

**An Investigation of Sustainable Consumption Behaviour in Relation to  
Indoor Domestic Soft Furniture Consumption in The Context of Riyadh,  
Kingdom of Saudi Arabia**

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**School of Material**



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Consumer Behaviour.

(Adapted from Moschis & Ong, 2011, p. 9)

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## **LIST OF ABBREVIATIONS**

<b>GCC</b>	Gulf Cooperation Council
<b>GDP</b>	Gross Domestic Product
<b>KSA</b>	Kingdom of Saudi Arabia
<b>OECD</b>	The Organisation for Economic Co-Operation and Development
<b>SC</b>	Sustainable Consumption
<b>SCP</b>	Sustainable Consumption and Production
<b>SD</b>	Sustainable Development
<b>SSI</b>	Sustainable Society Index
<b>TBL</b>	The Triple Bottom Line
<b>UN</b>	United Nation



## **ABSTRACT**

This PhD research investigates the extent of sustainable consumption behaviour, in the context of females in the Kingdom of Saudi Arabia (KSA), with a particular focus into indoor domestic soft furniture. It further was set out to identify any emerging patterns in their (Saudi females') behaviour that can be linked to green consumer typologies and see whether any greening behaviour exists. This utilised McDonald et al.'s (2006a,b) typology as an instrument for analysis of 'greening behaviour' within the context of this research. With the KSA introducing the 2030 Vision, the country has potential to shift towards a more 'sustainable' (less polluting) economy. This entails a shift in attitude towards a long-term commitment to sustainability and sustainable production and consumption.

This study is one of the first to investigate Islam as world religion – first in the context of the KSA, females, sustainable consumption behaviour, and indoor domestic soft furniture. The context of this study was exploratory and utilised a qualitative method approach where 26 in-depth semi structured interviews were conducted, with female participants, married, aged 25-59, reside in Riyadh City, KSA, and act as the head of the household. These interviews identified consumers understanding of sustainability, explored consumers consumption behaviour in the context of furniture consumption and disposal, as well as explored participants awareness and knowledge of the 2030 Vision.

Key finding of this PhD research is on the one hand religion as a main driver for sustainable consumer behaviour and the emergence of cognitive dissonance. Cognitive dissonance allowed to explain individual's sustainable practices, which is linked to Islam and has a significant influence within everyday life and thus, on sustainable consumption behaviour. This research offers original insight and important findings, that have theoretical and practical implications: understand sustainable consumption behaviour - through cognitive dissonance; and how religion (Islam) has a massive impact on sustainable consumption behaviour. With the 2030 Vision having been introduced in the Kingdom of Saudi Arabia, it is vital to explore potential means of translating it into action and how the values and beliefs of Islam can support this.

## **DECLARATION**

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## PUBLICATIONS

- **Journal Articles – Status R&R**

**Sahab, S.**, Henninger, C.E., & Stalker, I.D. (2017). “Exploring the Impact of Islam on Sustainable Consumption Behaviours.” Submitted to *International Journal of Consumer Studies*.

- **Conference Papers (Peer Reviewed)**

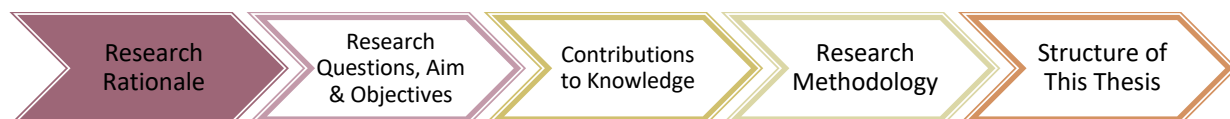
**Sahab, S.** “Do individual strategies for sustainable consumption exist in the Kingdom of Saudi Arabia? – An investigation.” Submitted to the 51<sup>st</sup> Academy of Marketing Conference, in July 2-5, 2018. (status: accepted and presented)

Oates, C.J., Henninger, C.E., **Sahab, S.**, & Le Normand, A. “How is ‘sustainability’ translated? Language and fashion context.” Submitted to 1<sup>st</sup> FMC SIG Colloquium 2018. (status: accepted and presented)



## CHAPTER ONE: INTRODUCTION AND OVERVIEW OF THE STUDY

### 1.1 Research Rationale



In the Kingdom of Saudi Arabia (KSA), the discovery of vast quantities of oil in 1938 signified a turning point away from agriculture towards the development of a modern, industrial and service-oriented society (Al-khateeb, 1998; Long, 2005). As a result, the boost in national income has enabled an increase in the standard of living of Saudi families (Assad, 2008), with 8% of monthly household income being spent on furniture and furnishings (CDSI, 2015). Furniture consumption in the KSA has rapidly expanded over the past decade, with Saudi consumers spending approximately USD 2.4 billion on furniture (Saudi Gazette, 2015). For the majority of Saudi families, soft furnishings in homes are replaced on an annual basis, on specific social and religious occasions (Alyousif, 2014; Albogmi, 2015). Albogmi (2015) claims that thus far, the concept of ‘sustainable consumption’ does not inform the decision-making process of the Saudi consumer. Yet, this study is three years old and may be out-dated, seeing that the KSA has undergone significant changes since, which will be explored and discussed further in the following section. Moreover, there is also a lack of literature investigating sustainable consumption behaviour in the context of Saudi women and furniture. As such, there is an opportunity to investigate sustainable consumption in this context – this gap is addressed in this research.

It is both challenging and interesting to examine the tension between consumer consumption behaviour within the society and the sustainability that it seeks. In April 2016, the KSA announced its 2030 vision, providing ambitious targets to “create a more diverse and sustainable economy” (Vision2030, 2016, p.1). The KSA’s current economy is driven by the oil industry, yet a McKinsey report by Al-

Kibsi et al. (2015) indicates that the country has potential to shift towards a more 'sustainable' (less polluting) economy by moving away from a government-controlled economic model to a market-based approach. This entails a shift in attitude towards creating a long-term commitment to sustainability by the government, as indicated in the 2030 vision (Vision2030, 2016) and more specifically sustainable production and consumption. This research focuses on sustainable consumption behaviour in the KSA, and in particular, in Riyadh City (justification provided in **Chapter 2**), additionally examining what the informing role is that Islam, one of the world's most widely practised religions, might have on sustainable consumption. Moreover, the KSA itself provides an interesting context for investigation as its 2030 vision is still relatively new and thus far, has only been looked at from the angle of social contract, e.g., austerity and transformation (Kinninmont, 2017).

'Sustainable consumption' has remained an active topic of research for a number of years, by both academics and policy makers; consequently, the concept is now a global concern (Jackson & Michaelis, 2003; Michaelis, 2003; Cherian & Jacob, 2012; Vergragt et al., 2014; Vision2030, 2016). The Oslo Symposium in 1994 has defined 'sustainable consumption and production' to be "the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations" (Norwegian Ministry of the Environment, 1994). This definition encompasses predominantly an environmental angle to sustainability and thus, emphasises the reduction of the impact that products and services have on the natural environment. In doing so, the social environment is indirectly affected, as creating fewer toxins and utilising more environmentally friendly raw materials can enhance a human's well-being. In a similar manner the OECD (2002, p. 16) defines 'sustainable consumption' as "the [household] consumption of goods and services that meet basic needs and quality of life without jeopardizing the needs of future generations". It has to be noted that although both definitions are commonly

cited neither the Oslo Symposium nor the OECD's definition of sustainable consumption focuses explicitly on all three facets of sustainability, which according to Elkington (1998) comprises economic, environmental, and social aspects. The term 'sustainable consumption' has evolved over time and different organisations have contributed to the definition, with some modifications in scope. In this research, 'sustainable consumption' refers to the purchase, use, and disposal of products with a reduced impact on the environment (cf. Follows & Jobber, 2000; Pedersen, 2000; Gordon et al., 2011).

This research explores whether sustainable consumer behaviour exists within the context of the KSA consumers and more specifically when purchasing indoor domestic soft furniture. As such, this PhD investigates the decision-making process of purchasing indoor domestic soft furniture in the KSA to see whether the emerging patterns can be linked to sustainable consumer typologies and see whether any sustainable behaviour exists. As different typologies indicate differences in consumer's awareness and knowledge of green issues (as detailed in Table 4.2.). For the purpose of this thesis the terms: sustainable consumer, ethical consumer, green consumer, sustainable consumption behaviour, sustainable behaviour, green consumption behaviour, green behaviour, will be used synonymously with sustainable consumer behaviour (e.g. Joshi & Rahman, 2015). A key typology focusing on green consumption behaviour is found in McDonald et al. (2006a) where a typology has been the most significant due to it covering the broadest product categories. McDonald et al. (2006a) used a sample of 'self-reporting' ethical consumers and identified patterns from their data sets to establish strategies for a greening behaviour typology (see **Chapter 4** for further details). This PhD research does not seek to replicate McDonald et al.'s (2006a, b) study, but rather to use the typology as an instrument to analyse 'greening behaviour' within the context of the KSA's indoor domestic furniture consumption process. McDonald et al. (2006a) distinguished three types of greening behaviour: Translators, individuals who "are green in some aspects of their lives, but grey in others" (McDonald et al., 2012, p. 453); Exceptors, individuals who are predominantly green, but have at least "one aspect of their

lives where they behave like grey consumers” (McDonald et al., 2012, p. 454); overall the greenest out of the three types identified and Selectors, individuals who “act as green or ethical consumers in one aspect of their lives, but as grey consumers in all other respects” (McDonald et al., 2012, p. 455). This research will investigate the extent to which these typologies can be used to inform analysis when applied to the research context.

