

## إقرار

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### **Towards A Contemporary Residential Interior Design Style in a Traditional Context in Gaza City**

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Deanery of Postgraduate Studies  
Faculty of Engineering  
Master of Architecture Program

**Towards A Contemporary Residential Interior Design Style in a Traditional Context  
in Gaza City**

A dissertation submitted to the department of architecture and the committee on graduate studies of Islamic University of Gaza fulfill of the requirements for the degree of master

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## نتيجة الحكم على أطروحة ماجستير

بناءً على موافقة شئون البحث العلمي والدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحثة/ هلا صبحي اسماعيل سكيك لنيل درجة الماجستير في كلية الهندسة قسم الهندسة المعمارية وموضوعها:

نحو تصميم داخلي معاصر يحتوي على المفاهيم العمارة التقليدية للبيوت السكنية في مدينة غزة  
**Towards A Contemporary Residential Interior Design Style in a  
Traditional Context in Gaza City**

وبعد المناقشة العلنية التي تمت اليوم الأربعاء 29 رجب 1435 هـ، الموافق 2014/05/28م الساعة الحادية عشرة صباحاً بمبنى اللحيان، اجتمعت لجنة الحكم على الأطروحة والمكونة من:

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واللجنة إذ تمنحها هذه الدرجة فإنها توصيها بتقوى الله ولزوم طاعته وأن تسخر علمها في خدمة دينها ووطنها.

والله ولي التوفيق،،،

مساعد نائب الرئيس للبحث العلمي و للدراسات العليا

أ.د. فؤاد علي العاجز



# **Towards A Contemporary Residential Interior Design Style in a Traditional Context in Gaza City**

## **Abstract**

Interior design plays an important role in reflecting the culture of countries and showing the characteristics of the age. In Gaza city, designers created interior spaces that were a real reflection of time, material, culture and all surroundings. This study investigates the influence of the contemporary design style with the traditional context on occupant response and degree of satisfaction in interior spaces. Thus, the methodology adopted the mixed method theory by collecting data from many related sources and analyzing it to get the final results. The researcher carried out a questionnaire of simulated models designed by 3D software to measure the occupant's response according to satisfaction scales. Moreover, many personal interviews with designers were a part of the research process. The research concluded that choosing the most appropriate design style is submitted to occupant satisfaction scales; relaxation, excitement and dominance. It is found that customers are more pleased in the contemporary design style with the traditional context. In addition to that, adding the traditional elements to homes plays a role in reviving the Palestinian heritage. Finally, the research ended with strategies and recommendations for the designers and the researchers.

**Key words:** Traditional style - Contemporary Style – Satisfaction – Heritage – Gaza – Space quality – Adaptation.

## المخلص

التصميم الداخلي يلعب دوراً هاماً في عكس ثقافة وخصائص العصر الذي عاشت فيه، وقد صمم عبر الزمن فراغات داخلية عكست ثقافة المكان والظروف المحيطة به فيه من خلال المواد وتحقيق المتطلبات الوظيفية في الفراغ، وقد تم تطبيق هذه الدراسة في مدينة غزة في فلسطين ذات المخزون التراثي باعتبارها بيئة مناسبة لتطبيق هذه الدراسة التي تهتم بتحقيق الحد المناسب من الرضى لقاطني الفراغات الداخلية السكنية، تسعى هذه الدراسة إلى دراسة تأثير نمط التصميم الداخلي المعاصر الذي يحتوي على المضمون التقليدي في مكوناته على ردود أفعال القاطن في الفراغ السكني، ولتحقيق هذا الهدف تم استخدام المنهجية البحثية التي تعتمد على النظرية المختلطة التي تجمع التجارب الكمية والتحليل النوعي والتي يتم من خلالها التعامل مع البيانات المتوفرة ودراستها وتحليلها بالإضافة إلى استخدام الاستبيان الذي يتكون من نماذج باستخدام برامج الحاسوب وذلك لاستطلاع رأي الزبائن، لقياس درجة رضاهم وتقبلهم للأنماط التصميمية التي يجرى عليها الدراسة، بالإضافة إلى إجراء مقابلات شخصية مع المتخصصين في مجال التصميم الداخلي، و تظهر نتائج البحث أن المجتمع مهتم بالطراز الحديث المعاصر الذي يحتوي على المضمون التقليدي وأخيراً ينتهي البحث بالتوصيات والمقترحات للمصممين والباحثين.

**الكلمات المفتاحية:** الطراز التقليدي – الطراز المعاصر – الرضا – التراث – غزة – كفاءة الفراغ – التكيف.

## **Dedication**

I am dedicating this thesis to and to my beloved parents and my husband who always love me unconditionally, and whose good examples have taught me to work hard for the things that I aspire to achieve. I am truly thankful for having them in my life.

I also dedicate this work to the spirit of my late uncle Jamal who is one of the first eminent architects in Gaza, from whom I learnt and loved architecture.

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# Chapter 1

## INTRODUCTION

This chapter starts with a discussion of the key issues of the thesis. Then the researcher reviews the research problem that shows the related factors promoted her to write the thesis. The scope and limitations are the next part, showing geographical and the historical scopes of the study as well as the obstacles that faced the researcher. The research question follows as a central question with many sub questions. Subsequently, the objectives that the researcher seeks to achieve in the research are indicated, then the most important part in the chapter; the methodology, illustrates the methods and measurement tools of the variables. Finally, the chapter ends with previous related studies and the structure of the research.

### 1.1 Background

The Messenger of Allah May Peace Be Upon Him said "Allah is beautiful and he loves beauty" [Muslim] . This hadith encouraged Muslims to beautify their life and all surroundings including homes. Thousands of years ago, people used different arts and handcrafts in beautifying their spaces (Nicanor, 2009). They created ceramics, stone curving, woodworks, reed works, pottery and other crafts that shaped their interior spaces. Consequently they created a real reflection of their life and a unique traditional design style. Such arts and handicrafts were associated with deep-rooted traditions passed from one generation to another and formed art masterpieces of spaces produced by skilled workers (Al-Sayd, 2011). In fact, the term of the traditional design style was created since then and it refers to the characteristics of the interior spaces in the old ages.

According to a description provided by Mohaisen (2009), Gaza traditional style is a reflection of the costumes, traditions, climate, the local material and the cultural legacy of ages that passed through Gaza city (Mohaisen 2009). Hence, inspiring from traditional style in interior design is important for people spirit and life; that way of using interior decoration of a house revive Gaza heritage as well as it displays nation characteristics and civilization. As well as strengthen the regionalism and realism for the best form of the interior space (Zheng-jun 2005).

Several attempts have been made to investigate and assess the influence of the interior design style on occupant well-being and satisfaction, especially the effects on occupants' response. In most of these attempts, researchers neglected the interior styles (Ali, 2011a). The major drawback of such attempts is that they tend to neglect the effects (e.g., emotional, psychological) caused by different properties of interior design (Ali, 2011a). The proper control and admission of interior design became a challenging issue for the designers, especially in buildings where occupant performance is including spending most of daytime, such as homes. There is a relationship between the selected design style of the space and occupants' satisfaction (Zheng-jun 2005). According to Altast and Gzsoy (1998), the general methods that are used to analyze and control occupants' satisfaction are four: (a) the room type; (b) the conceptual context of the design; (c) the occupant's attributes and expectations; and finally (d) the affective quality of the space. The theory that is used in this research depends on measuring people's response according to the satisfaction scales; relaxation, excitement, and dominance.

## **1.2 Problem Statement**

This research focuses on navigating the effect of interior design styles on occupant's response on the residential space in Gaza city. The tested design styles are the contemporary, the traditional and the contemporary design style in traditional contexts. The researcher gives many reasons for the selection of these three design styles, the noticeable spread of the contemporary design style in interior spaces despite the narrow scope in Gaza. Hadid (2002) mentioned in her paper that many contemporary techniques, materials, and forms are used inside homes. In addition to that, however Gaza has a significant treasure of the valued traditional elements, this treasure is almost neglected in the current era. Due to globalization and the rapid drift towards international influences, the traditional elements of interior spaces are almost disappeared. Artists and skilled workers have become under threat (Al-Sayd, 2011). In addition to that, multicultural accumulation of different communities is also one of the factors that caused the lack of traditional style presence in interior spaces (Zheng-jun 2005). Finally, a greater focus on the contemporary design style with traditional contexts in the research could produce interesting findings.

In Gaza city, the scope of this study is particularly relevant. Remarkably, the rapid increase of the interior design awareness in of interior design in the Gaza Strip has led to a boom in interior design work. According to an investigated statistics done, about 30 to 40 interior-design projects are annually completed (Sheikh, 2013). Aesthetic considerations are met in these projects, yet the satisfaction considerations are seriously missing for achieving relaxation, excitement and dominance of the space. More importantly, educational courses of interior design at university level within the Gaza Strip have basically ignored how to connect the properties of the design style with the satisfaction of the occupant (Shamia 2013). Noticeably, according to the researcher investigation, 40% of home elements are manufactured outside Gaza. Self-reliance on manufacturing home elements would strengthen innovative process of the interior design because this process provides unique elements with a suitable price. In addition to that, this would enhance the ability of reducing the imports amount and thus improving the industrial sector. On the other hand, according to the researcher statistics, 36% of occupants are satisfied on their current resident space, and 70% of occupants expect that the spaces do not belongs to a specific interior design style. Hence, the aim of this study seeks to achieve occupant's satisfaction of the interior design marked by all elements of the interior space. The study also suggests recommendation to make this process applicable in Gaza in order to reach the highest satisfaction ratios of occupants.

### **1.3 Scope of the Study Area**

The study investigates period of take time of Gaza history: Mamluk era (1250-1517), and the period of time ranging from 2000-2014. The geographic scope is Gaza city that is located at 31.3° N latitude north of the equator. On the northern west of Gaza the Mediterranean is located with 3 kilometers length. Surrounding localities include Beit Lahiya, Beit Hanoun, and Jabalia to the north, and the village of Abu Middein, the refugee camp of Bureij, and the city of Deir al-Balah to the south (Remembered, 2013).

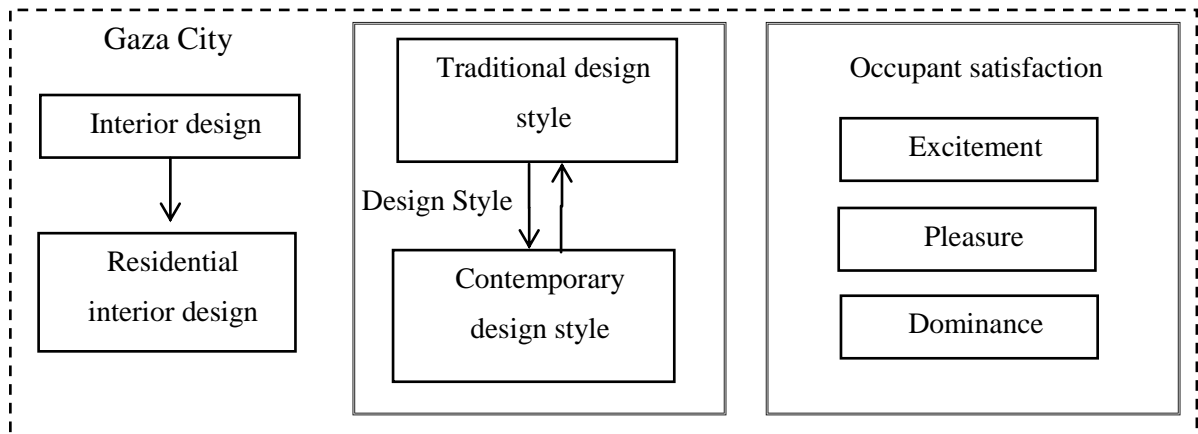


Figure 1.1 Conceptual framework

This study investigates the most affective elements that have a direct influence on the interior design satisfaction of the residential space. Primarily, the researcher defined the scope of the study by the interior design styles that exist commonly in Gaza through measuring people satisfaction to the interior spaces using the theory of satisfaction scales. This study proposes how to get suitable spaces according to the satisfaction scales as shown in figure 1.1.

#### 1.4 The Limitations

- a) Lack of studies and papers about interior design field and relating it with heritage.
- b) Difficulty in accessing internal space of the old houses in Gaza because this area is almost neglected.
- c) Difficulty in defining the traditional design style and its characteristics.

#### 1.5 Research Questions

- **The Main Question**

The central question of this study asks: How interior designers can create a contemporary design style with traditional contexts to make the occupant more satisfied about the residential interior space?

- **Sub Questions**

In particular, the thesis seeks to answer these questions:

1. What are the factors that affect the traditional and the contemporary design style?
2. What are the main factors that effect on occupant's response to the interior space, and how are these factors related to the interior design style elements?
3. What guidelines should the designer follow to get a contemporary interior design style with traditional contexts?

## 1.6 Research Objectives

The following objectives are of key concern:

1. To highlight the elements and the factors of the traditional and the contemporary design styles.
2. To study the relationship between the satisfaction scales with the design elements in order to enhance interior design situation in Gaza.
3. To propose guidelines to create an interior design style inspired from the Palestinian traditional style that satisfies home occupant.

## 1.7 Methodology

The data collection undertaken for this study is huge. The researcher employed many tools to systematically record data, and to manage analyzing it. This section highlights some of the key methodological decisions, and outlines the determination of results, how, and for what intended purpose. The researcher uses mixed method to investigate the thread by many tools to provide information from different sources throughout combining between qualitative and quantitative methods. Figure 1.2 illustrates the tools of the methodology approaches.

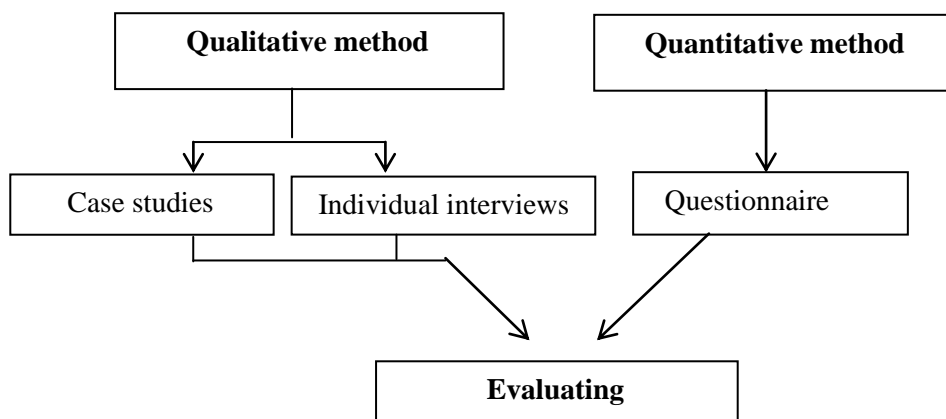


Figure 1.2 Chart of methodology tools

The qualitative approach focuses on the construction of the database that is a prime consideration from the outset. Its design and construction are determined by the information collected, and this also determined the manner in which recording of data took place. Brainstorming sessions and discussions with experts leads to various correlated data. Analyzing some case studies lead to highlight the understanding of the thread. The researcher creates relationships between the databases, analyzes them and compares them to the different sources. For example, the data about the conditions of interior design in Gaza may appear in a number of different sources and vary slightly between each other.

The second part of the methodology is quantitative. The researcher carried out a questionnaire, starting it with determining the sample of customers, evaluating it and making a survey study. Using 3D Studio MAX 2011, the researcher creates simulated models of living room and bedroom of three different design styles to measure satisfaction scales of costumers in the questionnaire. In an attempt to elucidate the complex relationships between various occupants' response, systematic modes of query are often needed. More specifically, it examines the adequacy of using three styles of interior design of the same space. By achieving different characteristics (e.g. lines, forms, colors, elements, and others) of the space, the response would give different primary occupant's perceptions about the three simulated spaces. The researcher distributes the questionnaires to the sample, gathers them, and analyses them by SPSS 17 program and finally gets the results and converts them to guidelines and recommendations. In addition to that, the results of the questionnaire widen the overview of the issue.

Figure 1.3 illustrates all the sequential stages of the methodology the researcher conducted to get on to the final results and to answer the research questions and obtain all objectives.

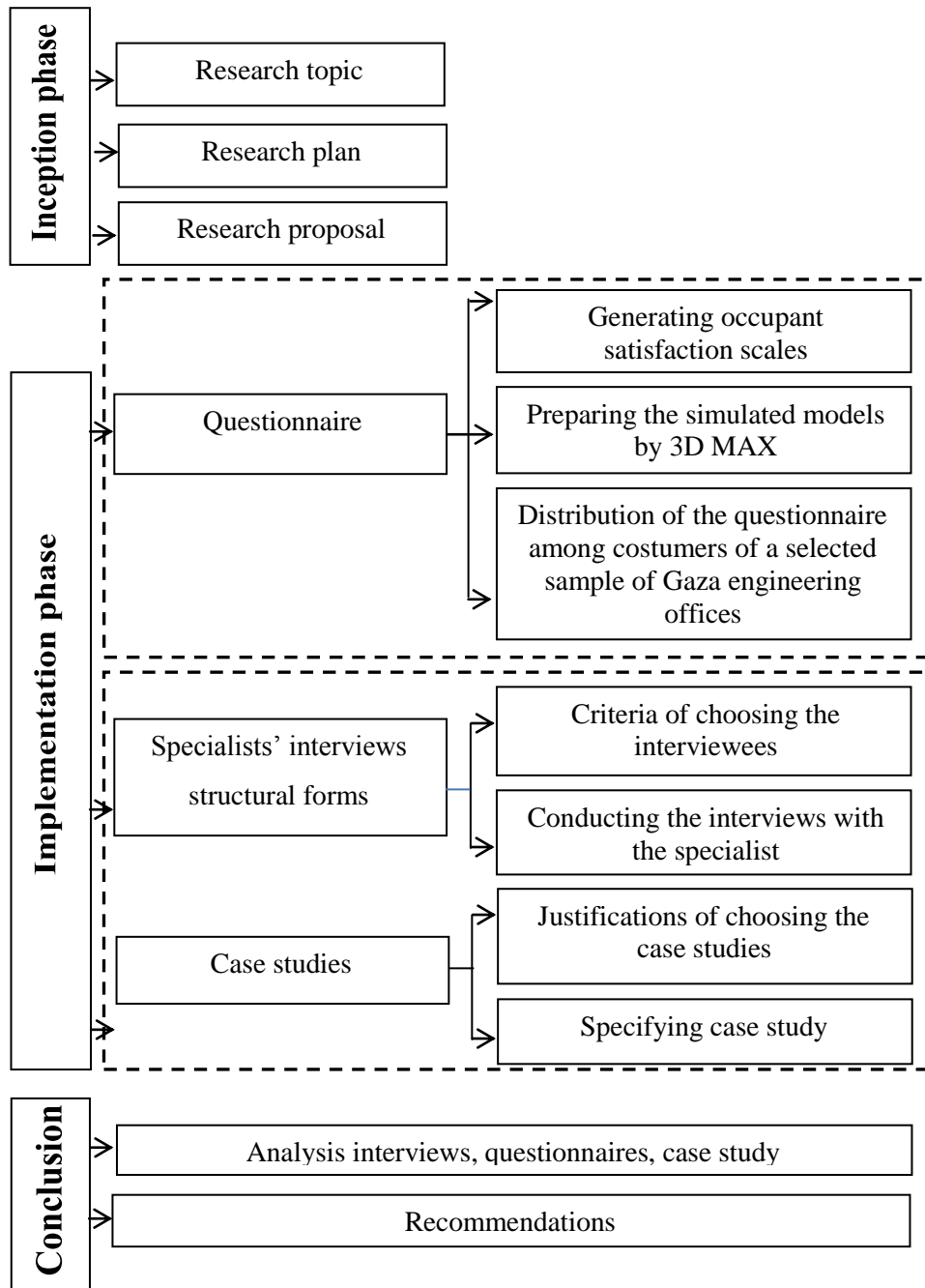


Figure1.3 Chart of thesis phases.

Phases of the methodology are categorized in three stages. The first one is the first steps to conduct the research. In view of that, choosing title and determining the objectives and the methodology of the research lays at this step. The initial steps could not be completed unless the enormous research on papers, dissertations, and any many discussions with experts. The second phase which including the practical steps to

conduct the research. All various research tools help the researcher to find the results for the research questions. The final stage includes all the resulted data to be analyzed and concluded by the researcher.

## **1.8 Previous Studies**

This section presents a review of the previous studies relevant to the questions of this study. Previous studies were selected according to the criteria which investigated the correlated relationship of interior design style with customer satisfaction on many perspectives. Some of these studies investigated the contemporary and traditional issues. Others investigated the space quality and customer satisfaction. The most relevant studies are:

1. **The Orient House and The Culture of The Place: The Contemporary Soul to Revive Traditional Arts and to Return the Originality to The Contemporary House** (Ali, 2011a)

This paper focused on the real concept of originality and the different ways to integrate it with contemporary style. The researcher said that originality is to return to the old and ancient concepts, but simply the real meaning of originality is the new view point and modern thoughts. Our old houses were a combination of different pieces that were overlapped in different ages. Each age had its distinguished characteristics of style, material and shapes. However, the eastern style had a lot of elements and items that was mentioned such as: doors, oriels pitchers grafted with silver, lightening units and burners that are related to the past age. Designers also used warm colors like red and green in carpets, curtains, wall paint and fabrics. Motifs were basic element that was used in walls and furniture. Calligraphy was also used on walls, lightening units, bedspreads and pillows. This paper aimed to recognize the factors that make a successful oriental design that mixes between traditional and contemporary design in a beautiful and integrated format. The researcher searched deeply in methods and strategies that the designer can follow and they are design that contains the details of oriental style, an oriental design style that contains the contemporary spirit, and finally the contemporary design style with modern elements, by the same time it gives the eastern original climate. This paper recommended that designer must activate traditional style by increasing people



awareness of heritage by conferences, meetings, and publications (magazines, newspaper and media). In addition to that, stake holders must decrease the globalization influences on our culture by starting self-manufacturing of furniture products, and decreasing importing them. Finally, designers have to emphasize that contemporary style does not contrast with our culture, but integrates with it to be real.

## **2. Criteria of Using Architectural Heritage Elements in Contemporary, Srchitecture and Its Role in Reviving Traditional Architecture** (Mohsen, 2009).

The researcher in this paper focused on producing some criteria of using old elements of Gaza architectural characteristics as it is the mirror of the community in order to minimize the bad effects of the national pattern that dissolved the architecture to be so cold and without identity. The researcher studied the criteria of traditional architectural elements in modern architecture and how they revive Gaza heritage by following a qualitative methodology included two approaches of collecting and analyzing data from many sources that is related to architecture in many ages, and reviewing a case study of old houses in Gaza as a local architecture model. The criteria were functional criterion and a humanist criterion; (public satisfaction and the religious, social, cultural and historical compatibility criteria). The researcher recommended increasing the public awareness of the great heritage in Gaza, and using the elements of old architecture as ornaments, arcs, domes and other elements in a new modern way.

## **3. Ancient Art in A Modern Context** (Evans,1993).

This literature concluded that with the importance of understanding the history, which is connected to the development of heritage industry, it is a main source of economy and that buying antiques connects between the past and the present. Heritages and antiques also reflect the historical side of any city and attract tourists and express the ancient world. Nowadays, antiquity reproduction industry is drawn from the international indoor spaces and derives it a fake way. Products are judged as not hollow with economical aims. Ancient arts-real, fake, or reconfigured have a modern spirit derives from contemporary context.

**4. A Description Of The Affective Quality Attributed to Environment** (Russell & Pratt, 1980)

The meaning that persons attribute to environments is divided into perceptual- cognitive meaning and affective meaning. Affective meaning is then conceptualized as a two-dimensional bipolar space that can be divided to eight variables falling in the following circular order around the perimeter: pleasant (arbitrarily set at 0°), exciting (45°), arousing (90°), distressing (135°), unpleasant (180°), gloomy (225°), sleepy (270°), and relaxing (315°, which is thus 45° from pleasant). Alternatively, the same space can be divided by two orthogonal bipolar dimensions of pleasant-unpleasant and arousing-sleepy—or equally well by exciting-gloomy and distressing-relaxing. Reliable verbal scales for these eight variables are developed and shown to approximate the proposed theoretical structure.

