



**FEMALE CONSUMERS' SENSORY EXPECTATIONS
OF SHOPPING MALLS: A SEMANTIC NETWORK
ANALYSIS**

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ABSTRACT

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Master Program in Marketing Communication and Public Relations

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The aim of this study is to present the expectations of the female consumers with respect to the strategies of sensory marketing implemented by shopping malls. The sensory expectation and related sensory experience differences between women and men are frequently discussed in the current literature. Taking this into consideration, in the study, female consumers particularly have been focused, and determination of the factors appealing to women's world has been intended, and related findings have been explained with a gender approach.

As for the methods of the study, a questionnaire has been developed to determine female consumers' expectations regarding sensory marketing practices. In the questionnaire, the expectations of the respondents concerning sensory marketing practices were tried to be measured. Network analysis was used to analyse the sensory expectations of females in shopping malls. This study took advantage of graph theory components which are correlated to semantic network analysis operating Pajek - network analysis software - for visualisation.

As a result of the analysis of the responses, it has been discovered that female consumers wish to make use of sensorial stimulants in the shopping malls. According to the evaluation of the findings, for female consumers, shopping malls are not only the places to meet their shopping needs, but also they are the places to spend their leisure time in a pleasant way. As a consequence of these findings female consumers can be defined as hedonic shoppers.

In this study, although a similar area, which is appealing to the senses and creating pleasant emotions in the shopping malls, has been focused on, with qualitative questions, female consumers' free associations has been revealed. In addition, the collective meanings provided belonging to females have been explicated by the interpretation of the existing knowledge in literature.

Keywords: sensory marketing, shopping malls, expectations of female consumers, semantic network analysis

ÖZET

KADIN TÜKETİCİLERİN ALIŞVERİŞ MERKEZLERİNDEN DUYUSAL BEKLENTİLERİ: ANLAMSAL AĞ ANALİZİ

Tuvay, Tolga

Pazarlama İletişimi ve Halkla İlişkiler

Tez Danışmanı: Prof. Dr. Ebru Uzunoğlu

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Bu çalışmanın amacı, büyük alışveriş merkezlerinin kullandığı duyusal pazarlama uygulamalarına ilişkin kadın tüketici beklentilerini ortaya koymaktır. Kadın ve erkek arasında duyusal beklenti ve buna bağlı olarak duyusal deneyim farklılıkları, mevcut alan yazında sıkça ele alınmıştır. Buradan hareketle, çalışmada özellikle kadın tüketicilere odaklanılmış, kadın dünyasından duylara hitap eden önemli faktörlerin tespit edilmesi amaçlanmıştır; buna bağlı olarak bulgular, cinsiyet yaklaşımıyla açıklanmaya çalışılmıştır.

Kadın tüketicilerin duyusal pazarlama uygulamalarıyla ilgili beklentilerini belirlemek amacıyla bir anket hazırlanmıştır. Ankette, katılımcıların, duyusal pazarlama uygulamalarıyla ilgili beklentileri ölçülmeye çalışılmıştır. Alışveriş merkezlerindeki kadınların duyusal pazarlama beklentilerini analiz etmek için anlamsal ağ analizi kullanılmıştır ve bulguları görselleştirme amacıyla ağ analizi yazılımı Pajek'ten faydalanılmıştır. Beş farklı boyutta yapılan analizlerin sonuçlarını daha iyi anlamlandırmak için çeşitli konularda literatür araştırmalarına yer verilmiştir.

Elde edilen yanıtların analizi sonucunda, kadın tüketicilerin alışveriş merkezlerinde duyuşal uyarıcılardan yararlanmak istedikleri ortaya çıkmıştır. Bulguların deęerlendirmesine göre alışveriş merkezleri kadın tüketiciler için sadece alışveriş ihtiyaçlarını karşılayacakları yerler olmayıp aynı zamanda boş zamanlarını keyifli bir şekilde geçirebilecekleri ortamlardır. Bu sonuç kadın tüketicilerin alışveriş özelliklerinin hedonik olarak tanımlanabilmesini sağlamaktadır.

Bu araştırmada da benzer bir alana odaklanılmakla birlikte, nitel sorularla kadın tüketicilerin serbest çağrışımları ortaya konulmaya çalışılacak; elde edinilen kadınlara ait kolektif anlamlar alan yazındaki mevcut bilgilerle yorumlanarak açıklanmaya çalışılacaktır.

Anahtar Kelimeler: duyuşal pazarlama, alışveriş merkezleri, kadın tüketicilerin beklentileri, anlamsal aę analizi

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TABLE OF CONTENTS

ABSTRACT.....	iii
ÖZET	v
ACKNOWLEDGEMENTS.....	vii
TABLE OF CONTENTS	viii
LIST OF TABLES	x
LIST OF FIGURES	xiii
CHAPTER 1: INTRODUCTION.....	1
CHAPTER 2: SENSORY MARKETING.....	4
2.1 <i>Human Senses</i>	4
2.1.1 <i>Vision</i>	5
2.1.2 <i>Olfaction (Smell)</i>	8
2.1.3 <i>Audition (Sound)</i>	9
2.1.4 <i>Taste</i>	10
2.1.5 <i>Touch</i>	11
2.2 <i>Definition of Sensory Marketing</i>	12
2.3 <i>The History of Sensory Marketing</i>	14
2.4 <i>Sensory Marketing Components</i>	18
2.4.1 <i>Visual Marketing (Sight Marketing)</i>	19
2.4.2 <i>Olfactory Marketing (Smell Marketing)</i>	20
2.4.3 <i>Auditory Marketing (Sound Marketing)</i>	22
2.4.4 <i>Gustative Marketing (Taste Marketing)</i>	22
2.4.5 <i>Tactile Marketing (Touch Marketing)</i>	23
2.5 <i>Aims of Sensory Marketing</i>	23
2.6 <i>Creating Brand Image, Identity and Sensory Signature</i>	26
2.7 <i>Use of Sensory Marketing In The Marketing Activities</i>	29
2.7.1 <i>Visual Marketing</i>	31
2.7.2 <i>Sound Marketing</i>	32
2.7.3 <i>Smell Marketing</i>	33
2.7.4 <i>Taste Marketing</i>	34
2.7.5 <i>Touch Marketing</i>	35
CHAPTER 3: SHOPPING MALLS	36
3.1 <i>Definition and Types of Shopping Malls</i>	36
3.2 <i>Shopping Malls in Turkey</i>	36

3.3	<i>Development of Shopping Malls in Turkey</i>	37
CHAPTER 4:	GENDER.....	41
4.1	<i>The Influence of Gender and Shopping Motives</i>	41
4.2	<i>Brand Loyalty and Women</i>	42
4.3	<i>Sensory Differences</i>	44
CHAPTER 5:	METHODOLOGY	46
5.1	<i>Introduction</i>	46
5.2	<i>Semantic Network Analysis and Graph Theory</i>	46
5.3	<i>Sampling</i>	47
5.4	<i>Data Collection and Coding Procedure</i>	48
5.5	<i>Application and Components of the Network Analysis</i>	49
CHAPTER 6:	FINDINGS AND ANALYSES.....	51
6.1	<i>Introduction</i>	51
6.2	<i>Degree Centrality Analysis</i>	54
6.3	<i>Closeness Centrality Analysis</i>	61
6.4	<i>Betweenness Centrality Analysis</i>	69
6.5	<i>Articulation Point Analysis</i>	76
6.6	<i>k-core Analysis</i>	80
6.7	<i>Total Findings of 5 Dimensions</i>	85
CHAPTER 7:	EVALUATION OF FINDINGS AND CONCLUSION	99
7.1	<i>Managerial Implications</i>	101
7.2	<i>Limitations and Further Research Suggestions</i>	102
REFERENCES	103

LIST OF TABLES

Table 1. Colour Combination According To The Customer's Taste.....	7
Table 2. Types of Shopping Malls.....	37
Table 3. First Shopping Malls of Turkey.....	39
Table 4. Number of Participants for Each Network	48
Table 5. Summary of Semantic Network Analysis Findings of "Visual Expectations" Network	51
Table 6. Summary of Semantic Network Analysis Findings of "Visual Disturbances" Network	51
Table 7. Summary of Semantic Network Analysis Findings of "Auditory Expectations" Network.....	51
Table 8. Summary of Semantic Network Analysis Findings of "Auditory Disturbances" Network.....	52
Table 9. Summary of Semantic Network Analysis Findings of "Tactile Expectations" Network	52
Table 10. Summary of Semantic Network Analysis Findings of "Tactile Disturbances" Network.....	52
Table 11. Summary of Semantic Network Analysis Findings of Gustatory Expectations Network.....	52
Table 12. Summary of Semantic Network Analysis Findings of "Gustatory Disturbances" Network.....	53
Table 13. Summary of Semantic Network Analysis Findings of "Olfactory Expectations" Network.....	53
Table 14. Summary of Semantic Network Analysis Findings of "Olfactory Disturbances" Network.....	53
Table 15. Degrees in "Visual Expectations" Network	54
Table 16. Degrees in "Visual Disturbances" Network	55
Table 17. Degrees in "Auditory Expectations" Network	56
Table 18. Degrees in "Auditory Disturbances" Network	56
Table 19. Degrees in "Tactile Expectations" Network.....	57
Table 20. Degrees in "Tactile Disturbances" Network.....	58
Table 21. Degrees in "Gustatory Expectations" Network.....	58
Table 22. Degrees in "Gustatory Disturbances" Network.....	59

Table 23. Degrees in “Olfactory Expectations” Network.....	60
Table 24. Degrees in “Olfactory Disturbances” Network	61
Table 25. Closeness Degrees in “Visual Expectations” Network	62
Table 26. Closeness Degrees in “Visual Disturbances” Network	63
Table 27. Closeness Degrees in “Auditory Expectations” Network	63
Table 28. Closeness Degrees in “Auditory Disturbances” Network	64
Table 29. Closeness Degrees in “Tactile Expectations” Network.....	65
Table 30. Closeness Degrees in “Tactile Disturbances” Network.....	65
Table 31. Closeness Degrees in “Gustatory Expectations” Network	66
Table 32. Closeness Degrees in “Gustatory Disturbances” Network.....	67
Table 33. Closeness Degrees in “Olfactory Expectations” Network.....	67
Table 34. Closeness Degrees in “Olfactory Disturbances” Network	68
Table 35. Betweenness Degrees in “Visual Expectations” Network.....	69
Table 36. Betweenness Degrees in “Visual Disturbances” Network	70
Table 37. Betweenness Degrees in “Auditory Expectations” Network.....	70
Table 38. Betweenness Degrees in “Auditory Disturbances” Network	71
Table 39. Betweenness Degrees in “Tactile Expectations” Network.....	72
Table 40. Betweenness Degrees in “Tactile Disturbances” Network.....	72
Table 41. Betweenness Degrees in “Gustatory Expectations” Network	73
Table 42. Betweenness Degrees in “Gustatory Disturbances” Network.....	74
Table 43. Betweenness Degrees in “Olfactory Expectations” Network.....	74
Table 44. Betweenness Degrees in “Olfactory Disturbances” Network	75
Table 45. Articulation Points in “Visual Expectations” Network	76
Table 46. Articulation Points in “Visual Disturbances” Network.....	76
Table 47. Articulation Points in “Auditory Expectations” Network	77
Table 48. Articulation Points in “Auditory Disturbances” Network.....	77
Table 49. Articulation Points in “Tactile Expectations” Network.....	78
Table 50. Articulation Points in “Tactile Disturbances” Network	78
Table 51. Articulation Points in “Gustatory Expectations” Network.....	78
Table 52. Articulation Points in “Gustatory Disturbances” Network.....	79
Table 53. Articulation Points in “Olfactory Expectations” Network	79
Table 54. Number of Repeats for “Visual Expectations” Network.....	85
Table 55. Number of Repeats for “Visual Disturbances” Network.....	87
Table 56. Number of Repeats for “Auditory Expectations” Network.....	88

Table 57. Number of Repeats for “Auditory Disturbances” Network..... 90
Table 58. Number of Repeats for “Tactile Expectations” Network 91
Table 59. Number of Repeats for “Tactile Disturbances” Network 92
Table 60. Number of Repeats for “Gustatory Expectations” Network..... 94
Table 61. Number of Repeats for “Gustatory Disturbances” Network 95
Table 62. Number of Repeats for “Olfactory Expectations” Network 96
Table 63. Number of Repeats for “Olfactory Disturbances” Network..... 97



LIST OF FIGURES

Figure 1. Wheel of Colours By Newton .	6
Figure 2. Wheel of Colours By Goethe	7
Figure 3. WYG-HYF-WIF Model	27
Figure 4. “Visual Expectations” Network k-cores	80
Figure 5. “Visual Disturbances” Network k-cores	81
Figure 6. “Olfactory Expectations” Network k-cores	81
Figure 7. “Olfactory Disturbances” Network k-cores	82
Figure 8. “Auditory Expectations” Network k-cores	82
Figure 9. “Auditory Disturbances” Network k-cores	83
Figure 10. “Gustatory Expectations” Network k-cores	83
Figure 11. “Gustatory Disturbances” Network k-cores	84
Figure 12. “Tactile Expectations” Network k-cores	84
Figure 13. “Tactile Disturbances” Network k-cores	85

CHAPTER 1: INTRODUCTION

The world has been in a rapid change for years. The change individuals are experiencing is happening everywhere. It takes place in many walks of life in different forms. Companies for the sake of more profit are testing new ways of affecting customers to consume more. Marketing takes its share in this wave of change. Classic mass marketing works on the idea that individuals as consumers will act in a rational way when buying a product. In that traditional way of marketing, it was assumed that consumers had rational way of thinking factors such as price, quality and practicality of the products.

However, what traditional marketing cannot do is to appeal to the senses of the consumers. Marketing is not only a deliberate activity but is also related to feelings since the consumers are humans. Sensory marketing is a tactic in advertising that is intended to attract one or more five human senses of sight, hearing, smell, taste and touch to form an emotional link to a specific service or product. Sensory marketing explores the consumers' life experiences and emotions. The popularity of multi-sensory marketing is on the rise. Sensory marketing is a component of experiential marketing. As a consequence of experiential marketing, the identity of the products becomes more powerful and a connection between the buying behaviour and the sale point ambiance is created (Mohasoa, 2014).

Today's competitive environment forces organizations and brands to establish strong connections with their consumers or to maintain the existing bonds they formed. Sustaining this connection drives them to create positive experiences for the sake of strong relationship. There exist various ways of creating experiences. While evaluating a product, a service, an environment, because of the fact that all senses are involved, sensory marketing has become an independent expertise area in the marketing world. It has been accepted that by appealing to the senses of the consumers, affecting their perceptions, attitude or even their behaviour has become a remarkable competitive advantage. Therefore, it is possible to observe several marketing efforts with catchy promises addressing five human senses that are seeing, hearing, smelling, tasting and touching.

The attempt to create positive experiences is also an indispensable key to success for the retail sales points. Creating a multidimensional experience, in other

words, the attempt to affect more than one sense positively, has been being executed successfully by a growing number of shopping malls. For this reason, the aforementioned areas build an attractive research topic for academic studies regarding the shopping malls. The most appropriate way of appealing to the senses and creating pleasant impressions and emotions depends on determining the sensorial expectations of the consumers in the most accurate way.

In order to find out the role of sensory marketing on female consumers' shopping decisions, the study has been conducted to seek answers for the questions below.

Research Question 1: What are the associations that embody the shared meaning of sensory experiences for female consumers?

The research question above can be broken down into sub-questions regarding the five human senses.

- i. What are the associations that embody the shared meaning of visual experiences for female consumers?
- ii. What are the associations that embody the shared meaning of olfactory experiences for female consumers?
- iii. What are the associations that embody the shared meaning of auditory experiences for female consumers?
- iv. What are the associations that embody the shared meaning of gustatory experiences for female consumers?
- v. What are the associations that embody the shared meaning of tactile experiences for female consumers?

Research Question 2: What are the associations that embody the shared meaning of sensory disturbances for female consumers?

The research question above can be broken down into following questions regarding the five human senses.

- i. What are the associations that embody the shared meaning of visual disturbances for female consumers?
- ii. What are the associations that embody the shared meaning of olfactory disturbances for female consumers?

- iii. What are the associations that embody the shared meaning of auditory disturbances for female consumers?
- iv. What are the associations that embody the shared meaning of gustatory disturbances for female consumers?
- v. What are the associations that embody the shared meaning of tactile disturbances for female consumers?

As for the answers of the questions above, a questionnaire has been developed to determine female consumers' expectations regarding sensory marketing practices. In the questionnaire, the expectations of the respondents concerning sensory marketing practices were tried to be measured. The role of five senses in perception of consumer, the relationship between marketing and perception is looked into. As a result, perception of the people shopping in the malls will be explained from the aspect of five human senses by taking the gender of the consumers into account.

In order to better interpret the results of the analysis conducted in five dimensions, several literature studies were included. The concept of sensory marketing has been explained in the first chapter. Human senses and how these senses have been utilized in the marketing area from past to present have been touched upon, thus theoretical background has been provided. Since the setting in the questionnaire has been chosen as shopping malls, in the second chapter, the development and evolution of the shopping malls have been explained, with the aim of better understanding the shopping mall environment. Next, in chapter four, how gender differences reflect on shopping and what kind of differences they reveal have been referred. The procedure of data collection and network analysis have been explicated in chapter five. Findings that have been established by five dimensions of semantic network analysis are provided in chapter six. Lastly, in chapter seven, evaluation of findings and conclusion have been presented.

CHAPTER 2: SENSORY MARKETING

2.1 *Human Senses*

Individuals understand the whole world using their senses. Human beings, are connected to their memories through their senses and the memories reach their emotions. When individuals are triggered emotionally by way of their five senses, their feelings of trust are also strengthened (Randhir et al., 2016). The five human senses are something that are used in everyday life. Thanks to the senses, the world is perceived and memories are acquired. When all the five senses are included, people tend to create, learn and explore their intellect that is the foundation of sensory marketing. When only seeing and hearing abilities of the people are influenced as in the traditional way of marketing, it may not be possible for the brands to create a more powerful and long-standing bond with the customers (Randhir et al., 2016). In order to understand which sense creates what kind of effect on which people, many studies have been conducted and have still been being done. It can be clearly understood that all five senses of human beings are getting more and more attention because experts, advisors and scientists are regularly interested in sensory marketing (Hultén et al., 2009).

Brands can gain a lot by employing these senses at the right setting for the right person. Marc Gobe (2001, p. 184) explains in his book “Emotional Branding”;

“I think no company can take the risk of neglecting five senses in today’s competitive environment. Elaborate icons that can stimulate the emotions can help the customer to prefer the brand among other similar ones.”

A sensory experience not only makes the brand to be differentiated but also makes it difficult for the people to choose other brands. However, if a brand includes five senses in their relations, it would not be easy for the customer to make a transition to another brand (Moser, 2007).

Although importance of five human senses have been known, they have been disregarded in marketing for a long time. They are critical in the customer’s buying and consumption mechanism. (Hultén et al., 2009) All the senses have different

meanings and they are important for creating a multisensory experience. With the help of the senses, individuals are aware of and recognize and appreciate companies, brands and products. Regarding this, if a company learns more about the human senses, its marketing activities can be more fruitful, and the consumer's sensory experience can be more complete (Hultén et al., 2009). While analysing an individual experience during a consumption process it is important to take into consideration the five human senses.

Five human senses can be classified as: sight, touch, hearing, taste and smell. Moreover, the senses can produce a favourable connection between the customer and the brand, because each sense is related with each other.

2.1.1 Vision

Because the link between eyes and brain is rapid, it can be said that vision is the strongest of the senses: spotting an object takes only 45 milliseconds for a human eye (Herz, and Engen, 1996). Thanks to the fast perception of the vision in the brain, human beings start interpreting the knowledge much faster than other senses. Because 80% of the information that a human receives is sent via the sense of vision, it appears to be the most crucial sense.

Studies and researches on vision have been conducted for so many years. Several studies about an experiment of a triangular glass prism using lights and colours had been carried on by Newton. As a result of the experiment with a triangular glass prism, he found out that the colour was not in the prism but in the light (Newton, 1672). So, in literature, investigation on the topic was started. Because of the deflection of the colours, a colour wheel that is based on the colours was invented by Newton and the colours' wavelengths are included in the spectrum.



Figure 1. Wheel of Colours by Newton (Source: Newton, 1672)

According to the wheel, (yellow, red, blue) primary colours are opposite to the secondary ones (yellow-violet, red- green, blue-orange). Based on the idea of the wheel, the reasons why human beings are affected by the vision of a work of art or an object they have seen in nature, has been started to be studied. The colours that are contrasting and complementing with each other create visual effects and these effects are used by designers and artists (Kuehni, 2004).

Following Newton, Goethe created a wheel of colours with his own ideas. It was based on Newton's design of colours. However, in his colour wheel, there were four essential parts divided according to whether they had positive or negative effect. As a matter of fact, there are dark and light colours according to Goethe's idea. Red and yellow which are the light ones represent the state of being pure and dynamic. Blue and purple that are defined as dark colours have a negative connotation and represent being cold and vague. This colour and meaning relationship are still being used by brands in modern day. The meaning associated to colours is significant for brands. As a writer, Goethe was the first, to mention the connection between colours and meanings. He asserted that yellow is dignified and respected. However, blue is an association of indigence, deprivation and vulnerability (Goethe, 1810).



Figure 2. Wheel of Colours by Goethe, (Source: J. W. von Goethe, 1810)

Later, a meaning for each and every colour has been studied and developed by other authors:

Table 1. Colour Combination According to The Customer's Taste (Source: Dědková, 2010, p. 84)

<u>Selected Colours</u>	<u>Colour Associations</u>
Red and orange	Friendly dynamic
Blue and black	Distinguished, noble, precious, excellent
Blue and gold	Solemnly, splendid
Red and gold	Beautiful, solemn
Pastel green	Unobtrusive, decent, free
Pink	Romantic, adorable
Light violet	Soft, reserved, kind
Red-brown and cream	Taste evoking, association of chocolate coffee

Nevertheless, it should be taken into consideration that besides these universal studies on colours, there can be changes depending on the regions. Different cultures in different regions can decipher visual suggestions in various ways (Krishna, 2013). What is observed is not only colours and this also demonstrates that it can be

interpreted in different ways. Interpretation of colours and some symbols can change in various regions of the world. Moreover, particular colours can be correlated with some companies in some parts of the world and in different places they can be linked to other companies (Krishna, 2013). Depending on the familiarity of the brand in that region, people can recognize it when they see the colour. Sometimes, even without seeing the name, they can recognize the brand just by looking at the colour.