The reason for using McDonald et al.’s (2006 a, b) as an analysis tool emerged as part of the PhD process. This research has changed focus dramatically, initially this research centred on a design perspective of furniture and the factors effecting the selection and purchase of indoor domestic soft furniture, with a photo-elicitation study. To explain, the initial plan for this PhD research was to develop an online platform that connects retailers and consumers to enable them to co-create indoor domestic soft furniture that meets the needs of the consumers, are financially viable for businesses and ultimately lead to sustainable behaviour. The idea was that consumers may purchase furniture less often if these are customised to their specific needs. This PhD research started in 2014, which implies that the 2030 vision was introduced 2 years into the PhD research. This development was also one of the key factors that reshaped the PhD research idea and changed to focus towards sustainable typologies. The research context of indoor domestic soft furniture and the KSA will be further justified in **Section 5.8.2**.

However, the initial data collection of 25 in-depth semi-structured interviews provided insights that were unexpected and thus, changed the research focus. (This is now classified as the pilot data collection). For example, in the pilot study specifically unsustainable behaviour emerged as a dominant theme, whereby participants discussed issues of changing their furniture on an annual basis and discarding them on the street. This led the question of what their understanding of sustainability is and whether sustainability plays a part in any aspect of their life and the decision-making processes. Thus, the context of the furniture industry was kept, yet the second data collection was very much targeted to look

at sustainable consumption and investigating whether greening typologies exist, which was a timely move seeing as the government introduced the 2030 vision. The findings presented in this thesis provide an insight into the second round of data collection, which provides novel insights not only into sustainable consumption, but also its link to religion (Islam) and associated cognitive dissonance felt by participants who cannot fully engage in the sustainable consumption process.

Sustainable consumption has been researched in a variety of contexts, such as the food industry, clothing, tourism and cars (e.g. Young et al., 2010; Vittersø & Tangeland, 2015; Armstrong et al., 2016; Boluk et al., 2017), but little is known about patterns of sustainable consumption behaviour in more general terms and in relation to religion, particularly in the KSA. This is surprising, given the global trend towards green and sustainable consumption, both in pursuit of the UN Sustainable Development Goals and to implement the recommendations of the Paris summit mitigating the impact of climate change (UN, 2015). The KSA shows a strong commitment to achieving these environmental sustainability targets by publishing the 2030 vision and actively seeking to foster more sustainable behaviour within the country, which could in the future lead to a more market-based economic approach with less reliance on the oil industry (Al-Kibsi et al., 2015; Vision2030, 2016). There has been a number of actions that have been accomplished or under accomplishment towards the 2030 vision. The country is trying to achieve environmental sustainability by promoting the optimal use of water resources by reducing consumption and utilizing treated and renewable water (NWC, 2018). There have been efforts towards protecting and rehabilitating a number of beaches in the KSA making them open to everybody (Vision2030, 2016). Finally, the government this year has introduced a website to recycle products such as: furniture, clothes, electronic products, wood, paper, plastics, and car tires (Tadweer, 2018). This further highlights the government's commitment and seriousness to changing the economy to become more sustainable. The website can be seen as a visual attribute highlighting to citizens how much the government has achieved.

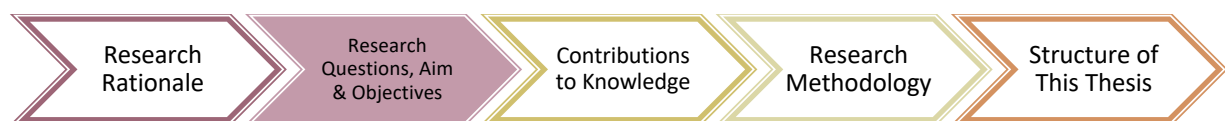
Religion and religiosity, the degree to which belief in specific values and ideals are held, practised and become a badge of identity (Mokhlis, 2006), can inform models predicting sustainable consumption behaviour (cf. Armstrong, 2001; Arnould et al., 2004). Minton *et al.* (2015) have recommended that future research should look into the relationship of religion and sustainable behaviour beyond the two religious groups they explored in their study (Buddhists and Christians); this gap is addressed in this research, by focusing on Islam.

Past studies (e.g. Djupe & Gwiasda, 2010; Hirschman et al., 2011; Sharma & Jha, 2017) have acknowledged that it is vital to investigate religion as a determinant of a consumer's attitude and behaviour, thereby emphasising that some religious scriptures directly address factors relevant to sustainability (environmental, social, and/or economic) and thus, lead to consumers enacting sustainable consumption behaviour (Woodrum & Wolkomir, 1997; Djupe & Gwiasda, 2010). Whilst instructive, past research predominantly focused on broad religious categories, such as Western religions (Christianity, Judaism) and Eastern religions (Buddhism, Hinduism, Taoism) rather than honing in on individual ones (Sarre, 1995; Sharma & Jha, 2017). Moreover, not all world religions are covered in past research, Islam, for example, is missing (Doran & Natale, 2011; Minton, Kahle, & Kim, 2015), yet it is the world's second largest religion after Christianity (Desilver & Masci, 2017). This research focuses on Islam and its impact on sustainable consumption behaviour, within the context of the KSA, and more specifically by focusing on Riyadh city. Both Islam and the KSA, in form of Riyadh City, have been chosen purposively: Islam is not only a world religion, but compared with other main religions, Muslims experience a mediated relationship with God, which implies that God only responds to those who "follow prescribed rituals in order to remove sin" (Miner et al., 2014: 91). As such, Islam plays a vital role in the everyday life of a Muslim. To gain salvation, Muslims need to obey the words written in the holy Quran, which, owing to the mediated relationship, is carefully adhered to. Moreover, the Islamic belief system has an 'organic relationship' with the state (al-Saif, 2014), which implies that the Islamic believe system

underpins governmental decisions, and thus, could foster sustainable consumption behaviour.

Therefore, this research seeks to explore in how far sustainable consumption behaviour is practiced in relation to indoor domestic soft furniture consumption in the KSA, with a focus on Riyadh City. Thus, this PhD research addresses various gaps in the literature in that it seeks to investigate whether sustainability is a consideration in indoor domestic soft furniture decision-making processes regarding the purchase and disposal of these goods. As well as, finding the influence of Islamic religion is currently missing from research in sustainability and related behaviours (cf. Doran & Natale, 2011; Minton, Kahle, & Kim, 2015). Employing only female participants might be seen as a limitation; however, existing research shows that Saudi women are the key decision makers for everyday and household products (Yavas et al., 1994; Ross, 2008; Al-Ahmadi, 2011). Moreover, existing research, whilst instructive, has not explored the sustainable consumption behaviour of female Saudi Muslims, instead focusing on other world religions and sustainable behaviour (Essoo & Dibb, 2004; Mokhlis, 2006; Doran & Natale, 2011; Al-Hyari et al., 2012; Ibrahim & Ismail, 2015; Minton et al., 2015).

## 1.2 Research Questions, Aims and Objectives



### 1.2.1 Research Questions

The following research questions emerged when first engaging with the topic:

- What sustainable consumption practices exist in the KSA?
- What is the extent of sustainable consumption behaviours in the KSA?
- What are the sustainable practices happening in Riyadh City?
- What are the drivers for sustainable consumption behaviours in Riyadh

City?

As the nature of the study is qualitative, it was decided that rather than focusing on all of the KSA, a narrow focus would better serve the research aims and facilitate a richer, more in-depth data set. Riyadh City was chosen as it is the biggest city and the capital city of the KSA, and the populace has a rich diversity of subcultures and reflects the majority of traditions existing in the KSA. Further justification for choosing Riyadh City is explored in **Chapter 5** Section 5.8.2 Research Sample and Study Population.

### **1.2.2 Research Aim**

The research aim of the work was to understand the extent of sustainability and sustainable consumption behaviour, in females residing in Riyadh City, the Kingdom of Saudi Arabia, with a particular focus into indoor domestic soft furniture.

### **1.2.3 Research Objectives**

Following the identification of the research aim, the following research objectives were formulated under the following themes:

#### **Theme One: Consumption Behaviour:**

1. To investigate consumers' consumption behaviour of domestic soft furniture in Riyadh City, KSA;
2. To investigate sustainable behaviour regarding furniture disposal and recycling;

#### **Theme Two: Awareness, Perceptions and Motivations:**

3. To investigate the awareness and perceptions of sustainability among females in Riyadh City;

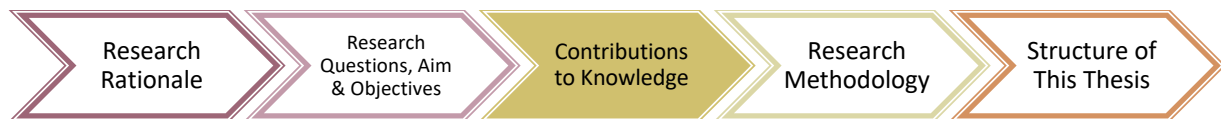


4. To explore the motivations of engaging in sustainable consumption behaviour and determine whether patterns or types of consumer emerge;

**Theme Three: The KSA 2030 Vision:**

5. To identify key components of sustainability and sustainable practices within the 2030 vision.

**1.3 Contributions to Knowledge**



The research contributions of the work are divided into theoretical, practical and policy contributions.

**Theoretical Contributions:**

- This research makes a direct contribution to knowledge in that it investigates an under-researched area: Islam and sustainable consumption behaviour, females residing in the KSA, more specifically Riyadh city, and the indoor domestic soft furniture context.
- A key theoretical contribution is towards the sustainable consumption behaviour literature, as this research utilised McDonald et al. (2006 a,b) green behaviour typology as a tool to investigate sustainable consumption behaviour in Riyadh City, KSA.

**Practical Contributions:**

As indicated, this PhD changed its focus dramatically. Initially this PhD research wanted to develop a web portal that allows for co-creation of products. Yet, this

idea was changed for a variety of reasons, such as the interview data re-shaped the project to focus even more on sustainable behaviour and consumption, moreover, there was a lack of access and engagement from the organisations and web-developers, thus, setting up a web portal would have been extremely challenging. With this change of focus however, the initial practical contributions that were anticipated focused on communication strategies for both the government and the furniture industry. It was also anticipated to provide advice on potentially re-shaping existing infrastructure to provide consumers with more information on how to act more sustainable in terms of discarding of their unwanted furniture.