**5. A Comparative Study of Building Occupant Response to Luminous Displays in Real and Simulated Indoor Environments** (M. Boubekri & Boyer, 1995)

This study examines the response of people to simulated environmental displays and the adequacy of such simulation media. The response elicited by color slides is compared to that from real environments as the lighting condition (sunlight penetration) and the size of the room window changed. The elicited Occupant response is an affective or a mood change response. Factor analysis was performed on the semantic differential mood inventory used to measure the mood change. The factor construct was to a large degree similar between the two environment representation mediums. However, the extent to which a change of luminous/environmental conditions influence upon occupant response revealed differences between the two mediums. When using the real room, factor analysis indicates, after an orthogonal varimax rotation, the existence of three underlying factors with eigenvalues of 6.02, 4.32, and 2.50 accounting for 46.8, 33.6, and 19.4% of the total variance of the 14 variables. These factors tend to be bipolar including both positive and negative loadings. Factor 1 was positively correlated with the variables 'calm' (0.74), 'peaceful' (0.66), 'restful' (0.64), and 'in control' (0.52), and negatively correlated with 'rushed' (-0.63) and 'hectic' (-0.47). Factor 2 was positively correlated with the words 'stimulated' (0.83), 'exhilarated' (0.55), 'excited' (0.54), and

'overwhelmed' (0.51). The third factor was positively correlated with 'dull' (0.72), 'bored' (0.63), and 'overwhelmed' (0.54).

## 1.9 Structure of the thesis

The current dissertation starts with an abstract followed by six chapters and ends with references. Figure 1.4 shows the contents of the thesis:

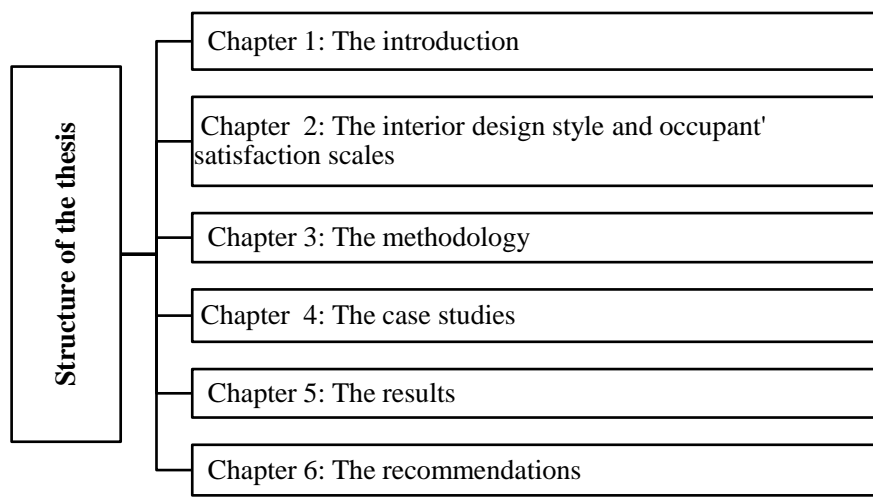


Figure 1.4 Structure of the thesis

The first chapter deals with introduction and background about the objectives, research statement, research questions, and methodology, with a focus on work-related issues and structure of thesis organizations. The literature review is presented in Chapters 2. It elaborates on the interior design and different related design styles focusing the navigation on Gaza and discussing the issues of occupant satisfaction. Chapter 3 gives a description of the methodology used for the research. The aim and objectives of the research as well as the hypotheses are stated, with an expanded discussion of the data collection methods of research, describing the analysis technique used and stating limitations during the research. Chapter 4 presents and analyses local, origin, and international case studies. Chapter 5 is solely for the presentation and interpretation of the results from the research which are compared to the findings from other research works. The last chapter concludes the results and outputs, also suggests recommendations for further researches.

## **1.10 Summary**

This chapter concentrated specifically on displaying the interior design styles and its effect on occupants' response. The importance of these problems increases with the extending constructions in Gaza and the noticeable negligence of the Palestinian traditional culture. Contemporary and traditional styles are the subject of this study. They are considered the most appropriate common design styles. The study assumes that there are significant effects of the design style on the occupants' satisfaction in Gaza city. So, by implementing a questionnaire and interviews, the study was carried out to find out the dimensions of this assumption. On the other hand, the chapter presented related studies that dealt with traditional and contemporary interior design styles. These studies showed that there is a lack of interest in the interior design styles and its effects on people's satisfaction. Also, many factors effects positively or badly on occupant satisfaction.

## **Chapter 2**

### **THE RESIDENTIAL INTERIOR DESIGN STYLES AND OCCUPANT'S**

#### **SATISFACTION SCALES**

### **2.1 Introduction**

This chapter is gradually presents all the items of the thesis. Firstly, it introduces the interior design, its elements, principles, the influencing factors, and the situation of interior design in Gaza. Then, it engages with the design styles types giving an overview of each one, customizing the traditional Palestinian design style and the contemporary design style in depth explanation, and linking these styles to the interior design and the way it works together with the steps to apply these styles to the elements of the interior design. Finally, the chapter views the scales of occupant satisfaction scales of the interior space that identify the correlation between them and the elements of the interior design style.

### **2.2 The Interior Design Situation in Gaza**

Decorating spaces became an important issue in Gaza, specially these days, people try to create beautiful and elegant spaces to live a spiritual experience that makes them feel happy and relax inside their residential spaces where they perform activities (Raid El-Ottol, 2013).

#### **2.2.1 Geographic location of Gaza city**

Gaza City has a middle geographic location between the continents of Asia and Africa. So, it is located in commercial corridor between Egypt and Syria, which led to the economically and the culturally growth. This growth reflected in all Palestinian life (Mohaisen 2009). The important geo-strategic location of Gaza has attracted tribes since the fifth millennium BC that caused the establishment of the earliest human settlements along the ancient land route between Palestine and Egypt, on the banks of the Gaza valley, and along the coastal line of the Gaza region (Sadeq, 2013).

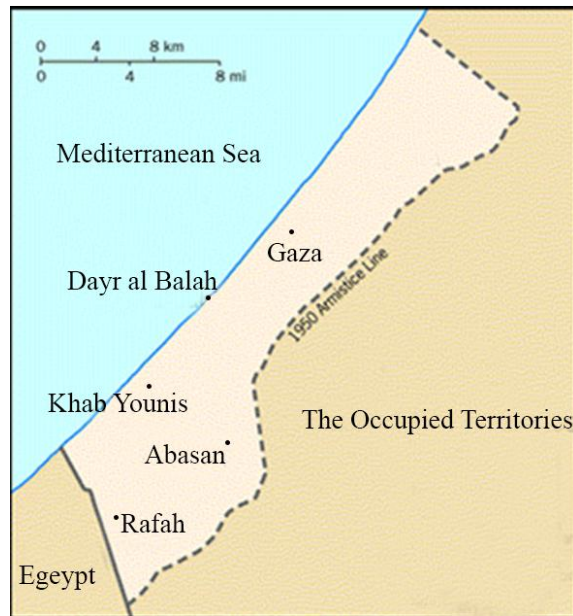


Figure 2.1 Gaza city location ("Geography about Gaza," 2005).

## 2.2.2 Interior design in Gaza

Until recently, there has been big interest in interior design. It is obvious by wide spread of interior design demand in Gaza from about the last five years. Noticeably, many reasons such as increasing people awareness was a part of this rapid development (Shamia, 2013). Interior design fields extended not only to homes, but also resorts and commercial places (Palestinetoday, 2011). Interior design provides more comfortable residential spaces and attracts occupants to get into the commercial spaces (Palestinetoday, 2011). Up to now, people in Gaza are moving into providing spaces which are suitable for daily activities without following a specific style. They only depend on the items they used to see, or on pictures from magazines or website that is not related to Gaza culture (Al-Hayk, 2013). So, it became fake and not suitable to our soul and our Palestinian traditions; Cross stitch, bosat, hot colors, goat horns, wooden chairs and beds, etc., are not found in homes nowadays. But they are considered a treasure that must be revived in homes (Al-Hayk, 2013).

## 2.2.3 Economic determinants that effects on interior design

There are many determinants that affect interior design in Gaza city. They can be explained by human resources, manpower, raw material, and supply and demand.

a) **Human recourses:** In Gaza city, there in a lack in professional designers with high qualifications; most of designers are architects. This specialization does not exist in

Gaza universities. It is only available as a diploma (Al-Hayk, 2013). Table 2.1 shows the most significant engineering offices in Gaza with the estimated number of the designers in each office (Ottol, 2013):

Table 2.1: Human resources in interior design in Gaza (Ottol, 2013).

<b>Sn.</b>	<b>The engineering office or company</b>	<b>Number of Designers</b>
1.	Zawaya company	2
2.	Design office	3
3.	UTOPIA office	1
4.	Annovated design office	2
5.	Re-Con office	2
6.	LaCasa office	2
7.	Al-Rai office	1
8.	Iwan office	3
9.	Wafi Group	2
10.	Al-Aqsa office	4

An example of this is the study carried out by Al-Ottol and Skaik (2013) in which the different interior design offices in Gaza use different styles and ways of creating the interior space. These pictures show some of offices products of residential spaces:



Figure 2.2 Entrance lounge (Recon, 2012).



Figure 2.3 Dining room (Design, 2012).



Figure 2.4 Living room in Gaza (Zawayya, 2012).



Figure 2.5 Living room in Gaza (Work, 2012).

b) **Manpower:** Professional workers and handcrafts are already present whose work can be seen in different workshops (Palestinetoday, 2011).

c) **Raw material:** Different types of material are already present with high standards and suitable prices, but sometimes the political situation, causes lack in material (Palestinetoday, 2011).

d) **Supply and demand:** it is noticeably that there is an increase in people's awareness about the importance of the interior design for their home (Palestinetoday, 2011). On the other hand, some people depend on their own opinion of making design for their residential spaces (Palestinetoday, 2011). About 50% of society do not make interior design for their homes because of their low income and the high cost of this process (Raed El-Ottol & Skaik, 2013). Gaza city passes through many political periods in the last 50 years. This affected the interior design process and caused chaos in the development of the design styles. During the occupation period the main concern of so many people was to build a temporary shelter in a very economical way regarding the form, shape, or style. The architect until late 1980s did not play a role in forming interior spaces. Thus interior design depended on personal tastes (Hadid, 2002). The instability of Gaza political situation causes the rare care of obtaining space of a high quality because these homes are not safe anymore (Al-Hayk, 2013).

### 2.3 The Residential Interior Design

Residential design is the design of the interior of private residences. As this type of design is very specific for individual situations, the needs and wants of the individual are paramount in this area of interior design. The interior designer may work on the project from the initial planning stage or may work on the remodeling of an existing



structure (Piotrowski. 2004). The research at this section defines the interior design by deeply addressing the situations of the residential interior design in Gaza city.

### 2.3.1 Definition of Interior Design

It is necessary to clarify exactly what is meant by the interior design. Alkrableh (2009) said that interior design is a creative process which helps people to create interior elements of spaces. It passes in two stages; creation and then implementing. This concept considers that interior design is a human demand. Therefore, it is a creative and mental action that creates useful and beautiful products for human activities. It is a process of planning and creating things according to a specific architectural data, and implementing these ideas using different material and colors with suitable cost. It is the art of dealing with interior spaces to get a suitable atmosphere to live in, and making us relax by the good distribution of interior elements.. It also suggests the best solutions of movements inside the space as well as achieving the esthetic considerations (Khanfar, 2000). By dealing with interior element details like materials, textures, shapes, and colors, a designer can create a suitable space to live in (Alkrableh, 2009). Interior design helps people to practice all their activities without any obstacles. It takes a lot of stages to achieve human demand throughout history to finally create different design styles. In environments where the well-being of the building occupant is a salient concern to the designer, the designer ought to control the interior design style so that it does not impede the performance of the occupant (Mohamed Boubekri, Hull, & Boyer, 1991)

### 2.3.2 Visual Elements of Interior Design

As response to give more understanding about the interior design style, figure 2.6 illustrates the elements of the interior space (Hannah, 2003):

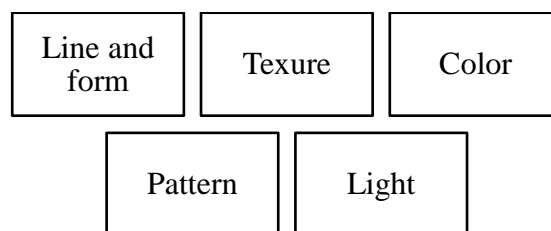


Figure 2.6 The Chart Of Interior Design Elements (Hannah, 2003).

Hannah (2003) identified five elements of the space as being potentially the visual elements that determine the parts of the interior space. These elements are explained widely at the following:

### **2.3.2.1 Line and form**

It is known that line is the basic design element. Too many lines of different nature in a room create an impression of visual chaos like too many beams; paneling on walls etc. Lines should be restricted to the minimum. Equal heights in furniture bring in the impression of unity in the space. Vertical lines create the impression of height and similarly horizontal lines create the impression of more length. Vertical lines of doorways, draperies, windows, built-in cup boards give strength and height to a room. Similarly horizontal lines are obtained by tables, chairs, book cases etc. (Hannah, 2003).

Undoubtedly, form is also referred as shape, area or mass. Forms are closely related to lines. Forms unite with lines to achieve overall design of a given space. Along a rectangular table or sofa and rugs which help increasing a line of unity in the room but at the same times too many shapes or forms of furniture create the impression of chaos (Hannah, 2003).


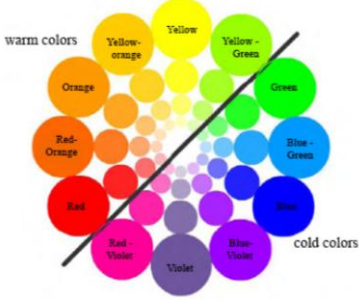
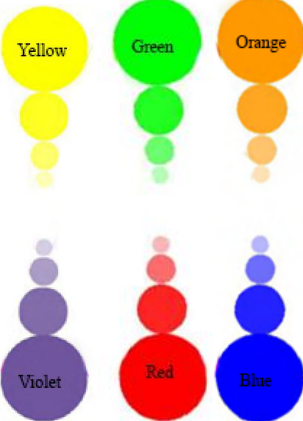
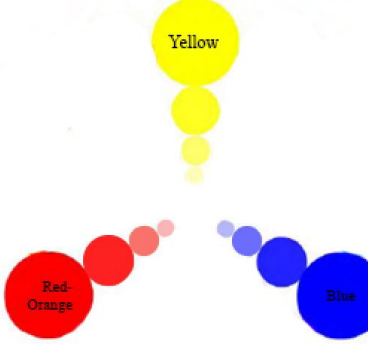
### **2.3.2.2 Texture**

Texture is known as the surface characteristics of any object. Texture surfaces range from smooth to rough. A rough texture absorbs light and smooth surface reflects light. Small and dark rooms should have smooth texture and large rooms can have rough texture, if needed. Textures can be used for wall finish, wood work, furniture etc. (Hannah, 2003).

### **2.3.2.3 Colors**

Color is the element that is produced when light, striking an object, is reflected back to the eye (Hannah, 2003). There are three properties to color. One of the most important considerations is choosing colors according to a physiological and functional way. Color plays a role in defining room characteristics, people feelings of warm or cold. It helps in specifying the focal point and disguise some features (Ehow, 2013a). Colors schemes can be illustrated as follows:

Table 2.2: Types of colors scheme:

Color scheme	Description	Illustrating figure
a) The monochromatic	<p>This scheme uses some hues of one color. It gives a tight focus of object, and brings unity in the space. It gives the right balance of values in a room. We can use the rang of green color from the forest to the creamy. This can be used in furniture, accessories and paintings.</p>	
b) Analogous scheme	<p>It is the second scheme of colors. This scheme works by varying values of one or two colors and making them suitable to each other. Predominating colors are used in many hues by adjusting colors to each other below four colors (green, green-blue, green, violet) from the color wheel.</p>	
c) Complementary scheme	<p>It presents dominant opposite colors on the color wheel, like red and green, yellow and purple, orange and blue. This scheme turns the room to be lively and animated. Using a wide range of colors is necessary and choosing only two or three colors is enough to get the focus tight.</p>	
d) Triadic scheme	<p>It consists of three equally spaced colors wheel. Colors vary when viewed on different computers, but the relationship of colors in the wheel remains the same.</p>	

#### 2.3.2.4 Pattern

According to Hannah (2003), pattern is a kind of surface enrichment. Any room will look dull without any pattern. In interior design, there are three types of motifs or units of design (Hannah, 2003):

- a) Naturalistic motifs, which look like a picture of flowers, fruits, animals or scenes.
- b) Stylized motifs, which depend upon the material as well as the purpose of the article. Ferns and leaves are the most commonly used pattern models for fabrics and other decorative articles.
- c) Geometrical motifs, which are based on forms of circle, rectangle, triangle etc. Stripes, dot and checks are the most commonly seen geometrical motifs in interiors.



(a) Naturalistic

(b) Stylized

(c) Abstract

Figure 2.7 Kinds of motifs (Hannah, 2003).




#### 2.3.2.5 Lightening







Lightening is the most important element of design process. Designers must distribute it in the space accurately and in a way that show the beauty of the place according to the vertical and horizontal elements and the way they are connected (Dawoud, 2013). Overall, there are many ways of lightening and they are natural lightening and artificial lightening. The natural lightening depends on the sun light and it comes from windows or doors of the room. Designers must study sun angle and the light amount that will enter the room. It also affects in choosing textures and material of furniture because it reflects and refracts in surfaces so it gives ethnical, functional, and physiological effects on people. Probably, this kind is not enough. Therefore, artificial lightening must be in the room space according to some specific functions. Generally, lightening may be grouped in several divisions according to function (Ali, 2011): General lightening, Action-oriented lightening, and attracting lightening.

- a) **General lightening** that makes the space luminous;
- b) **Action-oriented lightening**; this type is oriented to specific area like office, bed or kitchen table;
- c) **Attracting lightening**, it is used to attract the user eye to a specific furniture piece to highlight its beauty.

Types of lightening according to the fixing method are either fixed or mobile. Fixed light is focused, long lasting, and elegant. It requires spot or flood light bulb (Alkrableh, 2009). On the other hand, mobile light is used for some specific tasks. It can be changed from time to time, and also it is for decorative purposes and adds to overall lighting of the space (Omar, Abdelrazaaq, & Albeldawi, 2008). Table 2.3 below shows types of lightening units according to the fixing method:

Table 2.3: Types of lightening units (Seemydesign, 1999)

Type	Description	Illustrating figure
(a) sconce	Small size of light fixed on wall or ceiling, using low-watt bulbs, can be installed easily. It can be directed up and down. It is used as a decorative element of any room.	 <p style="text-align: center;">Sconce light.</p>
(b) Pendant	It is fixed on the ceiling, generally used over tables or bars for tasks, giving direct lighting with semi-hard shadows. It can be installed easily. adding overall brightness of the space.	 <p style="text-align: center;">Pendant light.</p>
(c) Track	It consists of moveable bar with many sconces, mounted on the ceiling or the wall. Omni - direction used for accent lightings.	 <p style="text-align: center;">Track light.</p>

<b>(d) Spot light</b>	It is mounted under cabinets, counter and ceiling, it kind of indirect lightening that gives the space special touch, it is used for tasks and is focused to a specific area. It gives several light, that falls from a painting to the countertop or other activity area.	 <p>Spot light.</p>
<b>(e) Valance</b>	It is fixed on the wall or the ceiling illuminating up and downward, it gives soft reflection that creates shadows. Very suitable with gloss paint and Increasing overall brightness of a room via indirect light.	 <p>Valance light.</p>
<b>(f) Soffit</b>	It illuminate a very large area of space so it is not suitable in mood spaces, it kind of direct light creates semi-hard shadows.	 <p>Soffit light.</p>
<b>(g) Table lamps</b>	It a mobile light can be replaced easily, it sets shade on a table for task lighting. Spreading directions depends on bulb, lamp shade and physical form. It's a decorative feature with low watt consumption.	 <p>Table light.</p>
<b>(h) Desk lamps / task light</b>	It is a lamp with small size sets on a table for task lighting; it gives generally uni – directional shadow with Low watt consumption. It is a mobile light.	 <p>Desk lamp.</p>
<b>(i) Floor lamps</b>	These lamps are tall, can be moved or replaced easily. Suitable for mood lighting. Adds to overall room illumination, Creates vertically opposing shadows.	 <p>Floor lamp.</p>

### 2.3.3 Significant Elements of The Interior Space

Alkrableh (2009) described four basic elements of the interior design. These elements are shown on the chart below (figure 2.8):

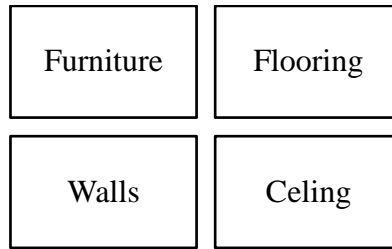




















Figure 2.8 Chart of significant interior design elements.

a) **Furniture:** includes furniture and accessories. These all contents affect the interior design. It is very clear that they are the main parts of the residential space. So, designers must arrange them harmonically according to designer point view and space function (Alkrableh, 2009). The following tables 2.4 defines place component:

Table 2.4: Furniture pieces of the residential spaces









 <p>Side chair</p>	 <p>Wing chair</p>	 <p>Lounger</p>
	 <p>Camelback sofa</p>	 <p>Tuxedo style chair</p>
 <p>Settle</p>	 <p>Sofa</p>	 <p>Sectionals.</p>

 <p>L Shape sofas</p>	 <p>Nesting tables</p>	 <p>Sofa table.</p>
 <p>Coffee table.</p>	 <p>Fireplace</p>	 <p>Footstool</p>
 <p>Ottoman</p>	 <p>End table</p>	 <p>TV unit.</p>
 <p>Chairs</p>	 <p>Dining table</p>	 <p>Buffet and cabinets</p>
 <p>Bar counter stools</p>	 <p>Bed</p>	 <p>Dresser</p>
 <p>Chests</p>	 <p>Night stand</p>	 <p>Kitchen cabinets</p>



Many accessories can be used beside the furniture. In spite of the limited functions they performed, they play an important role in beautifying space and complete the function of the interior elements (Alkrableh, 2009). These figures in table 2.5 show some of accessories that are regularly used in the residential space.






Table 2.5: Accessories pieces of the residential spaces

 <p>Rug</p>	 <p>Mirror.</p>	 <p>Lightening</p>	 <p>Sculpture</p>
 <p>Shoes cabinet</p>	 <p>Wall paper</p>	 <p>Pillow</p>	 <p>Curtains</p>

**b) Walls:** This element is considered as the curtains that cover the indoor spaces from the outside environment. It plays a role in protecting occupants and keeping suitable conditions to live inside it (ElHissi, 2012). In addition to that, walls inside home are used for separating functions and to provide privacy to every room with all its uses (ElHissi, 2012). Walls are sometimes considered as a decorative element that can be covered with different likable materials (Raed El-Ottol & Skaik, 2013).

**c) Flooring:** Floor may be either natural or synthetic. So, the decision process of choosing floor is according to the existing techniques of installation of required types, durability and warranty (Seemydesign, 1999). In Gaza, there are specific types of flooring that have been used from the old ages till now. These are marble in palaces, ceramic, mosaic, tiles, and granite which were widely used in old houses and contemporary houses as well (Alameri, 2000). Recently, many types of flooring were appeared in the last century. They were developed in many forms, dimensions and colors. Table 2.6 below shows these types:

Table 2.6: Types of flooring in homes (Builddirect, 2013)

Type	Description	Illustrating figure
(a) Marble	It was used since the Greek till know in many patterns and dimensions, it is mostly used in homes entrances, lounges, and stairs.	 <p>Figure2.9 Space with marble floor and stairs (IKEA, 2012).</p>
(b) Granit	Granit is rarely used in home floors, it is expensive and looks like small glassy pieces in the floor. It is available in neutral and worm colors. Also it is durable and had strong properties.	 <p>Figure 2.10 Granit floor (graniteflooring, 2012).</p>
(c) Mosaic tiles	It may be used to create a picture or to give a color, these are small pieces of different sizes and colors.	 <p>Figure 2.11 Mosaic floor (Seemydesign, 1999).</p>
(d) Wood floors (Parquet)	It is easy to install and It is adhered to a sub-floor to prevent buckling or uneven edges. Herringbone, basket-weave and oak are the most common patterns. Parquet is rarely used in Gaza because it is not suitable with Gaza weather.	 <p>Figure 2.12 Some samples of wood floor (Ehow, 2013a).</p>
(e) Ceramic and porcelain tile	Porcelain and ceramic tile are the same. Both are part of the larger category with small differences in dimensions, thickness and colors. It is available in different shapes and colors.	 <p>Figure 2.13 Ceramic tile (Ehow, 2013a).</p>

### 2.3.4 Factors That Have Effects on Interior Design

Alkrableh (2009) mentioned that there are many factors which affect interior design: Shape and background, Active element of the residential space; light and color,

focal point, space and area. Studying the available materials, tools and skills is important before beginning the design process (Alkrableh, 2009). Equally, achieving the required function of the space to get a useful design is an important factor. Finally, recognizing the subject of the design to enrich the design and giving it further dimensions. Design must be a story that is lived by the designer and the occupant as well. The subject also affects choosing colors, materials, shapes, cost and properties (Alkrableh, 2009).