Among other senses, the sense of sight has governed the marketing activities. Although the other senses (smell, sound, touch and taste) were as important as the sense of sight regarding the brand to be thought and decided to be bought by the consumers, they have been overlooked for some time (Hultén et al., 2009). Later on, they attracted the attention of marketing sector.

2.1.2 Olfaction (Smell)

The sense of smell has a strong influence in humans' memories because 75% of the emotions are produced by this sense (Lindström, 2005). The sense of smell has a significant role in the brain that leads consumers to differentiate the brand among others. People can identify the brand by recognizing the scent of the product and can be directed to buy the product being affected by the smell.

However, the process of smelling is much slower than the process of seeing. It is ten times longer to recognise a scent than identifying an object (Herz, and Engen, 1996). It takes longer time to remember or to retain the scent that is smelled. Still, the moment the smell is noted and retained in the brain, it becomes constant and permanent. That scent will be fixed in mind even long after it was smelled (Morrin, 2010). When people sense the smell, they will remember the experience they had related to that scent.

Many studies have been conducted but only few results were significant in relation with the impact of smell on mood. When the smell of the store or the product is examined, it has been seen that the smell in the environment has generally added a good influence. A study conducted by Spangenberg, Crowley and Henderson (1996) examined various scents in a store aimed for experiment. The effect of smell in a store has been studied.

Because a favourable mood in a store may be created by a scent in the environment, it also results in a more profitable sale and more income (Kotler, 1973).

When customers enter a store, they get the scent and have a positive mood and are inclined to stay there longer and purchase more with the effect of a scent.

The scent in the environment has a significant power on the customers' staying time and their idea of the products. In fact, the idea that how long the customers stay in the store becomes vague and because of the effect of the scent, the sense of time is lost (Liegeois, and Rivera, 2011). The customers lack their perception of time while they are shopping in the store because when they continue sensing the smell, they do not consider of leaving the store.

Because the scents might provoke personal images, the response people have when they sense a smell is really exclusive. This is the reason that a scent may provoke good emotions or bad emotions because of the memories induced (Liegeois, and Rivera, 2011). The scent that is sensed might cause a negative or positive recollection because of the experience related to that smell. Because of this, the individual's experience that the smell evokes is rather prominent.

There are some people who always wish to smell the food before they consume it. This fact has generally been used by companies to make their brands' position more powerful. The method of using the smell adds to the identity of the brand and it is used as a marketing strategy in advertising and empowering the brand image (Hultén, 2011). In advertising sector, adding smell to the product makes it more appealing for the consumers who are tempted to smell first, try later. When the smell is attractive, the possibility of the product to be tried and eaten is greater.

2.1.3 *Audition (Sound)*

Sound has the ability to change the mood of human beings and alter the buying behaviour. In late 1950s, the effect of the music played in a store in different environments was studied (Smith, and Curnow, 1966). This shows that studies about the sense of hearing have been conducted for quite a long time.

According to the review of Oakes and North (2008), several studies explored the influence of music in service and retail sector. The studies showed some discrepancies. However, it could be seen that there was a great deal of coherence between service sector and music and a positive influence of music. The inconsistencies mentioned above have been observed in plenty of studies. In reference to the above-mentioned information, Krishna (2013) states that there usually is no

universal right or wrong sound to be used in an environment. Instead, the type of target audience or customer or the seller's opinion of the customer defines the choice. In some environments, there can be more appropriate sounds in order to affect customers. For example, the sense of wine cellar may be boosted by classical music (Areni, and Kim, 1993) or a tea house might be more appealing (North and Hargreaves, 1996).

Music presents many opportunities for marketing experts in creating a desired selling environment and affecting the behaviour of consumers (Valenti, and Riviere, 2008). Music aims to lead customers to a state of mind corresponding to the products that are sold. For example, in a store selling guitars if rock music is played, the customer can imagine himself/herself playing that guitar himself. For this reason, the customer who hears the music and has a sensory connection feels the need to buy that guitar (Smith, 2008).

2.1.4 Taste

The tongue is the organ that is dedicated to the perception of flavours. Thanks to specific receptors human beings are able to perceive the flavour of what they eat. There are four areas on the tongue that perceives the tastes of bitter, acid, sweet, and salty (Lindstrom, 2005). Although it cannot be assumed that no one likes bitter taste and everyone likes sweet taste, the connection between the bitter taste and unfavourable food and the sweet taste with favourable food is an intrinsic reaction. Therefore, it can be concluded that reactions to tastes are not learnt or acquired based on experiences, but they are genetically programmed.

However, whatever taste people are fond of, food and sensations of taste have significant roles in their lives. Actually, all the tastes that humans recognize are related to the other senses, smell, vision, audition and touch (Liegeois, and Rivera, 2011). But taste has the strongest link with the smell. In the perception of taste, one prominent factor is the smell of the product (Small, and Prescott, 2005).

In supermarkets, some products are offered to customers to be tasted in order to increase the attraction. Taste addition or food or drink offering in a store can increase the value of the product in the eyes of the customers leading to build a positive brand image in their minds (Gobé, 2001).

The brand by its offering both creates a positive image and forms a brand-taste connection in the minds of the customer. Consumers are more informed about what

they eat and consume and also, they are pickier. Therefore, when companies try to add to the taste, they need to consider that fact and the quality of the product (Hultén et al., 2009). People may not be very attentive to what they see or hear but they can be more sensitive about the things that go to their stomachs. According to Lindstrom (2005) females are usually more sensitive to taste than males due to women having more taste buds than men.

2.1.5 Touch

In the womb, human beings' first sense that is developed is touch and it is the final sense that they lose (Krishna, 2011). Thus, it can be concluded that this sense has a more extended target market compared to other senses. The skin, joints, muscles, tendons are the organs for the sense of touch, and it is distributed in the body through these organs (Culbertson et al., 2018).

The sense of touch is also named as near sense or the proximal sense (Krishna, 2010). Although it is perceived as a single sense, it is closely related to other senses and it has a strong connection with them. Siegel (1970) states that according to Aristotle all types of sense perception vision included is mediated by the sense of touch. Many researchers have mentioned these connections among senses. By only looking at something or thinking about it, how something feels can be recalled or relived (Hultén et al., 2009). That is why the sense of touch has a strong effect on human beings.

Burke (1997) states that online shopping does not give sufficient information about the products and it is not satisfactory and entertaining as a physical store. It is not possible to be sure of the products' quality until the products ordered online and reach their addresses or until the consumers touch them. People by touching have the opportunity to feel and examine the texture and form of the product. A greater possibility of consumer satisfaction can be obtained by the companies that make use of touch experience (Hussain, 2019). Customers frequently try to understand the quality of the products in this way. For brands, material and surface can be some terms of sense of touch in product and service view, and sometimes the terms of temperature and weight are used. For example, high quality can be attributed to heavy objects (Hultén et al., 2009). Even when the packaging is perceived as quality, the customer

who have not experienced the products can be inclined to try the product and can create positive thoughts about the product.

2.2 Definition of Sensory Marketing

There are many ways and strategies in the market to develop a reliable relationship between customers and a product in an effective way. In order to do that, all the senses of human beings are addressed. Therefore, sensory marketing is one of the significant means to create loyalty against a product. In addition to that, the consumer will have an association with the brand through the means of senses.

When all human senses are included, sensory marketing concept is established and with all these five senses, the individual is probably going to compose memories and discover the mind. As a result, through sensory marketing, customers can have a stronger, long-standing emotional connection with the brands (Randhir et al., 2016). This emotional connection with the brand leads customers to create images in their minds directly related to the brand.

Kotler touched upon sensory marketing in 1973. As a matter of fact, in order to generate a buying action, product characteristics as the price and variety of the product are not sufficient; as stated by Kotler, a favourable atmosphere is required to be created. This could be built by taking action on the senses of the possible customers (the view, the display of the product in the department, the scent, the colours, the sound, the touch, the taste... etc.). The sense of the probable customers are the prominent features to be played on. Krishna (2010) characterizes sensory marketing as ‘marketing that employs the consumers’ emotions and influences their behaviors’. Sensory marketing entails the idea that marketing involves the consumers’ senses and changes their decisions, shopping actions and their perceptions (Krishna, 2012). The customers whose senses were affected generally change their decisions, consequently causing the change of purchasing actions.

Various authors in literature mention different strategies used to trigger the buying behavior of the customers. As stated by Dornetti (2018), sensory marketing includes strategies that target to tempt the customers, to use their senses, to affect their emotions and behavior. The customers before, during and after the purchase of the product admire the company due to the fact that sensory marketing generates good

experiences with the five human senses (Dissanayake, 2020). Using sensorial and emotional impact, consumers buying habits are affected by companies.

“Sensory marketing is a tool that is used by sellers to influence consumption habits by having sensory and emotional influence on customers.” (Erenkol, and Ak., 2015, p. 9).

Companies in order to affect buying decisions started to make use of five senses and within this concept have begun to develop sensory marketing strategies. Sensory marketing signifies the meaning that highlights the sensory impressions which lead to optimum emotional reactions so that the purchasing trend of the consumer could be altered (Yoon, and Park, 2012). In other words, sensory marketing is an implementation of sensation and idea of perception in marketing field, it could be applied to the perception of the consumers, their cognition, feelings, learning choices, or evaluation (Krishna, 2012). Accordingly, many brands offer unique experiences to their customers through their own scents, tastes and sounds and visual tools.

Erenkol and Ak (2015) states that sensory marketing is a comprehensive marketing technique targeting consumers’ senses by affecting their emotions in order to tempt them. Conventionally, consumers make their decisions depending on the learn-feel-act approach. They learn, decide, feel and buy. Nonetheless, according to a novel sensory branding model established on process of instinctive information, consumers first sense, feel later and finally they act (Yoon, and Park, 2012). First and foremost , they use their senses, feeling and getting into action to buy follow. This is the reason companies try to find new strategies to alter the way customers react when purchasing a product.

Sensory marketing is the marketing method that intends to tempt the consumers through utilizing senses to affect their feelings and behavior as the definition of the American Marketing Association states. Related to this, consumers’ emotional and behavioral tendencies are affected by the stimulants aiming senses of sight, hearing, smell, taste and touch. In a market, consumers’ feelings and behaviors are affected by loud voice, bright light, soft fabrics, fresh detergent smells or smell and taste of coffee (Erenkol, and Ak, 2015).

According to Hultén et al. (2009) sensory marketing can be considered as a method to formulate a company’s values and character in order to form a long-term

brand awareness and set up a sustainable brand image. Through the utilization of the consumers' senses, a long-term, brand image could be formed, and values gained about the brand create a brand awareness.

The trigger of the senses gives consumers ideas about the quality of the products, leading to different purchasing behavior. Bright light, soft fabrics, fresh clean scents and taste and smell of coffee are various tools to play with the customers' quality concepts as well. In this way, it could be easier to attract customers and appeal to their as many senses as possible. In order to research consumers' attitudes and inclinations affected by different stimuli, these are directed to their five senses (Erenkol, and Ak, 2015). All five senses are included and aimed to be stimulated in order to lure the consumers.

Experiential logic is a concept that could be attributed to a person's personal understanding of a diverse-sensory brand-experience and that is to say this logic helps individual to form values that are sentimental, cognitive, behavioral, symbolic or sensory (Holbrook, 1999; Schmitt, 1999). This experience turns to an image that creates mental notions and interaction ideas and contribution to service process, establishing an ultimate result of the multi-sensory experience in the viewpoint of the brand. This point of view can be described as a person's own beliefs, emotions, perspectives about a brand based on the complete experience (Kotler, 2000; Brakus et al., 2009). When consumers' five senses are stimulated, their judgments about the product becomes an image in their mind, providing values about the product, consequently, creating perceptions of their own (Hulten, 2011). Since companies address five senses, there can be more stable and positive reflections, as a result, multi-dimensional effects can be created in the minds of the people.

As a result, sensory marketing uses five human senses to trigger the motivation of the consumers to buy the product and enable them to create values about the brand thus creating a brand awareness and a robust brand image.

2.3 The History of Sensory Marketing

The competition increasing with the effect of industry revolution, the increase in the spendable incomes of the consumers, technological developments, the Internet being common, globalization, the rise in the level of consumers' education level, and the developments in communication caused marketing to go through some phases

(Alabay, 2010; Korkmaz et al., 2009). Marketers within these developments have started to search for some other methods.

A new era is starting for marketing where proven theories and concepts are reexamined. The divided markets with various parts where individuality and custom-made products are essential are taking place of the conventional mass markets (Gordon, 1998). As a result of this, the marketing strategies are changing worldwide according to the demand of the individualization processes. Gordon also states that; once dominant in the marketing area, conventional mass marketing, as a successful way to reach customers, has started to be queried.

During the post-depression period between 1940s and 1960s, product prices were more significant than products themselves. That time period was called meaningless with regard to marketing because customers shopping paid attention to prices, shops only sold inexpensive products (Krishna, 2010).

When customers decide on purchasing, they are affected by marketing communication such as printed advertisements and public relations. The cost advantages regarding mass marketing, particularly via advertising and the recognized “cost-per-thousand” criterion, are not capable of sending message to everyone. Only a few can be convinced. In the past decade, the use of advertising and commercials on TV has been questioned in Europe. The division of the market has been demonstrated through new channels of communication. (Joachimsthaler, and Aaker, 1997) According to the information obtained from the administrative records of the Turkish Press Advertisements Institution, in 2010, the number of newspapers and magazines in Turkey grew by 4% compared to 2008. A steep rise in 2011 has happened and the number of newspapers and magazines grew by 4.9% compared to 2010. (TÜİK, Printed Media Statistics, 2011) These statistics demonstrate that contemporary advertising methods were tried to be found because of the increasing ineffectiveness of TV commercials.

The expectations of consumers have become the determinants of which marketing tools will be used and how the messages will be conveyed. Some other factors affecting the customers other than marketing communications such as television commercials, printed advertisements and public relations are the views of their friends and families and their information and attitudes related to their past experiences. If the experiences meet the expectations, the customers will develop an emotional affection with the brand and their possibility of being an advocate of the

brand will increase (Kotler, et al., 2017). This growing fragmentation can be best seen as free newspapers at bus stops and underground stations, leaflets in newspapers with various themes such as beauty, home and health. During the past ten years, customer-specific marketing (CSM) and customer relationship management (CRM) have been used to indicate micro marketing and to improve more relationships. In order to develop customer relationships, many companies have used these strategies (Hultén, 2003). Since the conventional marketing practices have become inefficient the term “customer-specific marketing (CSM)” has added a new dimension to brand management. The strategies are used in technically advanced ways not in personal ways and this has been criticized by people observing (O’Malley, and Tynan, 2000). Thus, although the company’s aim is just the opposite, marketing has turned into a more depersonalized and technically improved form. That’s why the concept of being focused on the consumer cannot be put into practice. In time, the idea that brands need to exceed the concept of conventional advertising in order to persuade the consumers has started (Lorre, 2017). However, even though this idea began as a development, it was perceived as a radical change as well. According to some researchers, transformation from mass marketing to micro marketing and to relationship is perceived as a paradigm shift (Sheth, and Parvatiyar, 1995).

Some researchers claim that a firm’s marketing strategy and methods need to concentrate on a point of view that is customer-centric which depends on orientation and handling of relationships (El-Ansary, 2005). When in conventional marketing, the consumer is in a passive position, together with the changes in market structure, consumers have come to an active position where they can decide for themselves (Niccolo et al., 2013).

Some influential studies established the base for today’s research into sensory branding and the assessment of tactile and artistic clues in the retail world. While defining the atmospheric environment, Kotler mentioned human emotions in the store and made sensory descriptions. He wrote an article in 1973 called “Atmospherics as a Marketing Tool” which speculates that there is an instrumental relationship between the characteristics of retail or service environment and the customer’s decision-making in buying process. Although Kotler and his fellow Sidney J. Levy (1971), had already implied this theory earlier, it was 1973 when Kotler (1973, p.50). in his publication invented the term “atmospherics” that he describes as;

“The effort to design buying environments to produce specific emotional effects in the buyer that enhance his purchase probability.”

The researchers with this idea in mind, have started to do research about the influence of senses, within the store environment, on consumer behavior. In his study, Kotler envisages a link that connects atmosphere and purchase possibility (1973); emotional atmospherics of this model contain sensory features of space together with many other environmental and behavioral elements. As it is mentioned above, as the cost of reaching out to consumers through conventional media increases, the competition of retention has increased.

Starting with 1950s, brands had been working mostly on colours, designs of the products and printed advertisements. With the emergence of televisions, TV commercials and jingles were added to those studies. In 1970s, in order to find out how customers felt during tasting of the product, first blind tests were started to be conducted. In 1990s, the use of smells was added to the marketing strategies and since those years until these days, smells continued to be used as a marketing strategy. Currently, marketing experts know that the more they influence the senses of the customers, the more powerful the message is to be given to the customers (Valenti, and Riviere, 2008).

As it is stated in Hulten’s study in 2009; in order to deal with the challenges of future marketing, a framework of a sensory marketing is required. Accordingly, sensory marketing originates from five human senses; hence it is separated from mass and relationship marketing. A person’s sensory experience is produced in the human brain, in both hemispheres where psychological reactions, the mental flows and processes occur.

Sensory marketing originates from five human senses; hence it is separated from mass and relationship marketing. A person’s sensory experience is produced in the human brain, in both hemispheres where psychological reactions, the mental flows and processes occur.

Through time, one way of communication in marketing practices from organizations towards consumers has changed. The communication has transformed into a dialogue between organizations and consumers (Krishna et al., 2016).

The earliest field research was about the touch aspect. The need to check items haptically can be urged by inspirations regarding what Holbrook and Hirschman

(1982) present in terms of either shopper as problem solvers or consumers looking for fun, daydream, excitement, tactile incitement and delight. This division has been presented within the retail environment by the topics of shopping as work (Sherry et al., 1993) against the viewpoint of shopping as fun (Babin et al.,1994). Within the practical view, consumers are more interested in buying products in an efficient and convenient way to realize their aims with least hassle. However, as one consumer stated,

“I enjoy looking around and imagining what one day, I would actually have money to buy. Shopping . . . is an adventure” (Sherry, 1990).

This demonstrates shopping has a possible enjoyment value and the feeling of fun that is complete opposite of realizing a final goal (Holbrook, and Hirschman, 1982). This division complies with the idea in the psychological literature that there may be individual differences in inclination regarding the need to realize or the need for competence (McClelland et al., 1989).

2.4 Sensory Marketing Components

The colour, light, graphic designs, accessories, the decorations and hotness or coldness are features of a setting. In order to affect the customers' or employees' reactions, these features can be used to obtain a desired result (Bitner, 1992). These features mentioned form the ambiance of a store and as a result, the marketing of the brand is determined regarding senses. All sensory factors assist the consumers to buy when they perceive the brand and the store the brand is included. Everything around the customer plays a role in purchasing behavior. That is the reason companies pay attention to details such as decorations, scents, harmony of colours, sounds and temperature.

Each and every one of the human senses can revive the powerful memories and emotions that can influence easy or difficult decisions. The positive emotions created by the senses can affect the sales of the product in a favourable way (Boyle-Brayfield, 2008). The desired effect on customers lead them to stay in the store longer or better to buy more. The feeling aroused causes them to touch and feel the products. According to Howes (2013), the companies present products or put them in such areas

that the customers are stimulated and motivated in a cognitive and emotional way. The layout of the store is designed in such a way that the customer can see and touch and maybe taste the product easily or they will be tempted to do so. During shopping process, the road leading to purchasing goes through experience, and experience results from senses.

With the help of senses, the concept of sensory marketing has emerged. Contrary to conventional marketing, sensory marketing adds the experiences and emotions of customers to marketing process. People who market the products have been continuously realizing the significance of the mood of the store and how it increases sales (Milliman, 1982) and the contentment of the customer (Bitner, 1992). When the customers are in a good mood due to the atmosphere of the store, they tend to buy more because they feel well. They are inclined to use their five human senses to fully feel the products. The aim in sensory marketing, with the help of stimulants, is to create the feelings of curiosity and desire in the customers' perceptions. Having a pleasant store image highlights the brand equity, in addition to that it provides the brand to own a unique aspect that differentiates it from other brands (Dodds et al., 1991). The customer recognizes the brand with the help of sensory stimulants, prefers the brand to his/her liking. Through the senses, interpretations and preferences are created. The most important sensory interpretation is the sense of sight 58%, and the rest, respectively, is smell 45%, sound 41%, taste 31% and touch 25% (Lindstrom, 2007). That is why, the significance of all the senses in marketing is really extensive.

Taking this into consideration, "Sensory Marketing" concept can be analysed under five different headings. These concepts are "visual marketing" through the sense of sight, "audio marketing" regarding the sense of hearing, "olfactory marketing" using the sense of smell, "gustative marketing" related to taste, "tactile marketing" using the sense of touch.

2.4.1 Visual Marketing (Sight Marketing)

The most important sense among five human senses is the sense of sight (Lindstrom, 2007). The consumers look, see and decide on the products that they will try or examine. When they see a colour, shape or a specific visual effect, they recognize the brand. Furthermore, the fact that sight is a dominant element in generating brand awareness and customer experience has been shown by researchers (Randhir et al.,

2016). Customers remember their experiences, picture their memories that results in brand recognition. It has been also confirmed that visual stimuli affect consumer decision in terms of purchasing decisions, product selection, consumption and purchasing amount (Esmailpour, and Zakipour, 2016).

With visual marketing, even though the customers do not see the name of the company, they can recognize the company or the brand. Studies on memory retention demonstrate that rather than a message in just black and white, a message printed in colour is 78% more possible to be remembered. The effect of colours in the food and beverages sector is well-known and clearly defined. Several brands are linked to distinct colours that can be identified easily by the consumers; Coca Cola is red; Kodak is yellow and KFC red and white (Randhir et al., 2016). The consumers can recognize the brand as soon as they see the colours of the product. The colours, shapes, lighting, packaging of the products, product designs are important factors that should be taken into consideration in visual marketing.