With the development of the research and the data analysis this PhD research shifted its focus even further and saw an opportunity to include culture aspects (religion) and cognitive dissonance, as well as reflect on the 2030 vision. As such, the practical contributions also changed, and it was anticipated to again advise on existing and potential infrastructure changes, as well as reflect upon cultural influences on sustainable behaviour and how this can be incorporated in messages broadcasted both to the industry and consumers.

#### **Contributions to Policy Agendas:**

When starting this initial project in 2014 the idea of the portal was also to integrate standards and codes that are globally used in relation to furniture production, as it was anticipated that reasons for discarding of furniture could be due to a lack of quality assurance, changing trends, or comfort (e.g. furniture are designed with aesthetics considerations rather than practical use).

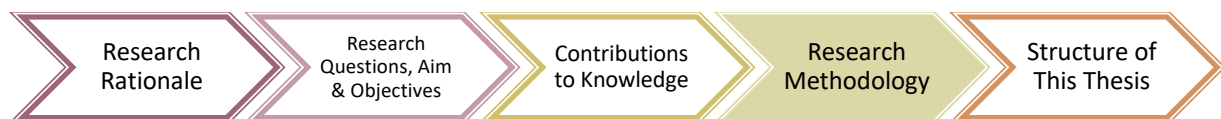
after the pilot study this changed as the 2030 vision was introduced half way through the PhD, which then allowed for redevelopment of the practical contributions. As such it was anticipated that suggestions could be made on how to more effectively communicate the 2030 vision, and whether there are any aspects that have not yet been considered in this new policy.

- The research has reviewed current 2030 vision in the KSA, communication tools regarding sustainability, and will provide feedback

in terms of how to achieve their goals, e.g. communication strategies to reach a wider audience, provide an infrastructure to achieve goals set in 2030 vision.

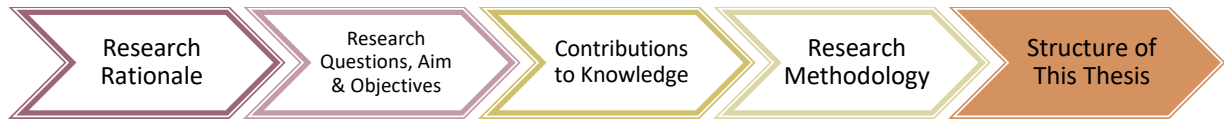
- The research suggests policy improvements towards 2030 vision in the KSA, enabling consumer to follow certain rules that would help them in behaving and consuming sustainably.

#### 1.4 Research Methodology



An exploratory research design was devised, informed by an interpretivist theoretical perspective, employing qualitative research methods to understand and identify KSA consumers' sustainable consumption behaviours. In-depth semi-structured interviews were conducted. An exponential discriminative snowball sampling strategy was adopted (Malhotra et al., 2012; Etikan et al., 2016) and the criteria for selection were female, married, aged 25-59, residing in Riyadh City, and acting as the head of the household in relevant purchasing decisions. First, a pilot study was conducted; then 25 in-depth, semi-structured interviews were conducted. These interviews identified consumers' understanding of sustainability, explored consumer's furniture consumption and disposal behaviours, and explored participants' awareness and knowledge of the 2030 Vision. The data were explored using thematic analysis to identify key themes that reflect participants' sustainable consumption behaviour.

## 1.5 Structure of This Thesis



This thesis is divided into eight chapters. **Chapter One**, the current chapter, introduced the context, motivation and primary contributions of this research. **Chapter Two** presents an overview of the Saudi society and culture, its consumption behaviour and explores furniture design, and preferences. As such it provides a detailed overview and understanding of the context. **Chapter Three** surveys literature exploring consumption behaviour studies and theories that influence sustainable consumption behaviour. A second literature review is presented in **Chapter Four**. **Chapter Four** reviews and provides insights into sustainability and sustainable development principles, as well as exploring sustainable consumption typology. The chapter analysis the different sustainable consumer behaviour typologies, toward sustainable consumption, whilst further justifying why McDonald et al.'s (2006a) typology was used as a guiding framework for the analysis. **Chapter Five** specifies the research philosophical stance and methodological tools adopted for this research, to fulfil the research's aim and objectives. This chapter presents the data collection tool for this research and a justification of the sample and sampling techniques adopted. Next, **Chapter Six** presents the data analysis and qualitative study results for this research, thereby clearly illustrating the novel findings of this research. **Chapter Seven** provides the discussion chapter, which reflects upon the findings and links it back to the literature review provided in Chapters Three and Four. The chapter also highlights the key findings, as well as draw the research's final conclusion regarding contribution made in relation to theory, practical and policy implications, the chapter ends with the limitation and future research.

## **CHAPTER TWO: SAUDIS SOCIETY CULTURE AND CONSUMPTION**

### **BEHAVIOUR**

#### **2.1 Introduction**



This chapter provides an overview of the geographical, historical, religious, furniture and social context of the Kingdom of Saudi Arabia (KSA). In this chapter, essential information regarding the KSA context will be presented through, firstly, providing an overview of the KSA in terms of its geographical location, social and cultural characteristics, and clearly outline key developments. Secondly, the chapter will explore the furniture products and market overview in the KSA.

#### **2.2 Saudi Perspective**



##### **2.2.1 Geographical features**

The KSA is located in the southwest corner of Asia and it is somewhat unique as it constitutes the meeting point of three continents of the world: Asia, Africa and Europe (Hazimi et al., 2006). Being the largest country in the Arab Gulf countries, in terms of size, population, and economic growth (Encyclopædia Britannica, 2016; MCI, 2017), has given the country a lot of power. First, the KSA is considered the largest producer of petroleum and other liquids, not only compared to the Gulf Cooperation Council countries (GCC), but also to all Arab countries in the area (Sakhrieh, 2016), with the highest GDP growth in the Middle East (MCI, 2017). Whilst the country will remain to have and be one of

the largest producers of petroleum and other liquids, the government seeks to change its overall approach in terms of economic income. To explain, rather than relying heavily on petroleum and other liquids, the 2030 vision highlights a shift in the country's focus towards more sustainable practices (Vision2030, 2016). The KSA thus, is looking for alternatives, which further highlights the importance of this research, as these are exciting times for the KSA in terms of sustainable consumption behaviour and generally changes in the economic environment.

Secondly, the KSA *occupies 80% of the Arabian Peninsula* (Long, 1997). In the north it borders Jordan, Iraq, and Kuwait; in the south, it borders Oman and Yemen; in the east it borders Qatar, the United Arab Emirates, and the Arab Gulf; and the Red Sea forms the western border (Encyclopædia Britannica, 2016). With two main ports the Persian Gulf and Red Sea provide the country with great leverage on shipping especially oil produce, when compared to other surrounding countries. Figure 2.1. illustrates the size of the KSA compared to other countries and its geographic location.

**Figure 2.1.** Geographical Map of the Kingdom of Saudi Arabia.



Source: Saudi Arabia Maps (2018).

Furthermore, all countries bordering the KSA as well as the KSA are guided by Islamic paradigms. This religious aspect is of interest to this research, as this research is looking into whether religion can have an impact on sustainable consumption behaviour. As mentioned previously and pointed out by past research, Islam, one of the world religions, is currently an under researched area (e.g. Minton et al., 2015; Arli & Tjiptono, 2017; Sharma & Jha, 2017). Furthermore, while past research predominantly focused on broad religious categories, such as Western religions and Eastern religions, not all world religions are covered in past research, Islam, for example, is missing (Doran & Natale, 2011; Minton et al., 2015), yet it is the world's second largest religion after Christianity (Desilver & Masci, 2017).

The KSA is the birthplace of Islam and, along with its role of guarding the holy cities of Makkah and Madinah, this has given the KSA a central religious importance in the Muslim world (Al-Khateeb, 1998); the role of Islam and its influence on consumption will be further investigated in **Chapter 3**. The KSA has recently publicly committed to the concept of sustainability, which is further demonstrated by the newly introduced 2030 vision (Vision2030, 2016; Alshuwaikhat & Mohammed, 2017). The previous facts, e.g. geographical location, religious importance, introduction of the 2030 vision, mentioned are promising in enabling the KSA to have an impact not only within the gulf region, but also on all Muslims regarding sustainable consumption behaviour. This could conclude in having the KSA taking on a leading position, in that if something changes in the KSA other countries will do the same.

Having explored the geographic location of the KSA, it is vital to focus on the KSA itself and what are the key characteristics. Generally speaking the country can be divided into a Western and Eastern region, each of which holds important aspect to the country: the West holding a strong religious impact while the East having an economical background. Looking into these two regions has given a clear background for their importance, however, Najd region where Riyadh City is located has shown growth and rapid development mainly due to the discovery of oil (Klein, 2016).

#### **2.2.1.1 The Western Region of The KSA and Its Religious Importance**

The Western region of the KSA, which is called the Hijaz region, holds the most important holy cities of Islam, which are Makkah and Madinah. Makkah is the direction of the Kaaba (Qibla) and the direction for more than a billion Muslims facing when praying (Esposito, 2011). This region is renowned for its historical and religious inheritance; the great pilgrimage (*hajj*) and the non-obligatory lesser pilgrimage and visit to the prophet's mosque in Medina enhance the region's importance with the arrival of many Muslims from all over the world annually (Long, 2005). The Hijaz region, and especially Makkah and Madinah, are the home to a large number of Muslims from non-Saudi's to non-Arab Muslims,



who decided to settle there after coming to the country and performing Hajj or Umrah<sup>1</sup>. The religious trade of the Hijaz developed in Jeddah, near Makkah on the western gate to the western region. Since the inception of the Saudi state, Jeddah has been an important economic, trade, and commercial centre; it is also the location of the diplomatic community and the foreign ministry (Long, 2005). Therefore, the tradition of different ethnicities mixing with other cultures has become an impetus for development and progress in the areas of trade and administration (Ibrahim, 2011). According to Long (1997), the population of the Hijaz is far more cosmopolitan than Najd, owing to centuries of immigration connected with the Hajj. The leading families formed a merchant class that grew up in the Hijaz to serve people whom are in Hajj Pilgrimage; also, these family's origins were far more varied than those in Najd with fewer tribal affiliations.