### **2.3.5 Steps of the Design Process**

When a designer begins to create a residential space, these steps ought to be sequentially followed:

- a) Listing the site inventory, site analysis, project program, developing the suggested program, sketches of the concept, developing the concept, and to get the final design (Omar, et al., 2008)
- b) Determining the function needed in the space, the gender and the number of residents (Alkrableh, 2009)
- c) Analyzing all elements of the space and the organic relationships between masses and the space (Ali, 2011a).
- d) Studying the ways of natural and artificial lightening material (e.g. fiber glass, steel, wood, glass, gypsum, aluminum etc.). In addition to that, designers have to evaluate the ways of using colors of the space (Alkrableh, 2009).
- e) It is important to establish an analytic study about the windows and the suitable distribution of furniture pieces to get the best locations and functions (Ali, 2011a).
- f) Analyzing furniture distribution according to the absorptive capacity of the space and according to the function (Ali, 2011a).
- g) Giving the attention to electricity distribution and lightening pots (Alkrableh, 2009).
- h) Defining the design style e.g. Islamic, contemporary, American, Chinese, etc. (Alkrableh, 2009).
- i) Giving an attention to accessories plays an important role in completing the whole vision of the space. Thus, it is important to give an adequate attention in choosing these accessories (Alkrableh, 2009).

### 2.3.6 Principles of Interior Design

Interior design has six general principles, and they are as follow:

- a) **Unity/Harmony:** The ultimate goal in the interior design of any room is that all the components of the room create a harmonious whole (Omar, et al., 2008).



Figure 2.14 Harmony in a bed room (Hannah, 2003).

Figure 2.14 shows a sample of a dresser in a bed room. Light violet and white colors are the unit of all elements. It is repeated on wall paper, buffs, and shelves. White color was clear at the curtain and wooden shelves. The harmony between different shapes such as rectangular and cylinder displays beautiful and various visual pictures (Hannah, 2003).

- b) **Balance:** Balance is achieved when the room's visual "weight" is distributed around the room as evenly as possible. For example, bright-colored items hanging on the walls will look "heavier" than those that blend into the wall color (Hannah, 2003).



Figure 2.15 Symmetrical balance (Dawoud, 2010).



Figure 2.16 Unsymmetrical balance (Dawoud, 2010).

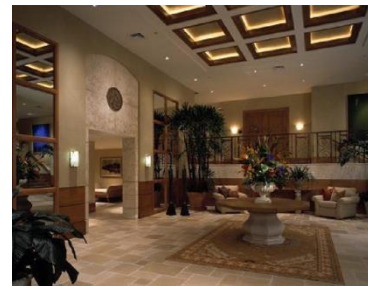


Figure 2.17 Radical balance (Dawoud, 2010).

Balance is divided into symmetrical balance, unsymmetrical balance, and radical balance. These three figures above 2.15, 2.16, and 2.17 illustrate these three types.

c) **Focal Point:** Every room should have one element that naturally draws the eye when you enter. This can be an architectural detail, such as a fireplace, or a work of art or other distinctive piece, or even lighting (Omar, et al., 2008).

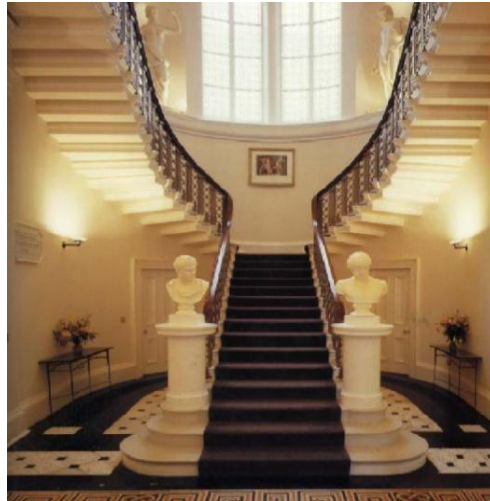


Figure 2.18 Example of the focal point (Network, 2003).

In figure 2.18, definitely, the focal point of the space is the stairs. This element is emphasized, so this helps to center the interest to the most important thing or spot in the arrangement. It should be called as convex of interest. If there is one main emphasized point in a room then others will become subdued (Hannah, 2003).

d) **Rhythm:** A room with good rhythm first draws the eye to the focal point, and then attracts the eye to other components throughout the room, creating a flow of visual movement (Omar, et al., 2008). Certainly, Rhythm is the movement of the eye' across a design. It is a kind of organized movement in continuity. Rhythm develops through repetition of shapes, lines or colors.



Figure 2.19 Example of rhythm (Dawoud, 2010).

Rhythm on figure 2.19 is obvious by the sequence of the repeated horizontal lines of the chairs, as well as the taller horizontal lines of the ceiling (Dawoud, 2010).

e) **Scale/Proportion:** The room must be decorated with furniture and accents that are the right scale for the room's size and shape, and in proportion to each other and to the people using the room.



Figure 2.20 Example of Proportion (Dawoud, 2010).

The proportion in wall unit in figure 2.20 is clear by the arrangement of the TV unit shelves. Also the equal division of every side of the unit means that all space divisions should be pleasingly related to each other.

## 2.4 The Interior Design Styles

The following is a brief explanation of the interior design styles that passed throughout history. Commonly the best style to be chosen for any room depends upon

designer personal taste (Ehow, 2012) as well as the culture of the surrounding environment, the identity and the collective memory of the place (Mohsen, 2009). According to Mohsen (2009), two major interior design styles are commonly used in residential spaces. It is important to address that 73% of homes in Gaza do not follow specific design style but a chaos is prevalent. Figure 2.21 below illustrates types of the popular interior design styles in Gaza:

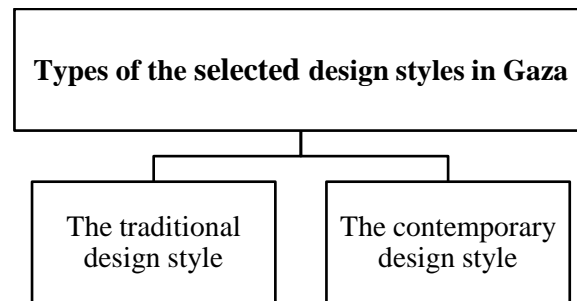


Figure 2.21 Chart of popular interior design styles types in Gaza.

## **2.4.1 The Palestinian traditional style**

According to a definition provided by Hadid (2002), The Palestinian traditional style is a term set for the design style that is raised in an old forms, materials, and techniques. This description includes the finest use of the affordable local materials, forms, shapes and colors related to this design style (Hadid, 2002). Generally, this style is considered a legacy treasure for Gaza that ought to be studied and investigated (Ali, 2011a).

### **2.4.1.1 Historical period of the Palestinian traditional style**

Palestinian traditional style was affected by other cultures although some techniques and building materials are still in use since the prehistory time. A series of details and mutual components have been developed, and a set of common elements and details started to be known and used as typical ones. Other techniques materials and details were taken from different cultures. Roman, Byzantine, Crusaders, and many other cultures left there footprints in the traditional style, most of what survived from the traditional design style in Palestine was built in the Ottoman period while we still can see some of the Mamluk style and rarely Umayyad and other different periods (Khanfar, 2000).

By the end of the first half of the 20th century new materials and techniques started to change the traditional way of building. However, there is no edge time to make a distinction between the traditional and the modern architecture(Mohsen, 2009).

#### 2.4.1.2 Elements of Palestinian traditional design style

a) **Flooring:** Stone tiling was the main common material in building tiles, for economic reasons some houses and building were left with no stones, clay or lime mortar were used in some cases instead of the expensive stones (Hadid, 2002). These samples at the figure 2.22 show some patterns of tiles that exist in some of Gaza old houses.



Figure 2.22 Tiles that found in old houses in Gaza (Alameri, 2000).



Figure 2.23 Tiles in Hmam El-Samra in Gaza (Khoudary, 2013).

b) **Openings:** Main doors were decorated with geometric and simple motifs, but the shutters of room doors devoid of carved motifs. White wood, which was drilled and painted with brown or white, wooden frames were used at the bottom of the wooden shelves that were placed in room corners. As well as wood was used in oriels (Alameri, 2000). These openings include al-qamaryat that are shown in the figures 2.24.


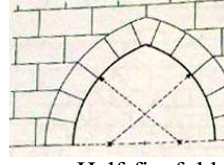
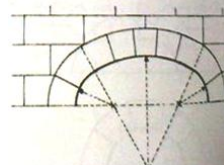
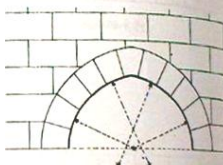
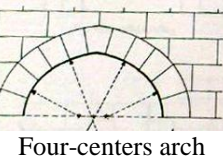
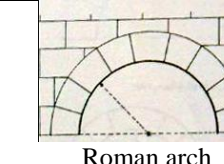
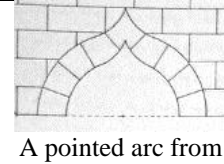

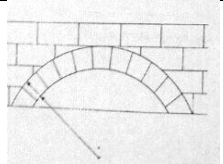
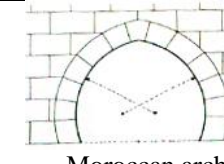
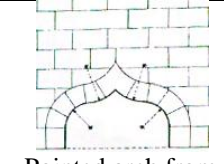
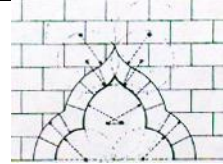




Figure 2.24 Samples of doors, windows, and Qmryat that exist in old city in Gaza

Arcs that cover doors, windows or corridors are very common in old houses because builders used them as supporters of house element. Workers used mud and stones to build arcs. Sometimes arcs include beautiful ornaments especially over the entrances (Hamdan, 1996).

Table 2.7: Types of arcs in the old houses in Gaza city (Hamdan, 1996)

			
Balanced fivefold arch	Half-fivefold	Quintuple arch	Three-centers arch
			
Four-centers arch	Roman arch	A pointed arch from inside and outside	Compound arch
			
Aggrieved arch	Moroccan arch	Pointed arch from inside and outside	Interpolated arch

These kinds of arcs that is in the interior space in the old houses in Gaza was used in different element (Hamdan, 1996).

c) **Roofs:** Vaults and Domes where the roofs of the traditional Palestinian buildings in most regions, both in towns and in villages, used to be vaulted. Cross vaults were built in traditional materials and a typical way. The frame-work for the vault was started with a strong piece of wood placed perpendicularly in the center of the room. This supported four transverse beams, more or less horizontal, each running to the center of the side-walls, and fore slanting beams to the corners (Hadid, 2002).

d) **Furniture pieces:** Furniture was little used in these small interiors. Low benches or couches were generally covered by textiles and rugs (Pile, 2005). The development of weaving techniques in Al-majdal city generated the design of rugs of great beauty and variety. A number of regions developed individual styles of chairs giving an attention to the small details like the legs, fabric, the ornaments of the back of the chair, it was wooden handmade chair (Ali, 2011b). Figure 2.25 shows some of remaining furniture pieces found in Palestine.



Figure 2.25 Law bench, and wooden chair with leather and bamboo (Alameri, 2000; Khanfar, 2000)

These pictures in figure 2.26 show some pieces of furniture that was found in old houses:



Figure 2.26 Samples of old furniture pieces (Alameri, 2000)

e) **Accessories:** Old photographs paintings of ancient mosques or markets niche play an important role in oriental design style. Designer must apply rules of painting position, so that they are at eye level (Ali, 2011a) together with potteries, and metallic pieces, and other handcraft accessories.



Figure 2.27 Palestinian portrait (Alameri, 2000).



Figure 2.28 Accessories in old houses (Khoudary, 2013).

Beautiful silver and golden jewelry which coordinate in paintings hangs on the wall or on the tables are elegant oriental items (See figure 2.29). Wooden partition “baravan” applies privacy for the family were used in complex old houses as well as its beautiful wooden motifs combination (Khoudary, 2013).



Figure 2.29 Some accessories found in old houses (Khoudary, 2013).

f) **Colors:** old houses used warm-color theme in home parts. It was clear in old carpets pieces in home floor or it can be used in seats or to vaccination part of it (Ali, 2011a). This theme is characterized by warmth and relaxation. Thus red and green colors which are used in the upholstery, curtains, paint and fabrics with Islamic motifs shows a good indication of this style (Ali, 2011a).

g) **Material:** Most of material that is used this design style is wood, copper and handmade fabrics. Wood had been used a lot in Islamic ages in furnishing homes, it had been used in ceilings, doors, windows, member, mashrbiat, moqrnsat (Ali, 2011a).

**h) Lighting:** lightening in old houses depended on natural light source it gives the place a special touch. In addition to the natural source, lightening that depended on kaz was used in room corners to highlight the beauty of the decor. Such as lanterns on poles are always made of copper and colored-stained glass (Ali, 2011a). the following samples in figure 2.30 presents some of lightening units in old houses.



Figure 2.30 Ancient oil lamps found in Gaza.(Sadeq, 2013).

**i) Ornaments:** our grandfathers used different motifs on walls, furniture, doors, and windows (Ali, 2011a). These motifs are divided according to the material into Stone Inscriptions (a geometric or vegetarian inscription) which is the most developed craft in Palestine. Also, Colorful ceramic dishes (al- kashani) that were used as a decorative element. It is called "kachani" according to the Kashan city. Different sizes and colors used over the entrances; green, blue, yellow and in some cases red were the colors that had been used (Alameri, 2000). Metal works used on windows or in some openings (Ali, 2011a).



Figure 2.31 Some gypsum and metal (Mohsen, 2009).

Types of ornaments according to the shape are: (a) Geometric ornaments that give the feeling of dynamic because of the shadows that appears in the ornamented areas. It is used to ornament the building from inside and outside; (b) Ornaments of human and animal shapes that are used as decorative elements without opposing with Islamic religion; (c) Calligraphy ornaments: Arabic calligraphy has a lot of aesthetic values and special soul and messages that convey precise meanings of Al-Quran and Hadith as shown in figure 2.32. So Arabic calligraphy is the holy message carries ethnic, social,

cultural, and historical contexts, calligraphy has several types; Kufic, Roqaa, or Al-Thuluth (Raed El-Ottol & Skaik, 2013).



Figure 2.32 Arabic calligraphy old houses in Gaza (Mohsen, 2009).

### 2.4.1.3 The Palestinian handcrafts

Palestinian handcrafts are produced by Palestinian people in towns and villages. There are many handcrafts that was formed in old ages (Ali, 2011b). These handcrafts occupy a fundamental touristic importance in the Palestinian industry life. These handcrafts shows Palestine history and emphasizes its identity and culture. It also helps in developing the national income when stakeholders improve the production lines and makes the best use of available resources (Wafainfo, 2011). These handcrafts are:

1. **Embroidery and weaving:** It was the most important feature of the Palestinian handcrafts. It was the income of most of Palestinian village. "Majdalawi dress", as a dressing style, was woven by a weaver on a single treadle loom, using black and indigo cotton threads. Gaza city produced cloths and silk threads that were known as "gazzatum". It was imported from Europe in past ages (Ali, 2011b).
2. **Bedouin waving:** this fabric was woven by Bedouin women ornamented their houses with these items, using sheep's wool that is colored by natural dyes, introducing tents, ruges, and other items (Ali, 2011b).
3. **Glass making:** workers manually made glass by mixing sand and sodium carbonate. By heating the mixture and configuring it to accessories, beads, bracelets, rings, stained glass windows and glass lamps (Ali, 2011b).
4. **Pottery:** it is the oldest handcraft in Palestine that exists in all villages and cities from old ages. Introducing domestic elements for all uses, this artifact widely found in Gaza because of the clay soil that in the main element of this process (Wafainfo, 2011).

5. **Olive-wood carving:** this artifact widely exists in Ralmallah and Horbon. People knew it form the sixteen century as the gifts that are presented from Palestine (Wafainfo, 2011).
6. **Bamboo artifacts:** In Gaza there are 12 factories that produce bamboo artifacts like chairs, tables, and lightening elements (Wafainfo, 2011).
7. **Reed artifacts:** that raw material of it is palm trees, women makes beautiful forms and elements from it (Wafainfo, 2011).
8. Ceramics artifacts.
9. Coincidences artifacts.



Figure 2.33 Embroidery and weaving (Wafainfo, 2011).



Figure 2.34 Glass making (Wafainfo, 2011).



Figure 0.35 Pottery (Wafainfo, 2011).



Figure 2.36 Curving on wood (Wafainfo, 2011).



Figure 2.37 bamboo artifacts (Wafainfo, 2011).



Figure 2.38 Reed artifacts (Wafainfo, 2011).



Figure 2.39 Ceramics artifacts (Wafainfo, 2011).



Figure 2.40 Coincidences artifacts (Wafainfo, 2011).

## 2.4.2 The Contemporary design style

The Contemporary design age in interior design begins roughly with the start of the 20<sup>th</sup> century (McMillan, 2013). Today contemporary furniture designers and manufacturers continue to evolve design seeking new materials, with which to produce unique forms, still employing simplicity and lightness of form, in preference to heavy ornament. And most of all, they are still endeavoring to step beyond what has gone before to create entirely new visual experiences for us (Al-Hayk, 2013). Contemporary combines influences, trends, and new technologies without strict adherence to any one

design philosophy. Current trends include designs that blend styles and periods but are streamlined for today's taste (McMillan, 2013).

There are common characteristics of contemporary design style. Lines are very sharp and sometimes irregular curvy. Finishing is very soft. Colors are light and neutral. Designers depend on light to give the visual attractiveness of the space, employing high technology on the space elements (Dawoud, 2010). For a streamlined, "less is more" home, a contemporary style is the way to go. Characterized by clean lines and a minimalist look, a contemporary home feels modern, fresh, and functional. Neutral colors and black and white are used in abundance as the backdrop for contemporary rooms. With a toned-down background, shapes and textures take the spotlight. Natural textiles such as linen and jute provide a welcome contrast to the simple geometric lines that make up a contemporary space. Architectural elements aim to connect the indoor and outdoor. Expansive windows, open floor plans, and lots of natural light are key characteristics of contemporary home design (Careil, 2003)

#### 2.4.2.1 Types of the contemporary design style

a) **Urban:** this style is characterized by speeding horizontal and vertical lines, as well as various types of finishing like leather and microfiber (Dawoud, 2010). Pictures in figure 2.41 illustrate this style.

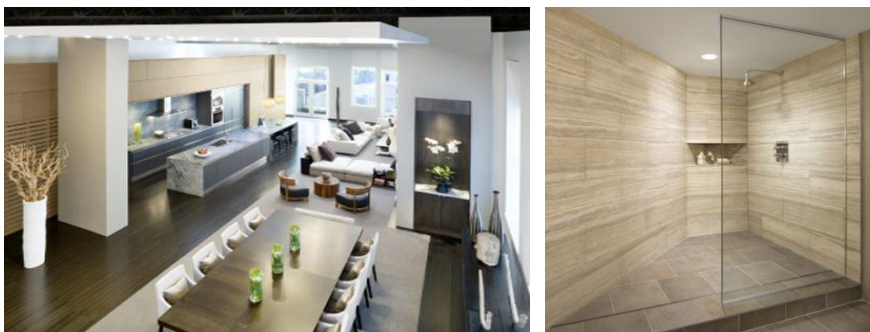


Figure 2.41 Samples of urban style (Dawoud, 2010).

b) **The Bauhaus style:** it depended on simplicity and using neutral colors like white and gray. Material which are used can be metal, glass, and concrete and uses model and the remanufactured units. These pictures below show this style (McMillan, 2013).



Figure 2.42 Samples of Bauhaus style (Dawoud, 2010).

c) **Art deco:** this style used smooth lines with bright and glossy finishing, bright colors of wood and paintings, using mirrors and chrome surfaces (McMillan, 2013).



Figure 2.43 Samples of art deco style (Dawoud, 2010).

d) **Mid-century modern:** at this style forms followed function, so ornaments didn't exist, organic and harmony shapes with long straight lines (McMillan, 2013).

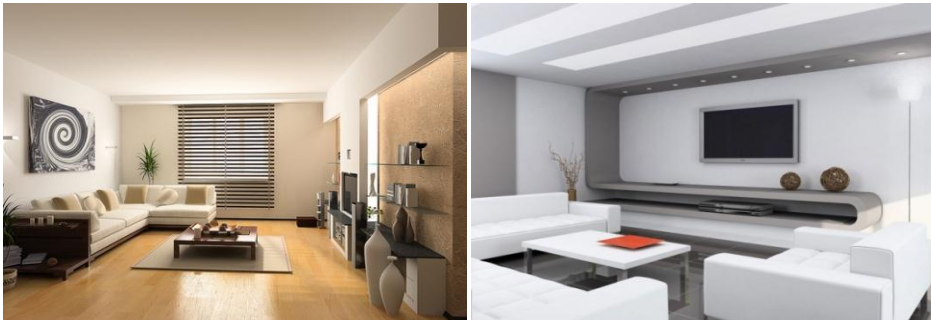


Figure 2.44 Samples of mid-century modern style (Dawoud, 2010).

e) **Casual contemporary:** curve angles and smooth surfaces with more fabrics and pillows and wood with natural look (McMillan, 2013).





Figure 2.45 Samples of casual contemporary style (Dawoud, 2010).

## **2.5 Occupant Satisfaction**

This title deals with the second part of the study, the indicators of occupant satisfaction. In order to expose these factors, the designer has to make a profound study about the quality of space. (Zorloni & Wien, 2009) figure that affective quality of the space is indicator by which actors in the space industry are evaluated and which determine whether the space is successful (Stephanie Clark Ridgway, Livingston, & Smith, 2005; Zorloni & Wien, 2009). Outcome quality is measured as the suitable conditions the space exposes to the occupant. Black's (2005) illustrated the factors that effects on space quality, these factors includes; the demographic indicators e.g. (age, gender, economic and educational status of the occupant) and the elements of the space e.g. (form, pattern, colors, light, finishing materials).

### **2.5.1 Definition of Satisfaction**

“Occupant satisfaction is an occupant’s feelings of pleasure or disappointment resulting from comparing a space’s perceived performance (outcome) in relation to his or her expectations. It is no longer enough to satisfy occupants, you must delight them” (Kotler, 2009).

Occupant satisfaction is a state of mind that an occupant has about a product when their expectations was met or exceeded over the lifetime of the product or service (ZaidanDhman, 2011). Kotler (2009) pointed out that it is important to measure occupant's satisfaction regularly through survey to determine occupant's level of satisfaction. He said this is because firms may think that they are getting a sense of occupant satisfaction through occupant's complaints (Kotler 2009). Thus, occupant literature links satisfaction to repeated visitations to the designer to make more designs for other spaces. In residential spaces, satisfaction leads to positive word-of-mouth,

which in turn leads to increased increase the demand on specific design (Yalowitz, 2002). Accordingly, satisfaction significantly increased occupanintention variables such as likelihood of recommending that friends and family visit, willingness to provide a quote to be used for endorsement of the institution, and perceiving that the institution cared about them.

### 2.5.2 Satisfaction scales

The emotional response is represented by the three affective dimensions; pleasure, arousal and dominance or their combined equivalent dimensions of relaxation and excitement (Mohamed Boubekri, et al., 1991). The emotional state of subjects was assessed using an adaptation of the questionnaire developed by Russell and Pratt (1980). Four words described the bipolar dimension of relaxation (i.e. restful, pleasing, beautiful, simplicity) and five others described the bipolar dimension of excitement (exhilarated, stimulated, dull, bored). The third dimension of dominance was described by three words (usability, significant, in control) (Mohamed Boubekri, et al., 1991).

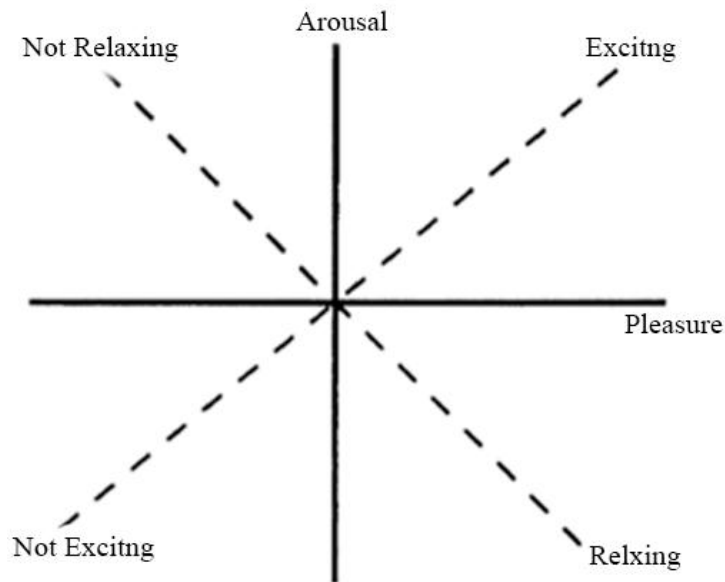


Figure 2.46: Circumflex model of affect (M. Boubekri & Boyer, 1995).