2.4.2 Olfactory Marketing (Smell Marketing)

Even though the fragrances of certain products were studied in the past on package fragrance (Schneider, 1977) or men's fragrances (Schmitt, and Shultz, 1995); more recent studies concentrated on the smell in the environment.

The parts of the brain that creates emotions and memories are stimulated by smells. Approximately 10,000 scents can be identified and recalled by the human nose. Moreover, nearly 75 percent of the emotions are produced by the scents that are smelled (Randhir et al., 2016). Smells revive memories, for example, when in front of a bakery, the smell of freshly baked cookies always reminds people the cookies made by their mothers, and they tend to buy those the moment they get the smell.

In Brain Rules, the bestseller of Dr John Medina, Dr Medina states that in the food industry, using artificial smells to attract the consumers in open spaces, the underground or shopping malls is a well-known method of olfactory marketing. In local marketplaces in Turkey, the smell of Turkish coffee roasted and ground in the stores tempts customers to buy or drink the coffee at the place. Starbucks coffee is another good example of the effect of smell. The company started to roast the coffee beans in the stores rather than having them roasted outside the stores. The smell of roasted coffee beans is spread providing the customers a sensorial experience (Randhir

et al., 2016). The brand in customers' minds is remembered, and they are directed to buy the coffee.

Studies examining the effect of smells began 60 years ago. However, there are still plenty of questions without answers. Still, the effect of smells on the behaviours of the consumers has been proven. Initially, the positive effect of smells on the assessment of the product has been confirmed (Cox, 1969). Customers tend to slow down and are inclined to buy the product. The reason how the smells affect the people's buying behaviour may not be definitely known but it has been noticed that it has a desirable effect on the consumers. Spangenberg, Crowley and Henderson (1996) emphasize that on a point of sale, while walking through the shop windows, during the time spent inside the shopping mall or during purchasing, a tempting smell affects the customer in a positive way. However, the origin of the effects hasn't been established. Stores utilize smells or the effect of scents in order to attract the customers towards their products.

According to some studies, gender also plays a role in the reaction to smell. Women and men have different responses to smells. Hirsch and Gay (1991) have realized the fact that females are more responsive to smell than males. Nevertheless, the reaction of sexes towards a scent may change, for example a spicy scent might keep the men longer in front of the shelf than women (Wall Street Journal, 1990), whereas women are more susceptible to the smell of shampoo than men are. Spicy scents are more attractive for men, while fresh smells like shampoo or soap are more inviting for women.

It is maintained that men and women have different behaviours regarding smell sensitivity, detecting, recognising and identifying smell. It has been obvious that women are more sensitive thereby more superior than men in reference to odour. (Koubaa, and Eleuch, 2020). Furthermore, as Doty (1985) points out that the customer's age alters the perception because the sense of smell is disrupted as the individual gets older. The notion of smell changes as the individual gets older. As a result, the age factor should also be taken into consideration in marketing. Similarly, people who were born before 1930 tend to remind recognize natural smells, whereas younger people think of more artificial smells or smells related to food (Hirsch, 1992).

2.4.3 Auditory Marketing (Sound Marketing)

With the sound heard, some emotions are created on the individuals. This leads brands to determine a marketing strategy using sound. Krishna (2013) have defined the concept of sonic branding as, connecting a certain sound to a specific brand name. The sound of jingles or catchphrases heard previously can revive memories in the consumer's mind and some brands with their slogans can be identified easily. That means sonic branding isn't restricted to words alone; noise and sounds, as well as expressions, can be utilized to create sensory signatures and even in some cases they complete each other (Krishna 2013). The modification of the mood of the customers will automatically change their buying behaviour. In many sectors, it can be observed that music triggers buying conditions by increasing the experiences of the customers. Music can also influence the "crowd management" and results in the customers staying inside the store longer or shorter. For example, based on the studies of Roballey and Ali (1985) and Milliman (1986), a piece of music with a fast tempo will encourage the customers leave the store earlier, whereas, a slow music keeps customers in the store and makes them spend more time and money (Randhir et al., 2016). When the customers hear the music with a fast tempo, they tend to do their shopping as quickly as possible as if they are trying to keep up with the rhythm. However, if a slow music is being played, they would not rush and take their time while shopping.

2.4.4 Gustative Marketing (Taste Marketing)

Marketers using direct tasting (sampling) technique try to convince customers to buy the food or drink. Treats served as food or beverage in the physical environment where the purchase takes place can have an impact on the perceptions of consumers (Esmailpour, and Zakipour, 2016). This applies to the service industry as well as to the retail industry. Serving good food in an accommodation business creates satisfaction in consumers and causes the relevant hotel to be preferred again (Bozpolat, 2017). The brand should also pay attention to the cultural and religious features of the country that they are selling their products. For example, in a Muslim country, an animal product that is forbidden by the religion cannot be expected to sell much. Or

for example, Mc Donalds took the cultural differences into consideration and presented “Mc Turco” to Turkish market while they presented “Curry Burger” in Indian market (Bilgiç, 2014). The brands need to consider the cultural aspects and the visual features of the product as well.

2.4.5 Tactile Marketing (Touch Marketing)

When choosing a product, consumers use their sense of touch. The feeling of touch is also perceived as compassion. Touching takes place with the help of the skin. Under the skin, there are 50,000 receptors and stimulants perceived are transmitted to the brain with the help of these receptors (Lindstrom, 2007). When the product is touched, the feeling of smoothness, the fabric or material gives an impression that the products are expensive or not (Randhir et al., 2016). On the other hand, the feeling the products gives when touched, can create pleasure. For example, the contours of a Coca Cola bottle create pleasure when it is touched. Moreover, when it is held at night in the dark, you can recognize the bottle (Sayadi et al, 2015). Touching alone may help the consumers experience different emotions. It can also remind them of the brand they wish to buy. It has been proven that the sense of touch does not only provide information about the product but also creates hedonic effects (Peck, and Wiggins, 2006). This creates a competitive superiority for physical stores compared to online stores. Consumers buy the products in physical stores by touching, feeling and trying (Hulten, 2011). It is possible to make inferences about the quality, price and durability of the product with the sense of touch (Çakır, 2010). Touching the fabric, feeling the softness or the texture of a product results in the increase of purchase.

2.5 Aims of Sensory Marketing

Djurovic, (2008) states that the aim in sensory marketing is to enable the brand to have an unforgettable experience by transforming the brand into an emotional atmosphere. Working on the efficiency of the design and packaging of the products and making them attractive in a commercial environment can be a way of triggering consumer’s senses. Sensory marketing ensures the brand sell a product as premium and create a strong competitive environment (Uddin, 2011). It is in a way to be able to address the consumers’ motives and senses with the intent that the companies can sell

more products. Creating a powerful competitive environment will help the companies to find new market opportunities, to influence the consumers' emotions. In a research published by European Business and Management Magazine, it has been stated that emotional responses build a strong relationship with consumer habit behavior (Abideen, and Saleem, 2011). This emotional relationship forms the foundation of sensory brand. This focuses on not what the product does, but what it means for the user and the ability of strengthening the emotional bond between the user and his/her desires (Panagopoulos, 2014). A powerful bond between the consumers and their wishes will change their consumption habits and here, the goal is to focus on the mind and heart of the consumer for the sake of increasing the sales and profit.

Moreover, not only it provides the product to be sold, but also it leads to the fact that the customers during communication with others defend the brand. Consumers embrace, like and make the product more popular. Every customer becomes like a voluntary advocate. It becomes hard to give up the brand. That is why, another goal of sensory marketing is creating a strong, positive and permanent connection between the consumer and the product that would make the consumer just glance at the competing product but go back to the product. For example, once a person masters in Apple's icons and installation (settings), a resistance is formed against learning a new system. This process has become intuitional and most people do not wish to interrupt the daily flow (Lindstrom, 2007). The connection mentioned could be called a cognitive awareness of the individual that is the focus of sequence of thoughts and data that examines and adopts the information about the brand.

As Panagopoulos (2014) puts sensory marketing has been defined as the way that targets these goals:

- Measuring and explaining consumer emotions
- Exploring new market opportunities and making use of these opportunities
- Creating opportunities in order for growing the profitability of the product to the highest level
- Providing the first purchase and repurchase (brand loyalty)
- Ensuring long-term product successes.

Giboreau and Body (2012) state that a company that embraces a sensorial marketing method allows the consumer to have the ability to assess the brand not only on cognitive aspects but also on others. Deliberately or not, the sensorial data arrives

naturally to the brain and makes a favorable emotion for the person, which is lacking in conventional marketing methods. Sensory marketing can target the memories of an individual. In conclusion, an unforgettable experience that can shape a link to the product or service, escalate pleasure and affect the consumer's behavior of purchase. For example the experiences people had in the past, might remind the senses they had.

Lindstrom (2007) expresses that sensory marketing adds the brand four important elements. These are:

1. Sensory link
2. An optimum equilibrium between perception and reality
3. Creating a brand platform for extensions of the brand
4. Being a registered trademark

Brand perception is how an individual view your brand. Companies try to instil the desired perception in customers. Thus, sensory marketing presents the most binding potential of creating a connection between the brand and the customer. The aim is to create a brand loyalty built in long term. To create a bond like this and addressing the senses need to have two main factors (Lindstrom, 2007, p. 121);

- The brand should be unique
- It should turn to a habit

Sensory marketing that is currently started to be used in the market conditions have some aims. Among these aims, the primary ones are brand image, creating identity and sensory signature, affecting consumer perceptions and decisions positively, creating consumer loyalty, attracting consumers to the sales point and extending their time of stay in the physical environment, achieving long term successes.

In sensory marketing strategies colours, designs, shapes, lights and atmosphere are really important in leading purchasing actions of consumers. How the individual perceives the brand is a complex mixture of every interaction the consumers had or did not have with the brand. Consumers are influenced by shapes and colours. They are sensitive to music. They are charmed by movement (Roberts, 2006). While defining the sensory marketing, Krishna (2010) emphasized that products and services are sold in nice environments, and affecting consumers' perceptions, preferences, past experiences and change of their consumption habits is required because the aim is to overcome the fierce competition. For example, Coca Cola created marketing strategies by using senses (the sound of bottle cap opening, bottle design, colour of packaging)

and using this way, gained an advantage over its competitors. The Coca Cola commercial takes place on a coast or in a home, a family having dinner. Because people have been watching the same advertisement for years, both their audio and visual memory have the sound of the cap opening and they do not even need to see the commercial. In other words, the aim of sensory marketing is to convey messages. Right hemisphere (right brain) is used to motivate the consumer and consequently creating a bond with the customer and induce the product and convince the customer to buy it (Costa et al., 2012). The aim is to build a sensory experience that makes the connection with users more powerful through a process that includes both the emotional and rational parts of the brain. Within this process, the subconscious part speeds up the decision-making. Because today the markets are more global and competitive, a sustainable relationship between the brand and the consumer is continuously influenced by emotional factors instead of rational determinants.

2.6 Creating Brand Image, Identity and Sensory Signature

According to Kotler, Armstrong, Wong, and Saunders, (2008) a name, term, sign, symbol or a mixture of these terms describes a brand and that defines the manufacturer or the seller of the product. Brands are distinguished from their competitors as well. These differences may be practical, emotional, symbolic, rational, or concrete which can be related to the product efficiency of the brand.

Recently, most companies notice that gaining the customer's loyalty is a necessity. The new target for the companies is responding a reciprocal interest, customer-oriented win-win idea (Doyle, and Stern, 2006). Building customer relationships is a prominent way to last in competitive markets (the markets where the products are easily imitated). "One-shot deal" idea is a thing of the past. The brand integrity has to support the customer integrity so that it is powerful and profitable for the company (Kapferer, 2008). In order to maintain a special relationship and loyalty, some steps should be taken, and the main aim is to build a brand loyalty.

A customer would tend to purchase the product (or the service) paying a higher price if he is faithful to the brand by sharing values with the former. It is named as the brand leverage. In fact, since the product satisfies the psychological needs of the customer, it will look as more charming for the customer (Doyle, and Stern, 2008). In time, customers develop relationships with brands, and they feel happy with the

products and for this reason they do not criticise or evaluate products merely because of their qualifications.

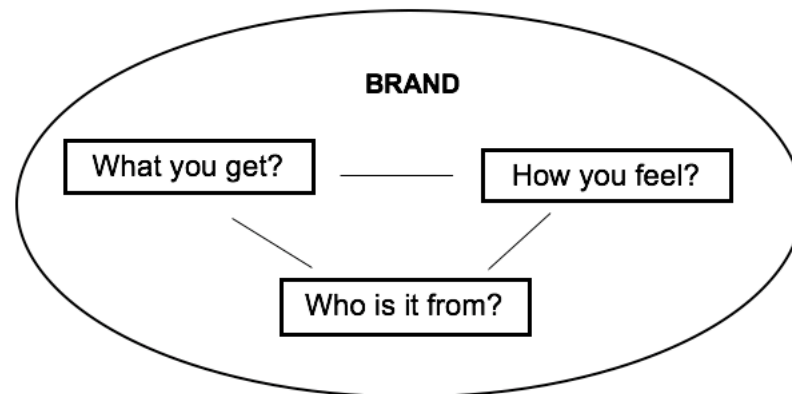


Figure 3. WYG-HYF-WIF model (Source: J. Knowles, 2001, p. 32)

Knowles (2001) states that there are three dimensions the customer considers when he is buying a product, and this is displayed by the previous brand model. The first dimension refers to the product itself “what you get”, the second “how you feel” is about satisfying emotional and psychological demands of the customer, and the final one, “who is it from” reveals the values symbolized by the company for the customer and the reliability it has for him. According to Knowles (2001), creating a successful brand will enable the company to satisfy the requirements of the customers and to share values held common with them. Therefore, the company can create a powerful brand identity since a powerful brand has a prominent role in business because of its capacity to convey meanings and common values.

There is a value of the brand and the term is brand equity. Aaker’s (1991, p. 15) brand equity definition is:

“A set of assets (or liabilities) linked to a brand's name and symbol that adds to (or subtracts from) the value provided by a product or service...”

Strong brand equity leads to greater brand loyalty. Kapferer (2008) emphasizes that a company aims to create a sustainable brand equity in long-term as the central part of its strategy. Because individuals require to have a reason for their purchase and companies use the brand management to meet this requirement.

The brand image is the feeling when the consumers hear the name of the brand (Hawkins et al., 2004). The brand image can be empowered by the studies addressing

the senses and emotions of the consumers and it enables the brand to be memorized (Liegeois, and Rivera, 2011). The idea of brand image evolves incessantly, and it is challenging for authors to conceptualize the term since the process of the consumer understanding is based on inner experience rather than fact. Thus, only a dominant image can be mentioned, not a single image (Govers, and Go, 2009). In addition to that, as Kotler (1991); Keller (1993); Aaker (1996) stated, in image measurement both a rational and an emotional factor are measured. However, when the consumer has created a group of associations on a brand, this is the definition of brand image. In the literature;

“the collection of beliefs, ideas and impressions of an individual has about the brand is the destination brand image.” (Crompton, 1979, p. 18).

The product’s qualifications, advantages, usage positions and marketer features are interpreted in the target market as the brand image that is the illustrative memory of a brand (Liegeois, and Rivera, 2011). Brand image can be defined as the representation of the brand that is in the minds of customers as a cluster of ideas and connections. Contrarily, Kotler (2000) maintains that brand identity is how the company wishes to appear in the market not what customers feel about. Similarly, an identity of the company is created by the point-of-purchase features. These features can be named as sensory signature. If a product or a line of products is given a specific and noticeable sensory signature and if the perception relates to the brand, this will be an effective branding method (Thomson, 2016). A sensory signature prominently increases reputation and as a result, the brand success can be increased.

In order to attract customers to the shop instead of the next one, a company has to create persuasive plans of action. According to Kotler (1973), a shop atmosphere can be defined as a place that stimulates pleasure and excitement to incline the possibility of purchasing and that environment should emit significant effects. The desire for the customer to enter a shop is created by a nice scent, songs or original visual factors. It attracts the consumers’ subconscious. When brands are considered, instead of the store, from a broader perspective, Hultén states that (2011) brands need to utilize sensorial methods regarding human mind and senses. These methods are significant because they are long-term and they can enable to differentiate a brand, exhibit its identity and enforce its image.

The intense competition introduces the issue of loyalty. Because customers are given many choices, they switch brands frequently, and they become butterfly customers. The term “Butterfly Customer” was first introduced by O’Dell and Pajunen (1997, pp. 1-2) in their book titled with “The Butterfly Customer- Capturing the Loyalty of Today’s Exclusive Consumer” described the term as:

“...people that flit from one store or supplier to another, always searching for a lower price or a different shopping experience. They have no loyalty to any particular store and are always in search of a better deal or a new promotion.”

Loyalty can be built up if sensory marketing is used at the point-of-purchase. It can present customers new experiences. According to Reinartz and Kumar (2002) because butterfly customer represents disloyal customer, this group of customers are potential customers for any brand. These kinds of customers look for different emotions and experiences. They will come back to the store wishing to stroll through when they have nice feelings in the atmosphere. When customers have pleasant feeling about a store, they have a link with the brand.

Integration of five senses in the brand’s platform will create a shift from “unique selling proposal” to a “holistic selling proposal”, thus, the future brands will be developed holistically (Lindstrom, 2007). Based on this integration, five human senses of the customers will be stimulated so that they would be directed to change their purchasing behaviour. The backbone of the sensory brands are visual, auditory, aromatic, sensual and neural identity elements (Dițoiu et al., 2014). Sensory signature is the identity that is given to the company by sensory features. For example, in all Tommy Hilfiger stores using only one scent leads customers identify the brand with the perfume and enables brands to have a sensory signature. In short, the companies that have powerful sensory marketing strategies can have a robust brand image, organization identity and sensory signature.

2.7 Use of Sensory Marketing in the Marketing Activities

Sensory marketing is used to create stimuli that affects subconscious which controls the perceptions of the consumers’ senses (Krishna et al., 2016). Consumers’ senses are stimulated by the effects that are created by marketers. The information of

what kind of effects do the senses have on which type of consumers help the strengthening of marketing strategy of an organization (Hulten et al., 2009). Human responses to various effects change from one another; this information helps companies to form their methods. In order to be able to influence consumer perceptions and decisions in a positive way, ICA Sverige, a Swedish retail chain, has decided to EU sensory label the products. In these labels, the statements that promote senses have been used, for example, instead of Florida oranges, juicy oranges or instead of sea bass fillet, plump sea bass so that the consumers have been attracted to the product (Krishna, 2012). Using adjectives describing the product help the consumers to have an image in their minds, to tempt them or help them remember their memories or experiences. For a long-term satisfaction of the customer, the stages of selecting, buying, consuming and aftermath is as important as profit and sales in experience marketing. Because it appeals the emotions of the customers, excite them, provoke their minds, marketers use experiences to design products and services (Gobé, 2007).

Reactions to the function of subliminal stimuli is underlined by the researchers in marketing. Krishna apprehended that when the senses are harmonious, they are intensified in combination. When cinnamon is considered as an example, because people have a connotation of cinnamon with heat, it can be used for a heating pad to attract the consumers, and they can be convinced that the heating pad can be more effective with the effect of cinnamon. The power of this influence is that when consumers watch the commercial, they might develop a resistance to the ad. However, when the association is clever and skilful, consumers will be more open buying the product without realizing that it was a marketing message. For example; fashion and styles are considered in the process of the consumer satisfaction, and the process is more important than the satisfaction itself. Experience marketing is original because it appraises the customer by giving the chance of explanation and having pleasure and it is shown as “IKEA’s effect”, that means the customers of IKEA value the products more since they put an effort in installing the furniture instead of having it installed by someone else, or if it is a kitchen, installed by professionals (Krishna, 2010).

2.7.1 Visual Marketing

The most important factor that determines the success of marketing strategy includes visuality; colours, designs and shapes. Among other senses, the most important sense is the sense of sight. (Lindstrom, 2007). Because the sense of sight is essential, it is frequently addressed by the marketing professionals.

In several sectors for consumer goods, merely visual features of the goods are concentrated by the companies and other sensory are generally neglected. As reported by Krishna, this gap should be attended by product designers and professional marketers. The sight of a product, or a dish becomes appealing when it is attractive for the customer. Before people taste a dish or even smell it, they use their sense of sight to decide whether the food is a quality one or not. The sense of sight leads the other senses, as a result they decide on which products they are willing to touch and what they anticipate when they touch them (Krishna, 2013). The appearance of the product, be it a dish or a product that is planned to be bought, is substantially important for the consumer.

In visual marketing, colours, shapes, designs are among the factors that reveal the success of marketing strategy (Valenti, and Riviere, 2008). The visual features of the product attract the customer, the shape and colours catch the eye, direct the customer towards the product. By using the purple cow in its advertisements, Milka Chocolate has turned it into a brand. When the purple tone used in other advertisements was banned, a connection was created between Milka chocolates and purple cow in the minds of consumers, and Milka was remembered wherever there is that hue of purple (Özer, 2012).

Packaging provides a visual prompt for the product. In order to create a visual impression of weight about the product, packaging can be used, and an image of the product can be placed at the bottom or on the right side of the package or printing an image of the product in the background or a picture in motion (Krishna, 2013). If the product is relatively heavy, the idea that it is a quality one. The visual effect that gives the product the impression that it is heavier is realized with the help visual images.

Colours play an important part in visuality. The reactions customers give to colours originate from their learned identities. For instance, the colour of mourning is black in Western cultures whereas it is white in Eastern cultures (Solomon, 2003).

These kinds of cultural aspects are also taken into consideration by companies especially before entering a new market.

As well as colours, shape is a prominent factor affecting the consumers. The shape of the product can make a difference in preferences. Cars can be categorized by their shapes in automotive sector. Beetle, Mini, and the admirable Hummer are all famous among people for their shape. In addition to that Lamborghini has its remarkable shape with its doors opening upward. This led the company to create a niche market (Lindstrom, 2010).