#### **2.2.1.2 The Eastern Region of the KSA and Its Economic Importance**

The Eastern region, which previously depended on date groves as well as fishing and pearl diving, has now become dependent on oil; subsequently the people of this region have been mixing socially with employees from foreign countries (Long, 2005). With the 2030 vision the country seeks to depend less on oil revenues and depend more on a sustainable economic growth and development (Alshuwaikhat & Mohammed, 2017), which can provide new opportunities, but also challenges seeing as this would imply changing an existing economic infrastructure.

In addition, in Al-Ahsa, which is the old oasis in the eastern region, developments began to grow in a number of cities during the period of oil extraction, such as Dammam and al Khobar (Long, 2005; Al-Rasheed, 2013). The Saudi Arabian American Oil Company (Aramco) (the national oil company) also began building Dahrhan City, which is one of the most important cities in the eastern region, in addition to Ras Tanura city, due to the oil economic factor, as they are largest oil export terminal in the world. All of these developments began after the discovery of oil and the influx of foreign labour that came in search of jobs

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<sup>1</sup> Hajj and Umrah are pilgrims that Muslims preform in Mecca.

(Wynbrandt, 2010). This is all about to change due to the 2030 vision, as the country is seeking to look into an alternative modern economy (Vision2030, 2016).

Riyadh City, is the capital and the largest city of the KSA, located in the Najd region in the central Arabian Peninsula (Stokes et al., 2009). The Najd region is predominantly a desert and has few oases; it used to be inhabited by tribesmen or Bedouin (from the Arabic 'badu', meaning to live in the desert) (History World, 2015). Riyadh City was a simple city until the 1960s; it had just the governor's house and some ministries for the management of the state. The state invested heavily in Riyadh City as the capital of the modern state and subsequently completed many development projects and built an infrastructure to follow the model of other global cities (Abdul Salam, 2013). Riyadh City has become, over the last three decades, the largest and most important city in the KSA; and the annual rate of migration continues to grow as people come to find services, jobs, or higher education (Asharaf & Mouselhy, 2012). Riyadh City can be seen as embodying the KSA model of Arabian modernisation, a confident capital city in the middle of the desert (Long, 2005). Where the assertion of traditional Bedouin identity meets with the assertion of the new state and modernity, a modern capital city, built from a small desert settlement representing the tribal roots of the new nation as well as the rational centralisation of administration and government (Long, 2005).

Riyadh City is divided into four living districts North, South, East and West; the North district is one of the oldest and most developed living districts in Riyadh City. This is due to the North district governing 'Al Masmak Palace', a palace that represents a stage in the establishment of the KSA, from which Riyadh City started its expansion and development (Riyadh Municipality, 2015). In 2017, there were an estimated 32 million people living in the KSA, of which about 4.5 million people are living in Riyadh City. The KSA has an annual population growth rate of 16.5% (General Authority for Statistics, 2018). This supports the decision to interview females from Riyadh City, as it is not only the capital city of the KSA,

but has the largest population, this will be further explored in **Chapter 5**.

### **2.2.2 Social and Cultural Characteristics**

Over the last fifty years, the KSA's population has witnessed dramatic transformations and changes in relation to economic, social and culture developments, as well as family lifestyle (Long, 2005; Assad, 2008; Saudi Embassy, 2017). Examples of these changes are: the KSA announced, in September 2017, permission for females to drive, and that the process of issuing driving licences for males and females would be similar (SPA, 2017a); there are more opportunities for Saudi women to work in many sectors (Saudi Embassy, 2017) and women are now able to work in mixed gender environments, such as the Ministry of Justice with female lawyers now permitted to enter the courthouse and represent clients (SPA, 2017b). Finally, in April 2016, the country introduced the 2030 Vision, through which the country is seeking to promote a sustainable economy (Vision2030, 2016). This latter point further highlights the importance of this research on sustainable consumption behaviour.

The indigenous people of Saudi society belonged to many tribes, each of which maintained its own identity, norms, laws, and social order (Maisel, 2014). Much of the tribal kinship relations have remained intact so far and are still a key component of the social fabric in the KSA today (Cole, 2003). Thus, the Saudi family is considered an important institution (Al-Kateeb, 1998). Social structure and social life style are still relatively the same (Cole, 1975). The family in Arab society, and the KSA in particular, is large and has a patriarchal structure, "household is composed of more than one conjugal family; most include three generations of males – grandfather, father, and grandson – and their wives" (Cole 1975, p. 66). With modernization, the concept of extended family living in one household has changed (Opoku & Abdul-Muhmin, 2010). As soon as couples get married they move to their own house rather than living with the extended family (Opoku & Abdul-Muhmin, 2013; Fadaak & Roberts, 2016). Singerman and Ibrahim (2002) summarises what an Egyptian groom provides towards a marriage, which is similar to a Saudi marriage, due to the application of Islamic

religion:

- Dowry, with part paid before the wedding;
- Shabka (“tying”) of the couple through rings or gold; and
- Housing, furniture, and appliances

This highlights the reason for this research to look into the context of furniture in the KSA, as furniture forms a key part of everyday life and plays a central role.

The Kingdom of Saudi Arabia as a country is no different from any other developing country in that it has been transformed by globalisation and consumer culture. Research on consumers in Riyadh City, the Kingdom of Saudi Arabia shows that the lower middle-income consumers are emulating the upper and middle-income classes in terms of their consumption behaviour (Assad, 2008; Mahajan, 2013). This mimicking of consumers’ lifestyles started in the Gulf region and spread to other Arab countries. “Today, it is generally agreed that the Gulf countries are consumer societies” (Assad, 2008, p. 74).

Owing to an increasing world demand for oil from the end of the 1940s, the KSA has witnessed significant economic development. The attendant per capita income increased, people migrated to the main cities (Riyadh, Jeddah, and Dammam) in the KSA (Long, 2005). This high increase in income allowed the population to start owning their homes, from personal income or government housing (Opoku & Abdul-Muhmin, 2013; Ministry of Housing, 2017). This implies that couples can make their own decision without having the impact of other family members on their decision-making. This aspect is further discussed in **Chapter 3** of this thesis.

## 2.3 Furniture Overview in the KSA



### 2.3.1 The KSA Furniture History

Having discussed the geographic location and the importance of Riyadh City, KSA, it is important to outline the central role of furniture in the KSA and thus motivate the research context.

The traditional seating arrangements in the KSA had to be custom-made based on the size of the living room, consist of upholstered cushions, which are placed on the floor and lined up along all the room's walls, mostly in a U- or L-shape, while the centre of the room is left completely open. Cushions are also placed standing up along the wall and often there are extra cushions, to lean one's elbow on (Al-Ansari, 1982; Long, 2005; Akbar, 2012).

Traditionally, as opposed to the furniture that people acquire today in the 21<sup>st</sup> century, handcrafted furniture were made from local materials found at that time, such as goat or sheep wool and camel skin. Women used to spin fleeces from their domestic herd into yarn using a hand spindle; with the same spindle they twisted thinner strands into thicker strands of yarn that would then be converted to fabric to make the furniture called floor seating (see Figure 2.2.). Dying fabric was an inherited craft, from father to son. They used natural dyes from plants such as dried lime, henna flower, pomegranate skin, saffron, curcuma and loumi. Some yarns are kept in their natural colours black, grey, brown and cream. The different colours are used to create different patterns in the fabric made (Al-Kateeb, 1998; Babelli, Al-Qwuiee & Greenberg, 2011). This shows that traditionally furniture was a 'family trade' that brought together skills from both women and men to create furniture that was then displayed and used in the living room area. After the oil boom in the KSA, much of furniture has

become westernised and imported from a variety of countries worldwide (Assad, 2008; World Furniture Outlook, 2017).

**Figure 2.2.** The KSA Traditional Floor Seating.



Source: Asharq Al-Awsat (2008)

### **2.3.2 The KSA Current Furniture**

The furniture market in the KSA is witnessing a fast growth in comparison to the other GCC<sup>2</sup> countries (RNCOS, 2016; Global Information Inc., 2016; Statista, 2018). This is due to increasing population, growing number of real estate development and increasing demand for residential property (Saudi Arabia Furniture Outlook, 2014; RNCOS, 2016). As the RNCOS (2016) report states, the furniture industry in the KSA will have an annual growth rate of 9% during the period of 2017-2022. The wealth of the country has enabled the KSA government, as well as the private working sector, to help most Saudi citizens secure housing in various forms, through “free housing schemes, land plots, and housing loans to promote ownership of housing units” (Salam et al., 2014, p. 2). As the KSA families have secured homes, a natural corollary is an increased demand for replacement or new furniture for home redecorations; thus, the demand for furniture in the KSA has increased (JFEMA, 2013), which further motivated the present research. Linking this back to this research, the 2030

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<sup>2</sup> the member countries of the Cooperation Council of the Arab States of the Gulf (GCC) are: Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

vision and sustainable consumption behaviour- the challenge between demanding for new furniture in the KSA, raises a concern for sustainable consumption behaviour, as hyper consumption is not classified as being sustainable (e.g. Dolan, 2002; Zalega, 2014).

Moreover, sustainable indoor domestic soft furniture offering in the KSA, furniture stores in the KSA commitment to sustainability and sustainable practices, is under researched, this research contributes to gaps in literature.