In addition to Russell scales the characteristics of the physical environmental of the space, for example, lines, forms, colors, of the space that could effect on occupant response. These physical characteristics of the space under control from designer, and makes an integrated system of the space quality.

- a) First scale: Relaxation
- b) Second scale: Excitement
- c) Third scale: Dominance

### **2.5.3 The Correlation of Satisfaction Scales**

These scales could be used as predictor variables in an attempt to explain behavioral reactions to interior spaces. This concern is exemplified by work on the behavioral effects of relaxation; the straight lines, bright colors that causes arousal; or, more generally, by indicators like the creativity of the items that would give the feeling of excitement (M. Boubekri & Boyer, 1995).

The previous mentioned conceptualization of the design styles varies from one to another according to the time age that had appeared in. defining it and illustrating the general characteristics of each design style affects directly on occupant response to the space he or she lives in. for example, if the occupant feels satisfied in his living space in either the traditional style or the contemporary style according to the physical characteristics of the space elements (Russell & Pratt, 1980).

Some other writers concentrate on the mechanisms affecting spatial behavior of the users. The aim of spatial behavior is to meet requirements, and changing/adapting behavior occurs when there is need to change the existing unsatisfactory situation. There are two different views concerning the adaptation of the environment: the more changes in the environment, the more suitable the environment will be, and too many adaptations made in the environment indicate that the environment is far from being satisfactory for the requirements. The problem seems to arise from the degree and the quality of adaptations made. In designing flexible dwellings, the question is what level of efficiently would be sufficient and suitable for the satisfaction of the user (Altaf & Gzsoy, 1998).

In the investigation of space quality, visual elements of the space have to be experimented; light, color, pattern, form, and texture. Despite the difficulty of scaling the interior surfaces, furniture, light fixtures and materials inside the building, the use of identifying the previous scales in accepted technique to make judges about the quality of the residential space (M. Boubekri & Boyer, 1995).

## **2.6 Summary**

This chapter is a lengthy detail about all issues of the research. It gives thorough structures of every part of the study starting with the interior design and ending with satisfaction factors. Originally, this chapter is at the beginning of the thesis to give readers a general understanding of the concepts. Thus, all these presented data helps researcher to use it in next steps to continue all the research process which is called the methodology of the research.

## **Chapter 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research methodology and the theoretical basis behind the approaches and their definitions for the understanding of the readers were given. It started by identifying the research approaches. Then the research strategy was discussed. Data analysis methods and instruments used in this study were also described. Finally, a brief discussion about the validity and reliability of the study is also included. Accordingly, the aims of this chapter are to: (1) Explain this research approach and strategy, followed with the data collection and sample selection methods. (2) Introduce the research techniques that is developed in the pursuit of this research aims, (3) Present the data analysis methods and the credibility of the research findings.

#### **3.2 Research Design**

The methodology of the research is consequent from the research objectives. There are main categories that control the occupant response of the design style design styles, with the concentration of the traditional and the contemporary design styles the design style, the contemporary design style in traditional contexts. They are Relaxation, excitement and dominance. These categories contain the related factors that are identified in chapter two.

There are two main methods used in this research: the quantitative method and the qualitative method. These concepts is explained in the next sections of this chapter.

##### **3.2.1 The Qualitative Method**

The qualitative analysis on issues of residential interior design and the design styles was willful by qualitative analysis on residential interior design style and occupant' satisfaction. Qualitative analysis is a study by the researcher by the literature review of the interior designs of homes. And the individual interviews with designers. Qualitative approaches to data collection usually involve direct interaction with individuals on a one to one basis or in a group setting. Data collection methods are time consuming and consequently data is collected from smaller numbers of people than would usually be the

case in quantitative tools such as the questionnaire survey. The benefits of using these approaches include richness of data and deeper insight into the issue under study (Hancock, 1998).

### **3.2.2 The Quantitative Method**

It examines the influence of the interior design style on occupants' satisfaction. After the analyses of the data arising from the surveys, the findings are identified. This quantitative analysis on the occupants' survey on the other hand, is based on the answers by the respondents using questionnaires (Hancock, 1998).

### **3.3 Purpose of Methodology**

In this methodology chapter, the aims, objectives and hypotheses is defined, followed by an elaboration on which data collection methods were used and an argumentation why they were chosen as the most suitable methods for this particular research. Following this, the analysis techniques that were used is discussed and the chapter ends with an elaboration on the limitations of the research (Careil, 2003).

According to Yin (2003) the research purpose is the way of conducting research and the way the results from the research can be used. Research purposes can be classified in various ways. A widely used method identifies them broadly as: exploratory, descriptive and explanatory (De Vaus D A, 1996; Yin, 2003). Exploratory studies are seeking deeper on a subject trying to get new insights, ask questions and assess phenomena in a new light (Saunders, Lewis, & Thornhill, 2000). The purpose of an exploratory research is to gather as much information as possible about a specific subject (De Vaus D A, 1996; Yin, 2003)". There are three principal ways of conducting exploratory researches (Saunders, et al., 2000) : (1) Searching of the literatures, (2) Talking to experts in the subject, and (3) Conducting group-focused interviews (Yin, 2003).

The descriptive research aims to portray an accurate profile of persons and events of situations (Saunders, et al., 2000). The descriptive research is often used when a problem is well structured (De Vaus D A, 1996; Sekaran, 2000). The objective of explanatory research is to analyze the cause-effect relationship, and explain which cause produces which effect (Yin, 2003). The research questions proposed in chapter one

reveal that this study is primarily descriptive, as it intends to describe and investigate the relationship between interior circulation design and visitors' satisfaction. The related secondary data is collected and analyzed from other literature or previous research to answer the research questions.

The methodology followed in this study is a descriptive research design in addition to collecting descriptive data about the interior design and Gaza city and factors that achieve effective quality of space and then, satisfaction of the residential space. The study is investigated relationships among (a) interior design style and (b) occupants' satisfaction.

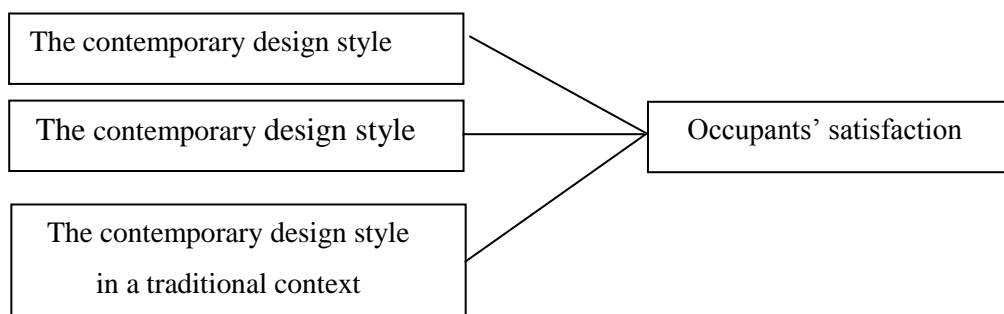


Figure 3.1 Interior design style& Satisfaction diagram.

### 3.4 Research process

This study takes four phases as shown in figure 3.3. Beginning with a literature study, theoretical and empirical materials were gathered from books, academic journals, seasonal reports for specialist international organizations, and some related documents from Gaza's authorities. The secondary materials were collected from other previous related studies. These secondary materials enable to discover patterns which emerge after close observation, careful documentation, and thoughtful analysis of the research topic (sheikh 2013).



Figure 3.2 The four phases of study approach.

According to the researcher investigations, there were no empirical model that covers the entire related studies in Gaza that discuss the interior design styles for interior spaces, estimate quality of interior space, occupant satisfaction on interior design, the study was based on the thesis's concept, people satisfaction was measured by the researcher. The survey questions were redeveloped among feedback of literature views and pilot survey. The literature of thesis study was followed by secondary data collecting from interviews and survey. Interviews were conducted along specialists in interior design field in engineering associations and offices. Furthermore, survey was the major part of analyzed data. Comprising both of quantitative and qualitative data richen the study and make a general sight on all study elements (Creswell, 1999: p. 457). The survey data was analyzed by SPSS both quantitative and qualitative. On the other hand, the interviews were only analyzed quantitatively. The results then give a full perspective for research objective. It was as the analysis of survey was finalized and the assessing results for the interior projects were presented. Three case studies of residential interior space with a contemporary design style in traditional concepts were presented and by the researcher at chapter four.

### 3.4.1 Qualitative Study

The qualitative research is characterized by the opportunity to explore a subject in a manner as real as possible (De Vaus D A, 1996; Saunders, et al., 2000). Furthermore, qualitative methods that are used in this study are: case studies, and individual interviews.

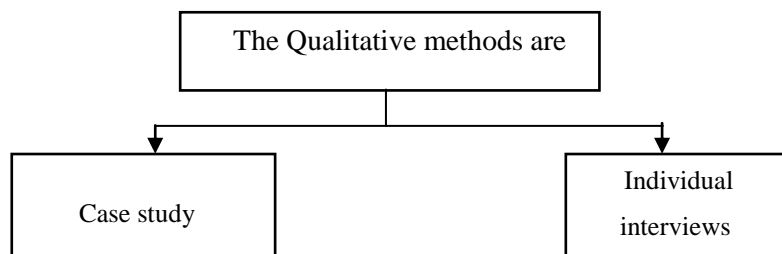


Figure 3.3 Qualitative research approaches

#### 3.4.1.1 Case study

It is a highly flexible research method. It is the second research approach of the qualitative method. A Case study research is used to describe an entity that forms a single unit such as a person, an organization or an institution (Hancock, 1998). In this research design, the case study claims to offer a richness and depth of information that is



not offered by other methods. Case studies can identify how a complex set of circumstances come together to bring into being a particular symptom. Case study in this research is conducted of the recent orientations of the design styles in an environments and cultures that are similar to Gaza city. Moreover, it is a case study in Gaza city by evaluating of the general satisfaction of some similar interior spaces as an approach and by evaluating alternatives to general procedures based on occupants' response, and considering the influence of these examples on local occupants and the development of collaborative links with other groups involved in promoting people effective space.

### 3.4.1.2 Interviews

In this study the researcher used structured interviews. This kind of interviews includes the same questions in the same forms for every respondent. A tightly structured schedule of questions is used, very much like a questionnaire. The questions are phrased in such a way that a limited range of responses can be elicited (Hancock, 1998). Undoubtedly the massive preparation of interview process makes good qualitative interviews. (Sheikh, 2013). Phases of proceeding the interview: there are four phases of proceeding the interview as shown in figure 0.5 below:

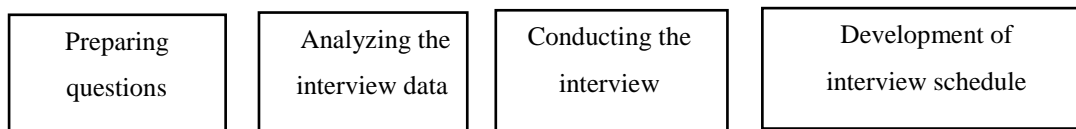


Figure 3.4 Phases of proceeding interviews

- **Interview process**

The main aim for this study is to measure people satisfaction on residential interior spaces with regarding the interior design style indicators. Accordingly, the study began with structural interviews with decision-makers and specialists whom work with engineering associations and interior design offices. As these offices are specialized in interior space design in Gaza city and have good experience in this field and in community response to interior design styles.

Whereas ten personal interviews were intercepted in structured form, the interview could format more captured specific data, and ensure in-depth question. Besides, the interviews were conducted by using limited and briefed questions combining closed,

open-ended and open questions. The value of the questions was well-reviewed especially in combination with questionnaire content. It aimed not only to confirm the measure occupant satisfaction on interior design styles Gaza city, but also to investigate:

- The conditions of the interior design in Gaza city with its elements, process, materials, availability, the surrounding factors that effects on the costumers demand on making interior design for their spaces;
- Any future expectations to interior projects among the surrounding situation in Gaza city;
- General culture about that Palestinian traditional Style and to the contemporary design style;
- A comparison between occupants satisfaction on different interior design styles;
- The importance of implanting steps for the interior design that helps to enhance this field and increase people demand on it;
- The role of making a contemporary interior design with traditional contexts in reviving Gaza heritage;
- Any recommendations and additions.

Then, ten interviewees were recorded in their offices at an average time of 30 minutes in the interviewees' offices and organizations in two weeks from 11 October 2013 to 25 October 2013. The data collected from interviews gave a clear image about the next step. It also reveals new sights of the empirical study. The data from the interviews were used together with data from previous studies as qualitative data in literature review.

- **Reliability of interviews**

An interview is a purposeful discussion. Therefore, the use of interviews can help to gather valid and reliable data which are relevant to the research questions and objectives. Structured interviews raise the reliability. This is why all the interviews were asked the same questions. For more increasing of the reliability, set of strategies were used: (1) the interviewer was all the time directly the same person, so all the information provided to interviewees was integrated; (2) The interviews were restricted to be conducted physically; not by phone or other means. This enabled the researcher to explore things

such as similarities and differences; (3) Recording the interviews by a recorder specially when asking the open questions.

- **Validity of interviews**

Validity is very important consideration as an instrument of this study. It refers to what this tool claims to measure (Sheikh, 2013). “It was tested through three instruments used in the research. The validity from the interviews is improved by making sure that the information is relevant to study. Therefore, all written questions were constructed according to the literature review and related previous studies” (Sheikh, 2013).

Three aspects were followed to improve the validity of interviews (Maurer, 1994):

- interview content: The interviewers used situational and study-related questions
- interview execution: The interview was highly structured and carried out by one person review reports.
- validation criteria: When the interview measures the criteria for the validation of the study.

### **3.4.2 The questionnaire**

Quantitative research is often formalized and well structured. By the same time quantitative research according to Aliaga and Gunderson (2000) is: ‘Explaining phenomena by collecting numerical data that are analyzed using mathematically based methods (in particular statistics)’. The researcher is interested in knowing more about how different factors relate to occupants' satisfaction and the used design style of the space.

While quantitative research is based on numerical data analyzed statistically, qualitative research uses non-numerical data. Qualitative research is actually an umbrella term encompassing a wide range of methods, such as interviews, case studies, ethnographic research and discourse analysis, to name just some examples. This research methodology deals also with the qualitative data which come in the form of field notes, notes from personal interviews, personal observations and reports. The qualitative data of this study are based on issues of interior design style concerned with the traditional

and the contemporary design styles of homes. The qualitative analysis is based on the check list factors arising from the literature review in Chapter Two. These factors identify the issues on the interior design styles that have real effects on occupant satisfaction of indoor spaces. In particular, the qualitative study handle the information obtained from the following activities: (a) questionnaire between costumers of engineering offices in Gaza about the interior design style of their homes; (b) Direct site personal observation of the sites; (c) the direct oral interviews (without survey) of the offices costumers and their verbal responses in space design.

### **3.5 Data Collection Methods**

#### **3.5.1 Direct Survey**

Surveys include cross-sectional and longitudinal studies using questionnaires for data collection, with the intent of generalizing from a sample to a population. It is more effective and wide range tool (Ceswell, 2003). There is no faster, more affordable way to conduct a survey irrespective of size. Furthermore, due to the quantitative nature of this study, a survey is appropriate because of its quantitative character. The advantages of using traditional survey tools like questionnaire are: cost effective, great for quantitative research, quick to deploy and can provide a good breadth of responses.

### **3.6 Location of the Study and Sampling**

The survey of this study is conducted in Gaza city. Sampling decisions are made for the main purpose of obtaining the highest possible source of information to answer the research questions. Sampling is performed to obtain the data from a portion of the population of 10 selected engineering offices. In another words, the survey is conducted on the whole population. In this study a sample of 120 costumers from 10 engineering offices were randomly chosen to conduct the survey of the study

### **3.7 Questionnaire Description**

The questionnaire contains of 3 main sections with 3 categories for each one, on one page for two sides. The first section showed 3 models of 3 designs for a bed room in 3 different styles; the traditional, contemporary, and the contemporary style with traditional contexts. The second section also presents 3 models of a living room with 3

different previous styles. The third section presents the demographic data; (gender, place of residence, type of residence, educational level, and occupation).

The effect of the interior design style on a person's emotional response and appraisal of satisfaction was assessed in a simulated model by 3D studio MAX program. Two spaces types were tested; a living room and bedroom each room was represented in three different design styles: (1) the first one applied all the Palestinian traditional elements on chairs, windows, colors, and the surrounding of the space. (2) The second model assessed the contemporary design style of the same living room.(3) The third model was a complex design that combined between elements of the Palestinian interior design style with the contemporary design style. Then, during the field experiment, the researcher determinates some factors of the three experimented models while the design process.

- **Model #1 (living room with traditional style)**

The Palestinian traditional style at the first model gives the real reflection of the environment he lived in, showing the construction system that is presented by domes, vaults, and the sandstone as the building material of the interior and exterior parts. These styles were commonly used on this era of Palestine.



Figure 3.5 The experimented model of the traditional style for a living room

The characteristics of the model in figure 3.5 are: (1) The brown wooden chairs that is covered with red and orange fabrics and ornamented with natural motifs, different kinds of handmade ornaments covers the elements of the space and heavy furniture is a dominant characteristic. (2) The small windows to decrease the sun amount that inters the room. (3) The featured conventional tile pattern that was widely used in old houses. (4) Heavy wight furniture that was made from natural wood, bamboo and steel. (5) Using hot colors of color cycle as dark red and orange. (6) Applying symmetrical method of disturbishing furniture and at the form of the pieces of the space. (7) Using different kinds of traditional home accessories like the Palestinian rug “Bosat”, potteries, and hand ornamented steel, embroidered fabrics with cross stitch combinations on pillows and placemats. (8) Stone ornamentations on the wall. (9) Rough spaces, a lot of details.

- **Model #2 (living room with contemporary style)**



Figure 3.6 The experimented model of the contemporary style for a living room

Figure 3.6 shows the characteristics of the contemporary design style in the experimented model, they are: (1) Using neutral colors excerpted from nature, like gray

and bage and zebra pattern. (2) Applying the realization of dynamic equilibrium in an optical vacuum. (3) Soft and smooth surfaces and light colors. (3) Large windows of the space that allow a large amount of sunlight. (4) Employing technology in devising techniques of design and lighting. (5) Flexibility of furniture pieces.

- **Model #3 (living room with contemporary style in traditional style)**



Figure 3.7 The experimented model of the model of the contemporary design style in traditional contexts for a living room

The final model in figure 3.7 shows the mix between the traditional and contemporary styles of the interior space: (1) By employing modern technology, which helps to reach for easy and flexible to use, such as using LED Lighting in glass shelves. (2) Merge between soft and rude surfaces. (3) Use neutral colors with a dominant red color, which gives warmth. (4) The use of Islamic motifs in a modern and streamlined and light color gives lightness of ways and new styles. (5) Using contemporary white sofa with the Palestinian spirit of pillows. (6) Side tables inspired from traditional elements. (7) The middle inscriptions inspired by rug the legs feature by the traditional design. (8) The use of lighting elements that adds warmth in place.

- **Model #4 (bedroom with traditional style)**



Figure 3.8 The experimented model of the traditional design style for a master bedroom

The first model follows the traditional design style (see figure 3.8). The model shows a real reflection of the construction system (vaults), warm colors as green and burgundy and the degrees of beige. The traditional known embroidered portrait of the Palestinian wedding used as a focal point on the wall. Using “dentelle namousya” over the steel bed that was commonly used in the past days. The elements were only a bed made from curved steel and small cupboard unit that made from curved wood. Tiles which were common at that time were used in this model.



- **Model #5 (bedroom with contemporary style)**



Figure 3.9 The experimented model of the contemporary design style for a master bedroom

The second model of the bedroom in figure 3.9 followed the contemporary style Using Degrees of gray color. Applying new techniques like LED on the background of the bed parquet as the ground of the room is used, large surfaces of mirror, visually light and clear forms of furniture, Soft and unornamented fabrics. Finally, adding natural patterns on pillows and wall painting.

- **Model #6 (bedroom with contemporary style in traditional contexts)**

Finally, applying the mixed way of master bedroom with the characteristics as shown in Figure 1. These characteristics are: Using Islamic proportion at the portrait at the background of the bed. The combination between neutral and warm colors and the combination between unornamented and ornamented fabrics. The light weight of elements and the use of high techniques on lightening. Using both of potential lamps and general light and Using both of natural and local material like random stone with soft surfaces of furniture.



Figure 3.10 The experimented model of the contemporary design style in traditional contexts for a master bedroom

In addition, the questions were phrased so that subjects were asked to describe how they were feeling at the current time rather than to appraise the emotion-evoking quality of the room. Justification and testing of the modification of the Russell and Pratt construct are discussed in Hull and Harvey (1989) and in Hull and Stewart (1990), and validity and reliability of the question are assessed.

### 3.7.1 Bipolar Scales and likert scale

In the practical use of these scales, the 28 unipolar scales are formed into 14 bipolar scales by treating items from one uni-polar scale as positively keyed and items from its bipolar opposite scale as negatively keyed items of a single scale.

Therefore, subjects were asked to describe how satisfied they were with the environment. All items were scaled from 1 to 5. The satisfaction scale ranged from satisfactory to unsatisfactory. The mood items ranged from original to unoriginal, innovated to not innovated, simple to not simple, visually light to not visually light, clear to unclear, happy to unhappy, energetic to unenergetic, fixable to unfixable, excited to unexcited, usable to not usable, efficient to inefficient, in control to not in control, and finally, adoptable to unadoptable.

### **3.7.2 Research Instrument Development**

This section describes the development of an instrument used to collect data on occupants' satisfaction about interior space design style within the selected residential spaces. Details are given about the subjects, scale development and items, followed by instrument face and content validation. Finally, a detail of pilot tests are presented. The procedures that were followed are also explained, along with the appropriate literature to support the data analysis technique. Then, the results of the questionnaire data analysis are discussed.

### **3.7.3 Subjects**

Respondents from costumers of 10 engineering offices in Gaza city were surveyed. The choice of expansion survey area for the collection of data is an attempt to place the research in a different areas and different context for all costumers, so that any possible influence of contextual factors (excitement, pleasure, dominance of space) on variables studied (contemporary design style, traditional design style, contemporary design style in traditional context) can be studied deeply. According to the association of engineering 2013, in Gaza city there are about 120 engineering office that offers all kinds on engineering services some of them produces interior design of spaces. While choosing the sample, the researcher assessed a proportion of 12% for all offices that presents community. The numbers of offices for surveying are 10 offices.

### **3.7.4 Way of Selecting Sample of Offices**

The offices where the sample that was chosen, Criteria for selecting the offices are as follows: (a) The office has a good experience in interior design services. (b) The quality of interior design services. (c) The engineers and the designers had a good knowledge about the interior design style (does not make design without concept). (d) The size of demand on office services. This process was insured by the association of engineering and some experts of company owners.

A small sample was chosen because of the expected difficulty of reaching participants, it is consisted of people from 10 engineering offices during selected weeks

at each location. The researcher administered the questionnaire to participants one time when they rest at the office. Each office lasted for 5 days.

Table 3.1: The list of selected engineering offices in Gaza city and Number of questionnaires to be distributed.

No.	Engineering Office Name	Location	Target Questionnaires
1	Zawayya company	Gaza city	15
2	Design office	Gaza city	15
3	UTOPIA office	Gaza city	15
4	Innovated design office	Gaza city	15
6	LaCasa office	Gaza city	15
7	Al-Rai office	Gaza city	15
8	Iwan office	Gaza city	15
9	Wafi Group	Gaza city	15
10	University College of Applied Sciences	Gaza city	15
<b>TOTAL</b>		All Zones	150
Target No. of Respondents required			+120

### 3.7.5 Sample Size and Response Rates

More than 150 Participants from 10 engineering offices were requested to complete the survey during their visits to each location. Visitors have been interviewed when they are about to rest at the office with explaining the adjectives for everyone. Each indoor place lasted for more than 3 days.

Confidence denotes how certain researcher is that his/her estimates, based on this sample statistics, will actually hold true for the population. The level of confidence can range from 0 to 100 percent. A 95 percent confidence is accepted level for most research, denoting the significance level as  $p < .05$ .

### **3.7.6 Potential Sample Bias**

Interior design style within homes affects the level of occupant response is thought to be a standard concept. However, this may not be true. It may be that interior design quality is influenced by philosophical positions and political realities. Most people are influenced (positively and negatively) by their experience with interior design style, which is reflected in their views. The respondents were from engineering clients, so they may reflect different opinions than others. Finally, occupants' role within their race, gender and experience may bias their view. Choosing two models from the house (the bedroom and the living room) causes makes diverse of visual experiences that occupant would test.