2.7.2 Sound Marketing

Using special sounds in the advertisements or in the stores can engage the emotions of customers and even the kind of music makes a difference (Gobé, 2009). The sound the customers hear when they are shopping creates an effect on purchasing behaviour. According to Kotler (2001) in order to have a favourable atmosphere in a store, music is a powerful motivator that causes people to spend more time in the store. People get pleasure as they hear a piece of music they like and enjoy spending time in the store while listening to that music. When there is a music on in the store, customers tend to stay longer there (Krishna, 2010). The customer has fun listening to the music shopping at the same time.

As it is mentioned, knowingly or unknowingly consumers' behaviours can be affected by music, it can also influence emotions, and this can form a group belonging sense. When a familiar song is played in the store, customers can identify the music with the brand and form a connection with the brand, for example, some fashion companies such as New Look and Zara have their own playlist changing depending on the time and customers (Clow, and Baack 2010). Music changes the mood of the individuals and it has an effect on human attitude.

The type of music and the tempo plays an important part as well. As for the music with a high volume, it is confirmed that it increases the consumption of drinks of the customers in a bar (North, and Hargreaves, 1996). Slow music makes people not to rush, when shopping, they tend to walk slowly.

Currently, research about the power of technology on purchasing and consumer behaviour has been carried to different domains; researchers have been studying even the use of sound during online shopping websites (Fiore, and Kelly, 2007). The sounds

when clicking on the icons can make a difference on shoppers, if these sounds are somewhat annoying, you tend to leave the website sooner.

2.7.3 *Smell Marketing*

The sense of smell is a kind of checking and understanding mechanism to see if a product is fresh or not. Or, the smell of smoke can be an indication of a dangerous situation. Or else, smell of freshly cooked or baked food can be a reminder of a good experience. People's memories can be awakened by a scent they smell, and this can affect their buying decisions (Lindstrom, 2007). With the identification of the smell of the store or the brand, customers may wish to repeat their visit to the store. Scents stimulate the emotions, lead consumers to imagine and to have connections with previously experienced events (Roberts, 2010). In the brain unconsciously, previous experiences associated with the scent are remembered. Scents stimulate the emotions of the people changing their moods (Bone, and Ellen, 1999). It is more probable for the customers to recall the products and the knowledge about them if they are fragrant (or not). This is valid even the scent of a product is not offered to the customer a second time or even two weeks later when the product is reoffered, and the memory is tested (Krishna et al., 2010). The fragrance is memorable for a long time and it awakens the similar emotions every time it is smelled.

Sometimes a fragrance can be used as a symbol of a brand, when this scent is smelled it is connected to the product, so it can be viewed as the logo of the company. In a way, the product is not in need of a logo to be discriminated among other products (Hultén, 2009). For example, the fragrance İpekyol uses in its stores attracts customers and make them stay in the store longer. In magazines and newspapers, perfumes, skin care products are given as testers or as the exclusive Italian brand Giorgio Armani does, perfume is given as scent strips. This strategy creates desirable results for the sector of advertising (Hulten et al., 2009). Testers and scent strips given with the magazines gives customers the chance to try the product and stimulate their sense of smell. Citroën, the French car manufacturer uses different scents for the interior of its cars, namely vanilla, lotus flower and lavender and more to be chosen by the consumers. Different fragrances in the interiors of the cars address different tastes of customers and lead to the purchase of the cars. As mentioned by Krishna (2012),

before, these fragrances provide a preferable atmosphere and a good mood to customers.

2.7.4 Taste Marketing

The sense of taste that is created by the taste buds is especially important for the brands in food and drinks sector. Regarding this, Coca Cola with its unique taste has its own identity as a brand (Jayakrishnan, 2013). The brands that are in food and drinks sector present their new or remanufactured products to the market, they offer their products in the supermarkets or at the point of sale. The customers taste the products even though they did not have any previous knowledge about the product, and they are inclined to buy the product. Characterizing food or dishes with intense and expressive words and names creates a difference when customers choose and they are attracted to the products in the restaurants and markets. The studies show that this kind of strategy increases restaurant sales as 27 % (Wansink et al. 2004).

Another point to be considered is that the brand / company should have knowledge about the people's religious ideas of the country that they entered. For example, if a brand that enters the market of a Muslim country uses an animal product that is religiously forbidden, it cannot be expected to be successful in that country. The cultural structure of the country whose market is entered is also really important. The brands of Mc Donalds and KFC take these cultural differences into consideration and prepare menus accordingly. They can offer "Mc Turco" or "Chicken over Rice" menus and drinks like "Ayran" in Turkey.

Lund (2015) states that even the products that do not have anything to do with taste are added a sense of taste by the companies in order to address the gustatory sense. DKNY brand, in order to lengthen the duration of the consumers' stay and to increase their comfort in the store, they spared an area for a cafeteria (Gladwel, 1996). It was determined that during the launching of Skoda Fabia, a real size cake of a Skoda car increased the visits done to the distributors as 160% (Hussain, 2014). This method is frequently used to add the image of the food to the product or to give a smell to create an image. For example, the cosmetic brand Dr. van der Hoog's line of facial masks has used the pictures of different fruits such as coconuts, raspberries and cherries on their packaging to associate the tastes (Lund, 2015). There are other examples like soaps smelling like strawberries or body lotions smelling like oranges.

2.7.5 Touch Marketing

Skin is the largest organ of the animals and humans. And under the skin there are 50,000 receptors. Thanks to the stimulants, perceived stimuli are transmitted to the brain through these receptors (Lindstrom, 2007). The receptors transmit a pleasant or unpleasant feeling to the brain as a result of touching.

In most of the researches done about the sense of touch, it has been concluded that the effect of the feeling of touching is quite important for the customer. According to Peck (2012), with the help of the sense of touch, the customer's negative opinion about the product is turned to a positive idea and customer's opinion of trust in the product is increased.

The goods manufactured using rare products or the products with a difficult manufacturing process are generally expensive and they are defined as luxurious by the customer. For example, the fabrics produced using silk and the clothes made with silk or silk upholstery have generally been defined as luxury, it has been considered that they are attracted by the higher income group in society (Lindstrom, 2007). Therefore, the feeling of silk when the customer touches the product gives a sense of luxury and if the price of the product is affordable, the customer would be inclined to buy the product because of the sense of touch.

Some brands such as Gap, Banana Republic attached importance to the layout of the store and placed their products on the shelves that the customers can touch (Lund, 2015). Ikea encouraged consumers to buy mattresses by providing them the experience of sleeping in their beds at night in the store (Hulten, 2011).

CHAPTER 3: SHOPPING MALLS

3.1 Definition and Types of Shopping Malls

Shopping centers are complexes designed, built and managed by one center, and that have retail stores and various service shops (Cengiz, and Özden, 2002). Zhuang et al. (2006) defined shopping centers as units where consumers can find almost any kind of product, and where retail shops take place but designed, developed and managed as one big unit.

Should a more comprehensive definition be made, shopping centers are “complexes built generally out of the city center, managed from one central office, that contain many department stores, retail shops, entertainment centers, movie theaters, exhibition halls, cafeterias, restaurants, banks or ATM’s, drugstores within an integrated architectural structure (Akibay et al., 2007).

There are two main commonly used classification systems in order to classify shopping centers at a global level. The first one of these is the classification made by the International Council of Shopping Centers, ICSC. This council classifies the shopping centers according to their gross size to be rented (ICSC, 2014). Whereas, the second classification system is the one made by British Council of Shopping Centers, BCSC, that the location and function they have is taken into consideration (DTZ, 2013).

3.2 Shopping Malls in Turkey

According to literature, there has not been a classification of shopping malls and a definition regarding shopping malls specific to Turkey. For the shopping malls in Turkey, classification and standards of ICSC that have been created for European countries have been used. According to the definition and standards based on the classification of shopping centers established by International Council of Shopping Centers, ICSC, shopping centers in Turkey are grouped under two main headings as “traditional” and “specific”.

Table 2. Types of Shopping Malls (Source: ARASTA 2006 June-July)

FORMAT	TYPE OF PROJECT		TOTAL RENTABLE SPACE
TRADITIONAL	Very Large		80.000 m ² and above
	Large		40.000 m ² - 79.999 m ²
	Medium		20.000 m ² - 39.999 m ²
	Small (convenience-based and comparison)		5.000 m ² - 19.999 m ²
SPECIFIC	Retail Park	Large	20.000 m ² and above
		Medium	10.000 m ² - 19.999 m ²
		Small	5.000 m ² - 9.999 m ²
	Outlet		5.000 m ² and above
	Theme (Fun Oriented)		5.000 m ² and above
	Centre (Not Fun Oriented)		5.000 m ² and above

Standard determination studies categorized shopping centers under two general groups as “traditional” and “specific”. While traditional shopping centers are classified as “very large”, “large”, “medium” and “small”, small shopping centers, among themselves, are divided as selling “convenience-based” and “comparison” commodities (supplies) (ARASTA, 2006).

3.3 Development of Shopping Malls in Turkey

When the historical development process of shopping centers on a global scale is examined, it is known that the first steps in the transformation of commercial areas into shopping centers were taken in Europe (Birol, 2005). Socio-cultural, economic, technological developments in the world, in addition to this, social changes brought by urbanization and industrialization have caused changes in consumption patterns and habits (Mert, and Altunışık, 2000). With the changing needs of the people shopping from grocer, greengrocer and with the effect of outward urbanization (suburban lifestyle), shoppers started to shop from shopping centers. Passages and big stores (bon

marche), which are the first counterparts of the contemporary shopping centers in terms of both its relationship with the urban space and its architectural form, appear in Europe in the 19th century (Biol, 2005). According to Gruen and Smith (1960), shopping malls will thus accommodate the necessary places and opportunities for participation in social life, seen in the history of the Greek Agora, medieval market area or city squares.

Socio-cultural, economic, technological developments in the world, in addition to this, social changes brought by urbanization and industrialization have caused changes in consumption patterns and habits (Mert, and Altunışık, 2000). With the changing needs of the people shopping from grocer, greengrocer and with the effect of outward urbanization (suburban lifestyle), shoppers started to shop from shopping centers.

The first traces of shopping centers in Turkey were seen during Ottoman Empire period. During that period, grocers and other tradesmen gathering together in places like Grand bazaar (covered bazaar) resulted in formations similar to shopping centers (Cengiz, and Özden, 2002). Covered bazaars where handcrafts and food stuffs sold under the same roof and that presented the chance of business connections can be counted as the first hypermarkets of Anatolia (Köksal, and Tıǧlı, 2018).

While a group of the researchers studied in the literature accept Grand Bazaar as the first shopping center of İstanbul, some studies discuss that Grand Bazaar of İstanbul is not similar to modern shopping centers regarding physical (architectural design), social and cultural sense, other than the fact that they are “a group of stores together in a closed area” (Özaydın ve Firidin, 2009).

In 1950s Migros entered Turkey for the first time and then Gima followed it. On the other hand, social and economic changes in the society, and the need to meet the demands and interests of consumers in imported products caused shopping centers to be opened (Cengiz, and Özden, 2002; Alkibay et al., 2007). This retail infrastructure created became a foundation for the shopping centers to be opened in Turkey. Turkish society have witnessed a fast transformation and economic growth because of structural changes in economy since the middle of 1980s. Fundamental reforms in economy and market-based, liberal, outward-oriented development strategies enabled international companies to make big investments and these companies' investments could be made possible through partnerships with Turkish companies (Erkip, 2005).

In this sense, the first example of an organized shopping center in the world was Galleria which was founded in İstanbul in 1988. Although the course of developments in retail sector in Turkey is slow compared to other countries, it could be maintained that with the start of 20th century, shopping centers gained momentum in the sector (Alkibay et al., 2007). With the liberal economic policies adopted in 1990s, lifestyles and demands in society started to change. As a reflection of the opening of the economy to foreign capital, consumers' interest in imported goods has increased and shopping centers (shopping malls) with these products have started to be in demand. Galleria in İstanbul (1988) and Atakule in Ankara (1989) have been accepted as the first examples of shopping centers in Turkey (Ceylan et al., 2017). Even though global crisis in 2008-2009 affected Turkey, a fast increase was observed in the number of shopping centers in Turkey between 2000 and 2001 which was the second period of retail sector. Even during 2008-2008 global crisis period, opening of 70 shopping centers in Turkey demonstrated that shopping center development was really quick.

Table 3. First Shopping Malls of Turkey (Source: Özyaydın, and Firidin, 2009; Özsoy, 2010; Akıncı, 2013)

1988 İstanbul	Galleria	First in the market
1989 Ankara	Atakule	First modern shopping mall of Ankara
1991 Ankara	Karum	First business and shopping mall of Ankara
1993 İstanbul	Capitol	First modern shopping mall of Anatolian side
1993 İstanbul	Akmerkez	First mixed-function shopping center.

Shopping centers opened between 1990-2010 in Turkey can be defined in three groups. The first group that could be called as integrated shopping centers are located in a close proximity to the city centers and their sizes change between 2,500-5,000 m². The shopping centers in this group have a more closed and inward-oriented building style. The second group shopping centers are mostly in the urban periphery and/or relatively far from urban centers or they are mostly designed to be independent from their surroundings. Lastly, the third group are comprised of multipurpose shopping centers which contain various uses such as entertainment venues, residence and retail stores, where semi open-closed constructional style is preferred, and that have high accessibility (Ceylan et al., 2017). The shopping centers opened recently are included

in the third group. It could be observed that between 1990-2000, shopping center investments were mostly directed towards smaller cities.

İstanbul, which has around 30% of shopping centers of the whole country, has been stated as the main actor of shopping center development boom especially during the last 10 years (AARREC, 2015). Even though shopping center concept entered Turkey quite late, Akmerkez in 1998, Armada (Ankara) in 2004 ranked number one in the contest of Europe's best shopping centers organized by ICSC (International Council of Shopping Center) regarding the criteria of location, layout, planning, architectural structure, renting strategy, customer commitment, return of investment and being an example to other shopping centers (Alkibay et al., 2007).

There emerges a competition between old and new shopping centers. The new ones cause the old ones to close down. During this period, instead of retail stores, it can be seen that shopping streets (high streets) such as Bağdat Street and Nişantaşı Street have become prominent (Özüduru, and Yalçınar, 2013; Erkip, and Özüduru, 2015).

CHAPTER 4: GENDER

4.1 *The Influence of Gender and Shopping Motives*

In today's competitive environment, marketing efforts for female consumers have been increasing the sales, market share and profits in a fast way because female consumers make 85% of all the purchasing decisions or affect them. Even the products traditionally accepted as men's such as cars and computers are bought by women or their possibility of affecting purchasing of these products is really high (Özdemir, 2005).

Marketing directed to female consumers has a positive outcome on the sales and the profits of the companies because of the fact that women have been joining the work life and their economic power has increased.

Moreover, women consumers are more lucrative consumers. That is, for each marketing investment, every one of women consumers has a higher yield for the company. The reasons of this can be explicated as follows:

- Female consumers as more profitable customers
- Higher customer satisfaction compared to male consumers
- Better return of investment in marketing (Barletta, 2000, 2003)

When traditional family structure is taken into consideration, it can be seen that woman because of her position and duties in the family is more dominant in purchasing.

Usually, women do the shopping for the home and they do shopping in a planned way (Baysal, 2005). For example, shopping for the small home appliances is dominated by women. As a mother or wife, a part of their household duties is to provide for the health, warmth and balanced nutrition of the family. Starting from the nutrition of the family, buying t-shirts for the man of the house to buying shoes for the children, everything depends on women's choices (Barletta, 2003).

Underhill (2004) claims that it is not possible for a male to enjoy a shopping mall because the shopping mall and marketplace designs are entirely for female customers and men prefer comfort over visual design; there is a linear relationship between the comforts of the shopping mall and liking it.

Likewise, Dholakia (1999) states that married men undertake the duties of meeting the needs of the house reluctantly. Babacan (2001) studied the shopping behaviours on special days and determined that women behaved in a more hedonistic way compared to men. Hedonism, when handled as an unusual consumer behaviour, as a result of the research, it has been shown that female consumers behave more unusually than men regarding shopping.

Researchers find it worthwhile to study the role of gender in consumer behaviour (Palan, 2002; Stern, 1988). In fact, because it can create an important effect on consumers' behaviour, the roles that gender play have attracted the interest of marketers (Stern, 1988; 1999).

A woman who likes shopping aims to indulge in a shopping activity spending more time in the shopping mall, visiting more shops and shopping more often. Men, on the other hand, consider shopping a way to solve a problem and are unwilling to prolong their shopping activity even if they would like to go on. This is logical, when the idea of socialization is taken into consideration, according to the gender role theory, women and men embrace different attitudes (Severiens, and Ten Dam, 1998).

4.2 *Brand Loyalty and Women*

Women tend to be highly focused on brand loyalty and relationship. Marketers, in order to have a potential of lifelong partnership with women, should develop their relationships with women (Blackwell, 2001). For the companies or brands that do not establish trust, it is very difficult to be able to compete. For example, Avon which is a brand mostly for women, had a programme against cancer that forms the pillar of the company (Barletta, 2003). According to the studies, 41% of women turn to brands that are more responsive to environmental issues. One out of five women agree that social responsibility of the company is the main factor affecting her purchasing decisions (Krabach, 2002). It is more probable for women than men to shift from one brand to another only for their environmental concerns. For that reason, a product and its packaging to be environmentally friendly and placing this fact on the packaging creates a positive effect.

Food and beverage companies have been using messages on their products saying that the product is nutritious in order to attract the female customers. For example, in the USA, General Mills and Quaker prepared special cereal products

especially for women. Moreover, Ocean Spray introduced its fortified fruit juice targeting women and Good Humor/Breyers company realized the marketing test of its ice cream fortified with calcium. Cereals specifically designed for women have their contents and ingredients information on the front side of the packaging. In addition to that, the messages related to the health of women is included to that message on the front of the packaging (Barletta, 2000). Regarding brand loyalty, 86% of women assert that they would use the same brand both for their home and workplace (Smalter, 2002).

Companies while introducing the product to a foreign culture, modify the organization message, language, visuals and media choices according to that country. Similarly, they should be aware of the important features related to women in order to appeal to those female consumers (Barletta, 2002). Furthermore, studying the lifestyles of the target audience is also important. Through studying lifestyles that has been frequently used by advertisers and marketers, much more detailed information about the consumers than merely the fundamental demographic variants can be obtained.

There are three decision factors determining whether a brand will be in women's short list or not. These are:

- The brands creating the highest awareness in a woman's mind. If a woman did not hear about the product of a company, she naturally would not think of buying that product. Before a woman starts to explore the products that brand as a candidate brand should come to the mind of woman automatically in some degree.
- Related distinctness. The brand of the company should be different from other similar brands regarding the needs or preferences of the woman.
- Brand satisfaction. The woman should really like the brand of the company. At least, she should not be against the brand of the company (Barletta, 2003). Female consumers bear an acceptance of the brand that creates a feeling of satisfaction towards the brand and company. Men and women possess different attitudes in shopping style that modifies the effect of retail brand personality on brand loyalty (Das, 2014). The companies might take that in to account provided that they create a strong bridge between the customer and the brand.

4.3 *Sensory Differences*

All of women's five senses are better compared to men's and this superiority has an effect on purchasing decisions of women. The reactions of women to differences can be demonstrated in an example of a car dealer (Barletta, 2003):

View: The environment will be as important as the inside of the showroom. For example, its scenery and organized exhibition contributes to the impression of the company as a whole.

Colours: Colours should not only be used for white walls. They should be used to create the feelings of energy and willingness in the showroom, vigilance and organization in finance department, comfort and serenity in service department.

Hearing: Music should be used in the same way as the colours are used. However, it should be made sure that the music is not so loud for the sensitive ears of the women.

Touch: Women possess a high sense of touch. According to a research conducted in Sprint Cellular retail store, although men were content while looking at the mobile phones behind the shop window, women preferred to touch the phones in order to check the weight and feel them.

Smell: Women prefer fresh smells and the environments where they feel clean. For this reason, service areas for women may be undesirable. Therefore, especially these kinds of areas should be kept clean and some brightness should be added.

Paying attention to details and creating them: Even tidiness may create a difference. Even a few small things on the floor can draw attention of the women and will create an undesirable untidiness.

According to Hu and Jasper (2004), in reference to the interviews carried out, the female shoppers shop for hedonic reasons (17% for female shoppers and 5% for male shoppers), whereas male shoppers are more utilitarian (54% for male shoppers and 36% for female shoppers).

In reference to the research that Hirsch and Gay (1991) conducted, female consumers are more sensitive to scents than male consumers are. Because women have extra sensitivity and sensory insight, they can read nonverbal signals such as the tone of voice, face expressions and body language efficiently (Barletta, 2003).

Especially female consumers' anticipation from shopping action is that they would like to obtain a hedonistic feeling from their shopping experience as they regard

shopping malls as recreational areas. As a result, whether they buy the product or not, they take pleasure from the activity in various ways (Markin, Lillis, and Narayana 1976). Female consumers consider shopping as pastime activity rather than meeting their household needs. They prefer spending their time enjoying themselves and savouring every minute of their time in shopping malls.



CHAPTER 5: METHODOLOGY

As for the methods of the study, a questionnaire has been developed to determine women consumers' expectations regarding sensory marketing practices. In the questionnaire, the expectations of the respondents concerning sensory marketing practices were tried to be measured. Network analysis was used to analyse the sensory expectations of women in shopping malls. This study took advantage of graph theory components which are correlated to semantic network analysis operating Pajek - network analysis software - for visualisation.

5.1 Introduction

A group of techniques with a common methodological perspective, which gives way researchers to illustrate relations among actors and to analyze the social structures that are created from the reoccurrence of these relations can be referred as network analysis (Chiesi, 2015).

In this research, in order to analyze the sensory expectations of women in shopping malls, semantic network analysis was used. This chapter includes theoretical framework of the method used for the research. This study took advantage of graph theory components which are connected to semantic network analysis while operating Pajek. For this reason, semantic network analysis and graph theory components are explained. In addition, Pajek, the software used for analysis is explained and data collection and sampling have been explicated in detail.