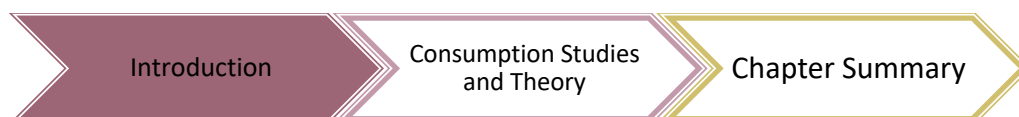
## 2.4 Chapter Summary



This chapter has reviewed the KSA from different perspectives, as it gives an in depth and clear background to the research context. The KSA has been known as the heartland of Islam, and for years was an agriculture-based country. The discovery of oil procured a huge transformation in the country. It is clear that the wealth the KSA has is due to oil, where country has witnessed an economic, social and culture developments, as well as changes in family's lifestyle (Long, 2005; Assad, 2008; Saudi Embassy, 2017). The furniture market reflects this transformation. Furthermore, the introduction of the 2030 vision provides an opportunity for the country to change its current dependency on oil-based revenues, diversifying into more sustainable avenues for economic growth. The following chapter will look into the literature on consumption behaviour in general and in relation to indoor domestic soft furniture.

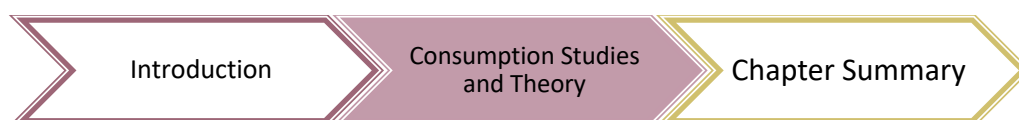
## **CHAPTER THREE: CONSUMPTION AND INDOOR DOMESTIC SOFT FURNITURE**

### **3.1 Introduction**



The primary purpose of this part is to understand consumption behaviour theories, through critically reviewing factors that influence (sustainable) consumption behaviour. This chapter is divided into two main sections, as it will build essential background knowledge in relation to factors influencing consumption behaviour in general and in the KSA. The first section focuses on critically reviewing consumption studies and theories. The second section discusses religion, religiosity and sustainable consumption behaviour.

### **3.2 Consumption Studies and Theory**



#### **3.2.1 Consumer Behaviour Theories**

The study and analysis of consumer behaviour is of great importance as it helps in understanding the relationship between an individual's purchasing power and their behaviour. Consumer behaviour is influenced by many factors and varies depending on different countries, regions, races, customs, traditions, norms, cultures and other factors (Lawan & Zanna, 2013; Ng & Lee, 2015). "Although people have been consumers for a very long time, it is only recently that consumption per se has been the focus of formal study" (Solomon et al. 2006, p. 23). The field of consumer behaviour is complex and multi-faceted: "it is the

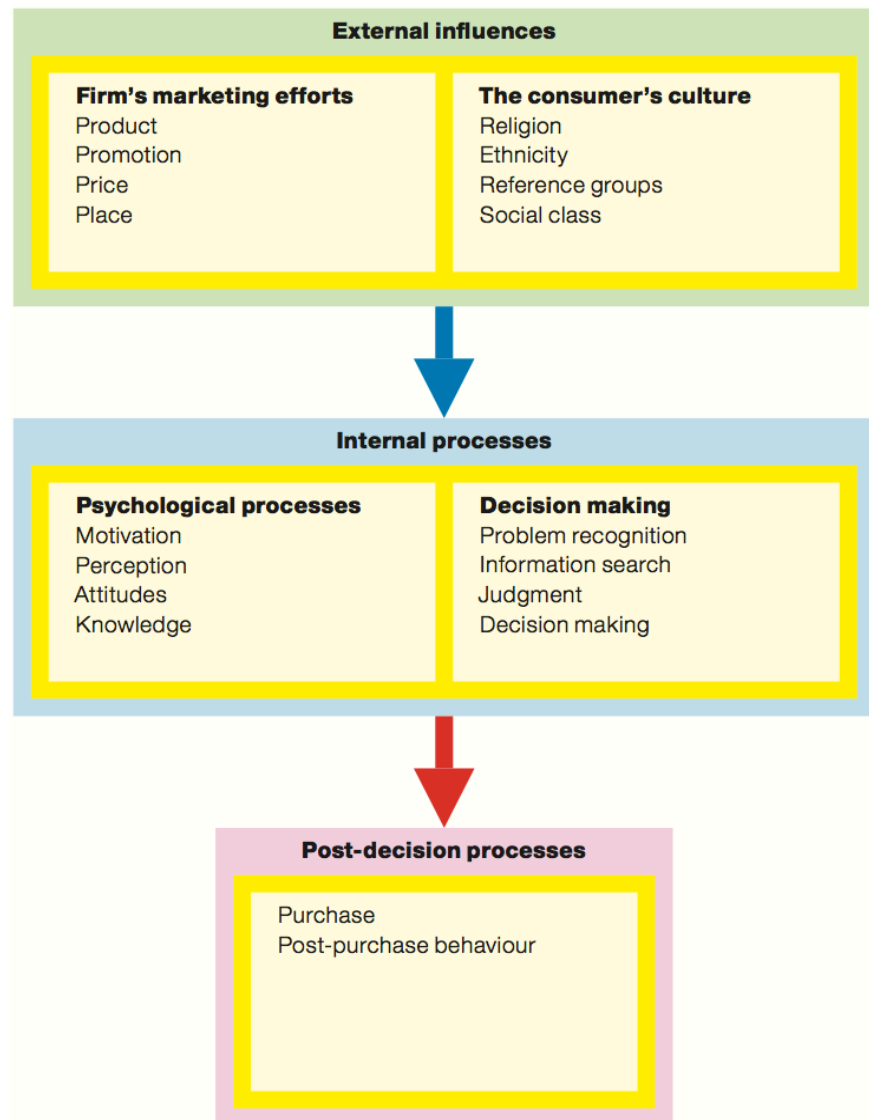


study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas or experiences to satisfy needs and desires” (Solomon et al., 2006, p. 6). Looking into consumer behaviour theories, allows this research to investigate into what factors influence sustainable consumption behaviour in the KSA, and more specifically female consumers residing in Riyadh City.

#### **3.2.1.1 Factors Influencing Consumption Behaviour**

Noel (2009) states that consumers buy, use and dispose of products, and he investigates the various factors that impact on consumers’ decisions at these three stages. He particularly explores what forces operate to lead consumers to purchase the product and brand that they finally choose. Noel (2009) groups the factors that can impact on consumer behaviour into three conceptual domains (Figure 3.1). Looking into these three different stages can help in identifying what promotes sustainable consumption behaviour in the KSA.

**Figure 3.1.** A Consumer Consumption Behaviour Model.



Source: Noel (2009, p.14)

Noel (2009) divides his model into three stages: external influences, internal process and post-decision processes, these will be further explored in the following and key questions are raised, which are addressed in this PhD research.

External influences:

External influences are defined as those factors that have an impact on consumers as they identify which products and services to use to satisfy their wants and needs (Manashi, 2009; Noel, 2009). The two key factors identified in Figure 3.1 are: (1) the store/company, which focuses on the products being

offered for sale and at what price(s), as well as the places these are offered for sale, any eco-labels attached to these products (eco-labels, sustainability claims) and how these stores choose to promote their products and if applicable sustainable labels/claims. This links to a key question that is addressed in this research, namely whether sustainable products are currently offered in stores in Riyadh City, at what price points and whether these are clearly labelled. (2) The consumer culture. A culture is a system of shared values beliefs and attitudes, that would shape and influence these groups of people's consumption behaviour (Mathras et al., 2016; Schütte & Ciarlante, 2016). Religion can be an external influence on these cultures, as it can provide consumers with a structured set of beliefs and values that guide their behaviours and help them when choosing a product (Noel, 2009). To reiterate this further, Abdul Latiff et al. (2016) found in their research that stores that provide clear food labelling, for example, Halal food labels, can be highly influential on the consumption behaviour of Muslims. A question here that arises is whether the presence of labels is influencing behaviour (e.g. purchasing labelled food), also holds true in this research context: purchasing indoor domestic soft furniture. Additionally, external influences also include a person's religion, family background, and social class, as these all have an influence on how people interact and consume (Koklic & Vida, 2009). Linking this back to this research's context, key questions that emerge are: What role does Islam play within a Muslim's consumption behaviour, and more specifically the furniture context? Moreover, are there any (other) external influences that effect sustainable consumer behaviour in the KSA?

*Internal processes:*

Noel (2009, p. 17) defines internal processes as the "psychological factors inherent in each individual". Internal processes, such as motivations and attitudes, work together with the external factors to influence a consumer's decision about a specific product (Noel, 2009). Other internal processes that effect a consumer's buying process include, but are not limited to experience, personality, feelings and knowledge (Koklic & Vida, 2009). For example, knowledge regarding product attributes can have a favourable impact on a

consumer's decision towards the intentions of purchasing a sustainable product (Tanner & Kast, 2003). Lack of knowledge and information about sustainable products can result in the attitude-behaviour gap between the consumer's environmental concern and the actual buying processes (Ginsberg & Bloom, 2004; Grimmer & Miles, 2017). Again, key questions that emerge are whether these motivations and attitudes might link to an individual's religion? How much would a person's motivation contribute to the buying decision of the KSA consumers? And are the KSA consumers aware of sustainable products?

*Post-decision processes:*

When a consumer makes a decision and a product is purchased, the last step is to evaluate the outcomes by deciding whether the product/service has met, exceeded or fallen short of expectations. Thus, it considers whether consumers are satisfied with the purchased product/service (Noel, 2009). Solomon et al. (2006) state that evaluating a product happens after it is purchased and mention that the cognitive element of '*I made a stupid decision*' is dissonant with the element '*I am not a stupid person*', therefore people tend to find even more reasons to like the purchased product after buying it. The act of purchasing alone can generate psychological and physiological effects with a resulting 'purchasing high' as endorphins are produced which consolidates the consumer's satisfaction with their decision. What emotional response rates and feelings affect consumers to purchase sustainably?

The attitude-behaviour gap highlights that whilst consumers attitudes may be that they want to purchase more sustainable products or services, this may not always be realised (Chan & Wong, 2012), as other elements, such as external influencers and internal processes, may hinder them. As such, an attitude may not always lead into a desired behaviour (Chan & Wong, 2012; Goworek et al., 2013). Chan and Wong (2012) found that consumers are not willing to give up on their identity for the benefit of purchasing sustainable products.