### **3.7.7 Procedure Overview**

The research commenced once a suitable topic was chosen. Development of a new instrument began with a review of the literature (step 1). The initial literature review was undertaken to locate information about interior design within homes and occupant satisfaction. A model was created that reflected the characteristics of the contemporary style, traditional style and the contemporary design style with traditional contexts. The first literature search suggested some items that were reflective of the constructs. A second search of the literature was conducted to locate support for the constructs, theoretical grounding, and items to measure the constructs. Again, little was found and only partial support could be located.

The initial study of visitors was undertaken to better understand the issues involved and to provide ideas for questionnaire items. The first draft of the questionnaire was created based on the analysis of the initial study data and the information found during the literature searches. The initial questionnaire draft was circulated to experts and questionnaire creation experts for their evaluation and input (step 2). The questionnaire was modified based on the feedback from this comparison. The next step was pilot testing the instrument to obtain preliminary analysis regarding validity and reliability (step 3).

### 3.7.8 Development of Scales and Factors

Craik (1971) developed a rather comprehensive list of adjectives commonly used to describe spaces. Many of these objectives primarily describe the space's affective quality. The researcher selected 14 such adjectives from her list (e.g., exciting, peaceful, comfortable). To complement these 14 adjectives which were based on spaces, the researcher asked 4 specialists in the Islamic University to provide adjectives descriptive of the affective quality of the interior space. "Affective quality was defined for these subjects by telling them: every place has associated with it a mood and an opinion. A place can make you react in an emotional way, or at least some feeling. Some places are exciting, others are ; some are relaxing, others fixable and makes you feel dominant." (Russell & Pratt, 1980) Each subject listed as many adjectives as he or she could. Such overlap was produced by these subjects as well. Such overlap was reasonably comprehensive, consisted of commonly used words, and was unique neither to open spaces nor to man-made environment.

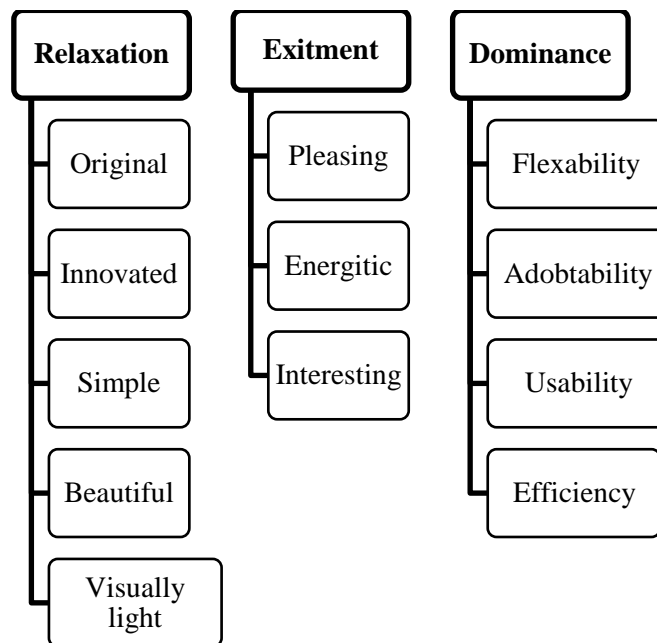


Figure 3.11 Chart of occupant satisfaction scales

### 3.7.9 Selected Scale Items and Factors

This section names the dimensions for each set of items based on the researcher navigations. Figure 3.13 shows all variables during the research process starting from

the selected design styles to the satisfaction\ dissatisfaction theory of occupants' response:

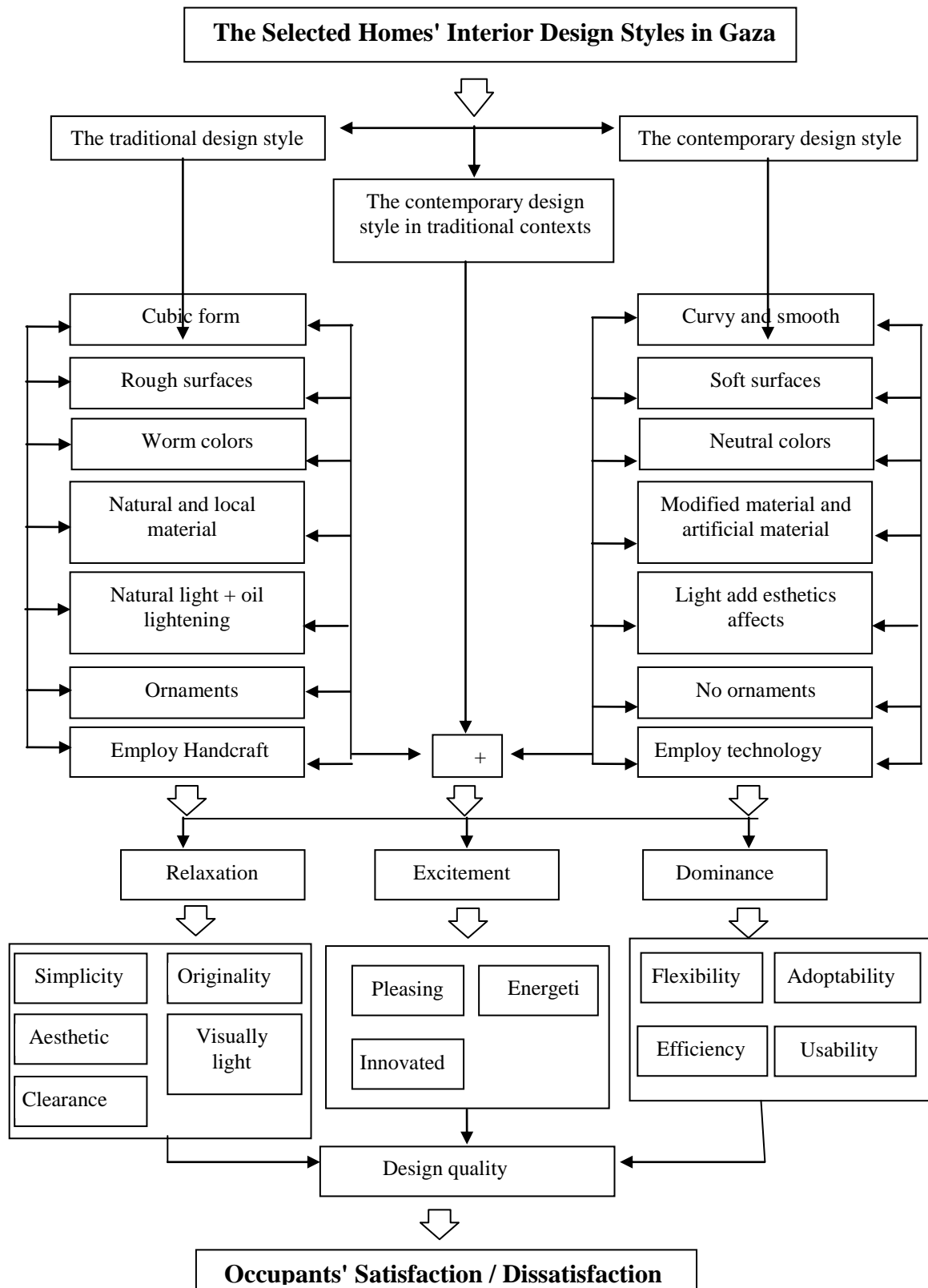


Figure 3.12 The variables effectiveness diagram

### **3.7.10 Pre-Test**

Pre-testing is a part of step 2 for scale development. This step helps to ensure face and content validity of the instrument. The initial draft of the survey was circulated to experts (as described earlier) who had expertise in interior design, design, methodology, research design, statistical analysis, and questionnaire writing.

### **3.7.11 Pilot test**

Step 3 requires pilot testing to gain additional support for content validity and to obtain initial indications about construct validity and reliability (Creswell, 2009; Joseph F. Hair, et al., 2007; Saunders, et al., 2000; Sekaran, 2000). The questionnaire was pilot-tested with 32 costumers of engineering offices. The data were analyzed with reliability analysis, which is based on the average correlation of items within a test if the items are standardized. If the items are not standardized, it is based on the average covariance among the items.

The questionnaire was made available on paper. The costumers had the choice to fill in the paper questionnaire and return it by hand to achieve a high response rate. According to many studies (Babbie, 2010; Creswell, 2009; Sekaran, 2000) the main advantages of personal administering the questionnaires are:

- Researcher can collect all the completed responses within a short period of time.
- Clarified on the spot any doubts that the respondents might have regarding any question.
- The opportunity to introduce the research topic and motivate the respondents by the researcher.
- Less expensive and less time-consuming than interviewing.

## **3.8 Analysis Technique**

The objective of the analysis was above all, “paint a picture” of the organizational structure of the organizations that were used in the research. Therefore, no use has been made of established analysis methods but each questionnaire was regarded as a separate unit. The objective was to use the answers to the questions to form an image of the individual aspects of organizational structure such as: hierarchy, level of centralization,



attitude towards status symbols and level of formalization / standardization. The general questions of the total number of employees that worked in the organization and the number of tourists in the area that the organization was responsible for served as indicators to the size of the organization. The answers to the questions have been input in an excel spreadsheet after which some general observations have been made about the perceived size of the organizations. After this, the answers of each organization were viewed and a conclusion on the situation concerning the structural dimensions for the individual organizations was described. Finally, the data from the qualitative and quantitative research were compared and observations were made on the corresponding results.

### **3.9 Summary**

In this chapter, the development and validation of a new instrument was established as it is required by quantitative analysis type of study. The instrument was prepared as a questionnaire and was used to measure the occupants' response to the interior design style in Gaza city. Measurement items were created and pre-tested also content and face validity were measured. Theory of satisfaction\dissatisfaction is used to measure occupant response by testing 6 models. These models were produced by the researcher, in addition to total adjusting of the scales items: deleting, adding, and rewording. The research methodology that was followed and adopted by the research was detailed out. This includes all the procedures, process, and guidelines which, according to research literature, are suitable for this kind of research.

# Chapter 4

## CASE STUDIES

### 4.1 Introduction

A case study research excels at bringing us to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research. Case studies emphasize detailed contextual analysis of a limited number of events or conditions and their relationships. Researchers have used the case study research method for many years across a variety of disciplines. Researcher Robert K. Yin defines the case study research method as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used (Yin, 1984, p. 23). Critics of the case study method believe that the study of a small number of cases can offer no grounds for establishing reliability of findings. Some dismiss case study research as useful only as an exploratory tool. Yet researchers continue to use the case study research method with success in carefully planned and crafted studies of real-life situations, issues, and problems.

### 4.2 Justifications of choosing case studies

A case study analysis focuses on a small number of cases that is expected to provide insight into a causal relationship across a population of cases. This presents to the researcher with a formidable problem of case selection, which cases should be chosen. The researcher made the selection on case studies according to these following criteria:

1. Residential interior space with specific characteristics.
2. Space with affective quality
3. The easy way to get into the data needed (photos, descriptions) for analysis
4. Having a direct contact with the occupant, this is for local case studies.
5. Location of the interior spaces.
6. Available for a current time

7. Deals with a diverse interior spaces types of residential areas
8. Not having an environment, size or structure duplicated by another case.

### 4.3 Bader Al-Rodaisy Home

The first section of the case studies presents a local case study, the researcher visited the place, made investigations and discussions with experts and designers, took photos and analyzed them in tables according to the design elements and with determining occupant satisfaction.

This home is a villa located at Tal El-Hawa quarter in the west of Gaza city. It consists of two floors. The first floor includes living room, dining room, guest room, entrance hall, kitchen, and bathes. The ground floor is illustrated in the following plan in figure 5.1:

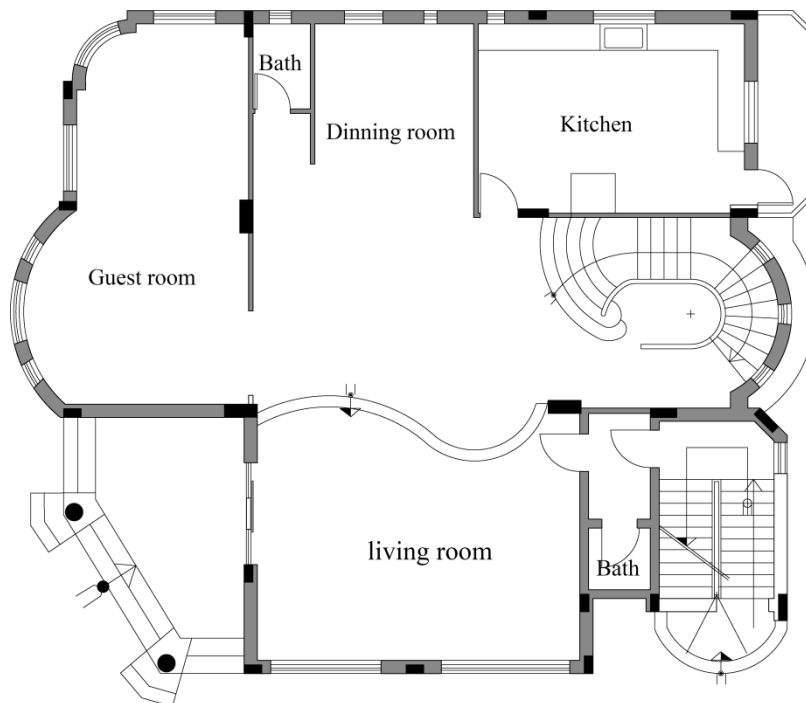


Figure 4.1 Ground floor Plan of Al-Rodaisy house

These spaces are presented in these following figures 4.2, 4.3, 4.4, 4.5. and 4.6:



Figure 4.2 Living room (Zawaya, 2012)



Figure 4.3 Entrance hall (Zawaya, 2012)

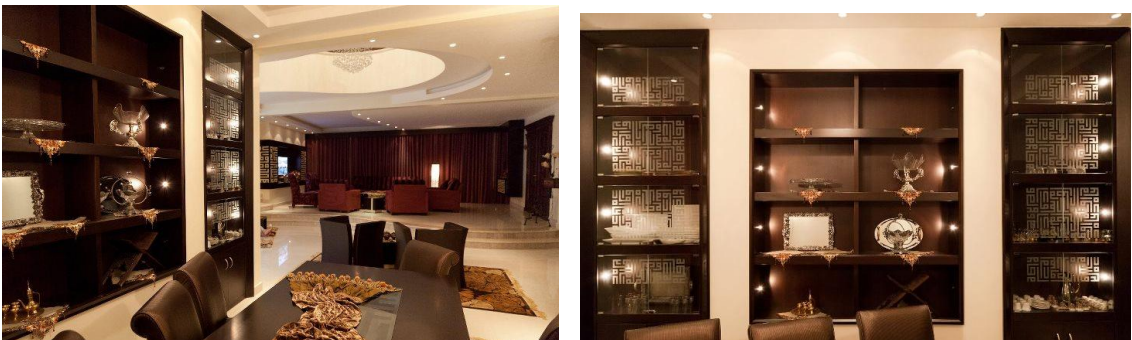


Figure 4.4 Dining room (Zawaya, 2012)



Figure 4.5 Guest room (Zawaya, 2012)



Figure 4.6 Kitchen room (Zawaya, 2012)

The following of this section describes the design concept, the design elements, and the satisfaction, regarding to the previous mentioned items in chapter 2.

### **4.3.1 Analysis of design concept**

The design concept adopted the contemporary design in all its elements with adding some traditional touches in relatively small parts; like the integrated Kufi font with center table and wall unit glass (See Figure 4.3). Calligraphy is kind of Islamic traditional arts that have been added in a modern technique using new technologies with keeping traditional esthetics. Also the Chinese pink "dark pink" degree in kind of worm colors is a character of traditional style. These unique elements formed the soul and the identity of the space.

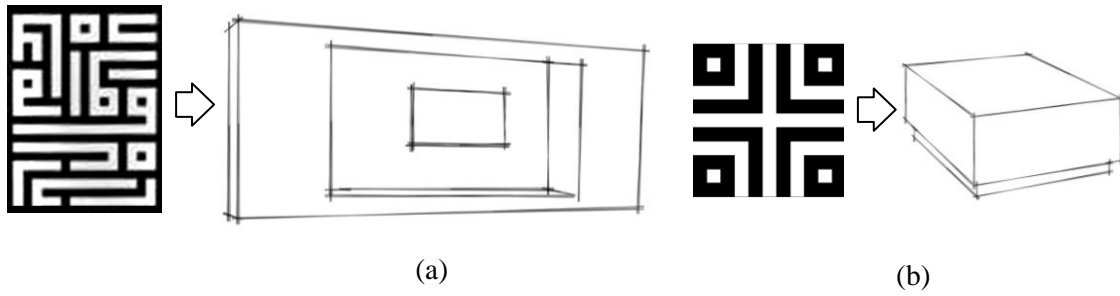


Figure 4.7 Sketches illustrates the design concept

Dining room which locates besides the living room that is previously mentioned explains the way the designer used the Islamic motif “La Elah Ella Allah” as a written glazy motif on the glass which is considered as a contemporary way of employing old Islamic treasure to the recent furniture pieces. The designer emphasized the traditional character of the space by making the buffet integrated to the wall; it is simulated to the “yook” in Gaza old houses (See Figure 4.8 b). The design of the chairs is inspired from old properties of goat motifs in old fabrics (See Figure 4.8c). This concept of design makes more relaxation pleasing beautiful, inspired energetic spaces. The design also makes an efficient use of spaces by using the wall as a buffet to keep room accessories.

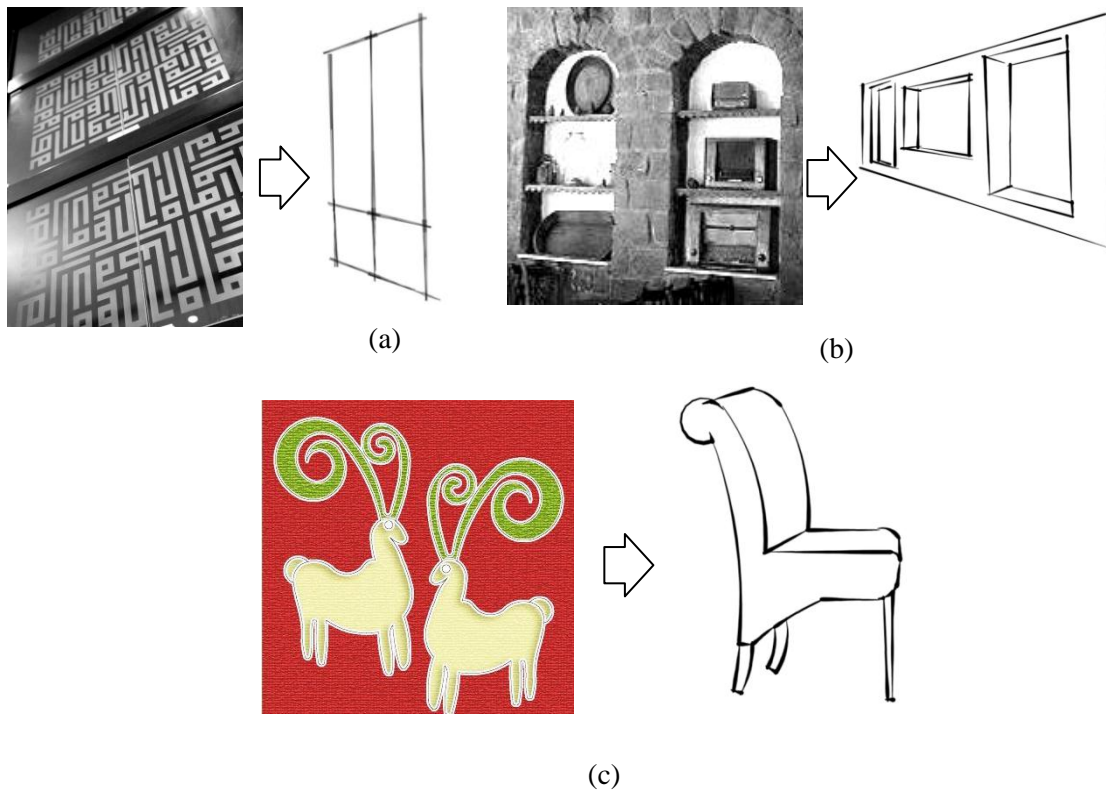


Figure 4.8 Sketches illustrates the design concept

The guest room in figure 4.10 distinguishes with the contemporary lines and forms of all space elements with adding the red color to the chairs as well as the unique design to the center table. The “mfrookra” which is a popular Islamic shape is used in the form of this piece as shown in the following figure 4.9:

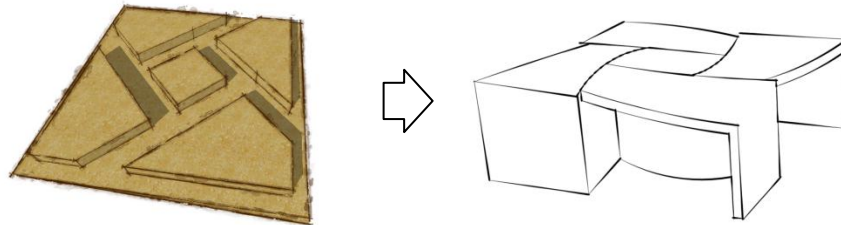


Figure 4.9 Sketches illustrates the design concept of the center table

The contemporary smooth lines of the stairs at the middle of the floor which is also reflected on ceiling design, shows a great soul of modernity in addition to the traditional relaxing cubic forms of the room.

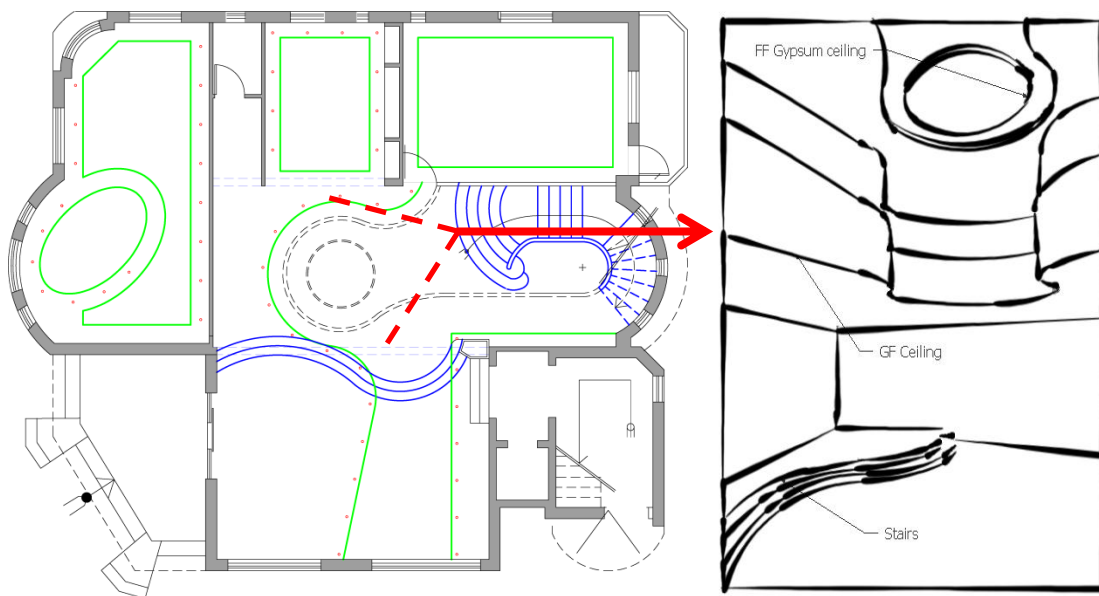


Figure 4.10 Ceiling Plan of the ground floor of Al-Rodaisy home with illustrating perspective

Kitchen as the vital element of the house is designed to offer perfect function for home occupants. However, with the importance of the efficiency in using, the designer ensured the esthetics in creating the space.

### 4.3.2 Analysis of design elements

Regarding to the visual elements of the space in chapter 2, this flowing analysis describes the general properties and techniques of the ground floor of the home.

#### a) Color



- This color theme is the degrees of dark pink in all fabrics for sofas and curtains and rug as the dominance color of the space.
- Brown as natural color of wood; wall unit and center table.
- White color of calligraphy ornaments on tables and wall unit and all surrounding surfaces; flooring, walls, and ceiling.

