yaşınız nedir? What is your age?</p> <ul style="list-style-type: none">. 18 Yaş altı /Under 18. 18-30. 30-45. 45-65	

<ul style="list-style-type: none"> . 65 Yaş üstü /Above 65
<p>2. Mezuniyet dereceniz nedir? What is your highest qualification?</p> <ul style="list-style-type: none"> . Lise / High school diploma . Lisans / Bachelor's degree . Yüksek lisans / Master's degree . Derece yok / No degree
<p>3. Mısır Çarşısı'nı nereden duydunuz? Where did you hear Spice Bazaar?</p> <ul style="list-style-type: none"> . Arkadaşlar / Friends . Dijital medya (Instagram, Facebook..)/ Digital media (Instagram, Facebook..) . Aile / Family . Diğer / Other
<p>4. Mısır Çarşısı'nı ziyaret etme amacınız nedir? Ya da seyahat modunuz nedir?/What is your purpose to visit Spice Bazaar? Or what is your trip mode?</p> <ul style="list-style-type: none"> . Turistik / Touristic . Alışveriş / Shopping . Kültürel / Culturel . Gurme / Gourmet . Diğer / Other
<p>5. İstanbul'u daha önce ziyaret ettiniz mi? / Did you visit before Istanbul?</p> <ul style="list-style-type: none"> . Evet / Yes . Hayır / No . Diğer / Other
<p>6. Mısır Çarşısını daha önce ziyaret ettiniz mi? / Did you visit Spice Bazaar before?</p> <ul style="list-style-type: none"> . Evet / Yes . Hayır / No . Diğer / Other
<p>7. İstanbul'u gezmeye nasıl karar verdiniz?/ How did you decide to travel Istanbul?</p> <ul style="list-style-type: none"> . Sosyal medyadan duydum / Heard from social media . Aileden ve veya çevremden duydum / Heard from family and/or friends . Reklamdan duydum / Heard from advertisement . Diğer / Other
<p>8. Hangi Şehirden ve ülkeden geliyorsunuz? / Where are you come from city and country?</p> <ul style="list-style-type: none"> . Asya / Asia

<ul style="list-style-type: none"> . Avrupa / Europe . Amerika / America . Afrika / Africa . Suudi Arabistan / Saudi Arabia . Diğer / Other
<p>9. Herhangi bir duyuusal engeliniz var mı? / Do you have any sensory disabilities?</p> <ul style="list-style-type: none"> . Tat / Taste . Duyuma / Hear . Görme / Sight . Dokunma / Tactile . Diğer / Other
<p>10. Mısır Çarşısı'nda daha önce duyduğumuz ve merak ettiğiniz bir deneyim var mı?</p> <ul style="list-style-type: none"> . Hediyeler hakkında merak edilenler / Curios about gifts . Etnik ürünlerle ilgili meraklar / Curios about ethnic products . Yerel ürünler hakkında merak edilenler / Curios about local products . Yerel lezzetler hakkında merak edilenler / Curios about local tastes . Tasarımla ilgili meraklar / Curios about design . Diğer / Other
<p>11. Hangi turistik yerleri gezmeyi tercih ediyorsunuz? / Which touristic places are you preferred to trip?</p> <ul style="list-style-type: none"> . Doğal yerler / Natural places . Kasabalar ve şehirler / Towns and cities . Kış veya yaz seyaheti / Winter or summer trip . Kültür ve mirası ile bilinen alanlar / Areas known for culture and heritage . Diğer / Other
<p>12. Mekanların atmosferi tekrar ziyaret tercihinde etkili olur mu? Will the atmosphere of the places be effective to choose the visit again?</p> <ul style="list-style-type: none"> . Evet / Yes . Hayır / No . Diğer / Other
<p>13. Mısır Çarşısı'nı ziyaret etmek için özel bir zamanı tercih eder misiniz? / Do you prefer special time to visit Spice Bazaar?</p> <ul style="list-style-type: none"> . Yaz / Summer . Kış / Winter . İlkbahar / Spring . Sonbahar / Autumn . Diğer / Other