5.2 Semantic Network Analysis and Graph Theory

Structural thinking has always existed in the tradition of sociology. However, until 1930s, there was not a definite network thinking as a social structure approach (Scott, 2010). Creating a well-defined thinking approach took quite a long time. Throughout the time, many researchers and theorists played a significant role in shaping this approach. Examining the structure of network with standard methods is rather a novel study (Streeter, and Gillespie, 1993), although the network concept is deep rooted in anthropology and sociology (Bolt, 1955; Moreno, 1934). In

understanding complex societal behaviour in a measurable way, “Semantic network analysis” is a traditional area (Sharma et al. 2016).

Semantic network analysis programs have a common framework that is the mathematical approach for graph theory, as a result of which a formal language is created for describing networks and their characteristics. Through graph theory matrix data is translated into formal concepts and theorems that could be straightforwardly associated to the substantive features of networks (Scott, 2000). The concepts and ideas that are related are used to create a matrix data. Graph theory in the mathematical approach is a generally known and accepted outline for social network analysis program. In order for the networks and their specifications to be described, it presents a formal language. Through graph theory translation of matrix data into formal concepts and theorems can be provided, and these concepts and theorems can be correlated to the features of social networks directly (Scott, 2000).

Points and lines are the terms that have been used for the elements and relations in graph theory (Scott, 2000). In our case, the responses that the participants gave to questions are termed points (or nodes), whereas the relationships of the answers with each other are defined as lines (or edges in our network). A line is formed by two points and these points that are linked are called to be adjacent to each other. Neighbourhood is the term when those points to which a particular point is adjacent, its degree is the term given to the total number of other points in its neighbourhood. The degree of a vertex is the number of lines incident with it (De Nooy et al., 2011). In other terms, a figure giving the size of the neighbourhood is the degree of the point that creates the values.

For relational data to be collected, organized, kept and analysed, social network analysis (SNA) is a prominent mechanism (Crossley, 2018). For the data on relationships to be processed, this type of a tool is indispensable. The relationships are not generally apparent, that’s why social network analysis can be likened to a kind of an “organizational X-ray” (Serrat, 2017). It is used to study the data in detail.

5.3 Sampling

To collect information on relationships in a definite group, network analysis, customarily, depends on questionnaires and interviews (Serrat, 2017).

This research was done between March 22nd, 2020 and August 9th, 2020. 340 respondents participated in the survey/questionnaire. The participants were asked to give three responses for each question. Those free associations were evaluated according to their relationship amongst each other. Some of the survey participants have failed to provide all 3 answers hence they are not eligible for the research. For this reason, each network has various number of participants.

Table 4. Number of Participants for Each Network

	Visual Expectations	Olfactory Expectations	Auditory Expectations	Tactile Expectations	Gustatory Expectations
Number of participants	239	234	237	230	234
	Visual Disturbances	Olfactory Disturbances	Auditory Disturbances	Tactile Disturbances	Gustatory Disturbances
Number of participants	239	234	236	230	228

5.4 Data Collection and Coding Procedure

Questionnaire surveys, interviews, archival analysis, online data scraping, and ethnographic observation are some of the methods that network analysis is suitable to be used for (Crossley, 2018). In this study, questionnaire survey method is used for collecting data.

The research was conducted via the Internet and telephone calls. The participants were asked about the situations they wanted or did not want to experience using their senses in shopping malls. They were requested to give three positive and three negative answers for each sense and these responses were coded in order to be analyzed using semantic network analysis. The responses were assessed by two independent coders.

After translation and coding were completed, responses were analyzed in order to determine the relationships between them via software. The connection of the data was done in this order: from first to second answer, from second to third answer, from first to third answer.

5.5 *Application and Components of the Network Analysis*

Many tools can be found in order to conduct analysis. “Pajek” is among them that can be accessible freely (Mrvar, and Batagelj, 2016). It is a fundamental tool used in literature for professional class analysis. Pajek is a Windows programme which means spider in Slovenian. It is an open source used for analysis and graphic presentation of large networks that have thousands or millions of vertices. Its development began in November 1996.

Points or nodes are representatives of members and the lines between them show that there is a relationship amongst them. Moreover, usually, an arrow is used in order to demonstrate the route of flow in a relationship (Streeter, and Gillespie, 1993).

1. Classification of a population of nodes (e.g. all of the employees in a factory or all of the companies in an industry)
2. Choosing a type (or types) of relation that is relevant
3. Carrying on a systematic poll survey to distinguish which pair of nodes are linked in the programmed way

are all identified in analysis. The nodes are the points that can connect any type of relationship studied. If the nodes are able to form any links between the relations, these can be investigated (Crossley, 2018). The connections that nodes form, are studied in analysis. “A graph represents the structure of a network; all it needs for this is a set of vertices (which are also called points or nodes) and a set of lines where each line connects two vertices. A vertex (singular of vertices) is the smallest unit in a network. In social network analysis, it represents an actor” (De Nooy et al., 2011, p. 6).

Relations can be either directed or undirected. A relation is directed if it is possible for it to be asymmetrical. “Liking,” for example, can be asymmetrical and is therefore directed: Ross may like Rachel without Rachel necessarily liking Ross. “Living with,” conversely, cannot be asymmetrical and is therefore undirected: If Ross lives with Rachel then she necessarily lives with him or rather they live together (Crossley, 2018). In this study, relationships are investigated symmetrically, ergo in an undirected way. When the direction of relationship is reciprocal, the matrix becomes symmetrical or when the data symbolizes relationships that are unidirectional (Streeter, and Gillespie, 1993).

The number of the lines in a graph is called as the density of a graph. This number is defined as a distribution of the maximum probable number of lines (Scott, 2000). When the graph has all of its points adjacent to one another that is each point is linked directly to every other point, it is termed a “complete” graph. In order to see the comprehensive distribution of lines, the concept of density is used to measure how complete the graph is (Scott, 1987).



CHAPTER 6: FINDINGS AND ANALYSES

6.1 Introduction

The findings to be obtained will be interpreted via gender approach, comparing similarities and differences in the expectations of women.

In chapter six, research findings and in depth analysis of the results are included. The analysis is done based on five different dimensions. These are degree, articulation points closeness, betweenness and k-core. The responses belonging to each and every sense will be investigated using these dimensions.

The tables between Table 5 and Table 14 summarize the numerical values of the networks.

Table 5. Summary of Semantic Network Analysis Findings of “Visual Expectations” Network

	Number of nodes	Number of lines	Number of lines with value 1	Number of lines with value more than 1	Density of the network	Average degree centrality
Visual Expectations	84	356	230	126	0.10212278	8.47619048

There are 84 nodes in “Visual Expectations” that represents expectations. The nodes build 356 lines. The number of lines with value 1 is 230, whereas the lines with more than 1 is 126.

Table 6. Summary of Semantic Network Analysis Findings of “Visual Disturbances” Network

	Number of nodes	Number of lines	Number of lines with value 1	Number of lines with value more than 1	Density of the network	Average degree centrality
Visual Disturbances	147	434	337	97	0.04044357	5.90476190

“Visual Disturbances” network has 147 nodes that establish 434 lines. 337 of these lines have value 1; 97 of them have value more than one.

Table 7. Summary of Semantic Network Analysis Findings of “Auditory Expectations” Network

	Number of nodes	Number of lines	Number of lines with value 1	Number of lines with value more than 1	Density of the network	Average degree centrality
Auditory Expectations	50	177	92	85	0.14448980	7.08000000

“Auditory Expectations” has 50 nodes that form 177 lines. The number of lines with value 1 is 92 and with value more than 1 is 85.

Table 8. Summary of Semantic Network Analysis Findings of “Auditory Disturbances” Network

	Number of nodes	Number of lines	Number of lines with value 1	Number of lines with value more than 1	Density of the network	Average degree centrality
Auditory Disturbances	58	209	126	83	0.12643678	7.20689655

There are 58 nodes in “Auditory Disturbances” whose nodes build 209 lines. 126 of them have value 1 and 83 of them have value more than 1.

Table 9. Summary of Semantic Network Analysis Findings of “Tactile Expectations” Network

	Number of nodes	Number of lines	Number of lines with value 1	Number of lines with value more than 1	Density of the network	Average degree centrality
Tactile Expectations	70	295	173	122	0.12215321	8.428571430

The “Tactile Expectations” network has 70 nodes and 295 lines. The number of lines with value 1 is 173; with value more than 1 is 122. There are 74 nodes in

Table 10. Summary of Semantic Network Analysis Findings of “Tactile Disturbances” Network

	Number of nodes	Number of lines	Number of lines with value 1	Number of lines with value more than 1	Density of the network	Average degree centrality
Tactile Disturbances	74	235	149	86	0.08700481	6.35135135

“Tactile Disturbances” that forms 235 lines. 149 lines have value 1 and 86 have value more than 1.

Table 11. Summary of Semantic Network Analysis Findings of Gustatory Expectations Network

	Number of nodes	Number of lines	Number of lines with value 1	Number of lines with value more than 1	Density of the network	Average degree centrality
Gustatory Expectations	54	202	116	86	0.14116003	7.48148148

There are 54 nodes “Gustatory Expectations” network that build 202 lines, of them, 116 have value 1, and 86 have value more than 1.

Table 12. Summary of Semantic Network Analysis Findings of “Gustatory Disturbances” Network

	Number of nodes	Number of lines	Number of lines with value 1	Number of lines with value more than 1	Density of the network	Average degree centrality
Gustatory Disturbances	64	313	193	120	0.15525794	9.78125000

“Gustatory Disturbances” has 64 nodes that build 313 lines. The number of lines with value 1 is 193, and the number of lines with value more than 1 is 120.

Table 13. Summary of Semantic Network Analysis Findings of “Olfactory Expectations” Network

	Number of nodes	Number of lines	Number of lines with value 1	Number of lines with value more than 1	Density of the network	Average degree centrality
Olfactory Expectations	40	139	74	65	0.17820513	6.95000000

“Olfactory Expectations” includes 40 nodes that establishes 139 lines. 74 of these lines have value 1. 65 of them have value more than 1. The last network

Table 14. Summary of Semantic Network Analysis Findings of “Olfactory Disturbances” Network

	Number of nodes	Number of lines	Number of lines with value 1	Number of lines with value more than 1	Density of the network	Average degree centrality
Olfactory Disturbances	42	166	87	79	0.19279907	7.90476190

“Olfactory Disturbances” possesses 42 nodes and 166 lines. Of them, 87 have value 1 and 79 have value more than 1.

In order to measure the location of each node, the concept of centrality and other relevant concepts should be used. Various forms of centrality are explicated by

SNA. Degree, closeness, and betweenness are three major forms (Borgatti et al., 2013; Scott, 2000; Wasserman, and Faust, 1994).

6.2 Degree Centrality Analysis

The number of connections each node has in a network is called “Degree centrality” (Crossley, 2018). It is historically first and conceptually the simplest. The number of direct ties that a node has is the degree of a node. Activity or popularity is indicated by it. Degree centrality would be increased by a lot of ties coming in and lots of ties coming out of an actor (Zhang, 2010). For degree centrality, the higher the values are, the more central the node is (Golbeck, 2015).

As it has been stated above, directed networks have degrees of input and output. Undirected networks can only be studied as degree. As the network in this study is an undirected network, it will be studied in degrees. The degree of a vertex is equivalent of the number of vertices that are adjoining this vertex. It doesn’t consist of any arcs: its lines are all edges.

When participants were asked the three things, they want to see in a shopping mall, the degree analysis can be conducted according to the responses they gave. Degree values of points which are ranked at the first fifteen in those networks are presented below.

Table 15. Degrees in “Visual Expectations” Network

Rank	Vertex	Value	Responses
1	21	1.0000	clean floors
2	8	0.8857	cafes and restaurants
3	1	0.8286	green areas
4	25	0.8000	quality stores/brands
5	42	0.7429	quality cafes and restaurants
6	19	0.7143	visually appealing
7	7	0.6857	product/ brand diversity
8	63	0.6286	diversity of activities
9	3	0.6286	my favourite stores/ brands
10	5	0.6286	spacious environment
11	29	0.6000	decent customer profile

12	13	0.6000	open-air walking areas
13	44	0.5714	elegant environment
14	53	0.5429	attentive staff
15	33	0.5429	movie theater

Vertices: 84

The lowest value: 0.0286

The highest value: 1.0000

When participants were asked what they want to see in a shopping mall, the degree analysis can be carried out according to the responses they provided. In the “Visual Expectations” network the most popular answer is “clean floors”. It is significant in its neighborhood in the network.

Table 16. Degrees in “Visual Disturbances” Network

Rank	Vertex	Value	Responses
1	90	1.0000	areas that are not clean
2	5	0.8108	overcrowded with people
3	125	0.3378	sloppy service
4	51	0.3108	dirty toilet
5	38	0.2703	poor quality people
6	18	0.2568	narrow spaces
7	92	0.2297	complicated architecture
8	7	0.2162	low ceiling
9	30	0.2162	noise
10	99	0.2162	bad service
11	43	0.2162	dark environment
12	54	0.2027	dirtiness
13	41	0.1892	poor quality products
14	74	0.1892	repairs
15	122	0.1757	bad architecture

Vertices: 147

The lowest value: 0.0135

The highest value: 1.0000

Degree values of the first two nodes, “areas that are not clean” and “overcrowded with people” are much higher than the others. Therefore in terms of degree centrality they are the most important responses.

Table 17. Degrees in “Auditory Expectations” Network

Rank	Vertex	Value	Responses
1	3	1.0000	discount announcements
2	9	0.9118	soft music
3	4	0.7059	kind salespeople
4	7	0.6471	live performances
5	24	0.6176	music
6	11	0.4118	announcements of activities
7	8	0.3529	voices of children having fun
8	10	0.3235	the sounds of nature
9	17	0.3235	classic music
10	16	0.3235	security announcements
11	33	0.3235	announcements
12	35	0.2941	announcements of caution
13	15	0.2647	nice music
14	6	0.2647	the sounds of people having meals
15	25	0.2647	piano
16	32	0.2647	sound of chat

Vertices: 50

The lowest value: 0.0294

The highest value: 1.0000

Because the nodes in the place of 15 and 16 have the same value, number 16 has been included to the this table. When participants were asked the three things, they want to hear in a shopping mall; “discount announcements” and “soft music” can be asserted as the most popular responses due to the high degree values.

Table 18. Degrees in “Auditory Disturbances” Network

Rank	Vertex	Value	Responses
1	4	1.0000	noise
2	26	0.7647	sound of fight
3	6	0.6471	people yelling
4	27	0.6471	sound of repair
5	22	0.5882	rude way of talking
6	5	0.5588	shouting children

7	8	0.5588	crying children
8	18	0.5294	people talking in a loud voice
9	10	0.4706	loud music
10	3	0.4412	we do not have this product
11	1	0.4412	loud promotion announcements
12	41	0.3824	disrespectful communication
13	2	0.3824	they do not have the size for me
14	29	0.3529	bad music
15	21	0.3235	rude employees

Vertices: 58

The lowest value: 0.0294

The highest value: 1.0000

In respect to degree centrality, the nodes' being more central indicates higher values. In terms of "Auditory Disturbances" network, it can be stated that "noise" is the most central component. Because of the fact that its degree value is significantly higher than others.

Table 19. Degrees in "Tactile Expectations" Network

Rank	Vertex	Value	Responses
1	14	1.0000	the clothes in the store I shop
2	3	0.9118	everything I am planning to buy
3	22	0.7647	books
4	19	0.7353	clean areas
5	39	0.6471	soft objects
6	7	0.6176	home textile products
7	21	0.6176	quality products
8	8	0.6176	the products I like
9	24	0.5882	cosmetic products
10	1	0.5588	green areas
11	41	0.5588	foods
12	4	0.5588	bags and shoes
13	15	0.4706	home products
14	6	0.4706	glassware
15	10	0.4706	glass products

Vertices: 70

The lowest value: 0.0294

The highest value: 1.0000

When participants were asked the three things they do not want to touch in a shopping mall, the degree analysis can be carried out according to the responses they gave. “green areas” answer is popular and substantial in both “Tactile Expectations” and “Visual Expectations” network.

Table 20. Degrees in “Tactile Disturbances” Network

Rank	Vertex	Value	Responses
1	17	1.0000	dirty surfaces
2	20	0.9459	I don't want to touch anything in the toilets
3	11	0.6216	wet surfaces
4	7	0.5405	door/ door handle
5	34	0.4324	dusty surfaces
6	38	0.4054	greasy surfaces
7	4	0.3784	rubbish
8	22	0.3514	stairs
9	41	0.3514	food
10	43	0.3243	escalators
11	18	0.3243	dirty tables
12	63	0.2973	everything that is used by everyone
13	12	0.2973	underwear
14	1	0.2973	elevator surfaces
15	35	0.2973	hand rails

Vertices: 74

The lowest value: 0.0270

The highest value: 1.0000

The first fifteen results are presented in this dimension with the aim of making a significant division in agreement with the number of clusters that they create. In the sense of semantic network analysis first two ranks, “dirty surfaces” and “I don't want to touch anything in the toilets” are more important than the other responses according to their values.

Table 21. Degrees in “Gustatory Expectations” Network

Rank	Vertex	Value	Responses
1	22	1.0000	coffee
2	5	0.8667	desserts
3	25	0.8000	delicious foods
4	6	0.6333	tea
5	17	0.6333	pastry products
6	19	0.5667	fast food
7	7	0.5000	waffles
8	15	0.5000	local foods
9	3	0.5000	alcoholic beverages
10	1	0.5000	traditional desserts
11	13	0.4000	meat
12	39	0.4000	beverages
13	31	0.3667	salad
14	12	0.3667	world cuisine
15	11	0.3667	kebabs

Vertices: 54

The lowest value: 0.0000

The highest value: 1.0000

When participants were asked the three things they do not want to taste in a shopping mall, the degree analysis can be conducted according to the responses they gave. Because it is essential in the measure of degree centrality, “coffee” holds the highest degree.

Table 22. Degrees in “Gustatory Disturbances” Network

Rank	Vertex	Value	Responses
1	13	1.0000	fast food
2	6	0.6857	desserts
3	30	0.6571	street food
4	7	0.6286	sea products
5	24	0.6286	home cooking
6	18	0.6286	soup
7	2	0.6000	hot spicy foods
8	5	0.5714	spicy foods
9	4	0.5714	alcohol

10	34	0.5429	pita / lahmacun
11	49	0.5143	drinks
12	43	0.5143	vegetable meal
13	42	0.5143	foods with onion / garlic
14	8	0.5143	corn
15	31	0.4857	foods that have a strong smell

Vertices: 64

The lowest value: 0.0000

The highest value: 1.0000

When the participants are asked the three things they do not want to taste in a shopping mall, the degree analysis can be administered according to the responses they gave. “Fast food” has high values in both “Gustatory Expectations” and “Gustatory Disturbances” networks. Thus, it is significant in the measure of degree centrality.

Table 23. Degrees in “Olfactory Expectations” Network

Rank	Vertex	Value	Responses
1	8	1.0000	perfume/ deodorant
2	4	0.8667	flower
3	18	0.6000	smell of soap
4	16	0.6000	room odours
5	5	0.5000	fresh scents
6	11	0.5000	smell of coffee
7	3	0.4000	smell of spices
8	22	0.4000	delicious food smells
9	1	0.4000	smell of fresh air
10	10	0.3667	unique scents of stores
11	29	0.3333	cosmetic products
12	14	0.3000	scented candles
13	13	0.2333	smell of books
14	20	0.2333	smell of pastry shop
15	27	0.2000	chocolate

Vertices: 40

The lowest value: 0.0333

The highest value: 1.0000

“Perfume/ deodorant” and “flower” has the highest degrees; thus, they are significant in the measure of degree centrality. In the network, they are important in the neighbourhood of theirs.

Table 24. Degrees in “Olfactory Disturbances” Network

Rank	Vertex	Value	Responses
1	7	1.0000	smell of rubbish
2	14	0.9565	smell of sweat
3	15	0.9130	smell of toilets
4	25	0.8696	smell of tobacco products
5	30	0.7826	bad food smells
6	3	0.6957	strong smells
7	2	0.6957	food smells
8	29	0.6522	smell of burnt oil
9	5	0.6522	fish
10	24	0.5217	smell of onion/garlic
11	10	0.5217	smell of meat
12	9	0.5217	smell of cleaning supplies
13	13	0.4783	grease/oil
14	11	0.4348	stuffy air smell
15	22	0.4348	bad smells
16	18	0.4348	smell of mildew

Vertices: 42

The lowest value: 0.0435

The highest value: 1.0000

In the network, “smell of rubbish”, “smell of sweat” and “smell of toilets” are the highest degree values therefore they are the most popular responses in that sense. “Smell of mildew” has also been included in the table because it has the same value with “stuffy air smell” and “bad smells” which is 0.4348.

6.3 Closeness Centrality Analysis

The path lengths connecting each node to every other node in the network are the basis for closeness (Crossley, 2018). Closeness of a node is the average distance of the shortest path between the node and all other nodes. According to Zhang (2010, p. 243);

“If a node or actor is close to all others in the network, a distance of no more than one, then it is not dependent on any other to reach everyone in the network. Closeness measures independence or efficiency. With disconnected networks, closeness centrality must be calculated for each component.”

Table 25. Closeness Degrees in “Visual Expectations” Network

Rank	Vertex	Value	Responses
1	21	1.0000	clean floors
2	8	0.9771	cafes and restaurants
3	1	0.9552	green areas
4	25	0.9481	quality stores/brands
5	42	0.9412	quality cafes and restaurants
6	19	0.9412	visually appealing
7	7	0.9143	product/ brand diversity
8	13	0.8889	open-air walking areas
9	3	0.8828	my favourite stores/ brands
10	29	0.8767	decent customer profile
11	44	0.8767	elegant environment
12	5	0.8767	spacious environment
13	63	0.8649	diversity of activities
14	53	0.8591	attentive staff
15	33	0.8591	movie theater

Vertices: 84

The lowest value: 0.0593

The highest value: 1.0000

Regarding closeness centrality, “clean floors”, “cafes and restaurants” are the most central expectations to see in a mall. “Quality stores/brands”, “quality cafes and restaurants” and “visually appealing” values in 4th, 5th and 6th orders are close to each other. “Decent customer profile”, “elegant environment” and “spacious environment” have the same value of closeness centrality.