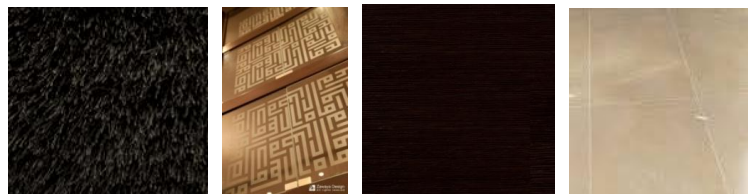
#### b) Texture

Texures for living room are:



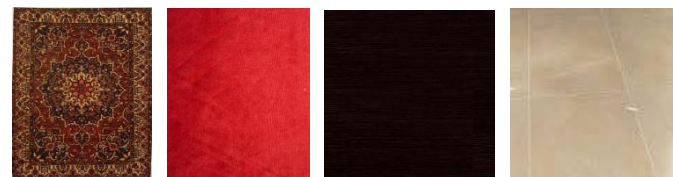
- Rugh surfaces: rug.
- Smooth serfaces: wooden surfaces, fabrics, and Porcelain.

Texures of dinning room:



- Rugh surfaces: rug.
- Smooth serfaces: Glass, wooden surfaces, leather, and Porcelain.

Texures of guest room:



- Rugh surfaces: rug.
- Smooth serfaces: Fabric, wooden surfaces, and Porcelain



**c) pattern** All surfaces are unornamented unless the surfaces include the Islamic motifs that are shown in living room wall unit, and center table, and buffet of dining room.

**d) Light**



Lightening types that were used in this space are:

- Natural lightening comes from windows.
- Spot lights above the wall unite fixed to the gypsum ceiling.
- The hidden neon lightening under the gypsum ceiling.

#### 4.4 Regional Case Studies

This part deals with a regional case study of interior design that follows the concept of celebrating Eastern craftsmanship through contemporary design. These examples are very close models to Gaza general culture and heritage; it presents the way the designer created these spaces and the way of achieving occupant satisfaction.



Figure 4.11 Living room space (Debs, 2013)



Figure 4.12 Console with small setting area (Debs, 2013)



Figure 4.13 Office zone (Debs, 2013)

The previous photos in figures 4.11, 4.12, and 4.13 are various interior designs for a home that is located at the Arab Emirates. The main concept of the designer is to achieve a harmonious translation of the minimalism ideals of the Far East and the contrasting warm patterns typical of Arabesque design made into classic, high quality interior pieces. The designer followed a fusion of design disciplines, the experimental use of materials, adoption of international trends and most importantly, the preservation of local craftsmanship across the Middle East (Debs, 2013). These three spaces are analyzed in at the next step:

### 4.3.3 The Living Room

Turning now to spaces analysis, The concept of the design is to achieve modernity as the dominance character of the room. On the other hand, in spite of the clear lines and contemporary element, traditional soul was achieved by adding the Islamic motif to the chairs and to the partition as a part of the chair design. Figure 4.14 illustrating this concept. Undoubtedly, the space has the contemporary style in general, but adding these motifs to the chairs gives more drama to the space. It brings occupant mind in to the heritage of his grandparents. Using technology in light units, new water proof fabrics with ornamented concrete tiles gives the occupant the feeling of durable, efficient functions of the space element.

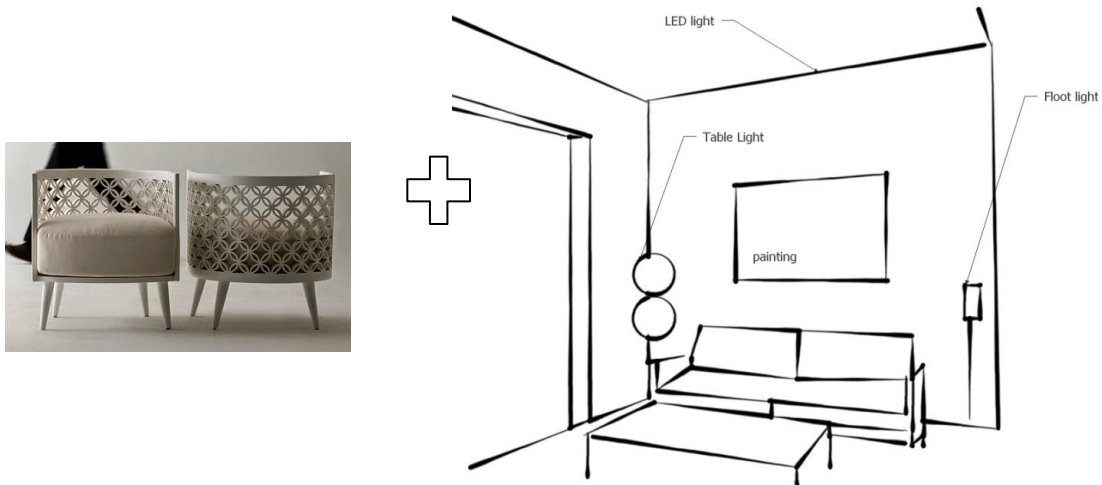


Figure 4.14 Sketches illustrate the design concept

As discussed above in the local case study, design elements are analyzed as follows:

**a) Color**



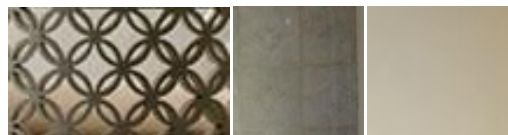
This color consists of white color with 3 degrees of gray and green- blue color

- White color is used as the main color with big area of the space in sofa and two chairs also used on one wall of the space
- Degrees of gray color is used as a secondary color in center table and one wall and in pillows as well on one lightening unit, the portrait at the middle of the room, and arabesque partition between two rooms were grey. Flooring was also light grey.
- Blue green color is used in low area, it is one vase.

**c) pattern**

All surfaces are unornamented except the Islamic motif on chairs and Partition

**b) Texture**



- Rough surfaces: ornamented partition and chairs and Concrete surface.
- Glossy surfaces: marble tiles and chrome table.
- Tissue surfaces: sofa with billows and lightening units.

**c)Light**



- Natural light from window
- Hidden LED yellow light from the ceiling - Table light unit-Floor light unit

Home Entrance in figure 4.12, the designer illustrates the ornamented concrete tile curtain of wall and flooring around the area as the main character that distinguishes the space. On the other hand it makes the occupants feel in modernity by the concrete material, this design takes his mind into the traditional soul by motifs printed in these concrete tiles. Designer adopted the contemporary chair design with motifs with circles in the center table with sprightly console of wood cover with mosaic. Collectively, the Feeling of excitement, relaxation and dominance was achieved in this space because of the great mixture between traditional Arabian elements; mosaic, motifs together with the contemporary space. All this makes occupant feels satisfied according to the superior use of current materials with the old patterns with the best use of efficient and durable material. This concept is illustrated in figure 4.15.

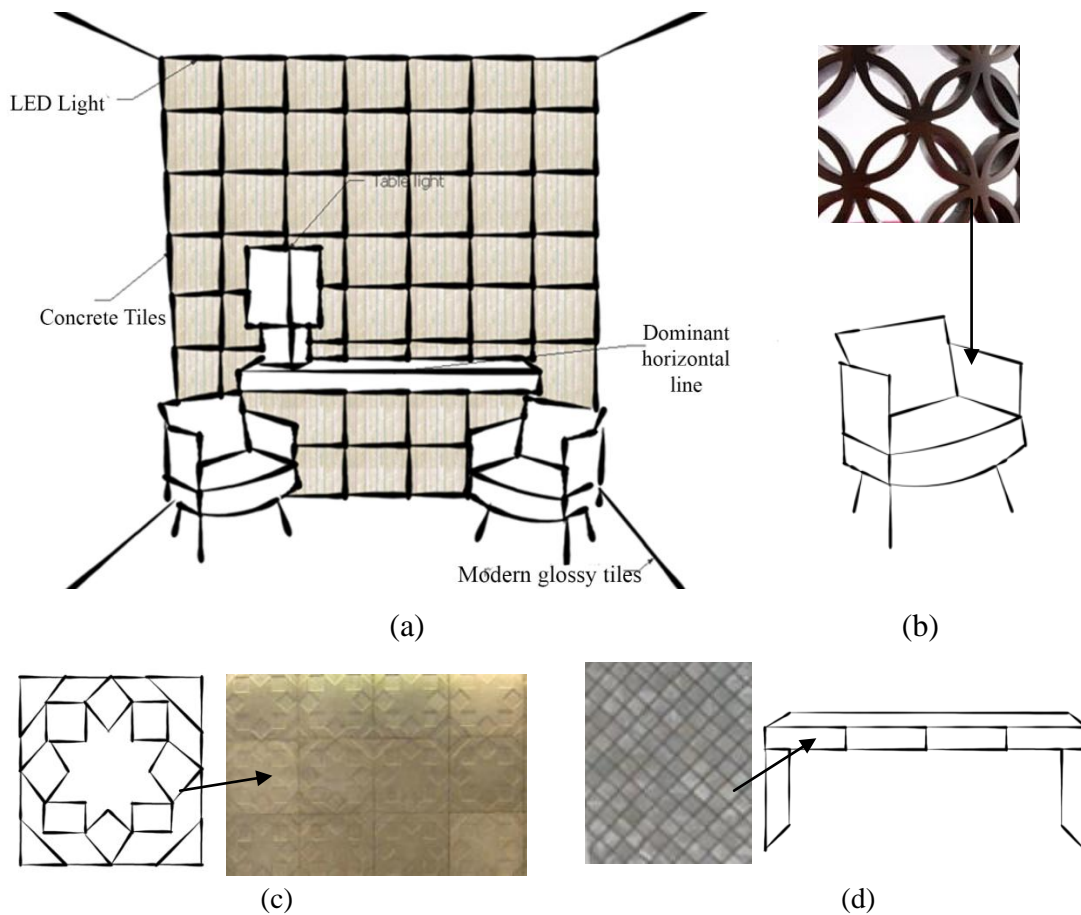


Figure 4.15 Sketches illustrate the design concept

Analysis according to the design element is illustrated at the following:

**a) Color**



Color theme was a combination of neutral color; grey with the natural wooden color; brown.

**b) Texture**



- rough surfaces: ornamented concrete tiles, wooden ornaments of chairs, and sever mosaic on console



- Smooth surfaces: waterproof fabric of chairs, golden glossy center table.

**c) Pattern**

Treated concrete surface tiles, Natural wood, Mosaic, painted steel  
Artificial fabric

**d) Light**

Light comes from the hidden LED light on the ceiling with natural lightening.

To better understand Office Room design concept, the designer emphasized the Arabian soul by motifs on the desk. This Islamic motif is abstracted in a modern view to get in to this final result. Method of arranging the shelves was based on the proportion of Islamic motifs but in a modern way. Traditional style is clear in the symmetrical balance of the room which is one of the most popular properties of traditional design style and also the cubic regular forms. In Figure 5.19a, ornaments are on desk.. And the shelves inside the wall like the concept of “yook” in traditional houses as shown in Figure (5.16b).

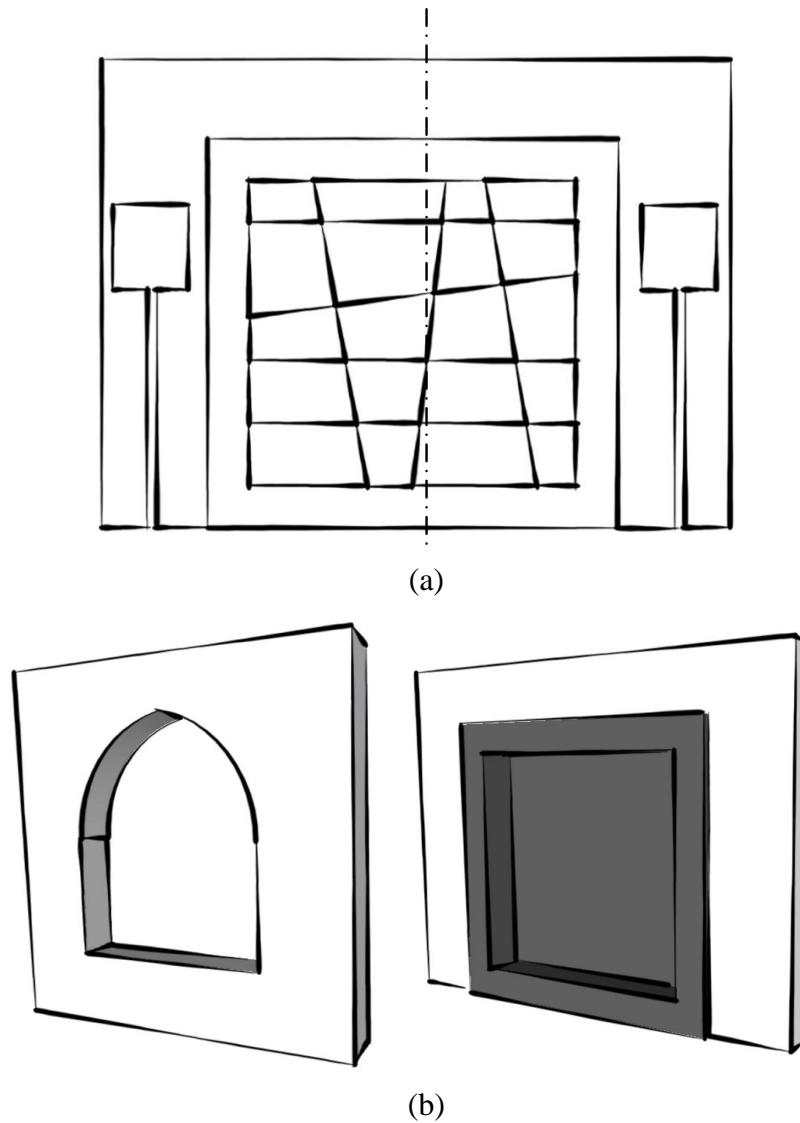


Figure 4.16 Sketches illustrate the design concept

Finally, here is the analysis of the design elements:

- a) **Color**      Neutral colors; dark grey and white
- b) **Texture**      All surfaces are smooth surfaces.
- c) **pattern**      Natural wood, Golden steel, Artificial fabric
- d) **Light**      Natural light from large window.  
                         Decoration floor lights on office both sides.

#### 4.3.4 Furniture pieces

These furniture pieces are examples of the harmony mixture between traditional elements with the contemporary form of the pieces (See Figure 4.17).

Figure 4.17(a) presents old and traditional tiles with contemporary organic buff forms. Figure 4.17(b) shows the interconnection between the past (wooden ornaments) and the contemporary form of the chair. Figure 4.17(c) is corner table where the designer used the smooth glass with ceramics integrated to wood. At figure 4.17(d) the designer integrates the Kufi font to the wooden contemporary center table. Also, in Figure 4.17(e) the designer used the shown white motif on the wooden chair form. Finally, Figure 4.17(f) this piece used the Islamic motif as shelves with 2 meters height and 1 meter width in red color, this unusual method of reuse of traditional motif is considered a new way of the development of traditional elements.



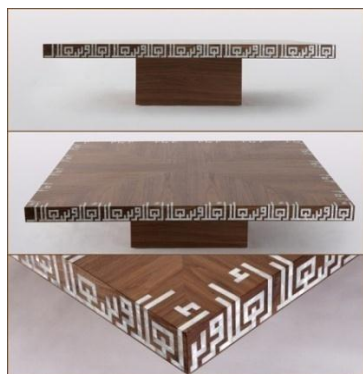
(a)



(b)



(c)



(d)



(e)



(f)

Figure 4.17 Furniture pieces (Debs, 2013)

## 4.5 Blossom Hill House

The case studies presents a philosophy of making a design combines between two design styles that transform a space into a five-sense emotional experience. The designer combines cutting-edge innovations, opposites, concepts with Eastern cultural

influences to create their trademark designs. The result is a space that exudes boldness, elegance, youthfulness, innovation – all within the structure of a client’s identity and expectations. In the spirit of their philosophy, designers make a design.

#### 4.3.5 Zhouzhuang city

This building is situated in Zhouzhuang, a water town known as the “Venice of the Orient,” in China as shown in figure 5.18. It is a city with ancient residential houses, flowing water canals, and colorful traditions and customs. Zhouzhuang is a popular tourist destination. It is one of the most famous water townships in China, noted for its profound cultural background, the well preserved ancient residential houses and the elegant watery views (Xaluan, 2010).



Figure 4.18 Location of Zhouzhuang city in China (forecast, 2014)



Figure 4.19 Zhouzhuang city watercorridors (Xaluan, 2010)



Figure 4.20 Some of handcraft in Zhouzhuang("Visiting Zhouzhuang," 2013)



### 4.3.6 Analysis of design concept

In order to design rooms that illustrates the beautiful scenery and history of Zhouzhuang, the designer created the concept of “one sensory travel through the seasons.” The idea came from the 24 seasons on the Chinese traditional solar calendar. He also designs the rooms where each was given different seasons, hues, and names based on certain seasons. To preserve the building’s heritage, team of designers carefully collected and documented ancient relics before renovation. Have a walk around the pavilion and be entranced by the journey back in time: Rustic East Asian traditionalism meets modern in this minimalist dining setting. Brightly repainted yellow and pink Ming-style chairs are combined with French ceramic patterns to convey opposite seasons. Anachronisms posing as modern lighting fixtures line the ceilings, walls, and tables, illuminate this traditional Chinese setting. Chinese style courtyards allow for a breath of fresh air in an enclosed space, and traditional style windowpanes allow insiders to peek out. This clean, sophisticated space emulates the black lacquer and white wall style of years past. Overall, there seems to be some elements to indicate that beauty is achieved through the strategic use of space, light, and cultural references. Each of these rooms lends itself to a unique experience. The contemporary Chinese painting adds a bit of drama to this otherwise neutral, subtly sophisticated space. The following Figures are more explained by the researcher. (See Figures 4.21, 4.22).



Figure 4.21 Dining room with kitchen bar (Designshuffle, 2013)



Figure 4.22 Dining room (Designshuffle, 2013)

Brightly repainted yellow and pink Ming-style chairs are combined with French ceramic patterns to convey opposite seasons (Darial, 2013). Rustic East Asian traditionalism meets modern in this minimalist dining setting. (See Figures 4.23, 4.24).



Figure 4.23 Bedroom (Designshuffle, 2013)



Figure 4.24 Corridor (Designshuffle, 2013)

At the first figure 4.23, the clean, sophisticated space emulates the black lacquer and white wall style of years past. Calm beauty is achieved through the strategic use of space, light, and cultural references. Each of these rooms lends itself to a unique experience (Dariel, 2013). Corridor in figure 4.24 shows glass gourds greet visitors in the corridor as they stroll past each door, sauntering on the chevron-patterned floor (Designshuffle, 2013).



Figure 4.25 Some views from Blossom Hill House

This extraordinary mix between the traditional styles as golden motifs with the modern smooth material is a great example of civilizations' meeting.

## 4.6 Summary

To conclude the results of analyzing the local case studies this table 5.1 evaluates the main satisfaction scales and the sub scales of satisfaction according to the researcher point of view. This process was limited only with local case studies because it is related to the research study issue. This table adopts 3 evaluating intervals; (1%-33% good, 34%-66% very good, 67%-100% excellent) the mean of ever scales illustrates the most adjective in the interior space and the lowest apparent also. As a result, it is clear that pleasing adjective takes the highest ratio that appears in all spaces, whereas the adjectives to energetic and in control take high rates also. It is clear that the characteristic of bored space takes the lowest ratio in these spaces.

On the other hand, the regional case study had the best evaluating score (29 points) of the affective characteristics of the space. Undoubtedly, achieving all equal effect of characteristics in one space could be unworkable process, designers ought to achieve suitable range of excepted characteristics to reach occupants' satisfaction.

Table 4.1: Evaluating local case studies

Satisfaction main scales	Satisfaction sub scales	Case study 1	Case study 2	Case study 3	Mean
<b>1. Relaxation</b>	Originality	*	*	**	44.4
	Innovated	***	*	*	44.4
	Simple	***	***	*	77.7
	Beautiful	**	**	***	77.7
	Visually Light	**	**	*	55.5
<b>2. Excitement</b>	Pleasing	***	***	***	99.9
	Excited	***	***	**	88.8
	Energetic	*	**	***	66.6
<b>3. Dominance</b>	Flexibility	***	***	*	77.7
	Efficiency	***	**	**	77.7
	In control	**	***	**	77.7
	Adaptability	*	***	*	55.5
<b>Sum</b>		27	29	23	

Table key:

Good \*                      Very good \*\*                      Excellent \*\*\*                      \*=33.33%

## **Chapter 5**

### **THE RESULTS AND ANALYSIS**

#### **5.1 Introduction**

This chapter analyzes and discusses the two steps conducted in the methodology. The first one is the questionnaire that carried out with costumer in engineering offices throughout Gaza city to evaluate their response to the design style, their satisfaction or dissatisfaction towards the interior space. Whereas, the questionnaires give indication that designers have good perception, and positive attitude among the analytical process, but their environmental behaviors were not guided. Then the second step after the questionnaire is the interviews which were conducted with experts in Gaza city. This step was very important for some issues related to interior design situations, such as community awareness about the interior design style, occupants' needs and complains, and the correlation between the design style and heritage revivalism. The questionnaire was mainly the most important tool to measure occupant satisfaction according to satisfaction scales. Results are displayed in tables or charts to make a clear declaration of derive tested models. There were similarities in the answers when conducting the interviews. Hence, the interviewees generally expressed their support for such issues in order to contribute in many fields, such as self-reliance and heritage revivalism. Their answers for the ten questions suggested in the structural interview were asked from ten interviewees.

#### **5.2 Analyzing and reflecting of questionnaires**

After analyzing the questionnaire by SPSS 17, the results were shaped as tables and charts with specific ratios that show the highest and the lowest factors that play an important part in directing occupant satisfaction.

##### **5.2.1 Measuring the community awareness about interior design**

This part includes section 3 of the questionnaire that deals with the demographic data of the participants like gender, occupation, residence place in Gaza and educational status, these data indicates the general awareness of the interior design style. This

information helps the researcher to give a general understanding of the existence situation of the costumers' knowledge within interior resident design.

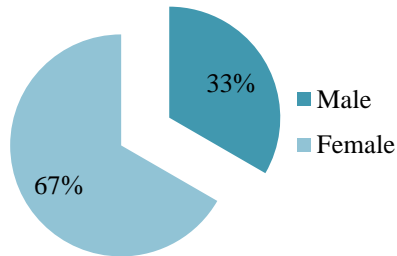


Figure 5.1 Percentage of male and female of the questionnaire sample

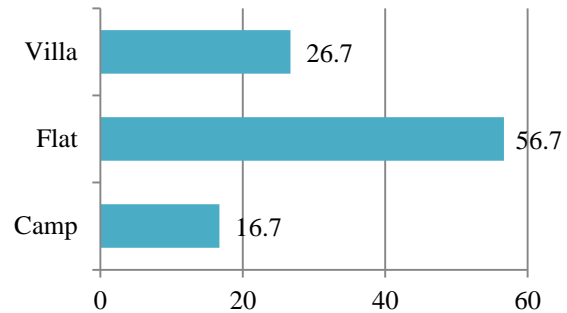


Figure 5.2 Chart of residence type percentage of respondents

Starting with the client's gender, figure 5.1 shows the percentage of female of the sample. It is obvious that 67% of people who are more interested in the interior design are females, whereas, 33% of the sample is male. This illustrates that females are more interested in making interior design for their homes than males. Turning now to the respondent's residence type, respondents, who live in flat, are more interested in interior design than those who live either in villa or camp. This is according to the relatively reasonable price of the flats in Gaza. This is shown in figure 5.2.

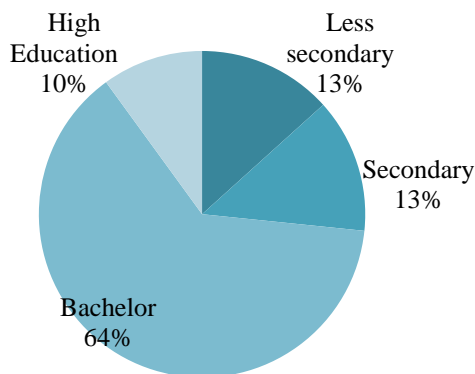


Figure 5.3 Chart of educational status

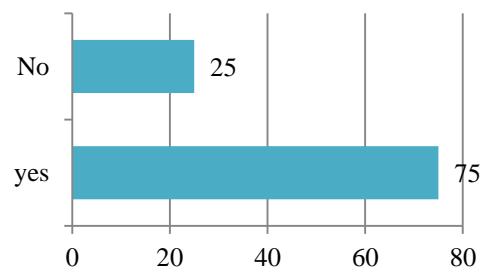


Figure 5.4: Chart of occupational status of respondents

Regarding to figure 5.3, the educated occupants; who have bachelor or high certificated, takes the highest ratio of engineering offices occupants, whereas people who shape the lowest ratio are not educated or they have less than secondary education. This raises questions about the reasons that caused this small ratio, it could be formed because these people work in commercial projects. On another hand, It is clear from figure 5.4 that 75% of respondents who own occupation are more concerned with interior design.