<p>14. Mısır Çarşısını gezmek için motivasyonumuz nedir? / What is your trip motivation for Spice Bazaar?</p> <ul style="list-style-type: none">. <i>Turistik / Touristic</i>. <i>Alışveriş / Shopping</i>. <i>Kültürel / Cultural</i>. <i>Gurme / Gourmet</i>. <i>Diğer / Other</i>
<p>15. Aç mısınız? / Are hungry?</p> <ul style="list-style-type: none">. <i>Evet / Yes</i>. <i>Hayır / No</i>. <i>Diğer / Other</i>
<p>Geriyeye Dönük Sorular (Bölüm 2) (Duyusal Yürüyüşten Sonra) (Açık Uçlu Sorular) / Retropective Questions (Section 3) (After the Sensory Walk) (Open-ended Questions)</p>
<p>1. Hangi kategorideki ürünleri daha çok beğendiniz? Which category of products mostly like?</p>
<p>2. Hangi kategori ürünleri satın aldınız? Which category of products did you buy?</p>
<p>3. Mısır Çarşısı atmosferine benzer başka çarşıları ziyaret ettiniz mi? Evet ise nerede? Did you visit any bazaars and atmosphere like Spice Bazaar? If yes where?</p>
<p>4. Mısır Çarşısını tekrar ziyaret etmek ister miydiniz? Do you want to visit Spice Bazaar again?</p>
<p>5. Mısır Çarşısı'nı aileniz veya arkadaşlarınız gibi çevrenize tavsiye eder misiniz? Do you advise Spice Bazaar to your environment like family or friends?</p>

Geriyeye Dönük Sorular (Bölüm 3) (Duyusal Yürüyüşten Sonra) (SEEP Protokol) / Ve şimdi gözlerini kapatabilir misin ve gözlerini kapalıyken soruları cevaplayabilir misin? / **Retropective Questions (Section 3) (After the Sensory Walk) (SEEP Protocole) And now could you close your eyes and could you answer questions while closing your eyes**

6. Mağazanın atmosferi hakkındaki düşünceleriniz nelerdir? **Can you give information about Spice Bazaar atmosphere?**

7. Hangi Atmosferik Elementleri hissettiniz? **Which Atmospheric Elements did you feel?**

Koku/ Scent

8. Çarşıda herhangi bir koku fark ettiniz mi? **Have you noticed a scent in the bazaar?**

9. Eğer var ise bu kokuyu nasıl tanımlarsınız? **If so, how would you describe this scent?**

Ses / Sound

10. Çarşıda herhangi bir ses fark ettiniz mi? **Have you noticed a sound, in the bazaar?**

11. Eğer var ise, bu sesi nasıl tanımlarsınız? **If so, how would you describe this sound?**

Görüntü/ Sight

12. Çarşının görünümü hakkında ne düşünüyorsunuz? **What are your thoughts about the bazaar visual?**

13. Mağazaların görseli veya vitrinler hakkında düşünceleriniz nelerdir? **What are your thoughts about stores or window display?**

Dokunma /Touch
14. Herhangi bir doku detayı fark ettiniz mi veya herhangi bir şeye dokundunuz mu? <i>Did you notice any texture details or did you touch anything?</i>
15. Eğer var ise, bu haptiği nasıl tanımlarsınız? <i>If so, how would you describe this haptic?</i>
Tat /Taste
16. Duyusal yürüyüşünüz sırasında size çarşıda ikramlar verildi mi? <i>Have you been given any treats in the bazaar during your sensory walk?</i>
17. Çarşıda herhangi bir ürün veya ikramın tadına baktınız mı? <i>Did you taste any product or treat in the Bazaar?</i>
18. Bu tadı nasıl tanımlarsınız? <i>How would you describe this taste?</i>
Genel Atmosfer Soruları / General Atmosphere Questions
19. Hangi duyuusal deneyim atmosferi farklılaştırır? <i>Which sensory experience atmospherics play in this differentiation?</i>
20. Birkaç kelime hakkınız olsa Mısır Çarşısını hangi kelimeleri tanımlarsınız? <i>If you have a few words which words could you describe for the Spice Bazaar?</i>
21. Hangi duyuusal deneyim daha dikkat çekicidir? <i>Which sensory experience mostly remarkable?</i>
22. Eğer öyle ise neden? <i>If so why?</i>
23. Hangi duyuusal deneyimi daha az dikkat çekmiştir? <i>Which sensory experience mostly unremarkable?</i>