Table 26. Closeness Degrees in “Visual Disturbances” Network

Rank	Vertex	Value	Responses
1	90	1.0000	areas that are not clean
2	5	0.9398	overcrowded with people
3	51	0.7689	dirty toilet
4	18	0.7689	narrow spaces
5	125	0.7632	sloppy service
6	38	0.7603	poor quality people
7	30	0.7463	noise
8	54	0.7436	dirtiness
9	92	0.7409	complicated architecture
10	43	0.7355	dark environment
11	7	0.7250	low ceiling
12	98	0.7250	too many closed areas
13	42	0.7250	closed areas
14	99	0.7199	bad service
15	44	0.7199	chaos
16	85	0.7199	security

Vertices: 147

The lowest value: 0.0221

The highest value: 1.0000

Because the nodes in the place of 15 and 16 have the same value, number 16 is included in the first 15. Closeness degrees of the first 15 nodes starting from the beginning of the list in the “Visual Disturbances” network are close to each other in terms of closeness centrality values. With reference to closeness centrality, “areas that are not clean” is the most central response.

Table 27. Closeness Degrees in “Auditory Expectations” Network

Rank	Vertex	Value	Responses
1	3	1.0000	discount announcements
2	9	0.9552	soft music
3	4	0.8649	kind salespeople
4	7	0.8421	live performances
5	24	0.8312	music

6	8	0.7442	voices of children having fun
7	17	0.7273	classic music
8	33	0.7273	announcements
9	11	0.7191	announcements of activities
10	35	0.7191	announcements of caution
11	16	0.7191	security announcements
12	6	0.7111	the sounds of people having meals
13	10	0.7033	the sounds of nature
14	34	0.7033	voices of people
15	15	0.6957	nice music
16	27	0.6957	smell of cleaning

Vertices: 50

The lowest value: 0.4848

The highest value: 1.0000

“Discount announcements” is the most central response in terms of closeness centrality. “voices of people” is particularly significant in this dimension. So, lines related to “voices of people” are easily linked to other networks in spite of the fact that it does not receive edges like other responses in this dimension.

Table 28. Closeness Degrees in “Auditory Disturbances” Network

Rank	Vertex	Value	Responses
1	4	1.0000	noise
2	26	0.8919	sound of fight
3	6	0.8462	people yelling
4	27	0.8462	sound of repair
5	22	0.8250	rude way of talking
6	8	0.8148	crying children
7	5	0.8049	shouting children
8	18	0.7952	people talking in a loud voice
9	10	0.7674	loud music
10	3	0.7586	we do not have this product
11	1	0.7500	loud promotion announcements
12	41	0.7416	disrespectful communication
13	29	0.7333	bad music

14	2	0.7333	they do not have the size for me
15	23	0.7021	the sound of crowds

Vertices: 58

The lowest value: 0.0518

The highest value: 1.0000

Table 29. Closeness Degrees in “Tactile Expectations” Network

Rank	Vertex	Value	Responses
1	14	1.0000	the clothes in the store I shop
2	3	0.9903	everything I am planning to buy
3	22	0.9107	books
4	21	0.8870	quality products
5	19	0.8870	clean areas
6	24	0.8644	cosmetic products
7	39	0.8644	soft objects
8	8	0.8644	the products I like
9	7	0.8571	home textile products
10	41	0.8571	foods
11	1	0.8500	green areas
12	4	0.8226	bags and shoes
13	11	0.8160	toys
14	15	0.8095	home products
15	6	0.8095	glassware

Vertices: 70

The lowest value: 0.0448

The highest value: 1.0000

With reference to closeness centrality, “the clothes in the store I shop”, “everything I am planning to buy” and “books” are the most central responses.

Table 30. Closeness Degrees in “Tactile Disturbances” Network

Rank	Vertex	Value	Responses
1	17	1.0000	dirty surfaces
2	20	0.9652	I don't want to touch anything in the toilets
3	11	0.8538	wet surfaces
4	7	0.8102	door/ door handle

5	22	0.7872	stairs
6	41	0.7817	food
7	38	0.7817	greasy surfaces
8	34	0.7817	dusty surfaces
9	18	0.7762	dirty tables
10	43	0.7708	escalators
11	4	0.7708	rubbish
12	1	0.7603	elevator surfaces
13	19	0.7551	dirty trays
14	35	0.7551	hand rails
15	63	0.7351	everything that is used by everyone
16	12	0.7351	underwear

Vertices: 74

The lowest value: 0.4269

The highest value: 1.0000

The most reachable and central response is “dirty surfaces” in terms of closeness centrality.

Table 31. Closeness Degrees in “Gustatory Expectations” Network

Rank	Vertex	Value	Responses
1	5	1.0000	desserts
2	22	0.9759	coffee
3	25	0.9101	delicious foods
4	19	0.8617	fast food
5	17	0.8617	pastry products
6	6	0.8526	tea
7	3	0.8265	alcoholic beverages
8	7	0.8100	waffles
9	15	0.8020	local foods
10	1	0.8020	traditional desserts
11	13	0.7864	meat
12	31	0.7788	salad
13	12	0.7788	world cuisine
14	8	0.7714	different tastes
15	39	0.7642	beverages

Vertices: 54

The lowest value: 0.0000

The highest value: 1.0000

“Desserts” and “coffee” are the most central responses in terms of closeness centrality.

Table 32. Closeness Degrees in “Gustatory Disturbances” Network

Rank	Vertex	Value	Responses
1	13	1.0000	fast food
2	6	0.8750	desserts
3	24	0.8585	home cooking
4	18	0.8505	soup
5	5	0.8349	spicy foods
6	7	0.8273	sea products
7	2	0.8273	hot spicy foods
8	30	0.8198	street food
9	49	0.8125	drinks
10	4	0.8125	alcohol
11	34	0.8125	pita / lahmacun
12	43	0.7982	vegetable meal
13	8	0.7982	corn
14	22	0.7913	kebab
15	42	0.7913	foods with onion / garlic

Vertices: 64

The lowest value: 0.0000

The highest value: 1.0000

With reference to closeness centrality of “Gustatory Disturbances” network, “fast food” are “desserts” are the most central responses.

Table 33. Closeness Degrees in “Olfactory Expectations” Network

Rank	Vertex	Value	Responses
1	8	1.0000	perfume/ deodorant
2	4	0.9167	flower
3	18	0.7857	smell of soap
4	16	0.7857	room odours

5	5	0.7458	fresh scents
6	11	0.7458	smell of coffee
7	22	0.7097	delicious food smells
8	1	0.7097	smell of fresh air
9	3	0.6984	smell of spices
10	10	0.6984	unique scents of stores
11	29	0.6769	cosmetic products
12	14	0.6567	scented candles
13	13	0.6286	smell of books
14	20	0.6286	smell of pastry shop
15	6	0.6197	smell of nature
16	32	0.6197	smell of sea

Vertices: 40

The lowest value: 0.0626

The highest value: 1.0000

As it can be identified in the Table 33 “perfume/ deodorant” and “flower” are the most central responses in terms of closeness centrality.

Table 34. Closeness Degrees in “Olfactory Disturbances” Network

Rank	Vertex	Value	Responses
1	14	1.0000	smell of sweat
2	7	0.9836	smell of rubbish
3	15	0.9524	smell of toilets
4	25	0.9231	smell of tobacco products
5	3	0.8955	strong smells
6	2	0.8955	food smells
7	30	0.8696	bad food smells
8	29	0.8451	smell of burnt oil
9	5	0.8451	fish
10	9	0.8219	smell of cleaning supplies
11	13	0.8108	grease/oil
12	10	0.8000	smell of meat
13	22	0.7895	bad smells
14	24	0.7792	smell of onion/garlic
15	11	0.7792	stuffy air smell

Vertices: 42

The lowest value: 0.4444

The highest value: 1.0000

The most central expectations to see in a mall in terms of closeness centrality are “smell of sweat” and “smell of rubbish”.

6.4 *Betweenness Centrality Analysis*

The number of times that a node falls along the path tying any two other nodes is represented by betweenness (Crossley, 2018). In this type of centrality, the number of times a node joins pairs of other nodes, that otherwise would not be able to reach one another. This is an entirely structural measurement of popularity, efficiency, and power in a network, that is to say, the more popular, efficient, or powerful one is the more connected or centralized actor (Zhang, 2010). The percentage of shortest paths that must go through the particular node is measured technically. The node is very important to the flow of information through a network and betweenness is a measure of that (Golbeck, 2015).

Table 35. Betweenness Degrees in “Visual Expectations” Network

Rank	Vertex	Value	Responses
1	21	1.0000	clean floors
2	1	0.7363	green areas
3	8	0.7070	cafes and restaurants
4	19	0.6063	visually appealing
5	25	0.5253	quality stores/brands
6	7	0.5088	product/ brand diversity
7	33	0.4974	movie theater
8	13	0.3596	open-air walking areas
9	44	0.3471	elegant environment
10	63	0.3294	diversity of activities
11	20	0.3198	luxury stores/brands
12	42	0.3192	quality cafes and restaurants
13	29	0.2925	decent customer profile
14	32	0.2865	my friends

15	53	0.2075	attentive staff
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Vertices: 84

The lowest value: 0.0000

The highest value: 1.0000

Betweenness values of the “Visual Expectations” network are defined by “clean floors” and “green areas”.

Table 36. Betweenness Degrees in “Visual Disturbances” Network

Rank	Vertex	Value	Responses
1	90	1.0000	areas that are not clean
2	5	0.6010	overcrowded with people
3	38	0.1166	poor quality people
4	51	0.1137	dirty toilet
5	125	0.1100	sloppy service
6	122	0.1061	bad architecture
7	18	0.1007	narrow spaces
8	97	0.0977	visual pollution
9	30	0.0913	noise
10	86	0.0757	insufficient parking lot
11	142	0.0616	smoking people
12	32	0.0616	insects
13	98	0.0605	too many closed areas
14	14	0.0436	children's play grounds
15	43	0.0414	dark environment

Vertices: 147

The lowest value: 0.0000

The highest value: 1.0000

The highest betweenness degree is “areas that is not clean” in the “Visual Disturbances” network. The betweenness degree difference between the first and second values is great, i.e. the first one being considerably higher than the others.

Table 37. Betweenness Degrees in “Auditory Expectations” Network

Rank	Vertex	Value	Responses
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1	3	1.0000	discount announcements
2	4	0.6227	kind salespeople
3	9	0.5863	soft music
4	24	0.2177	music
5	7	0.1751	live performances
6	17	0.0920	classic music
7	8	0.0793	voices of children having fun
8	10	0.0741	the sounds of nature
9	6	0.0589	the sounds of people having meals
10	33	0.0440	announcements
11	32	0.0424	sound of chat
12	15	0.0388	nice music
13	27	0.0361	smell of cleaning
14	11	0.0210	announcements of activities
15	5	0.0174	welcome

Vertices: 50

The lowest value: 0.0000

The highest value: 1.0000

“Discount announcements” has the highest betweenness degree. Even if it is not most popular, because of its position, the response at the top become the most important.

Table 38. Betweenness Degrees in “Auditory Disturbances” Network

Rank	Vertex	Value	Responses
1	4	1.0000	noise
2	26	0.3538	sound of fight
3	6	0.3281	people yelling
4	18	0.3192	people talking in a loud voice
5	5	0.2727	shouting children
6	27	0.2272	sound of repair
7	22	0.2207	rude way of talking
8	3	0.1737	we do not have this product
9	10	0.1727	loud music
10	2	0.1355	they do not have the size for me
11	1	0.1154	loud promotion announcements

12	8	0.1056	crying children
13	41	0.0989	disrespectful communication
14	29	0.0643	bad music
15	21	0.0441	rude employees

Vertices: 147

The lowest value: 0.0000

The highest value: 1.0000

In the “Auditory Disturbances” network “noise” ranks the first place among the responses.

Table 39. Betweenness Degrees in “Tactile Expectations” Network

Rank	Vertex	Value	Responses
1	14	1.0000	the clothes in the store I shop
2	3	0.8937	everything I am planning to buy
3	22	0.8236	books
4	19	0.4619	clean areas
5	1	0.3419	green areas
6	39	0.3384	soft objects
7	65	0.3147	different materials
8	4	0.3040	bags and shoes
9	41	0.2409	foods
10	8	0.1973	the products I like
11	24	0.1912	cosmetic products
12	11	0.1871	toys
13	10	0.1761	glass products
14	7	0.1697	home textile products
15	21	0.1653	quality products

Vertices: 70

The lowest value: 0.0000

The highest value: 1.0000

Table 40. Betweenness Degrees in “Tactile Disturbances” Network

Rank	Vertex	Value	Responses
1	17	1.0000	dirty surfaces

2	20	0.7984	I don't want to touch anything in the toilets
3	11	0.3850	wet surfaces
4	7	0.3754	door/ door handle
5	42	0.1907	woolen objects
6	4	0.1852	rubbish
7	34	0.1647	dusty surfaces
8	15	0.1247	felt
9	18	0.1134	dirty tables
10	41	0.1119	food
11	43	0.1053	escalators
12	22	0.0909	stairs
13	1	0.0852	elevator surfaces
14	8	0.0852	the things others touch
15	63	0.0793	everything that is used by everyone

Vertices: 74

The lowest value: 0.0000

The highest value: 1.0000

Table 41. Betweenness Degrees in “Gustatory Expectations” Network

Rank	Vertex	Value	Responses
1	5	1.0000	desserts
2	22	0.6690	coffee
3	25	0.5071	delicious foods
4	40	0.4793	quiet environment
5	37	0.2574	healthy foods
6	41	0.2496	serenity
7	39	0.2216	beverages
8	6	0.1877	tea
9	3	0.1783	alcoholic beverages
10	19	0.1460	fast food
11	32	0.1273	special foods
12	31	0.1004	salad
13	17	0.1002	pastry products
14	7	0.0907	waffles
15	14	0.0801	homemade dishes

Vertices: 54

The lowest value: 0.0000

The highest value: 1.0000

Table 42. Betweenness Degrees in “Gustatory Disturbances” Network

Rank	Vertex	Value	Responses
1	13	1.0000	fast food
2	6	0.4854	desserts
3	49	0.3679	drinks
4	26	0.3533	pastry products
5	28	0.3506	local food
6	4	0.2853	alcohol
7	3	0.2755	foods sold in open spaces
8	30	0.2683	street food
9	14	0.2632	fatty foods
10	2	0.2576	hot spicy foods
11	12	0.2094	spoiled foods
12	51	0.1943	poor quality food / drinks
13	7	0.1672	sea products
14	19	0.1663	different cuisines
15	11	0.1623	sugary foods

Vertices: 64

The lowest value: 0.0000

The highest value: 1.0000

Table 43. Betweenness Degrees in “Olfactory Expectations” Network

Rank	Vertex	Value	Responses
1	8	1.0000	perfume/ deodorant
2	4	0.7853	flower
3	16	0.2511	room odours
4	18	0.2113	smell of soap
5	1	0.1578	smell of fresh air
6	22	0.1176	delicious food smells
7	5	0.0965	fresh scents

8	10	0.0898	unique scents of stores
9	3	0.0887	smell of spices
10	11	0.0880	smell of coffee
11	20	0.0467	smell of pastry shop
12	7	0.0349	beautiful scents
13	14	0.0163	scented candles
14	24	0.0139	incense
15	29	0.0128	cosmetic products

Vertices: 40

The lowest value: 0.0000

The highest value: 1.0000

Table 44. Betweenness Degrees in “Olfactory Disturbances” Network

Rank	Vertex	Value	Responses
1	15	1.0000	smell of toilets
2	7	0.7896	smell of rubbish
3	14	0.7840	smell of sweat
4	2	0.6094	food smells
5	30	0.4468	bad food smells
6	3	0.4207	strong smells
7	25	0.3827	smell of tobacco products
8	9	0.3423	smell of cleaning supplies
9	22	0.3366	bad smells
10	13	0.3024	grease/oil
11	4	0.2801	spice
12	20	0.2736	bad smell of stores
13	29	0.1573	smell of burnt oil
14	23	0.1148	smell of humidity
15	24	0.0652	smell of onion/garlic

Vertices: 64

The lowest value: 0.0000

The highest value: 1.0000

6.5 Articulation Point Analysis

“Articulation points” are vertices that emerge in more than one biconnected component. Two separate subgraphs can be formed when an articulation point is removed from a graph (Canutescu et al., 2003).

Articulation points represent susceptibility in a connected network. In other words, an articulation point (or a bridge) is a node in a network and if it is removed, the network is disconnected or the number of connected constituents in the network is increased when they are deleted, and networks are broken up. The graphs become independent (Behzad, and Chartrand, 1972).

Table 45. Articulation Points in “Visual Expectations” Network

Rank	Vertex	Value	Responses
1	1	2.0000	green areas
2	20	2.0000	luxury stores/brands

Vertices: 84

The lowest value: 0.0000

The highest value: 2.0000

As for the “Visual Expectations” network with two articulation points, “green areas” and “luxury stores/brands” are the most significant constituent. This value displays that the network is divided into two different parts if “green areas” or “luxury stores/brands” is removed.

Table 46. Articulation Points in “Visual Disturbances” Network

Rank	Vertex	Value	Responses
1	90	4.0000	areas that are not clean
2	122	2.0000	bad architecture
3	51	2.0000	dirty toilet
4	97	2.0000	visual pollution
5	5	2.0000	overcrowded with people
6	38	2.0000	poor quality people
7	142	2.0000	smoking people

Vertices: 147

The lowest value: 0.0000

The highest value: 4.0000

Seven responses form the main points of the basic structure of the “Visual Disturbances” network. As for the “Visual Disturbances” network with seven articulation points, “areas that are not clean” is the most significant constituent. This value displays that the network is divided into four different parts if “areas that are not clean” is removed.

Table 47. Articulation Points in “Auditory Expectations” Network

Rank	Vertex	Value	Responses
1	3	3.0000	discount announcements

Vertices: 50

The lowest value: 0.0000

The highest value: 3.0000

In relation with the “Auditory Expectations” network having one articulation point, “discount announcements” can be stated as the most noteworthy component. This value indicates that the network is separated into three different parts, provided “discount announcements” is erased.

Table 48. Articulation Points in “Auditory Disturbances” Network

Rank	Vertex	Value	Responses
1	13	2.0000	Distrust

Vertices: 58

The lowest value: 0.0000

The highest value: 2.0000

In terms of “Auditory Disturbances” network that has one articulation point, it can be stated that “distrust” is the most important component. The value mentioned demonstrates that due to the removal of “distrust”, the network is divided into two different parts.

Here, the respondents thought of the word as the term of feeling distrust as the translation of hear in Turkish. That is the reason they included this answer in the “Auditory Disturbances” response.

Table 49. Articulation Points in “Tactile Expectations” Network

Rank	Vertex	Value	Responses
1	65	2.0000	different materials

Vertices: 70

The lowest value: 0.0000

The highest value: 2.0000

As for the “Tactile Expectations” network with one articulation point, “different materials” is the most significant constituent. This value displays that the network is divided into two different parts if “different materials” is removed.

Table 50. Articulation Points in “Tactile Disturbances” Network

Rank	Vertex	Value	Responses
1	7	2.0000	door/ door handle
2	42	2.0000	woolen objects
3	20	2.0000	I don't want to touch anything in the toilets

Vertices: 74

The lowest value: 0.0000

The highest value: 2.0000

The key points of the main structure of the “Tactile Disturbances” network are created by three responses. In terms of “Tactile Disturbances” network that has tree articulation points, because of the fact that it can be stated that “door/ door handle”, “woolen objects” and “I don't want to touch anything in the toilets” are the most important component. The value mentioned demonstrates that due to the removal of “door/ door handle”, “woolen objects” and “I don't want to touch anything in the toilets”, the graph is divided into sub graphs.

Table 51. Articulation Points in “Gustatory Expectations” Network

Rank	Vertex	Value	Responses
1	25	2.0000	delicious foods
2	5	2.0000	Desserts
3	41	2.0000	Serenity
4	40	2.0000	quiet environment

Vertices: 54

The lowest value: 0.0000

The highest value: 2.0000

Four responses form the main points of the basic structure of the “Gustatory Expectations” network. Those four articulation points are; “delicious foods”, “desserts”, “serenity” and “quiet environment” is the most significant constituent. Value displays that the network is going to be divided into two different parts if “delicious foods”, “desserts”, “serenity” or “quiet environment” is removed.

Table 52. Articulation Points in “Gustatory Disturbances” Network

Rank	Vertex	Value	Responses
1	28	2.0000	local food

Vertices: 64

The lowest value: 0.0000

The highest value: 2.0000

In relation with the “Gustatory Disturbances” network having one articulation point, “local food” can be stated as the most noteworthy component. This value indicates that the network is separated into two different parts, provided “local food” is erased.

Table 53. Articulation Points in “Olfactory Expectations” Network

Rank	Vertex	Value	Responses
1	4	2.0000	Flower

Vertices: 40

The lowest value: 0.0000

The highest value: 2.0000

As for the “Olfactory Expectations” network with one articulation point, “flower” is the most significant constituent. This value displays that the network is divided into 2 different parts if “flower” is removed. Table 53 was the last articulation point illustration that can be examined because “Olfactory Disturbances” network has no articulation points.

6.6 *k*-core Analysis

The *k*-core of a graph is the maximal subgraph so that every vertex has degree at least *k*. Therefore, a “1*k*-core” is a simple element. All the points in the *k*-core have an equal to or a bigger degree than *k* (Scott, 2000).

The *k*-core can be provided as follows. All vertices of degree less than *k* are removed. Then some vertices may be with less than *k* edges. Next, remove these vertices and go on until no removal of vertices is probable. In conclusion, if there is any, it is the “*k*-core” (Dorogovtsev et al., 2006).

All the *k*-core graphs belonging to the networks in this study are demonstrated below.