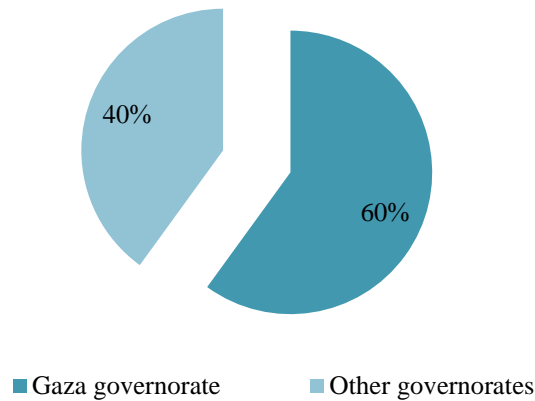


Figure 5.5 Chart of occupation status

The chart in figure 5.5 illustrates the percentage of the residence place of the costumers, by dividing the Strip into two parts; Gaza governorate and the other four governorates; Rafah, Khanyounis, Al-Wosta, and The Northen governorates. 60% of costumers live in Gaza and the other lives outside Gaza. There are several possible explanations for this result, one of them is that Gaza is the vital city in all Gaza strip also, there is in Gaza 80% of engineering offices that is specialized in interior design.

### 5.2.2 Evaluation Indoor spaces Quality of traditional design style

This part investigates people response to the 15 satisfaction scales of the traditional style model. Table 5.1 shows that the item originality takes the highest rate of respondent opinion (85.7%) of the traditional bedroom and the living room models. Then costumers think that the traditional models of bedroom and living room are characterized as innovated, usability, efficient, dominance and adoptability to the space. However, costumers assumed that these models do not make them feel exited or energetic. There is also less of simplicity and less of flexibility in usage.

Table 5.1 Satisfaction scales effect on costumers of the traditional models

Sn.	Styles	1	2	3	4	5	Average
1.	Originality	0.0	1.7	20.0	31.7	46.7	84.7
2.	Innovated	13.3	10.0	30.0	31.7	15.0	65.0
3.	Simplicity	31.7	26.7	21.7	<b>3.3</b>	<b>16.7</b>	<b>30.7</b>
4.	Beautiful	13.3	15.0	28.3	16.7	26.7	65.7
5.	Visually light	15.0	23.3	20.0	26.7	15.0	60.7
6.	Clear	20.0	16.7	10.0	18.3	35.0	66.3
7.	Pleasure	21.7	31.7	21.7	16.7	8.3	51.7
8.	Excited	30.0	20.0	25.0	25.0	0.0	49.0
9.	Energetic	25.0	21.7	21.7	25.0	6.7	53.3
10.	Flexibility	18.3	23.3	20.0	21.7	16.7	59.0
11.	Usability	11.7	20.0	16.7	16.7	35.0	68.7
11.	Efficient	13.3	13.3	30.0	23.3	20.0	64.7
13.	Dominance	11.7	18.3	35.0	10.0	25.0	63.7
14.	Adoptability	11.7	23.3	20.0	28.3	16.7	63.0

In table 5.2, costumers claim that the contemporary models are characterized by the innovated form and visually light. Also, it had a lot of esthetic values and had a good usability and adoptability characteristics. On the other hand, they think that the contemporary models had rare properties of both of originality and boredom. Furthermore, these models made costumers feels simple, beautiful, clear, dominance, usability and efficient in average.



Table 5.2 Satisfaction scales effect on costumers of the contemporary models

Sn.	Styles	1	2	3	4	5	Average
1.	Originality	18.3	21.7	31.7	10	18.3	57.7
2.	Innovated	0	11.7	20	13.3	55	82.3
3.	Simplicity	5	13.3	20	33.3	28.3	73.3
4.	Beautiful	0	6.7	21.7	28.3	43.3	81.7
5.	Visually light	3.3	6.7	10	33.3	46.7	82.7
6.	Clear	11.7	16.7	8.3	35	28.3	70.3
7.	Pleasure	5	10	15	33.3	36.7	77.3
8.	Excited	5	11.7	16.7	30	36.7	76.3
9.	Energetic	6.7	13.3	35	15	30	69.7
10.	Flexibility	3.3	6.7	25	35	30	76.3
11.	Usability	0	6.7	20	31.7	41.7	81.7
12.	Efficient	6.7	1.7	25	36.7	30	76.3
13.	Dominance	3.3	8.3	23.3	36.7	28.3	75.7
14.	Adoptability	0	8.3	20	30	41.7	81.0

In table 5.3 means of most of characteristics are very close to each other. both of the living room and the bedroom models indicate positive feelings of originality, innovated design, beauty, visually light, pleasure, excited, energetic and usability.

Table 5.3 Satisfaction scales effect on costumers of the contemporary models with traditional contexts

Sn.	Styles	1	2	3	4	5	Average
1.	Originality	0.0	8.3	26.7	40	25	76.3
2.	Innovated	5.0	3.3	8.3	26.7	56.7	85.3
3.	Simplicity	3.3	3.3	36.7	33.3	23.3	74.0
4.	Beautiful	1.7	5.0	11.7	31.7	50.0	84.7
5.	Visually light	3.3	8.3	13.3	33.3	41.7	80.3
6.	Clear	3.3	8.3	25	26.7	36.7	77.0
7.	Pleasure	<b>0.0</b>	5.0	15.0	48.3	31.7	81.3
8.	Excited	3.3	6.7	18.3	33.3	38.3	79.3
9.	Energetic	<b>0.0</b>	6.7	20	36.7	36.7	80.7
10.	Flexibility	<b>0.0</b>	10	26.7	36.7	26.7	76.0
11.	Usability	<b>0.0</b>	11.7	8.3	45.0	35.0	80.7
12.	Efficient	6.7	5	20	40	28.3	75.7
13.	Dominance	6.7	13.3	16.7	36.7	26.7	72.7
14.	Adoptability	20	1.7	13.3	36.7	28.3	70.3

### 5.2.3 Mean Scores for Styles by variables

In accordance with the previous results, present chart demonstrates the main variation between the three design styles.

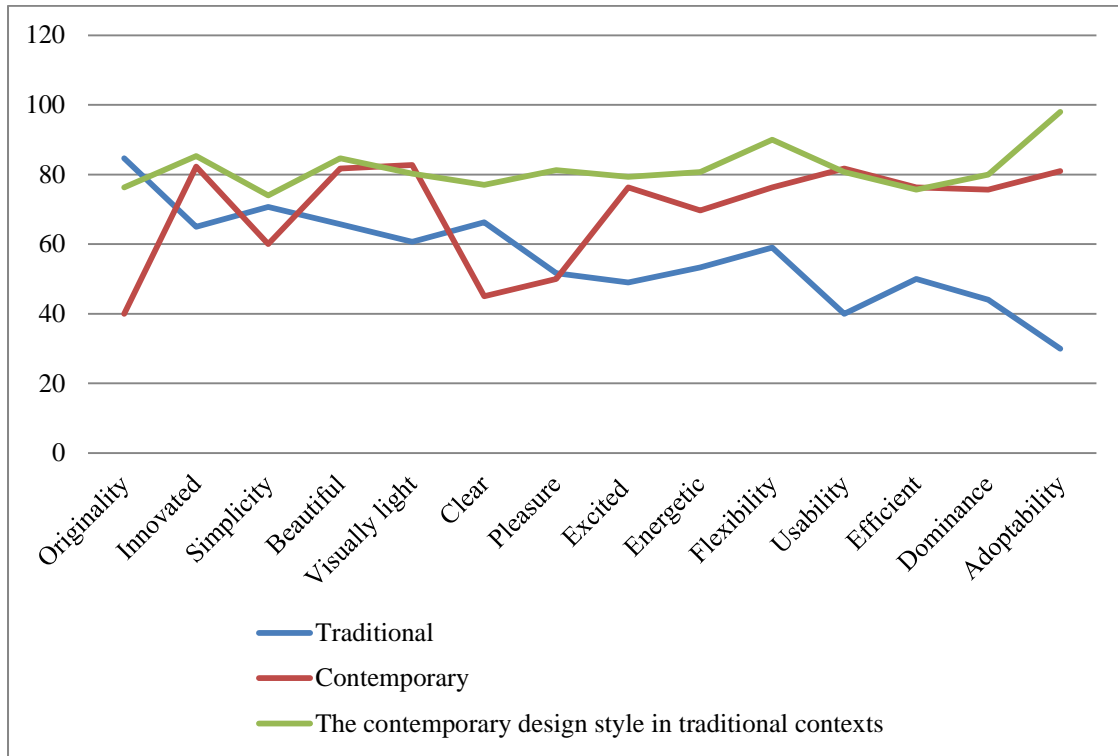


Figure 5.6 The varieties between the three design styles of occupant satisfaction

The chart in figure 5.6 illustrates the relative relationships between the three experimented design styles. The chart depicts that the traditional design style has the lowest rates. Meanwhile, the contemporary design style with traditional contexts takes the highest ratios in most cases.

#### 5.2.4 Evaluating the three interior design styles

After illustrating the opinions of costumers, it is obvious that the contemporary design style in traditional contexts comes with the next mentioned averages in table 5.4

Table 5.4 Average Scores of the three Styles of models

Sn.	Styles	Bed Room	Living Room	Average
1.	Traditional	58.0	67.9	63.0
2.	Contemporary	72.2	68.4	70.3
3.	The contemporary design style in traditional contexts	76.5	80.5	78.5

### 5.2.5 The correlation between demographic data with the design styles

It is clear that table 5.5 shows the relationships between the three design styles and gender, Female were interested in the traditional design style more than males. On the other hand Male are more concern about the contemporary design style with a percentage of 75.3%, and females 73.8%. Moreover, a high percentage of Males (80.1%) were interested in the contemporary design style with traditional contexts.

Table 5.1 Differences between design styles and gender

	Gender	Num.	Mean
Traditional	Male	40	63.7
	Female	80	62.6
Contemporary	Male	40	70.3
	Female	80	60.8
Contemporary with traditional context	Male	40	80.1
	Female	80	74.6

Next figure 5.7 shows the effect of the occupational status and their opinions on the interior design styles.

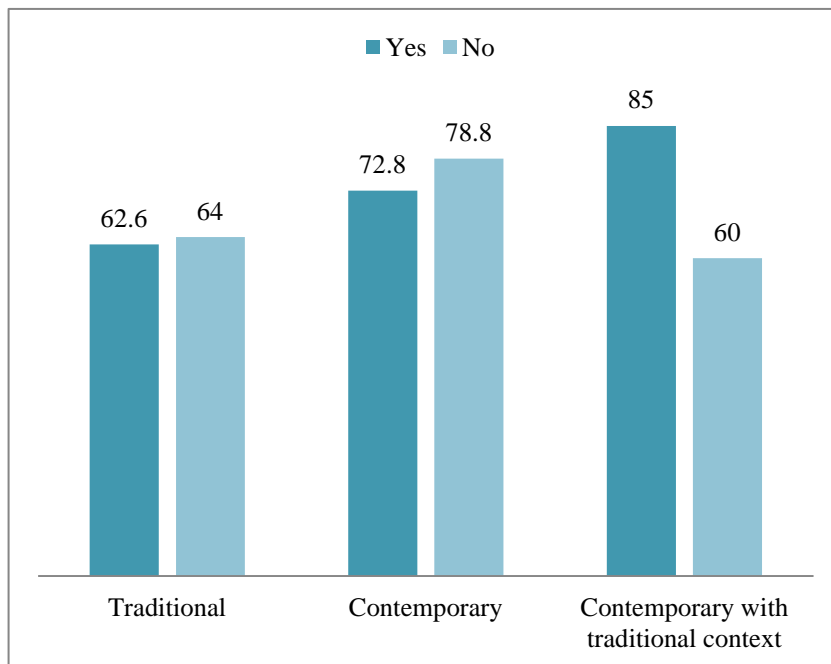


Figure 5.7 The variation of occupational status about the interior design styles

Most of people with no job prefer the traditional style. By the time that most of who has a job goes to the contemporary design style. The contemporary design style also was a good choice.

Results also depicts that occupants in Gaza who prefers the contemporary design style with traditional context have the highest ratio for the overall occupant satisfaction. Costumers from other governorates are more concern with the contemporary design style than Gaza costumers. These results are illustrated in table 5.6.

Table 5.6 Differences between design Styles and residence place

Design style	Resident	Num.	Mean
Traditional	Gaza	72	60.5
	Other governorates	28	65.1
	Total	120	63.0
contemporary	Gaza	72	74.1
	Other governorates	28	73.0
	Total	120	74.3
Contemporary with traditional context	Gaza	36	77.0
	Other governorates	14	71.8
	Total	60	76.4

Turning now to the relationship between the design styles with the different residence types in Gaza, figure 5.8 presents the resulted ratios:

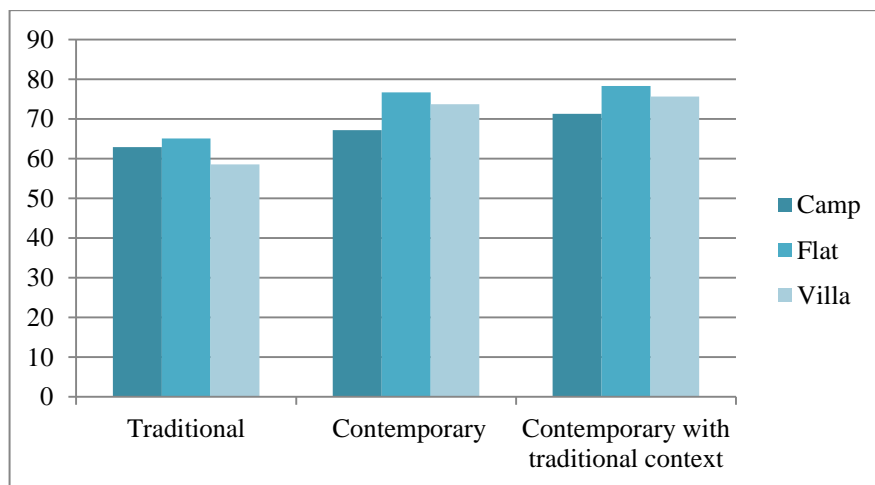


Figure 5.8 Differences between design styles demand and residence type

It is obvious that occupants are relatively more interested in making a contemporary design and a contemporary design with traditional contexts with high ratio. Next charts show that people in general are not often interested in making a traditional style for their resident spaces. People who live in flats are always directed to the contemporary design style in various resident types. And this is due to the suitable prices of making an interior design for flats in relative to villas. Moreover, most of people in Gaza own flats more than any other residential types.

The final table 5.7 presents the effect of the educational status on choosing the design style. Also, the contemporary design style within traditional context shows high satisfaction from most respondents.

Table 5.7 The effect of the educational status on design style

Design style	Resident	Num.	Mean
Traditional	Less secondary	16	61.5
	Secondary	16	61.5
	Bachelor	76	62.4
	High Education	12	70.4
	Total	120	63.0
Contemporary	Less secondary	8	80.2
	Secondary	8	79.7
	Bachelor	38	72.8
	High Education	6	68.7
	Total	60	74.3
Contemporary with traditional context	Less secondary	8	78.0
	Secondary	8	77.2
	Bachelor	38	74.8
	High Education	6	83.3
	Total	60	76.4

### 5.3 Analyzing and reflecting of interview questions

This process comes to justify the previous resulting data from the experts point of views, these experts are directly communicate with society and has a good knowledge about the customer needs and the general expectations they wants.

#### 5.3.1 Costumers awareness of the interior design style

The following table shows the percentage of community awareness about the interior design and the slices who are interested to make a design for their homes. It is obvious that 80% of designers think that people in Gaza depend on foreign Catalogs and other communication means such as face book, twitter, and websites to get their space design. By the time that 20% of designers approve that community has no concern in interior design that is according to some specific factors. Finally, 60% of them say that people with high education (more than secondary school) and women are interested in it.

Table 5.8 People awareness about interior design

Q1: What is your opinion about the awareness of society about the interior design in Gaza?	NO. of respondents
a) Most of people depends on catalogues and another communication means to get interior design of their homes	5
b) People in Gaza are rarely interested in interior design	1
c) Only people who are educated and women had a big concern slice of it	2
d) People in Gaza are concern of interior design	3

The table 5.9 illustrates the obstacles that face interior design in Gaza, most of designers see that instability on political situations and the bad economic situations affect badly on interior design.

Table 5.9 Obstacles that faces interior design in Gaza

Q2: What are the obstacles that face interior design in Gaza?	NO. of respondents
a) Instability of Political situations	4
b) Uncommon awareness of society	1
c) Bad economic situations	1
d) Rare of materials	4

It is very clear from table 5.10 that the answers varies between 3 residential interior design on one month with a percentage of 20%, equal percentages are divided in to (1-3) projects per month, and 1 project in two months with a percentage of 40%, also 20% 1 project in 3 months in office.

Table 5.10 The population of the residential interior projects

<b>Q3: How many residential projects do you produce monthly?</b>	<b>NO. of respondents</b>
a) More than 3 projects in month	1
b) From 1-3 projects in month	1
c) 1 project in tow months	3
d) 1 project in 3 months	6

### 5.3.2 Costumer most preferable visual elements of the design style

This table discusses the general community knowledge of the design style. According to designers' opinion, some occupants prefer classic design, others prefer modern design style but in general costumers do not has the knowledge about the design styles, but they depend almost on the visual experiments that they live and they usually see.

Table 5.11 Costumers awareness about the interior design

<b>Q4: Do occupants ask you to make a design with specific design style?</b>	<b>NO. of respondents</b>
a) They had no any idea about the design styles	6
b) They mostly prefer classic design style	3
c) They do prefer modern design style but they don't know any deep details about it	1

Regarding to some details of interior style, 60% of designers say that occupants tend to choose a combination of worm colors and neutral theme. 40% of designers say that occupants sometimes choose neutral colors in space design. Worm colors were also a choice for some costumers. Table 5.12 shows the answers:



Table 5.12 Colors preferred from costumers

<b>Q5: what color theme do occupants prefer?</b>	NO. of respondents
a) Worm colors	5
b) Neutral light them	2
c) Mix of worm and neutral colors	3

Continuing some elements of the interior design, the best choice for costumers according to designers, is cubic form, in chairs, tables,, beds, and any element of the house. That does not eliminate the fact that some occupants tend to make a curvature forms of the interior space. Some leaner forms also were a preferred choice with a percentage of 20%

Table 5.13 The form and line preferred form costumers

<b>Q6: what form styles do costumer prefers</b>	NO. of respondents
a) Cubic	6
b) Curvature	2
c) Leaner	2

People in Gaza like to use the local material in decorating their homes with high rate. On the other hand, they do not mind to use other kinds of artificial and modern materials.

Table 5.14 The preferred material form costumers

<b>Q7: what kind of material do costumers prefer</b>	NO. of respondents
a) Natural material like wood, stone, ...	4
b) Glossy surfaces	3
c) Mix between ruff and glossy surfaces	3

### **5.3.3 The correlation of reviving heritage and design style**

Regarding to the contemporary design style with traditional contexts and its relationship with heritage revivalism, most of respondents submitted that adding traditional elements to the current elements strengthen and enhances the belonging to the local culture and revive the Palestinian heritage. Table 5.15 presents the different opinions of the designers:

Table 5.15 The effect on heritage revivalism

<b>Q8: : Do you think mixing between traditional and contemporary design could revive Palestinian heritage</b>	NO. of respondents
a) It's a great and useful idea to revive heritage	3
b) Reviving heritage is one of the most important aims of using traditional elements in the contemporary design style	6
c) There is no relationship between design style and heritage	1

## 5.4 Summary

This chapter concludes all the results collected from all research method in this stage, be illustrating all tables and charts that indicates the differences in values between the traditional and the contemporary and the contemporary design style with traditional contexts. It is obvious that by merging between the qualitative and quantitative methods to insure results and widen the study domain, results in both questionnaire and interviews indicates the same opinion that the contemporary design style with traditional contexts is the most active and suitable style form home occupant with average score of (78.5%).

## Chapter 6

### CONCLUSION AND RECOMMENDATIONS

#### 6.1 Introduction

This dissertation has investigated the potential of enhancing occupant's response to the interior design of the residential space through the appropriate interior design style elements. To achieve the purpose of the research, three main factors which are relaxation, excitement, dominance of space were taken into consideration at studying interior design conditions in Gaza city with intensive study about occupants' needs. The thesis is structured into two parts. The first part states a literature review about interior design, design styles, and occupant's response to the design style. The second part is a parametrical study carried out by using questionnaire, individual interviews and case studies within the use of 3D Max 2011 and Sketch up pro7 programs to make the best simulated models to investigate the influence of previous three factors on the overall satisfaction of typical residential spaces model. This is the last chapter of the thesis which is designed to make the summarization of the conclusions and recommendations derived from the gathered data and the simulation which is discussed in this study. The final chapter of this dissertation is divided into three parts. The first deals with the reflection of the research questions and objectives. The second part includes the findings. The third and the final part discusses deeply the suggested recommendations and strategies for many aspects.

#### 6.2 Reflections of research questions and the objectives

This thesis has thrown up many questions in need of investigation. Three questions were asked to support the three objectives of the study. This section presents the procedures the researcher follows to answer the questions.

**The first objective** includes the interior design style; the interior design situations in Gaza city, the contemporary design style and the traditional design style. Chapter 2 has briefly provided the necessary information including the concept of the interior design, interior design in Gaza and the contemporary and the traditional design styles. These strategies are explained in Chapter 4 in case studies by analyzing the

methods that designer do to get to the suitable combination of the contemporary design style with the traditional elements.

**The second objective** deals with the appropriate spaces that cause good conditions for living, the factors that effects on occupant response to the space he lives in Gaza. The definition of satisfaction and its related scales are presented in Chapter 2. Answering this question needs intensive discussions with experts to produce satisfaction scales, the second way is to interact with community to define the occupant's needs and further to listen to their complains.

**The third objective** highlights the enhancement of customer's satisfaction of the interior design in Gaza city by the best correlation of design elements with the three satisfaction factors. In order to provide the answer of this question in Chapter 3 and Chapter 5, the researcher pursues three stages which are:

- Questionnaire that was distributed to the presented sample in order to measure design style visual elements and effects on people satisfaction according to the design elements.
- Interviews with experts were proceeded to insure the results.
- Assessing local, regional, and international case studies to understand the concept and the element of the design style and the way it achieves occupant satisfaction.

### **6.3 Findings**

The researcher observed that occupants in the contemporary design style with traditional contexts are on average more satisfied. Nevertheless, one can see some difficulties for this design style to be applicable. Research results suggest that on average the strategies commonly employed in contemporary design style with traditional contexts are effective in improving occupant's satisfaction with the high rates of positive characteristics achieved in this design style. Conversely, the researcher sees that this objective cannot be realistic without achieving affective quality of the residential interior space. The traditional-contemporary design style does show a significant improvement in comparison to any other style. Complaint profiles of the existing home designs point to problems with inexistence of required materials and the rare of interior techniques due to instability of political situations. Common findings can be classified into:

### **6.3.1 General Findings**

- Interior design has no effects on people lifestyle; therefore, it must have more concern for authorities, designers, and students.
- Achieving best possible interior design of homes according to design style strategies has positive influence not only for people satisfaction, but also for other aspects like economic, social, and ethical.
- Occupant's response to the interior space can be defined by emotional scales excitement, relaxation and dominance.
- Interior design with the consideration of satisfaction scales and connecting these impalpable scales with design elements include using form, pattern color, texture and light.
- It is the best opportunity to start to improve the production of interior design projects. This procedure will make people's attention about interior design get better.
- Most of associations and firms in Gaza don't follow specific design style, there is small misunderstanding between people needs and offices design style.

### **6.3.2 Interior design in Gaza city**

Gaza is chosen as the study area. It is a great city with great legacy because of the geographic and historic importance. However, it faces many difficulties and constrains.

- There is no specific design style of the interior design in Gaza. The result of this randomized interior design styles causes uncomfortable and inefficient living spaces.
- All raw materials needed for interior design manufactory in Gaza city are related to instability of the political situations. This issue goes up and down according to uncontrolled conditions that affects badly on interior design. In addition to the effects of political situations in Gaza, designers are restricted to the limited number of materials to be used in interior design. Therefore, this situation limits the innovation process.
- In Gaza, designers denoted their readiness to add traditional elements to the contemporary design style of interior projects, and they have a positive attitude towards studying occupants' needs for their indoor spaces. On other hand, small

proportion of offices do implement the contemporary design style and design without a deep study of costumer satisfactory items.