24. Eğer öyle ise neden? If so why?
25. En hatırlanabilir duyuşal deneyim hangisi olmuştur? Which sensory experience the most rememberable?
26. Eğer öyle ise neden? If so why?
27. En az hatırlanabilir duyuşal deneyim hangisi olmuştur? Which sensory experience unmostly rememberable?
28. Eğer öyle ise neden? If so why?
29. Çarşı atmosferinin/çevresinin bu farklılaşmada rolü nedir? Which part of the bazaar atmosphere/environment play in this differentiation?
30. En unutulmaz duyuşal deneyim hangisi olmuştur? Which sensory experience was the most unforgettable experience?
31. Eğer öyle ise neden? If so why?
32. Çarşıda en yoğun duyuşal deneyimi yaşadığınız alan neresiydi? What was the area where you had the most intense sensory experience in the bazaar?

33. Mısır Çarşısı atmosferini değiştirecek olsanız neyi değiştirirdiniz? *If you were to make changes to Spice bazaar atmosphere, what would you change?*

34. Eğer öyle ise neden? *If so why?*

35. Çarşının hangi duyuşsal yönlerinin geliştirilmesi gerektiğini düşünüyorsunuz? *Which sensory aspects of the bazaar do you believe should be enhanced?*

36. Eğer öyle ise neden? *If so why?*

37. Mısır Çarşısını anlatma şansınız olsa üç duyu kelimesi ne olurdu? *If you have to chance to describe Spice bazaar what would be three sensory word?*

38. Mısır Çarşısının duyuşsal deneyim yoğunluğunu sıralayabilir misiniz? *Can you list the sensory experience density of the Spice Bazaar?*

1.	2.	3.	4.	5.
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Ekleme istediğiniz birşey var mı? Is there anything you would like to add?

Appendix C: Observation Schedule



İZMİR UNIVERSITY OF ECONOMICS

Observation Schedule / Gözlemci Programı

This observation sheet includes the observation phase in the field study of Ceyda Telek Altıparmakogulları's doctoral thesis at the Izmir University of Economics Design Studies doctoral thesis titled "Sensory Experience design in Spice Bazaar." The fieldwork includes the stages of observing the participants by the observer during the sensory walk with the participants, and examining and observing their focus points during their sensory experience-oriented walk. During the Observation, the participants will be followed, notes will be taken and photographs or videos will be taken where necessary points.

Tarih/ Date	Katılımcı Kodu /Participant Code	Duraklama sayısı /Stopping number	Duraklama Süresi /Stopping Time	Duraklama Yeri/ Stopping Place	Duraklama Nedeni/ Stop Reason

Bu gözlemci sayfası, Ceyda Telek Altıparmakogulları'nın İzmir Ekonomi Üniversitesi Tasarım Çalışmaları Programında “Mısır Çarşısında Duyusal Deneyim tasarımı” başlıklı doktora tezinin saha çalışmasındaki gözlem aşamasını içermektedir. Alan çalışması, katılımcılarla yapılan duyuşal yürüyüş sırasında gözlemci tarafından katılımcıları gözlemlene, duyuşal deneyim odaklı yürüyüşleri sırasında odak noktalarını inceleme ve gözlemlene aşamalarını içermektedir. Gözlem sırasında katılımcılar takip edilecek, notlar alınacak ve gerekli noktalarda fotoğraf veya video kayıtları alınabilir.

CURRICULUM VITAE

Ceyda Telek Altparmakoğulları graduated from Haliç University in 2009 and completed a master's degree at Mimar Sinan University, İstanbul in 2013. She is currently a lecturer at Halic University's Faculty of Architecture and Department of Industrial Design. For about five years, she worked as a designer and manager in an architectural office, a factory's technical office, and a jewellery store display design office. She gives Industrial Design Project, Human Factors and Ergonomics, Urban Elements, Communication in Design and Interface courses for three years.