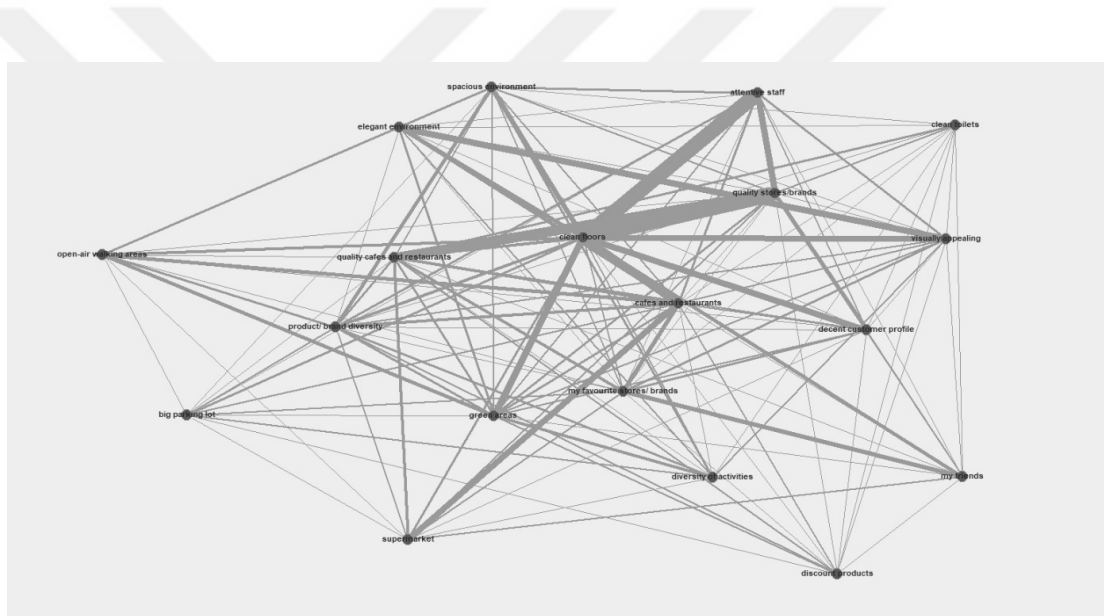


Figure 4. “Visual Expectations” Network *k*-cores

Among 84 given nodes of the “Visual Expectations” network, 19 of them are members of this *k*-core graph.

The core with the highest value in this network of sensory expectation associations was 11 core, which represents connections between associations that appear in cognitive maps of at least 19 consumers. According to the *k*-core method, the key sensory expectation associations in this network were the “attentive staff”, “clean floors” and “quality stores/brands”.

in cognitive maps of at least 9 consumers. According to the k-core method, the key sensory expectation associations in this network were the “perfume/deodorant”, “flower” and “smell of soap” as can be seen in the Figure 6.

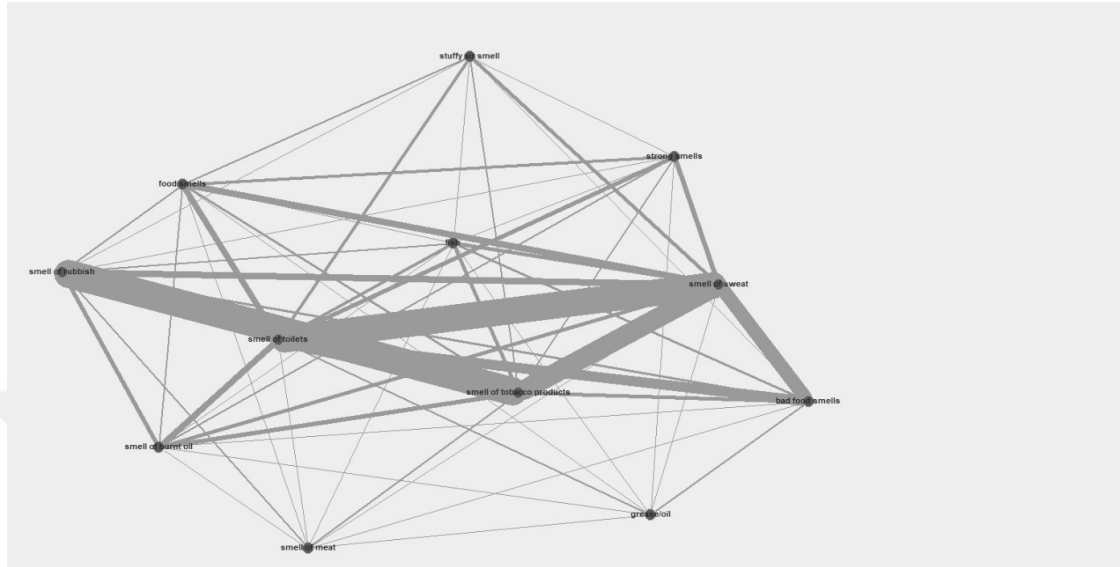


Figure 7. “Olfactory Disturbances” Network k-cores

The core with the highest value in this network of sensory expectation associations was 8 core, which represents connections between associations that appear in cognitive maps of at least 12 consumers. According to the k-core method, the key sensory expectation associations in this network were the “smell of toilet”, “smell of rubbish”, “smell of tobacco products” and “smell of sweat”.

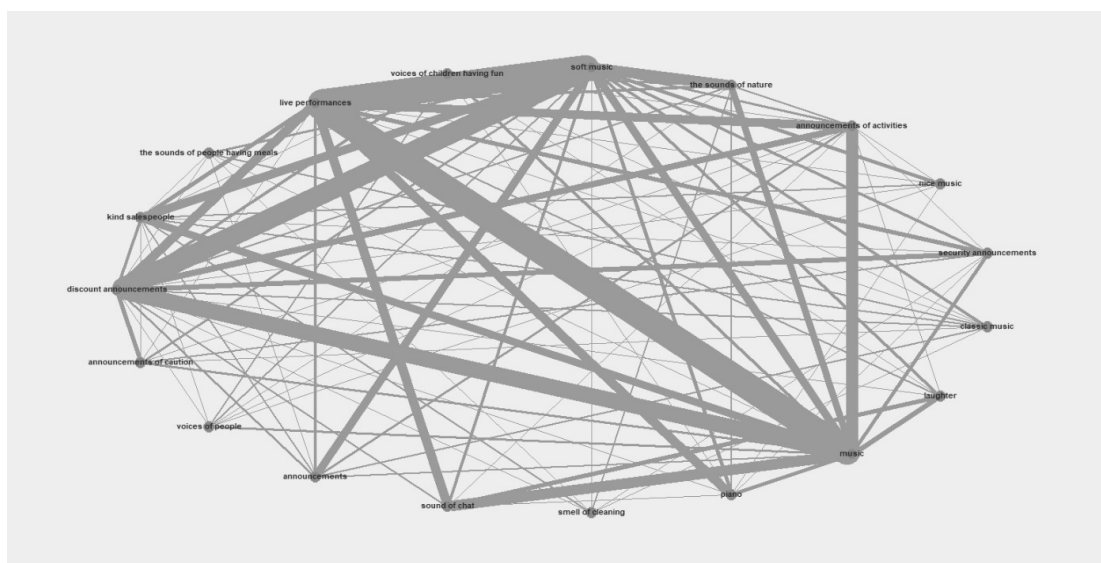


Figure 8. “Auditory Expectations” Network k-cores

The core with the highest value in this network of sensory expectation associations was 9 core, which represents connections between associations that appear in cognitive maps of at least 11 consumers. According to the k-core method, the key sensory expectation associations in this network were the “noise”, “sound of fight”, “sound of repair” and “people yelling”.

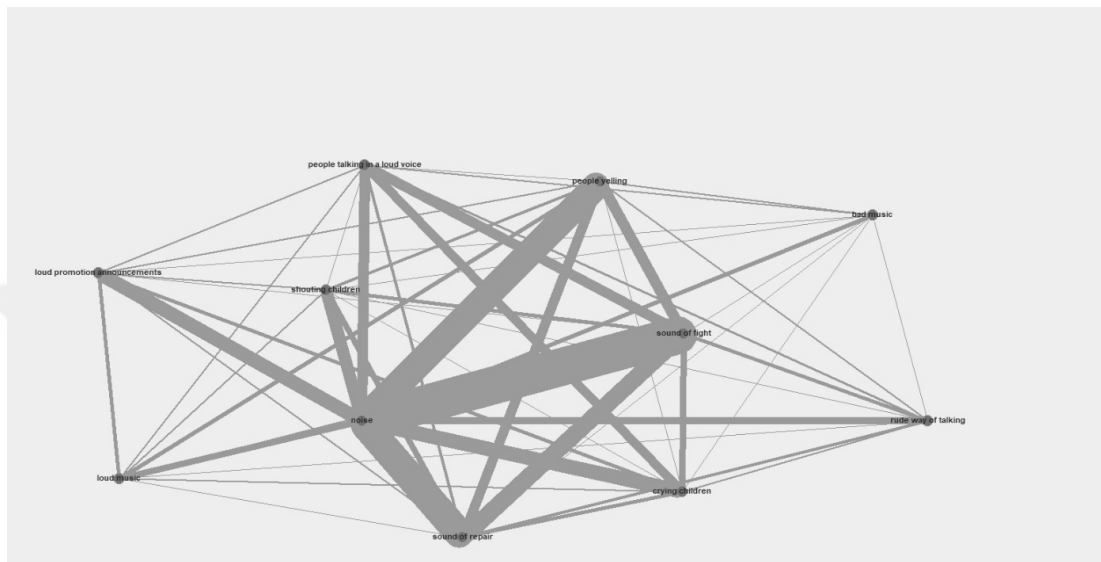


Figure 9. “Auditory Disturbances” Network k-cores

The core with the highest value in this network of sensory expectation associations was 9 core, which represents connections between associations that appear in cognitive maps of at least 11 consumers. According to the k-core method, the key sensory expectation associations in this network were the “noise”, “sound of fight”, “sound of repair” and “people yelling”.

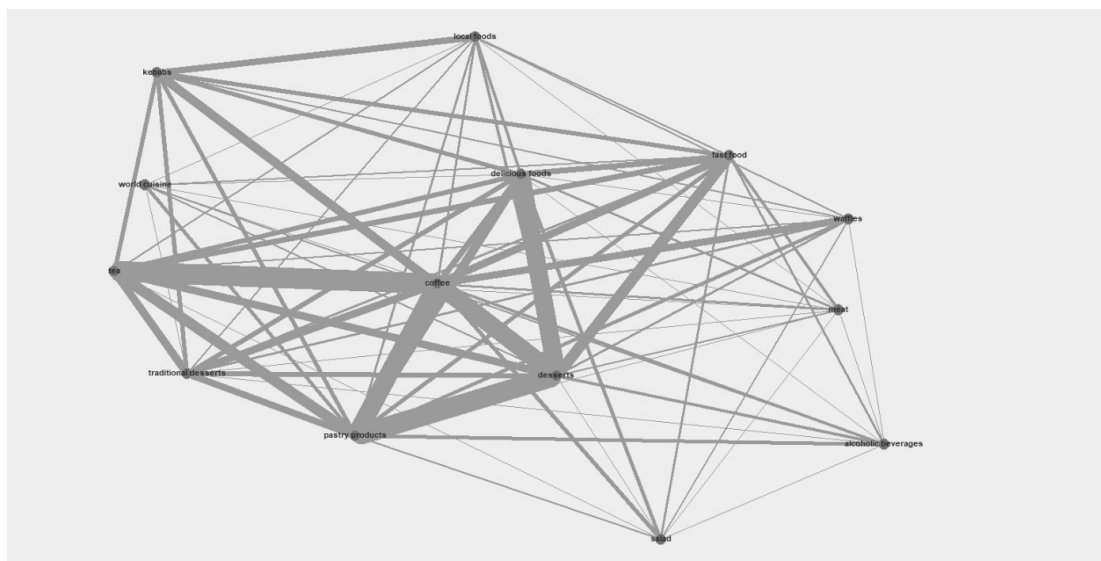


Figure 10. “Gustatory Expectations” Network k-cores

The core with the highest value in this network of sensory expectation associations was 9 core, which represents connections between associations that appear in cognitive maps of at least 14 consumers. According to the k-core method, the key sensory expectation associations in this network were the “coffee”, “desserts”, “pastry products” and “tea”.

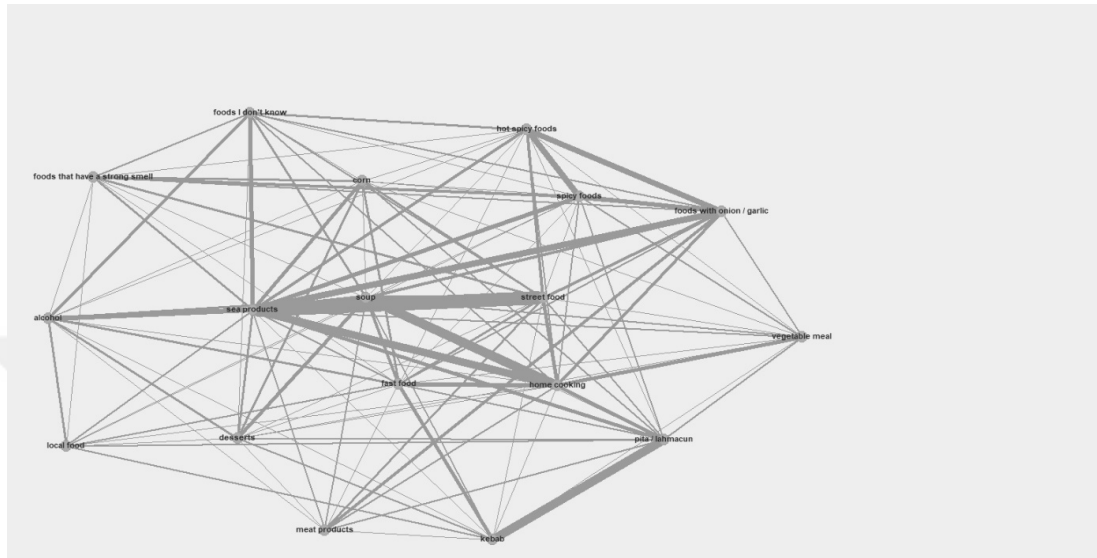


Figure 11. “Gustatory Disturbances” Network k-cores

The core with the highest value in this network of sensory expectation associations was 10 core, which represents connections between associations that appear in cognitive maps of at least 18 consumers. According to the k-core method, the key sensory expectation associations in this network were the “sea products”, “street food”, “soup” and “home cooking”.

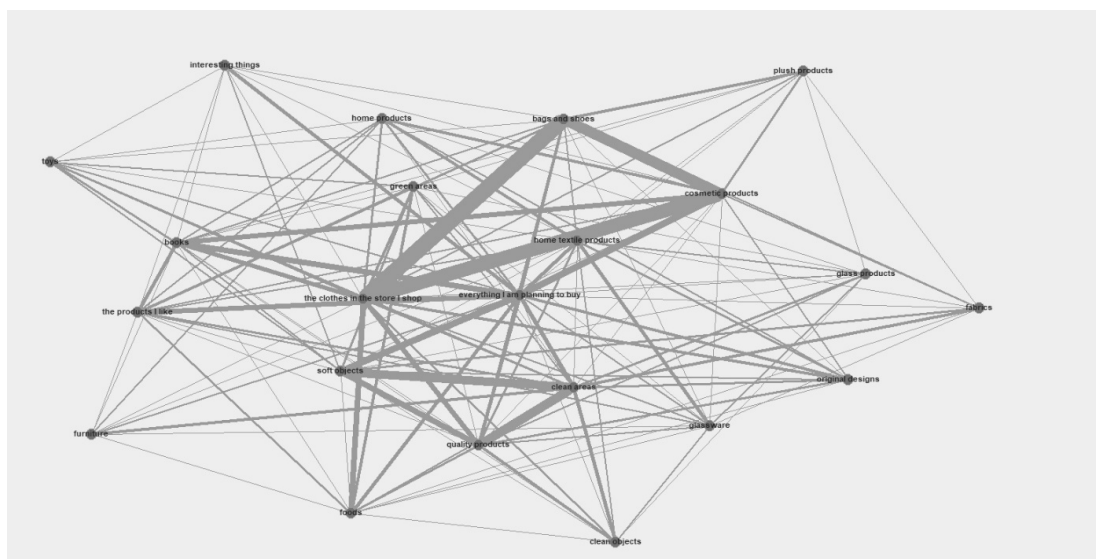


Figure 12. “Tactile Expectations” Network k-cores

The core with the highest value in this network of sensory expectation associations was 9 core, which represents connections between associations that appear in cognitive maps of at least 22 consumers. According to the k-core method, the key sensory expectation associations in this network were the “clothes in the store”, “bags and shoes”, “cosmetic products” and “home textile products”.

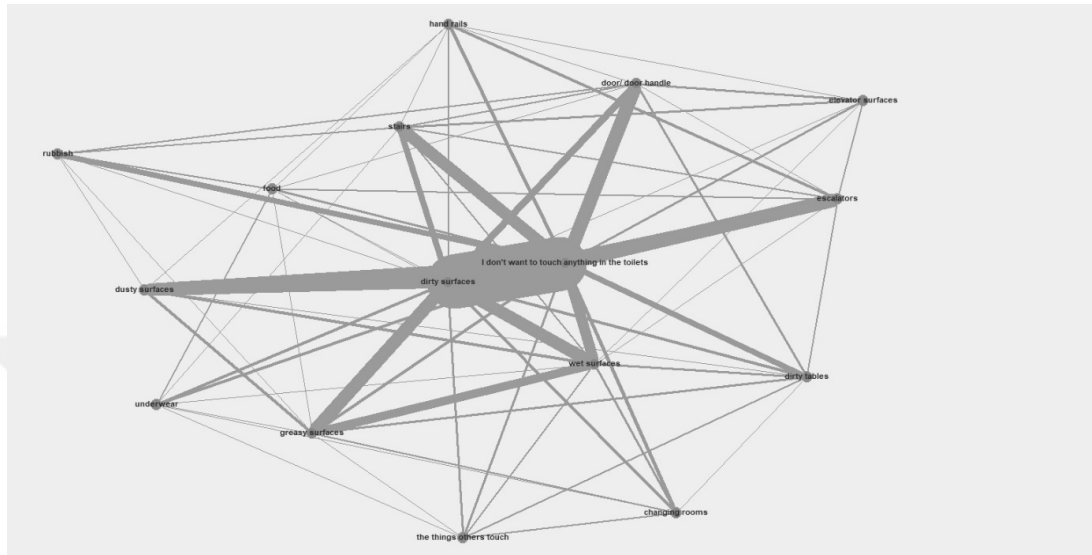


Figure 13. “Tactile Disturbances” Network k-cores

The core with the highest value in the network of sensory expectation associations was 7-core, which represents connections between associations that appear in cognitive maps of at least 16 consumers.

According to the k-core method, the key sensory expectation associations in this network were “dirty surfaces”, “anything in the toilets”, “escalators” and “dusty surfaces”.

6.7 Total Findings of 5 Dimensions

Sensory experience values of women's expectations in shopping malls are analyzed based on five dimensions. Entire results are maintained in related sections. Nevertheless, only the first fifteen most important values are included in the tables of degree centrality, closeness, betweenness, articulation points and k-core. The more repeated the values are, the more prominent they become in the network. All dimensions with their repeat numbers are compiled in tables.

Table 54. Number of Repeats for “Visual Expectations” Network

Responses	Number of Repeats	Repeated Dimensions
green areas	5	degree, closeness, betweenness, articulation point, k-core
clean floors	4	degree, closeness, betweenness, k-core
quality stores/brands	4	degree, closeness, betweenness, k-core
cafes and restaurants	4	degree, closeness, betweenness, k-core
visually appealing	4	degree, closeness, betweenness, k-core
product/brand diversity	4	degree, closeness, betweenness, k-core
diversity of activities	4	degree, closeness, betweenness, k-core
decent customer profile	4	degree, closeness, betweenness, k-core
open-air walking areas	4	degree, closeness, betweenness, k-core
elegant environment	4	degree, closeness, betweenness, k-core
attentive staff	4	degree, closeness, betweenness, k-core
quality cafes and restaurants	4	degree, closeness, betweenness, k-core
movie theater	3	degree, closeness, betweenness
luxury stores/brands	3	betweenness, articulation point, k-core
my favourite stores/brands	3	degree, closeness, k-core
spacious environment	3	degree, closeness, k-core
my friends	2	betweenness, k-core
big parking lot	1	k-core
supermarket	1	k-core
clean toilets	1	k-core

“Green areas” response given for “Visual Expectations” network in this semantic network analysis has become a significant answer for this network by being repeated in 5 different dimensions that are studied. “Clean floors”, “quality stores/brands”, “cafes and restaurants”, “visually appealing”, “product/brand

diversity”, “diversity of activities”, “decent customer profile”, “open-air walking areas”, “elegant environment”, “attentive staff” and “quality cafes and restaurants” responses for the same network are repeated in four dimensions except for articulation points. “Movie theatre”, “luxury stores/brands”, “my favourite stores/brands” and “spacious environment” responses are repeated in three dimensions. Only “my friends” was repeated in 2 dimensions while the responses of “big parking lot”, “supermarket” and “clean toilets” are repeated merely in k-core dimension.

Table 55. Number of Repeats for “Visual Disturbances” Network

Responses	Number of Repeats	Repeated Dimensions
overcrowded with people	5	degree, closeness, betweenness, articulation point, k-core
areas that are not clean	5	degree, closeness, betweenness, articulation point, k-core
dirty toilet	5	degree, closeness, betweenness, articulation point, k-core
poor quality people	5	degree, closeness, betweenness, articulation point, k-core
sloppy service	4	degree, closeness, betweenness, k-core
narrow spaces	4	degree, closeness, betweenness, k-core
noise	4	degree, closeness, betweenness, k-core
dark environment	4	degree, closeness, betweenness, k-core
bad architecture	3	degree, betweenness, articulation point
low ceiling	3	degree, closeness, k-core
bad service	3	degree, closeness, k-core
dirtyness	3	degree, closeness, k-core
complicated architecture	3	degree, closeness, k-core
too many closed areas	3	closeness, betweenness, k-core
children's play grounds	2	betweenness, k-core

visual pollution	2	betweenness, articulation point
smoking people	2	betweenness, articulation point
poor quality products	2	degree, k-core
repairs	2	degree, k-core
closed areas	2	closeness, k-core
chaos	1	closeness
insufficient parking lot	1	betweenness
insects	1	betweenness
dirty surfaces	1	k-core
security problems	1	k-core
insufficient sitting areas	1	k-core
mall being unventilated	1	k-core
dirty areas	1	k-core
irregularity	1	k-core
trash piles	1	k-core

It was seen that according to the network analysis results, when “Visual Disturbances” network was studied, the responses of “overcrowded with people”, “areas that are not clean”, “dirty toilet” and “poor quality people” are repeated in all five dimensions. “Sloppy service”, “narrow spaces”, “noise” and “dark environment” responses are repeated in four dimensions as degree, closeness, betweenness and k-core. The responses repeated in three dimensions are ; “bad architecture”, “low ceiling”, “bad service”, “dirtiness”, “complicated architecture” and “too many closed areas”. The responses “children's play grounds”, “visual pollution”, “smoking people”, “poor quality products”, “repairs” and “closed areas” are repeated in two dimensions, whereas, “chaos”, “insufficient parking lot”, “insects”, “dirty surfaces”, “security problems”, “insufficient sitting areas”, “mall being unventilated”, “dirty areas”, “irregularity” and “trash piles” are repeated in just one dimension.