- According to the survey results and interviews with experts, there is no adequate awareness towards design styles among the people of what reflects random interior spaces. This affects negatively the occupant's response to the space.
- Despite the high cost spending for air conditioning, the indoor spaces do not achieved the comfort conditions. This affirms that there has not been a deep study for mechanical conditioners.
- Depending on interior designs from catalogues and multimedia means or the individual opinions of clients causes a high percentage of random indoors with negative effects on occupant's emotions, like unoriginality, inefficient and spaces.
- There are no apparent previous studies in Gaza that discuss interior design styles. Moreover, there is no interior bachelor program among universities.
- The instability of economic and political situation in Gaza affects negatively on interior design development.
- These findings required that there should be accurate and comprehensive strategies among all stockholders. These strategies can be summarized in relevance to responsible authorities.

## **6.4 Strategies and recommendations**

Strategies guided and shape the thesis recommendations. These are summarized as strategies for stake holders, for community, for forward customer satisfaction of the interior space, and finally for the designers to follow.

### **6.4.1 Strategies for stakeholders**

Interior design in Gaza City needs upraising and developmental actions. This demands significant modifications to be implemented on the administrative level such as:

- Taking real steps forward towards the development of the interior design strategies of the engineering offices;
- Preparing professional designers by workshops;

- Widening designer visual experiences by seeking and offering scholarships to specialized abroad in the field of interior design;
- Planning for training programs for fresh graduates to understand the real steps to make applicable and efficient design;
- Increasing community awareness about the importance of the interior design for their homes to achieve a good response to the living space;
- Enhancing the community sharing and interactions;
- Using the innovative technological movements and tools which can save time and effort, and make efficient use of the space;
- Joining between the good education systems in Gaza universities and enhancing the interior design education is the key to get a good interior design that satisfies the designer

#### **6.4.2 Strategies for community**

Community response towards the interior design must be enhanced. This requires some efforts to be exerted to make more residential spaces satisfy occupants such as:

- Interacting with the formal and authoritative appeals like designers and expressing their opinions and needs of the existing situations of the interior design;
- Adapting the new techniques of the contemporary design style that seek to enhance usability, durability, flexibility and the efficiency of the space;
- Thinking about the future of Gaza heritage that is considered as a treasure to be existed on all fields of our life;
- Increasing people's awareness about Gaza legacy by making articles, leaflets, in multimedia means;
- Increasing people's attention about the significant of the interior design for the residential spaces;
- Providing efficient interior design services at good and suitable prices with interacting and sharing of the costumer's needs and opinions.

### **6.4.3 Strategies forward customer satisfaction of the interior space**

- Trying to make deep understanding of customer's needs for their residential spaces
- Joining between customer's satisfaction and the effective quality of the space.
- Connecting the quality of the space with the elements and the properties of the traditional and the contemporary design style.
- Efficient results of the interior spaces that makes the best use with the least cost
- Quality and comfort the space must be observed and controlled

### **6.4.4 Strategies for designers**

- Making workshops about the interior design fields for the new graduates to increase their awareness of the interior design;
- Involving the heritage issues in the design process to interact with the interior elements of the space;
- Increasing the designer knowledge about the local materials in Gaza and the handcrafts that Gaza famous in;
- Establishing round trips inside the old city of Gaza that helps the designers to identify the traditional elements that still exist there.

### **6.4.5 Strategies for Researchers**

This thesis has thrown up many questions in need of further investigation. It could be a start point for researcher to deeply study occupant's response in Gaza City. Then, the research and development efforts have to be directed towards:

- Researches and studies have to depend other methods of evaluating customer's satisfaction of indoor spaces, which can give accurate and wide results. Moreover discussing the results from other perspectives to get efficient and comprehensive overview would enrich the issue. This could enhance the interior spaces because of their abilities of connecting all problem branches to get the best results. The (expectation, experience and opinion theory) or (durability with flexibility theory) and the ethics theories) about occupant satisfaction can introduce efficient methods to be used in querying, analyzing, putting alternatives and making judicious decisions.



- A greater focus on the occupant's needs could produce interesting findings that account more for the social life of people in Gaza.
- Evaluating the actual reality as possibilities and constrains, and giving numerical results is the essential step to reach to the most affective quality of the interior space. The thesis introduces the theory of producing satisfaction adjectives of the effective quality of the space to evaluate the elements of the design style. This process mainly about merging between the possible positive properties of either the traditional or the contemporary design styles.
- It is recommended to start working on the detailed trends of the thesis, such as; the basic elements of the traditional design style, more details about community needs, more details about ways of employing some elements like ornaments of the golden properties of traditional elements in furniture pieces, etc. Also, the thesis is an applied study needs a lot of future efforts to be converted into a real implemented project.
- A managerial action plan has to be drawn. Also, an organized staff has to be formed to make sure that all strategies are directed towards achieving occupant satisfaction.
- Financial analytical studies have to be made to recognize and estimate all costs and risks that may face planning, designing, managing and implementing the project.
- There is a strong recommendation for researchers and academic associations to look for more integrated solutions for the problems of transportation, urban sprawl and environmental issues. These solutions have to be appropriate to Gaza City and its hard circumstances.
- Complete applications are recommended to be developed to serve the actual reality of Gaza City. The thesis introduces three technical outputs that can be assembled into one application and be easy used by all stakeholders.

#### **6.4.6 Toward heritage revivalism**

On the way to revive heritage, there are too many methods. Inspiring from traditional style is one of them. By analyzing traditional elements and the components of the local culture, the designer can form it in a new way that simulates the past and the

present. So, the field of "redesign of heritage elements" needs to be developed and reconsidered.

### **6.4.7 Design hints for designers**

- Making a contemporary design by adding traditional touches to all elements
- Making a contemporary design with the traditional elements in its real form without modifications
- Using the traditional elements in a contemporary way and techniques.
- Making a traditional style in all elements, with adding the new techniques.

#### **6.4.7.1 Line and form**

Old houses used many kinds of arches in decorating openings and partitions of the rooms. Many ways can be used in our modern houses as:

- 1) Using the fivefold arch as a unique unit as partition between rooms.
- 2) Employing arches in modern techniques with new materials and various colors
- 3) Integrating the concept of the old "yook" inside modern houses to make the best uses of room area.
- 4) Old houses distinguished with cupic forms with perpendicular angles. This is what is considered the most relaxed and clear form for human eye.

These properties of the traditional forms and lines give the feeling of originality. This feeling brings occupant to his legacy and heritage. In addition to that, cubic forms give feelings of relaxation, clearance, and simplicity.

#### **6.4.7.2 Color**

Probably, the process of choosing colors for rooms depends on function of the room, the main concept here is to add one or two color theme of warm colors to a space with neutral colors.

- 1) Inspiring from the degrees of the Palestinian "Busat" ( dark red with orange and dark blue) as colors of the space in a percentage of (30-40%) from the space colors.
- 2) To use degrees of natural colors of materials (brown, beige) as background of the space.

- 3) Dependence on the brightly colored tiles in a space with neutral colors of all elements.
- 4) Glaring colors of the stained glass gives a vital spirit in the neutral place.

#### **6.4.7.3 Light**

- 1) Optimal use of natural renewable energies for lightening; sunshine, illuminate the rooms by making calculations for the glass areas to be appropriate for each room.
- 2) Exploitation modern technologies to provide lighting for the home, that adds a beautiful touches in the space, especially if they are kept on an area of wholesale certain throws.
- 3) Transforming the concept of traditional lighting units that worked by Kaz to new designs. It give a sense of warmth and psychological comfort, especially in the living spaces.

#### **6.4.7.4 Pattern and texture**

Patterns are a very wide range in traditional elements. It varies between the cross stitch, all kinds of motifs, ornaments on colored glass, etc. These patterns can be employed in modern designs by:

- 1) Using old ornamented fabrics such as cross stitches, Busat in contemporary space. These fabrics can be used in pillows, rugs...etc.
- 2) Using the old patterns like Kufya pattern and tiles pattern in a modern way in new colors and forms.
- 3) Adding wooden ornaments to furniture pieces in an elegant way.
- 4) Pottery can be used in its real form to make new forms within it.

Related materials used in the design process is preferable to make a texture a judicious mix between soft and coarse surfaces, which adds the beauty and excitement.

### **6.5 Summary**

The final chapter draws upon the entire thesis, tying up the various theoretical and empirical strands in order to get into the final suitable results. The researcher adopted three research tools, the questionnaire, the interviews, and the case studies to make a

complete, deep, and rich study that covers all branches aiming to create suitable interior space for occupants. Nevertheless, our evidence demonstrate the generality of the across a broad range of the design styles. It therefore speaks against any theory that puts the design style as the sole determinant of how occupants' emotional response. Of course, the role of design style is not an either-or matter.

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## Appendix

### Appendix A: Questionnaire in Arabic



بسم الله الرحمن الرحيم  
تسعى هذه الدراسة للحصول على درجة الماجستير في الهندسة المعمارية- تصميم داخلي بالجامعة الإسلامية بغزة، حيث تهدف الدراسة إلى دراسة مدى استجابة الزبائن لطرز التصميم الداخلي المعاصر الذي يحتوي على الطراز التقليدي الفلسطيني، في مضمونه في قطاع غزة، ومن خلال مشاركتك في هذا الإبتداء فإني أطمح إلى تطبيق نظري يقدم أفضل تصميم داخلي بما يتناسب مع المعاصرة والتطور مع الحفاظ على التراث الفلسطيني واللوية المحلية.

1. أملك ثلاث تصاميم لغرفة نوم رئيسية .. في كل غرفة تم اتباع طراز معين .. الأولى طراز تقليدي فلسطيني والثانية طراز معاصر والثالثة طراز يجمع بين التقليدي والمعاصر أروم منك وضع علامة  في المربع حسب مقياس رضاك عن التصميم

31. الطراز المعاصر يحتوي مضامين تراثية تقليدية



غير راضي أبدا  
غير راضي  
راضي  
راضي جدا

أصيل	<input type="checkbox"/>	غير راضي أبدا	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	غير راضي	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	القليل من الرضي	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	راضي	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	راضي جدا	<input type="checkbox"/>
غير بسيط	<input type="checkbox"/>	أصيل	<input type="checkbox"/>
غير بسيط	<input type="checkbox"/>	ميدح	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	ميدح	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	غير بسيط	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	غير بسيط	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	جميل	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	جميل	<input type="checkbox"/>
غير خفيف بصريا	<input type="checkbox"/>	خفيف بصريا	<input type="checkbox"/>
غير واضح وصريح	<input type="checkbox"/>	واضح وصريح	<input type="checkbox"/>
غير واضح وصريح	<input type="checkbox"/>	واضح وصريح	<input type="checkbox"/>
لا يشعرك بالسعادة	<input type="checkbox"/>	لا يشعرك بالسعادة	<input type="checkbox"/>
لا يشعرك بالسعادة	<input type="checkbox"/>	لا يشعرك بالسعادة	<input type="checkbox"/>
لا يشعرك بالامل	<input type="checkbox"/>	لا يشعرك بالامل	<input type="checkbox"/>
لا يشعرك بالامل	<input type="checkbox"/>	لا يشعرك بالامل	<input type="checkbox"/>
لا يشعرك بالمتعة	<input type="checkbox"/>	لا يشعرك بالمتعة	<input type="checkbox"/>
لا يشعرك بالمتعة	<input type="checkbox"/>	لا يشعرك بالمتعة	<input type="checkbox"/>
لا يبعث الطاقة	<input type="checkbox"/>	لا يبعث الطاقة	<input type="checkbox"/>
لا يبعث الطاقة	<input type="checkbox"/>	لا يبعث الطاقة	<input type="checkbox"/>
عدم مرونة الاستخدام	<input type="checkbox"/>	عدم مرونة الاستخدام	<input type="checkbox"/>
عدم مرونة الاستخدام	<input type="checkbox"/>	عدم مرونة الاستخدام	<input type="checkbox"/>
عدم سهولة الاستخدام	<input type="checkbox"/>	عدم سهولة الاستخدام	<input type="checkbox"/>
عدم سهولة الاستخدام	<input type="checkbox"/>	عدم سهولة الاستخدام	<input type="checkbox"/>
عدم كفاية الاستخدام	<input type="checkbox"/>	عدم كفاية الاستخدام	<input type="checkbox"/>
عدم كفاية الاستخدام	<input type="checkbox"/>	عدم كفاية الاستخدام	<input type="checkbox"/>
لا يشعرك بالسيطرة	<input type="checkbox"/>	لا يشعرك بالسيطرة	<input type="checkbox"/>
لا يشعرك بالسيطرة	<input type="checkbox"/>	لا يشعرك بالسيطرة	<input type="checkbox"/>
عدم سهولة التكيف	<input type="checkbox"/>	عدم سهولة التكيف	<input type="checkbox"/>
عدم سهولة التكيف	<input type="checkbox"/>	عدم سهولة التكيف	<input type="checkbox"/>

21. الطراز المعاصر



غير راضي أبدا  
غير راضي  
راضي  
راضي جدا

أصيل	<input type="checkbox"/>	غير راضي أبدا	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	غير راضي	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	القليل من الرضي	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	راضي	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	راضي جدا	<input type="checkbox"/>
غير بسيط	<input type="checkbox"/>	أصيل	<input type="checkbox"/>
غير بسيط	<input type="checkbox"/>	ميدح	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	ميدح	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	غير بسيط	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	غير بسيط	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	جميل	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	جميل	<input type="checkbox"/>
غير خفيف بصريا	<input type="checkbox"/>	خفيف بصريا	<input type="checkbox"/>
غير واضح وصريح	<input type="checkbox"/>	واضح وصريح	<input type="checkbox"/>
غير واضح وصريح	<input type="checkbox"/>	واضح وصريح	<input type="checkbox"/>
لا يشعرك بالسعادة	<input type="checkbox"/>	لا يشعرك بالسعادة	<input type="checkbox"/>
لا يشعرك بالسعادة	<input type="checkbox"/>	لا يشعرك بالسعادة	<input type="checkbox"/>
لا يشعرك بالامل	<input type="checkbox"/>	لا يشعرك بالامل	<input type="checkbox"/>
لا يشعرك بالامل	<input type="checkbox"/>	لا يشعرك بالامل	<input type="checkbox"/>
لا يشعرك بالمتعة	<input type="checkbox"/>	لا يشعرك بالمتعة	<input type="checkbox"/>
لا يشعرك بالمتعة	<input type="checkbox"/>	لا يشعرك بالمتعة	<input type="checkbox"/>
لا يبعث الطاقة	<input type="checkbox"/>	لا يبعث الطاقة	<input type="checkbox"/>
لا يبعث الطاقة	<input type="checkbox"/>	لا يبعث الطاقة	<input type="checkbox"/>
عدم مرونة الاستخدام	<input type="checkbox"/>	عدم مرونة الاستخدام	<input type="checkbox"/>
عدم مرونة الاستخدام	<input type="checkbox"/>	عدم مرونة الاستخدام	<input type="checkbox"/>
عدم سهولة الاستخدام	<input type="checkbox"/>	عدم سهولة الاستخدام	<input type="checkbox"/>
عدم سهولة الاستخدام	<input type="checkbox"/>	عدم سهولة الاستخدام	<input type="checkbox"/>
عدم كفاية الاستخدام	<input type="checkbox"/>	عدم كفاية الاستخدام	<input type="checkbox"/>
عدم كفاية الاستخدام	<input type="checkbox"/>	عدم كفاية الاستخدام	<input type="checkbox"/>
لا يشعرك بالسيطرة	<input type="checkbox"/>	لا يشعرك بالسيطرة	<input type="checkbox"/>
لا يشعرك بالسيطرة	<input type="checkbox"/>	لا يشعرك بالسيطرة	<input type="checkbox"/>
عدم سهولة التكيف	<input type="checkbox"/>	عدم سهولة التكيف	<input type="checkbox"/>
عدم سهولة التكيف	<input type="checkbox"/>	عدم سهولة التكيف	<input type="checkbox"/>

11. الطراز التقليدي الفلسطيني



غير راضي أبدا  
غير راضي  
راضي  
راضي جدا

أصيل	<input type="checkbox"/>	غير راضي أبدا	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	غير راضي	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	القليل من الرضي	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	راضي	<input type="checkbox"/>
ميدح	<input type="checkbox"/>	راضي جدا	<input type="checkbox"/>
غير بسيط	<input type="checkbox"/>	أصيل	<input type="checkbox"/>
غير بسيط	<input type="checkbox"/>	ميدح	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	ميدح	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	غير بسيط	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	غير بسيط	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	جميل	<input type="checkbox"/>
غير جميل	<input type="checkbox"/>	جميل	<input type="checkbox"/>
غير خفيف بصريا	<input type="checkbox"/>	خفيف بصريا	<input type="checkbox"/>
غير واضح وصريح	<input type="checkbox"/>	واضح وصريح	<input type="checkbox"/>
غير واضح وصريح	<input type="checkbox"/>	واضح وصريح	<input type="checkbox"/>
لا يشعرك بالسعادة	<input type="checkbox"/>	لا يشعرك بالسعادة	<input type="checkbox"/>
لا يشعرك بالسعادة	<input type="checkbox"/>	لا يشعرك بالسعادة	<input type="checkbox"/>
لا يشعرك بالامل	<input type="checkbox"/>	لا يشعرك بالامل	<input type="checkbox"/>
لا يشعرك بالامل	<input type="checkbox"/>	لا يشعرك بالامل	<input type="checkbox"/>
لا يشعرك بالمتعة	<input type="checkbox"/>	لا يشعرك بالمتعة	<input type="checkbox"/>
لا يشعرك بالمتعة	<input type="checkbox"/>	لا يشعرك بالمتعة	<input type="checkbox"/>
لا يبعث الطاقة	<input type="checkbox"/>	لا يبعث الطاقة	<input type="checkbox"/>
لا يبعث الطاقة	<input type="checkbox"/>	لا يبعث الطاقة	<input type="checkbox"/>
عدم مرونة الاستخدام	<input type="checkbox"/>	عدم مرونة الاستخدام	<input type="checkbox"/>
عدم مرونة الاستخدام	<input type="checkbox"/>	عدم مرونة الاستخدام	<input type="checkbox"/>
عدم سهولة الاستخدام	<input type="checkbox"/>	عدم سهولة الاستخدام	<input type="checkbox"/>
عدم سهولة الاستخدام	<input type="checkbox"/>	عدم سهولة الاستخدام	<input type="checkbox"/>
عدم كفاية الاستخدام	<input type="checkbox"/>	عدم كفاية الاستخدام	<input type="checkbox"/>
عدم كفاية الاستخدام	<input type="checkbox"/>	عدم كفاية الاستخدام	<input type="checkbox"/>
لا يشعرك بالسيطرة	<input type="checkbox"/>	لا يشعرك بالسيطرة	<input type="checkbox"/>
لا يشعرك بالسيطرة	<input type="checkbox"/>	لا يشعرك بالسيطرة	<input type="checkbox"/>
عدم سهولة التكيف	<input type="checkbox"/>	عدم سهولة التكيف	<input type="checkbox"/>
عدم سهولة التكيف	<input type="checkbox"/>	عدم سهولة التكيف	<input type="checkbox"/>



## Appendix B: Questionnaire in English language

In The Name of Allah

I am attending to make a study to get the Master degree in architecture - interior design at Islamic University in Gaza that aims to investigate occupant response to the contemporary interior design style with traditional contexts. Your participation in this survey helps to reach to the most suitable interior design style that simulates the modern life with the revivalism of the Palestinian heritage and the local identity



A. In front of you three interior designs models for a bed room, every room follows a design style . . . the first room has a traditional design style, the second room has a contemporary design style, the third room has a contemporary design style with traditional contexts . . . put  in the square to indicate your satisfaction on the design

A1. the traditional Palestinian style



Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Unoriginal	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	innovated	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Simple	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Beautiful	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Visually Light	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Clear	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Pleasing	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Energetic	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Interesting	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Flexibility	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Usability	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Efficiency	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	In control	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Adaptability	<input type="checkbox"/>

A2. Contemporary style



Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Unoriginal	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	innovated	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Simple	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Beautiful	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Visually Light	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Clear	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Pleasing	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Energetic	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Interesting	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Flexibility	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Usability	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Efficiency	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	In control	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Adaptability	<input type="checkbox"/>

A3. The contemporary design style in traditional contexts



Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Unoriginal	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	innovated	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Simple	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Beautiful	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Visually Light	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Clear	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Pleasing	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Energetic	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Interesting	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Flexibility	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Usability	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Efficiency	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	In control	<input type="checkbox"/>
Very satisfied	<input type="checkbox"/>	little satisfied	<input type="checkbox"/>	not satisfied at all	<input type="checkbox"/>	Adaptability	<input type="checkbox"/>

B. In front of you three interior designs models for a living , every room follows a design style . . the first room has a traditional design style, the second room has a contemporary design style, the third room has a contemporary design style with traditional contexts .. put in the square to indicate your satisfaction on the design

A1. the traditional Palestinian style



Very satisfied	little satisfied	not satisfied	not satisfied at all
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Original	<input type="checkbox"/>	<input type="checkbox"/>	Unoriginal
innovated	<input type="checkbox"/>	<input type="checkbox"/>	Not innovated
Simple	<input type="checkbox"/>	<input type="checkbox"/>	Not Simple
Beautiful	<input type="checkbox"/>	<input type="checkbox"/>	Not Beautiful
Visually Light	<input type="checkbox"/>	<input type="checkbox"/>	Not Visually Light
Clear	<input type="checkbox"/>	<input type="checkbox"/>	Unclear
Pleasing	<input type="checkbox"/>	<input type="checkbox"/>	Unpleasing
Energetic	<input type="checkbox"/>	<input type="checkbox"/>	Energetic
Interesting	<input type="checkbox"/>	<input type="checkbox"/>	Uninteresting
Flexibility	<input type="checkbox"/>	<input type="checkbox"/>	Inflexibility
Usability	<input type="checkbox"/>	<input type="checkbox"/>	No Usability
Efficiency	<input type="checkbox"/>	<input type="checkbox"/>	Inefficiency
In control	<input type="checkbox"/>	<input type="checkbox"/>	Not In control
Adaptability	<input type="checkbox"/>	<input type="checkbox"/>	No Adaptability

A2. Contemporary style



Very satisfied	little satisfied	not satisfied	satisfied at all
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Original	<input type="checkbox"/>	<input type="checkbox"/>	Unoriginal
innovated	<input type="checkbox"/>	<input type="checkbox"/>	Not innovated
Simple	<input type="checkbox"/>	<input type="checkbox"/>	Not Simple
Beautiful	<input type="checkbox"/>	<input type="checkbox"/>	Not Beautiful
Visually Light	<input type="checkbox"/>	<input type="checkbox"/>	Not Visually Light
Clear	<input type="checkbox"/>	<input type="checkbox"/>	Unclear
Pleasing	<input type="checkbox"/>	<input type="checkbox"/>	Unpleasing
Energetic	<input type="checkbox"/>	<input type="checkbox"/>	Energetic
Interesting	<input type="checkbox"/>	<input type="checkbox"/>	Uninteresting
Flexibility	<input type="checkbox"/>	<input type="checkbox"/>	Inflexibility
Usability	<input type="checkbox"/>	<input type="checkbox"/>	No Usability
Efficiency	<input type="checkbox"/>	<input type="checkbox"/>	Inefficiency
In control	<input type="checkbox"/>	<input type="checkbox"/>	Not In control
Adaptability	<input type="checkbox"/>	<input type="checkbox"/>	No Adaptability

A3. The contemporary design style in traditional contexts



Very satisfied	little satisfied	not satisfied	not satisfied at all
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Original	<input type="checkbox"/>	<input type="checkbox"/>	Unoriginal
innovated	<input type="checkbox"/>	<input type="checkbox"/>	Not innovated
Simple	<input type="checkbox"/>	<input type="checkbox"/>	Not Simple
Beautiful	<input type="checkbox"/>	<input type="checkbox"/>	Not Beautiful
Visually Light	<input type="checkbox"/>	<input type="checkbox"/>	Not Visually Light
Clear	<input type="checkbox"/>	<input type="checkbox"/>	Unclear
Pleasing	<input type="checkbox"/>	<input type="checkbox"/>	Unpleasing
Energetic	<input type="checkbox"/>	<input type="checkbox"/>	Energetic
Interesting	<input type="checkbox"/>	<input type="checkbox"/>	Uninteresting
Flexibility	<input type="checkbox"/>	<input type="checkbox"/>	Inflexibility
Usability	<input type="checkbox"/>	<input type="checkbox"/>	No Usability
Efficiency	<input type="checkbox"/>	<input type="checkbox"/>	Inefficiency
In control	<input type="checkbox"/>	<input type="checkbox"/>	Not In control
Adaptability	<input type="checkbox"/>	<input type="checkbox"/>	No Adaptability

Demographic data  
 Gender:  Male  Female  
 Resident location:  Gaza  Other governorates

Resident type:  Camp  Apartment  Villa  Others  
 Educational degree:  Less than secondary school  secondary school  Bachelor  High education  
 occupation:  Has got a job  Has not got a job