This attitude-behaviour gap can lead to cognitive dissonance. After completing the first coding cycle it emerged that the findings were best interpreted through cognitive dissonance, and is vital to a full understanding and analysis of the findings presented in this research. As this will be explored in **Chapter 6**.

### **3.2.1.2 Consumer Buying Process**

The consumer buying process has been described by authors (Blackwell et al., 2006; Solomon et al., 2006) as a sequence of steps. According to Solomon et al. (2006), consumers first realise that they want or need to make a purchase, and then go through a series of steps before purchasing a product. These steps are: problem recognition, information search, evaluation of alternatives and product choice. At the problem recognition stage, consumers perceive that there is a want or need to be resolved that may be small or large, simple or complex (Solomon et al., 2006). Once consumers recognise this problem, Solomon et al. (2006) argue that adequate information is needed to resolve it.

At the information search stage, consumers scan their environment for the data required to make a reasonable decision. Information seeking is generally more intense for larger and more expensive purchases such as domestic furniture and generally (Lihra & Graf, 2007), when consumers need more information prior to purchase, they can readily find and apply this information (Punj & Staelin, 1993). When it comes to indoor domestic furniture, the scope of this search may vary, possibly due to consumer background, education level and gender (Lihra & Graf, 2007).

When solving a complex problem, some consumers may carefully evaluate several available alternative brands, while those making a routine decision may not consider alternatives to their regular brand (Solomon et al., 2006). After the various options are compiled into a category, consumers make a choice from them. The decision rules that guide this choice can range from simple strategies to complicated processes that require focus and cognitive processing. Consumers' choice making may be influenced by factors such as prior experience

with the product, what information is available at the time of purchase and beliefs about the brand that have been created by advertising (Solomon et al., 2006). In the domestic furniture market according to Lihra and Graf (2007) research findings, furniture retail store are the most important communication channel in shaping the consumer purchase decision. In the final step, the consumer pays for the product.

As this research looks into sustainable consumption behaviour in the KSA, what are the factors that contribute to consumers buying process in the KSA? What are the buying processes for furniture products in the KSA, as well as identify whether they are sustainable or not?

### **3.2.2 Consumer Decision-Making**

In general, consumer researchers have approached decision-making from a 'rational' perspective (Wright, 2006; Solomon, 2014). Solomon et al. (2006) state that in this approach, people integrate as much information as possible with what they already know about a product and this in turn leads to a satisfactory decision. However, other purchasing behaviours are made with no advanced planning, and many purchasing behaviours are actually contrary to those predicted by rational models (Solomon, 2014).

'Purchase momentum' occurs when we buy more of a product, even though our needs are satisfied; for example, impulsively grabbing that picture frame or cushion cover at the checkout till while waiting to pay for your furniture. 'Behavioural influence' perspectives are decisions that are made under conditions of low involvement. This occurs when consumers decide to buy something on impulse; for example, a product that is on promotion as a special offer in a shop (Hausman, 2000; Solomon et al., 2006). In other cases, consumers are highly involved in a decision, but still the selection that is made cannot be explained entirely rationally. For example, it is hard for a consumer to explain their choice of art, music or furniture. In these cases, it may be that no single quality is the determining factor. Instead, the 'experiential' perspective is the

determining factor (Solomon et al. 2006; Wright, 2006). Solomon et al. (2006) state that consumers evaluate the effort required to make a particular choice, and then choose a strategy best suited to that level of effort. This research looks into the furniture purchasing decision-making process, as the living room is one of the most important rooms within a Saudi household and furniture purchase have increased in recent years (Akbar, 2012; Saudi Arabia Furniture Outlook, 2017). Thus, asking about furniture purchases provided an opportunity to explore consumption patterns relating to larger purchases that do not occur every day (high involvement), but that form an important part of contemporary living, and whether these purchases are sustainable or not?

### **3.2.2.1 The Purchasing Decision-Making of The KSA Consumers**

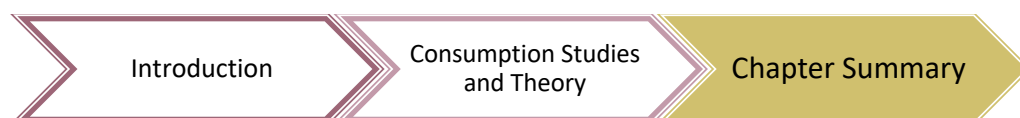
Since the KSA is considered a male-dominant country, many would assume that males make all or most purchasing decisions (Al-Khateeb, 1998). Assad (2008) however states that there has been an increase in female participation in family purchase decisions in the KSA. Various researchers (Yavas et al., 1994; Al-Khateeb, 1998; Sager, 2004) have noted that the influence of Saudi women on family purchase decisions is rapidly increasing. This could even increase with the KSA allowing women to drive, as women will be able to drive themselves to and from shops without the need for a driver (SPA, 2017a). Furthermore, women's status as reflected by their education and employment are factors giving them such authority (Al-Khateeb, 1998). Similarly, authors (Yavas et al., 1994; Sager, 2004; Al-Khateeb, 2007) agree that education and employment have given Saudi women more power in family decision-making and this has been most clearly shown in the upper-middle and upper classes. Yavas et al. (1994, p. 79) stated that "Saudi wives with high purchase decision involvement exert more influence in consumer decision-making". A key question that is addressed in this PhD research is whether females are involved only in low purchase decisions or also in high purchase decisions within the KSA.

In the KSA shopping is considered to be a gendered activity (Assad, 2006; Al-Khateeb, 2007). Research on consumption behaviour suggests that it is women

who tend to go shopping and that shopping is categorised as a ‘female type’ behaviour (South & Spitze, 1994). In a study of Saudi couples’ purchasing decisions, Yavas et al. (1994) concluded that the husband makes 26% of these decisions, while the wife makes 30%. This research investigates this further to see whether it is still the case or not. Yavas et al. (1994) further state that couples together make about 44% of purchasing decisions. While in general husbands dominated on the question of how much to spend, this did not hold true in the case of women’s clothing. Similarly, on the question of where to shop, husbands dominated except in the cases of furniture and women’s clothing (Yavas et al., 1994). This suggests that females may have a greater influence on the furniture purchasing process, which justifies the female sample chosen for this study.

Yavas et al. (1994) also note a direct relationship between Saudi wives’ employment and educational status, and how dominant they are in purchase decisions. Men’s increasing interest in their work affords them less time to spend with their families, increasingly leaving household and child responsibilities in the hands of women (Al-Khateeb, 2007). As men’s domestic authority lessens women’s increases, resulting in Saudi women being the key decision makers for everyday and household products (Assad, 2008). Research has also indicated that women have higher levels of decision making towards sustainable products than men (e.g. Ross, 2008; Al-Ahmadi, 2011; Khan & Trivedi, 2015). In summary, it can be said that there is a lack of research on the KSA consumers purchase decision making in general and towards sustainable products and especially Saudi females, as this research will contribute to filling this gap.

### 3.3 Chapter Summary



This chapter reviews the literature on consumption studies and theory as well as



the relationship between religion and consumption behaviour. Although consumption behaviour is not new *per se* the link with cognitive dissonance and religion, more specifically Islam, has as of yet not been explored. As such, this PhD research is novel by contributing to fill this research gap and exploring in how far Islam influences sustainable consumption behaviour within the context of Riyadh city, KSA, and the soft furnishing industry.

The following chapter leads on nicely from the decision-making process and consumption studies and theories to showing a stronger focus with sustainability, by reviewing the literature on Sustainability Principles and Sustainable Consumption.

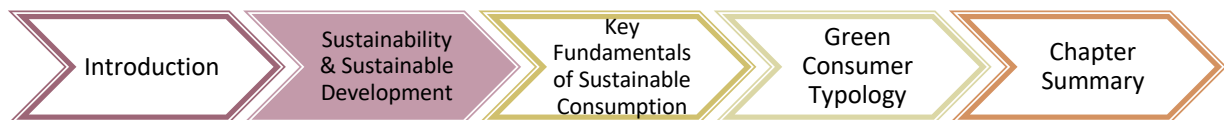
## **CHAPTER FOUR: SUSTAINABILITY PRINCIPLES AND SUSTAINABLE CONSUMPTION**

### **4.1 Introduction**



The primary purpose of this part is to understand sustainability and sustainable development principles as well as sustainable consumption typologies, through critically reviewing a variety of the literature and previous research in this field. This part is organised into three sections to build essential background knowledge of sustainability and sustainable development, in order to improve the performance of sustainability practices with respect to indoor domestic soft furniture. The first section focuses on critically reviewing the key fundamentals of sustainability and sustainable development. The second section discusses the key fundamentals of sustainable consumption. The third section discusses the typologies of behaviour toward sustainable consumption principles.

### **4.2 Key Fundamentals of Sustainability and Sustainable Development**



The growth in world population and consumption has led to environmental issues that spread worldwide (IPCC, 2007; Cuc and Vidovic, 2011; Cuc et al., 2015). Global awareness of environmental issues is steadily increasing and there is pressure upon individuals to change their attitudes toward sustainable consumption and minimise the negative effects of consumption on both the environment and society (Steg et al., 2015). The KSA shows a strong commitment to achieving environmental sustainability, through publishing the 2030 vision and

actively seeking to foster more sustainable behaviour within the country, which could in the future lead to a more market-based economic approach with less reliance on the oil industry (Al-Kibsi et al., 2015; Vision 2030, 2016). The 2030 vision was introduced in the KSA shortly after the pilot study for this PhD research was completed. As such, it provided a further opportunity to look more into sustainable consumption and knowledge on sustainability. The 2030 vision depends on Islamic religion in all aspects, which is explored in this research. This research explores sustainable consumption in the KSA, simultaneously and as part of the findings that emerged from the data set, this research also investigates the informing role of Islam in this context. Islam is the dominant faith in the KSA and influences both practices of worship and everyday life; this will be discussed further in the sequel.