Table 56. Number of Repeats for “Auditory Expectations” Network

Responses	Number of Repeats	Repeated Dimensions
discount announcements	5	degree, closeness, betweenness , articulation points, k-core
soft music	4	degree, closeness, betweenness, k-core

kind salespeople	4	degree, closeness, betweenness, k-core
live performances	4	degree, closeness, betweenness, k-core
music	4	degree, closeness, betweenness, k-core
announcements of activities	4	degree, closeness, betweenness, k-core
voices of children having fun	4	degree, closeness, betweenness, k-core
the sounds of nature	4	degree, closeness, betweenness, k-core
classic music	4	degree, closeness, betweenness, k-core
announcements	4	degree, closeness, betweenness, k-core
the sounds of people having meals	4	degree, closeness, betweenness, k-core
nice music	4	degree, closeness, betweenness, k-core
security announcements	3	degree, closeness, k-core
announcements of caution	3	degree, closeness, k-core
noise	3	degree, closeness, betweenness
piano	2	degree, k-core
sound of chat	2	betweenness, k-core
smell of cleaning	2	betweenness, k-core
voices of people	1	closeness
welcome	1	betweenness
laughter	1	k-core
voices of people	1	k-core

In semantic network analysis that have been conducted, the response “discount announcements” have been repeated in five different dimensions as degree, closeness, betweenness, articulation points and k-core.

“Soft music”, “kind salespeople”, “live performances music”, “announcements of activitie”, “voices of children having fun”, “the sounds of nature”, “classic music”, “announcements”, “the sounds of people having meals” and “nice music” responses given to the same question are repeated in four different dimensions.

While “security announcements”, “announcements of caution” and “noise” are repeated in three dimensions, “piano”, “sound of chat” and “smell of cleaning” are repeated in two dimensions, whereas, “voices of people”, “welcome”, “laughter” and “voices of people” responses are repeated in only one dimension. When “Auditory Expectations” network findings are taken into consideration, female consumers seek pleasure in shopping malls, such as listening to music and being treated nicely by employees.

Table 57. Number of Repeats for “Auditory Disturbances” Network

Responses	Number of Repeats	Repeated Dimensions
noise	4	degree, closeness, betweenness, k-core
sound of fight	4	degree, closeness, betweenness, k-core
people yelling	4	degree, closeness, betweenness, k-core
sound of repair	4	degree, closeness, betweenness, k-core
rude way of talking	4	degree, closeness, betweenness, k-core
shouting children	4	degree, closeness, betweenness, k-core
crying children	4	degree, closeness, betweenness, k-core
loud music	4	degree, closeness, betweenness, k-core
loud promotion announcements	4	degree, closeness, betweenness, k-core
bad music	4	degree, closeness, betweenness, k-core
people talking in a loud voice	3	degree, closeness, betweenness, k-core
we do not have this product	3	degree, closeness, betweenness
disrespectful communication	3	degree, closeness, betweenness
they do not have the size for me	3	degree, closeness, betweenness

noise	3	degree, closeness, betweenness
smell of cleaning	2	betweenness, k-core
the sound of crowds	1	degree
rude employees	1	closeness
distrust	1	articulation points
welcome	1	betweenness
laughter	1	k-core
voices of people	1	k-core

In each of the dimensions studied in the semantic network analysis, there are not any response repeated at five dimensions for “Auditory Disturbances” question. “Noise”, “sound of fight”, “people yelling”, “sound of repair”, “rude way of talking”, “shouting children”, “crying children”, “loud music”, “loud promotion announcements” and “bad music” that are the most frequently reiterated responses are repeated in four different dimensions. The responses of “people talking in a loud voice”, “we do not have this product”, “disrespectful communication”, “they do not have the size for me” and “noise” are repeated in three different dimensions as degree, closeness and betweenness. While, only “smell of cleaning” response is repeated in two dimensions, “the sound of crowds”, “rude employees”, “distrust”, “welcome”, “laughter” and “voices of people” responses are repeated in one dimension.

Table 58. Number of Repeats for “Tactile Expectations” Network

Responses	Number of Repeats	Repeated Dimensions
the clothes in the store I shop	4	degree, closeness, betweenness, k-core
everything I am planning to buy	4	degree, closeness, betweenness, k-core
books	4	degree, closeness, betweenness, k-core
clean areas	4	degree, closeness, betweenness, k-core
soft objects	4	degree, closeness, betweenness, k-core
home textile products	4	degree, closeness, betweenness, k-core

quality products	4	degree, closeness, betweenness, k-core
the products I like	4	degree, closeness, betweenness, k-core
cosmetic products	4	degree, closeness, betweenness, k-core
green areas	4	degree, closeness, betweenness, k-core
foods	4	degree, closeness, betweenness, k-core
bags and shoes	4	degree, closeness, betweenness, k-core
glassware	3	degree, closeness, k-core
home products	3	degree, closeness, k-core
toys	2	closeness, betweenness, k-core
different materials	2	betweenness, articulation point
glass products	2	degree, betweenness, k-core
furniture	1	k-core
interesting things	1	k-core
plush products	1	k-core
original designs	1	k-core
fabrics	1	k-core

According to the network analysis carried out, “the clothes in the store I shop”, “everything I am planning to buy”, “books”, “clean areas”, “soft objects”, “home textile products”, “quality products”, “the products I like”, “cosmetic products”, “green areas”, “foods”, “bags and shoes” responses are repeated in four dimensions as degree, closeness, betweenness and k-core. The responses repeated in three dimensions, which are degree, closeness and k-core, are “glassware” and “home products”. For “Tactile Expectations” network, “toys”, “different materials” and “glass products” are repeated in two dimensions. However, “furniture”, “interesting things”, “plush products”, “original designs” and “fabrics” responses are only repeated in only one dimension that was k-core.

Table 59. Number of Repeats for “Tactile Disturbances” Network

Responses	Number of Repeats	Repeated Dimensions
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I don't want to touch anything in the toilets	5	degree, closeness, betweenness, articulation point, k-core
door/ door handle	5	degree, closeness, betweenness, articulation point, k-core
dirty surfaces	4	degree, closeness, betweenness, k-core
wet surfaces	4	degree, closeness, betweenness, k-core
dusty surfaces	4	degree, closeness, betweenness, k-core
rubbish	4	degree, closeness, betweenness, k-core
stairs	4	degree, closeness, betweenness, k-core
food	4	degree, closeness, betweenness, k-core
escalators	4	degree, closeness, betweenness, k-core
dirty tables	4	degree, closeness, betweenness, k-core
elevator surfaces	4	degree, closeness, betweenness, k-core
greasy surfaces	3	degree, closeness, k-core
everything that is used by everyone	3	degree, closeness, betweenness
underwear	3	degree, closeness, k-core
hand rails	3	degree, closeness, k-core
woolen objects	2	betweenness, articulation point
the things others touch	2	betweenness, k-core
felt	1	betweenness
changing rooms	1	k-core

When “Tactile Disturbances” network was analysed, the responses of “I don't want to touch anything in the toilets” and “door/ door handle” responses are repeated in all five dimensions studied and they have become the most significant answers for this network. For the same network, the responses of “dirty surfaces”, “wet surfaces”, “dusty surfaces”, “rubbish”, “stairs”, “food”, “escalators”, “dirty tables” and “elevator

surfaces” are repeated in four dimensions. These four dimensions include all the dimensions that have been studied except for articulation points. As for the responses of “greasy surfaces”, “everything that is used by everyone”, “underwear” and “hand rails”, they are repeated in three dimensions. While “woolen objects” and “the things others touch” responses are repeated in two dimensions, the responses “felt” and “changing rooms” are repeated in one dimension.

Table 60. Number of Repeats for “Gustatory Expectations” Network

Responses	Number of Repeats	Repeated Dimensions
desserts	5	degree, closeness, betweenness, articulation point, k-core
delicious foods	5	degree, closeness, betweenness, articulation point, k-core
coffee	4	degree, closeness, betweenness, k-core
tea	4	degree, closeness, betweenness, k-core
pastry products	4	degree, closeness, betweenness, k-core
waffles	4	degree, closeness, betweenness, k-core
alcoholic beverages	4	degree, closeness, betweenness, k-core
fast food	3	degree, closeness, betweenness
local foods	3	degree, closeness, k-core
traditional desserts	3	degree, closeness, k-core
meat	3	degree, closeness, k-core
salad	3	degree, closeness, betweenness, k-core
world cuisine	3	degree, closeness, k-core
kebabs	2	degree, closeness
quiet environment	2	betweenness, articulation point
serenity	2	betweenness, articulation point
beverages	1	degree
healthy foods	1	betweenness
special foods	1	betweenness

homemade dishes	1	betweenness
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For the network “Gustatory Expectations” the important responses, “desserts” and “delicious foods” are repeated in five different dimensions. “Coffee”, “tea”, “pastry products”, “waffles” and “alcoholic beverages” responses are restated in four dimensions. Next, “fast food”, “local foods”, “traditional desserts”, “meat”, “world cuisine” and “salad” are repeated in three dimensions.. Following those, the responses repeated in two dimensions are “kebabs”, “quiet environment” and “serenity”. Finally, “beverages”, “healthy foods”, “special foods” and “homemade dishes” are repeated in one dimension. When “Gustatory Expectations” network findings are taken into consideration, female consumers seek pleasure in shopping malls, such as satisfying their craving for a dessert or just having a coffee.

Table 61. Number of Repeats for “Gustatory Disturbances” Network

Responses	Number of Repeats	Repeated Dimensions
fast food	4	degree, closeness, betweenness, k-core
desserts	4	degree, closeness, betweenness, k-core
street food	4	degree, closeness, betweenness, k-core
sea products	4	degree, closeness, betweenness, k-core
home cooking	4	degree, closeness, betweenness, k-core
hot spicy foods	4	degree, closeness, betweenness, k-core
alcohol	4	degree, closeness, betweenness, k-core
soup	3	degree, closeness, k-core
spicy foods	3	degree, closeness, k-core
drinks	3	degree, closeness, betweenness
vegetable meal	3	degree, closeness, k-core
foods with onion / garlic	3	degree, closeness, k-core
corn	3	degree, closeness, k-core
local food	3	betweenness, articulation point, k-core

pita / lahmacun	2	degree, closeness
foods that have a strong smell	2	degree, k-core
foods sold in open spaces	1	betweenness
fatty foods	1	betweenness
spoiled foods	1	betweenness
poor quality food / drinks	1	betweenness
different cuisines	1	betweenness
sugary foods	1	betweenness
foods I don't know	1	k-core
meat products	1	k-core

For “Gustatory Disturbances” network, no response repeated at the same time was found in the five dimensions studied. “Fast food”, “desserts”, “street food”, “sea products”, “home cooking”, “hot spicy foods” and “alcohol” are the responses that are the repeated in four different dimensions. The responses that are restated in three dimensions are “soup”, “spicy foods”, “drinks” and “vegetable meal”, “foods with onion / garlic”, “corn” and “local food”. Next came the responses that are repeated in two dimensions, these are “pita / lahmacun” and “foods that have a strong smell” responses. “Foods sold in open spaces”, “fatty foods”, “spoiled foods”, “poor quality food / drinks”, “different cuisines”, “sugary foods” are repeated in one dimension that is betweenness, responses as “foods I don't know” and “meat products” are repeated in one dimension that is k-core.

Table 62. Number of Repeats for “Olfactory Expectations” Network

Responses	Number of Repeats	Repeated Dimensions
flower	5	degree, closeness, betweenness, articulation point, k-core
smell of soap	4	degree, closeness, betweenness, k-core
room odours	4	degree, closeness, betweenness, k-core
fresh scents	4	degree, closeness, betweenness, k-core
smell of coffee	4	degree, closeness, betweenness, k-core

delicious food smells	4	degree, closeness, betweenness, k-core
smell of fresh air	4	degree, closeness, betweenness, k-core
perfume/ deodorant	3	degree, closeness, betweenness
smell of spices	3	degree, closeness, betweenness
unique scents of stores	3	degree, closeness, betweenness
cosmetic products	3	degree, closeness, betweenness
scented candles	3	degree, closeness, betweenness
smell of pastry shop	3	degree, closeness, betweenness
smell of books	2	degree, closeness
chocolate	1	degree
smell of nature	1	closeness
smell of sea	1	closeness
beautiful scents	1	betweenness
incense	1	betweenness

When “Olfactory Expectations” network has been studied as a semantic network analysis, it can be established that response of “flower” has a significant position because of its repetition in all five dimensions. The rest of the values are as follows; “smell of soap”, “room odours”, “fresh scents”, “smell of coffee”, “delicious food smells” and “smell of fresh air” are repeated in four dimensions, “perfume/ deodorant”, “smell of spices”, “unique scents of stores”, “cosmetic products”, “scented candles” and “smell of pastry shop” are repeated in three dimensions, “smell of books” are repeated in two dimensions and finally “incense” was repeated in one dimension.

Table 63. Number of Repeats for “Olfactory Disturbances” Network

Responses	Number of Repeats	Repeated Dimensions
smell of rubbish	4	degree, closeness, betweenness, k-core
smell of sweat	4	degree, closeness, betweenness, k-core
bad food smells	4	degree, closeness, betweenness, k-core
smell of toilets	4	degree, closeness, betweenness, k-core

smell of tobacco products	4	degree, closeness, betweenness, k-core
strong smells	4	degree, closeness, betweenness, k-core
food smells	4	degree, closeness, betweenness, k-core
smell of burnt oil	4	degree, closeness, betweenness, k-core
grease/oil	4	degree, closeness, betweenness, k-core
fish	3	degree, closeness, k-core
bad smells	3	degree, closeness, betweenness
smell of onion/garlic	3	degree, closeness, betweenness
smell of meat	3	degree, closeness, k-core
smell of cleaning supplies	3	degree, closeness, betweenness
stuffy air smell	3	degree, closeness, k-core
smell of mildew	1	degree
bad smell of stores	1	betweenness
spice	1	betweenness
smell of humidity	1	betweenness

For “Olfactory Disturbances” network in five dimensions that are studied, not only one answer that was repeated could be received. “Smell of rubbish”, “smell of sweat”, “bad food smells”, “smell of toilets”, “smell of tobacco products”, “strong smells”, “food smells”, “smell of burnt oil” and “grease/oil” responses are repeated in four different dimensions but articulation point. For the rest of the responses, the repetition of frequency was like this: “fish”, “bad smells”, “smell of onion/garlic”, “stuffy air smell”, “smell of meat” and “smell of cleaning supplies” in three dimensions, “smell of mildew”, “bad smell of stores”, “spice” and “smell of humidity” are only repeated in betweenness dimension. Additionally, for “Olfactory Disturbances” network, no response was received in articulation point dimension.

CHAPTER 7: EVALUATION OF FINDINGS AND CONCLUSION

This study aims to present some insight for enterprises in shopping malls about the expectations of women consumers. In this study, by making use of recent, developed forms of semantic network analysis and graph theory and using their components, participants were required to give three responses. The questions were planned for the respondents to have free associations. These three responses were received and the relationship among them was studied and while doing this, semantic network analysis and graph theory were utilized as an instrument. The analysis of them was done in five dimensions of semantic network analysis. These are namely, degree centrality, closeness centrality, betweenness centrality articulation points and k-core. The data received was studied and the relationship of these responses given by the respondents was specifically investigated.

The target group was the female customers. The main reason why female consumers were chosen for this research is that women consumers are more sensorial compared to men while shopping. They desire to obtain satisfaction from shopping unlike men whose shopping experience relies on needs. In regard to Hu and Jasper (2004), women are hedonic shoppers, however, men are utilitarian shoppers. Because this study takes sensorial expectations as its focal point, this actively demonstrates that the female consumers are the more appropriate population for this study.

The results that were obtained by analysing the responses the respondents provided enabled the author to maintain some outcome. As it is demonstrated people do not reject the sensorial stimulants in shopping malls, they even wish to benefit from them. They prefer a slow music or a pleasant scent. When the respondents were asked what they do not want to feel as sensory expectations it can be seen that they did not favour extreme stimulants.

In terms of auditory perspective, “discount announcements” is the leading sensorial expectancy. Babin et al. (1994) maintain that exploring and finding a bargain may also motivate hedonic consumers. In this study, the response as an “auditory expectation” is given by female consumers. They intend to buy the product at a better price and exploring the product in the shopping mall is a pleasurable act and an expectation for them. Barletta (2003) mentioned the importance of a clean environment for women. It is also stated that women prefer fresh smells and the

environments where they feel clean when they are shopping. This complements with the results in this study. From the visual and tactile point of view, the women in the shopping malls tend to feel the cleanliness. Both in the visual and tactile networks outcomes emphasize that clean areas are the most popular expectations.

From the tactile perspective, the female consumers in the shopping malls tend to feel the green environment. They are all aware that they are not passive shoppers and they do demand from the environment they are in. For example, the questions; “What are the three things you want to see in a shopping mall?” and “What are the three things you want to smell in a shopping mall?” were asked and the most important responses in terms of semantic network analysis that was conducted, included “green areas” and “flowers” which were repeated in every dimension. This illustrates that nature could be the most popular, therefore the most significant expectance for the consumers visiting a shopping mall. Also, higher values in dimensions demonstrate that the responses are more central, thus, more important. Again, when the dimensions of closeness and betweenness are considered, the higher the values are, the more important responses they are regarding their locations. Because of their positions in the network, they gain significance.

It can be concluded that the strategy that is using the food and drink smells to attract the customers, which has been used frequently in food and beverages industry, can achieve desirable results in shopping malls as well. The respondents preferred the smell of their favourite food and drinks right after the smell of soap and fresh scents. An attitude likewise can be implemented in other sectors in the shopping malls.

As for the results, by studying the responses given by the respondents, sensory determinants in shopping malls have been found out. In the literature review, three main parts have been examined as sensory marketing, shopping malls and gender. Regarding the results of the study, the important factors that can be or should not be used in shopping malls have been pointed out in relation to sensory marketing. As Barletta (2003) maintains in her book that the music in the shopping area should not be so loud for the sensitive ears of the women. In this study, for the question; “What are the three things you do not want to hear in a shopping mall?”, the most important responses in terms of degree, closeness and betweenness analysis were “noise” and “loud music”. For this reason, there appears to be a consistency between those outcomes.

7.1 Managerial Implications

This study offers a number of implications for practitioners. Findings from this research might be used by mall managers to increase malls' attractiveness in their respective area.

An insight can be developed into sensory marketing by the findings of the study. The managers of the shopping malls can take the results of the study into consideration and can increase the amount of the green areas which has been one of the most expected demands from the shopping malls. Furthermore, since sensory marketing represents an enormous opportunity for marketers, making use of five human senses provides valuable insights into sensory marketing implementation in shopping malls.

Because this study has reached a conclusion that female consumers are mostly hedonic shoppers, marketing elements should be based on the shopping styles of hedonic consumers. For hedonic shoppers, in order to provide a more pleasurable shopping, the appeal of the shopping malls can be increased. Preference of that shopping mall and the increase of the traffic inside the mall will create positive feedback for the stores as well.

To illustrate, treats offered as food or beverage will satisfy the hedonic shoppers in the physical environment where the purchase takes place. It can be seen that music plays an important role in shopping behavior, as well. Mall managers should consider including performance areas for live music shows to influence consumers' mood. Consumers will make their decisions under the influence of multiple sensory inputs.

The major disturbances of the female consumers in shopping malls, namely the object they do not want to touch, are the door handles and any surface in the toilets. In line with the findings, doors with handles can be changed to automatic doors. For example, this can be applied in the dressing rooms of the clothing stores or the toilets of the malls. Narrow space, dark environment and low ceiling are the main unwanted features of the shopping malls. Avoiding these structural elements should be the goal of the designing team of the mall in order to make female consumers more content. One way to attain this aim might be creating bright and large spaces with high ceilings. These provide benefits such as longer stays for consumers in the physical environment.

Moreover, these outcomes regarding the general impact of hedonic components seem to justify latest trends toward entertainment and the creation of more pleasurable environments. A shopping mall that utilizes all these sensorial expectations and takes all the disturbances into account will provide a better competitive advantage.

7.2 Limitations and Further Research Suggestions

The study had several limitations one of which was the question whose answer was lost in translation, such as “do not want to hear” as the verb “hear” in Turkish may also mean “feel”, so the responses received did not correspond to the question.

This study was primarily about women’s sensory expectations. Particularly, if and when women as consumers are taken on board, the information of what kind of sensory marketing strategies can be considered and what type of strategies can backfire, could be planned strategically in shopping malls.

This study conducted only on females and it can be taken as a foundation, and a similar study can be carried out on male consumers in the future. Thus, by taking these two studies into consideration, many studies can be diversified such as consumption habits of women and men from gender perspective, their points of view in shopping, and the effect of shopping on gender or vice versa. As an alternative, a similar study can be conducted in different countries and possible similarities and differences can be investigated from the cultural perspective. Novel studies can be carried out in order to find answers to questions such as “Do the consumption habits that are the results of cultural differences affect sensory marketing as well?” or “Does the culture of the region affect sensory marketing differently?”.

Similar to the study that has been conducted, demographic diversity can be increased. Moreover, studies with single, married, married with children families or regarding Turkish traditional family structure, research on crowded families or extended families can be carried out. Because each group has their own needs and priorities, it may lead to the idea that there will be differences in purchasing behaviour. As a result, working with demographically different individuals and family structures can diversify the studies including similar and different approaches to shopping.

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