Although the number of sustainability studies is increasing, sustainable development has been interpreted in different ways depending on researchers' disciplines and research contexts (Ratiu & Anderson, 2014; Sauvé et al., 2016). The words 'sustainability' and 'sustainable development', according to AlAqeel (2012), have different definitions and meanings for different people. Sustainability to the KSA is a new concept that has not yet been fully explored. As previously highlighted, the Saudi government has introduced the 2030 vision, which seeks to foster a more 'sustainable' future for the KSA, as such the government has introduced various key priority areas (e.g. food, furniture, electrical goods, fashion) in an attempt to introduce their vision of 'sustainability' (Vision2030, 2016; Alshuwaikhat & Mohammed, 2017). Yet, with sustainability being a relatively new concept within the KSA it is vital to investigate what it means within this research's context, which further showcases the importance of this research, by also exploring 'sustainability' within the KSA.

#### **4.2.1 Definitions of sustainability and sustainable development (SD)**

The term sustainability gained widespread usage in 1987 after the report '*Our Common Future*' was published by the United Nations World Commission on Environment and Development (WCED) (WCED, 1987). Sustainability, in this

thesis, means the goals or endpoints of a process called 'sustainable development'.

Although there are at least 70 documented definitions for 'sustainable development' (Kibert et al., 2011), this research adopts the Brundtland Report's definition published in '*Our Common Future*' (WCED, 1987). This is because it is effective in capturing a comprehensive description of sustainable development (SD) and the definition is people-centred, which is consonant with the research objective to change people's consumption behaviour toward sustainability practices. The Brundtland Report defined sustainable development as "development which meets today's needs without compromising the ability of future generations to meet theirs" (WCED, 1987, p. 41). Kibert et al. (2011) assert that this definition provided a new vision of development, optimistic in tone, but laced with challenges and contradictions. The Brundtland Report's definition implies that in the process of global development we have a moral responsibility to consider both the welfare of present and future people and the effects of present activities on future inhabitants of our planet (WCED, 1987). Sustainable development based on this definition needs to address both intergenerational and intragenerational equity, by looking at both what current generations want/need and predictions of what is needed/wanted in the future (Kibert et al., 2011). (It is acknowledged that this definition is limited and further criticism is provided in the following section.) In the same way, Diesendorf (2000) commented that the Brundtland Report's definition emphasises the long term aspect of the sustainability concept and introduces the ethical principle of achieving equity between present and future generations. The context of the definition indicates 'needs', that include a sound environment, a just society and a healthy economy.

Furthermore, the Brundtland Report's (WCED, 1987) definition focuses on the balance between present and future generations, within the present generation. This balance requires changes in attitudes, social values, and aspirations and will depend on radical education campaigns. Therefore, there is a global trend to

adopt policies and programmes promoting life-style changes in response to ecological considerations with regard to consumption and the usage of energy. These approaches to attain sustainability are matched with the primary purpose of this research: to define the drivers behind the consumption of domestic soft furniture in the KSA and identify if sustainability is a consideration in householders' decision-making process with regard to the purchase and disposal of these goods. One of the most important points in the Brundtland Report's definition that needs to be considered during the development stage is the improvement of the quality of life, not only for the present, but also for future generations (WCED, 1987). This presents a huge challenge for developers and decision-makers, which is discussed in the following.

While providing a valuable perspective on sustainable development, the Brundtland Report's definition is limited in several ways. As part of a political document — in the sense of involving power structures in international relations — the definition appears to equate 'needs' with 'wants' and to assume that economic growth is a necessary part of the development. It does not clearly distinguish between different types of economic structures, as it appears to support growth in the use of materials and energy, a form of economic growth that damages the natural environment. The definition does not mention the natural environment explicitly, focusing only upon human needs or wants. However, the report as a whole makes it clear that these 'needs' include the conservation of the natural environment (Diesendorf, 2000).

Diesendorf (2000) tried to address these drawbacks with a broad definition of sustainable development which noted that sustainable development includes types of economic and social development that conserve and improve the natural environment and social equity. This broad definition suggested by Diesendorf (2000) focused explicitly on the three principal aspects of contemporary sustainability: ecological, economic and social. He also asserted that both the ecological aspect and social equity are primary. Furthermore, Diesendorf's (2000) definition tried to avoid trade-offs between environment,

economy and society. It stated that any kind of social or economic development is sustainable if it provided protection for and enhancement of environmental resources and social equity as well.

Based on the Diesendorf (2000) definition, future development needs to consider social and economic improvement in a broad sense. The emphasis is not on economic growth per se, but rather on qualitative improvement in human well-being or the unfolding of human potential. Moreover, Diesendorf's (2000, p. 4) idea of "protecting the natural environment is not intended to mean 'freezing' ecosystems to the extent that natural evolutionary and ecological processes cannot occur, but rather means 'keeping changes at non-catastrophic, pre-human rates'". A further challenge that emerges is the fact that the Brundtland Report's definition does not state or will know what are the future generation's needs. So, without knowing a future generation's needs how can we compromise its ability to meet these?

The Brundtland Report's definition of sustainable development as "development which meets today's needs without compromising the ability of future generations to meet theirs" (WCED, 1987, p. 41), which is explored in the following. Although commonly cited, the Brundtland Report has been criticised, as the report understands sustainability as a more political entity (McKenzie, 2004). The 2030 vision differs from the Brundtland Report in two ways: first it makes Islam its constitution and moderation its method; and second it strikes a balance between the three pillars of sustainability through the three themes of the vision: vibrant society, thriving economy, and ambitious nation (Vision2030, 2016). The country is aiming to achieve environmental sustainability, as this category falls under the vibrant society theme (Vision2030, 2016).

Madhavi et al. (2007) suggest that the following aspects are commonly incorporated when defining sustainable development:

- A desirable human condition because society meets their needs;

- A stable ecosystem condition that maintains its capacity to support human life and others;
- A balance between present and future generations;
- A balanced economic and social development through keeping changes within ecological capacity limits.

These features need to be clear for individuals, governments and institutions whilst drawing routes toward sustainable consumption. Furthermore, sustainability is not a fixed state of harmony, but rather a process of change in the exploitation of resources, the direction of investments, the impact of technological development and institutional changes, consistent with future as well as present needs (El-Barmelgy, 2002).

In focusing back on this research, understanding what sustainability and sustainable development implies is vitally important. If these terms are defined in different ways by the government, the public and key stakeholders it may not be feasible to implement changes that can help moving towards a more 'sustainable' future. To explain, if sustainability means different things to different people and the strategic goals on how to achieve them do not align, it will be challenging to achieve the milestones set in the 2030 vision.

As indicated the KSA has introduced the 2030 vision, which lays out their sustainable development goals, yet current research lacks to investigate what this means for consumers and how they interpret sustainability, aspects that are addressed in this PhD thesis. Thus, it is important to explore what sustainability means to consumers and key decision-makers, which in this case are female Muslims and to investigate what sustainability means to them.

#### **4.2.2 The rationale for sustainability**

The concept of sustainability has its roots in what might be called 'the crisis of development', that is the failure since World War II of international development schemes intended to improve the lot of impoverished people around the world

(Kibert et al., 2010).

Although, highly-advanced technological achievements have been made by human societies during the last two centuries, these achievements have blinded us to our limited capacity (Azapagic & Perdan, 2000; Diesendorf, 2000). Simultaneously, the world is facing environmental crises and resource shortages that compound the problem for the poorest countries in particular and place stress on even the wealthier nations as energy prices rise, climate patterns shift, and the Earth's dowry of biodiversity dwindles. Research (Azapagic & Perdan, 2000; Kibert et al., 2010; UN, 2015) emphasised that sustainable and balanced development is one way to mitigate these crises, through global initiatives and policies. One of the most conspicuous of these activities and a direct consequence of the emergence of the concept of sustainable development was the Earth Summit held in Rio de Janeiro in June 1992. The Summit, adopted a comprehensive action plan, known as Agenda 21, for the pursuit of sustainable development. In response to Agenda 21, many governments and organisations started developing their own plans of action and setting out strategies for sustainable development, concentrating on the sustainable development of industries. For instance, in its declaration on the 'Role of Technology in Environmentally Sustainable Development' signed by fourteen countries world-wide, the Council of Academies of Engineering and Technological Sciences points out that achieving sustainable economic development will require changes in industrial processes, in the type and amount of resources used and in the products which are manufactured (Azapagic & Perdan, 2000) . The KSA was not one of the countries that signed the declaration, yet the 2030 vision clearly indicates that the KSA is changing and actively seeking to move towards a more sustainable future (Vision2030, 2016). Questions that emerge here are how the 2030 vision is acted upon and whether sustainable development can be observed in any aspects of daily life.

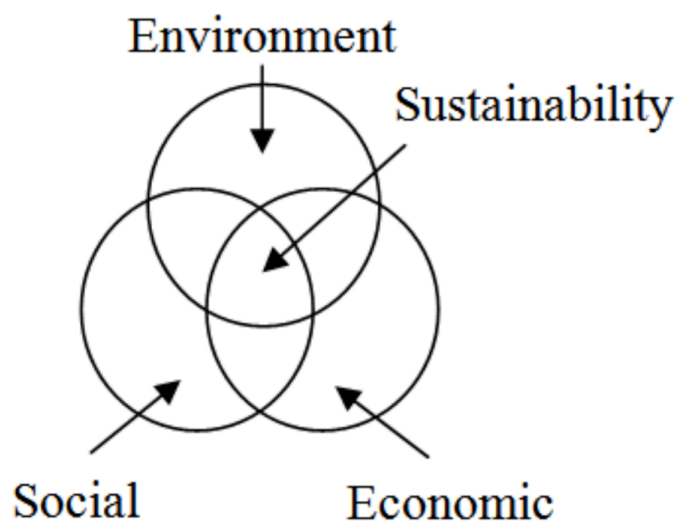


### 4.2.3 The Triple Bottom Line (TBL) of Sustainability

The sustainability concept is based on striking a balance between economic, environmental, and social priorities. This simple three-pillar framework is commonly called 'the triple bottom line' (TBL) (Elkington, 1998). This framework is referred to in different contexts as 'the three-legged stool,' the 3 E's (economy, ecology, equity), or the 3 P's (prosperity, planet, people) (Boyer et al. 2016). The TBL was coined by John Elkington in 1998 within his book 'Cannibals with Forks: the Triple Bottom Line of 21st Century Business'. Sherman (2012) indicates that the TBL widens the environmentalist agenda of those working towards sustainability, so that it more explicitly incorporates a social dimension.

The relationship between the components of TBL is commonly presented as a Venn diagram (Figures 4.1), with each circle representing one component. In an ideal example of sustainability, the three circles need to be either completely overlapped or have equally shared interfaces (Madhavi et al., 2007). If any component is not considered, then the system as a whole will be unsustainable (El-Barmelgy, 2002).

**Figure 4.1.** TBL of Sustainability.



Source: adapted from Bañon Gomis et al. (2011, p.184)

Elkington (1998) believed that the ‘social justice’ dimension that completes the triple bottom line is the element of sustainability that businesses ‘preferred to overlook’. Organisations need to become sustainable and think beyond ‘the bottom line’. For organisations to continue to function in the long term, they need to take actions to ensure that they contribute to the sustainable management of natural and human resources, as well as contribute to the well-being of society and the economy as a whole (Mitchell et al., 2007). For example, in the furniture industry, to achieve SMaRT<sup>3</sup> Sustainable Product Certification (i.e. good for the environment, economy and social equity) products must achieve prerequisite points that cover the product’s life cycle (MTS, 2017). The KSA does not have Sustainable Product Certification for the furniture industry yet. But the country has created SASO<sup>4</sup>, which aims to set up standards and technical requirements that must be met in products and goods, to achieve the acceptable quality limit and to maintain the health and safety of the KSA consumer. SASO has issued Saudi standards in a few fields and furniture is not yet part of them, but could be in the near future: construction and building materials, chemical and petroleum products, electrical and electronic products, mechanical and metal products.

It is Elkington’s (1998) promotion of the TBL as an accounting and reporting tool that has led to its rapid adoption, especially among global corporations looking for ways to enhance their public image as good global citizens. Elkington (1998, p. 72) argued that key to managing organisational progress towards sustainability is measurement. He believed that “what you cannot measure, you are likely to find hard to manage”. Elkington (1998) acknowledged two main challenges: First, there is the difficulty of accounting for the social dimension, which is not just a matter of how you measure social attributes. He notes that one of the major challenges of the TBL agenda is that “when we include the social and ethical dimensions of sustainability, the range

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<sup>3</sup> Sustainable Materials Rating Technology.

<sup>4</sup> Saudi Standard, Metrology and Quality Org.

of sustainability-related issues and impacts grow [sic] dramatically” (Elkington 1998, P. 94). The second challenge is to develop an approach to measuring progress in an integrated way across the TBL. However, the TBL framework itself lacks the concept of measurability. As it is not possible to measure social dimension and environmental impact over time, new methods for measuring and achieving sustainable development have been developed (Mitchell et al., 2007).

Although researchers such as Sherman (2012) and Mitchell et al. (2007) criticise Elkington’s (1998) framework, outlined above, it is still fundamental to sustainability and sustainable development. Over time, the social component has earned a reputation for elusiveness, in part because social priorities are diverse and context specific. The current opacity surrounding social sustainability results from a multiplicity of legitimate meanings, lack of cross-disciplinary communication, and a reluctance to engage diverse and local sources of knowledge in scholarly research. Boyer et al. (2016) discussed the different roles of social pillars in framing sustainability. They emphasised that social capital stock acts as a pre-condition for economic and environmental health and may even compensate for shortcomings in economic or ecological, as Figure (4.2.) illustrates.

This research seeks to promote sustainability, through sustainable consumption behaviour regarding indoor domestic soft furniture. Boyer et al. (2016) commented that consumption behaviour change goes beyond individual ideas to encompass larger groups, onto national or global levels, implicating policies, institutions and laws.

**Figure 4.2.** Social Pillar as A Foundation for Other Sustainability Pillars.



Source: Boyer et al. (2016, p.7)

#### **4.2.4 The Triple Bottom Line and the Furniture Industry**

In the context of this research, “sustainability is about much more than our relationship with the environment; it is about our relationship with ourselves, our communities, and our institutions” (Seideman, 2008, p. 58), and this links directly to the three aspects that define TBL: environment, society and economy.

Investigating sustainability in the upholstered furniture industry in regard to the TBL has become increasingly important owing to the scale and scope of the furniture industry (Dangelico et al., 2013). Economically, in 2014, consumers’ furniture consumption worldwide was approximately USD 134 billion (World furniture outlook, 2015), while the Saudi consumer consumption of furniture was worth USD 2.4 billion (Saudi Gazette, 2015). Environmentally, companies need to consider the entire physical furniture life-cycle, which includes manufacturing, distribution, and disposal, such as upcycling, repurposing, reselling, charity donations, to have a sustainable

product. Thus, to develop a sustainable furniture product, R&D needs to develop new development processes and new networks that look at the product stage of end-of-life (Dangelico et al., 2013). The process of developing sustainable products could be a market opportunity, but it could also be a risk as they might be under public scrutiny regarding environmental and social impact, requiring additional product information such as material source and carbon footprint (Dangelico et al., 2013).

Having businesses focusing on the TBL helps raise awareness of the impact production has on the environment — social, economic, and environmental — as well as raising motivation among employees and stakeholders to achieve sustainability as an environmental and economic performance tool (Bowden et al., 2002; E.C., 2001; Siebenhühner & Arnold, 2007). Consequently, when the bottom line is incorporated into a business process it can lead to sustainable development (Chambers et al., 2008).

#### **4.2.5 Sustainable Furniture**

Different approaches and definitions have been created to develop sustainable products (Ljungberg, 2007). Sustainable development reduces negative impacts on the environment and the health and comfort of humans. “The basic objectives of sustainability are to reduce consumption of non-renewable resources, minimize waste, and create healthy, productive environments” (General Service Administration, 2015, p.1). This research uses the following definition (Ljungberg, 2007): Sustainable furniture are products that have been produced with as little impact on the environment as possible the production process and can (ideally) be recycled after its useful life, thus having overall a low environmental impact throughout the product’s life cycle. Two questions that emerged here are whether sustainable furniture is available in the KSA and more specifically Riyadh City, as well as whether consumers are interested in sustainable furniture. As the government has introduced the 2030 vision, it is vital to understand whether sustainable furniture can be purchased if consumers have the desire to do so. If sustainable furniture is desired, but not available,

then this could lead to cognitive dissonance, an aspect explored within this research.

Designs should protect people's safety, by protecting the health of the environment as well as people's own health (Berman, 2008). Chapman (2005, p. 3) states "the mess we are in today is more likely to be as a result of unsustainable developments in the way we design, manufacture and consume objects in the modern world". He says that the main cause of an unsustainable economy lies in socially-constructed consumption cycles and manufacturing practices that have "production and consumption in their current guises (that) are both inequitable and without a future" (p. 33). In the KSA the furniture industry has increased dramatically within the past decade (Statista, 2018). This implies that by the time the KSA wants to change towards sustainable furniture products, it will take a little bit longer. As the country is not only producing, but also importing a lot of furniture to supply for the markets demand. Since Saudi's have high income, especially disposal income (Assad, 2008; CDSI, 2015), it allows them to consume a lot of furniture and change their living room seating arrangements on a regular basis (see **section 2.3.2**). Furthermore, there is a question on whether their purchasing decision is associated with sustainable consumption behaviour. For example, as will be investigated, would an eco-label affect the consumer's purchase decision?

Chapman (2005) thinks that designers' methods have evolved into just a treatment of non-sustainable 'symptoms', much like a Band-Aid on cancer, rather than addressing the root cause. Therefore, 'sustainable design' regularly becomes just a marginalized role in the product life cycle. The life cycle of a furniture product progresses from raw materials, production and use to, finally, recycle or disposal (Ljungberg, 2007). Transition towards sustainability requires changes in the way we produce, consume and, in general, the way we live (Manzini, 2007, p. 78).

A number of concepts have been developed to fulfil sustainable and

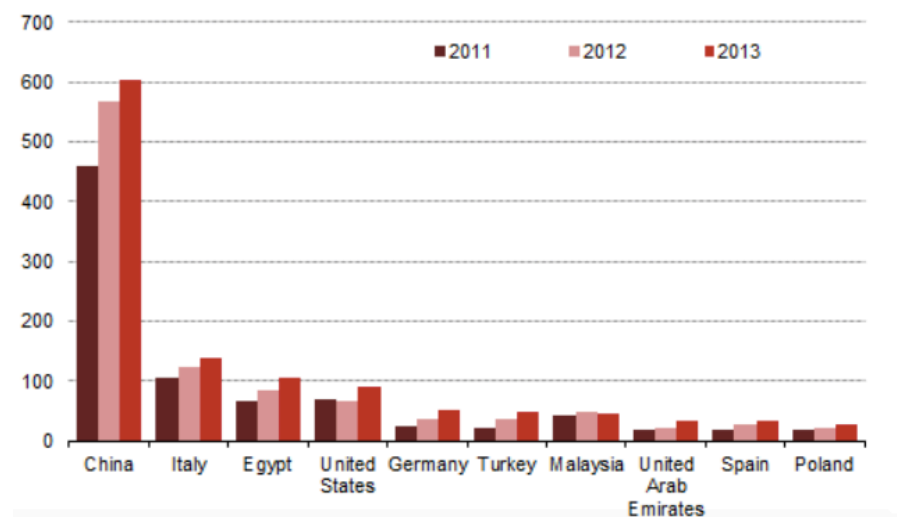
environmentally friendly production, such as DFE (Design For the Environment) (Kalpakjian & Schmid, 2001; Ljungberg, 2003; da Luz, 2018; Sarkis & Zhu, 2018). DFE is a broad and general concept that promotes sustainable design (Ljungberg, 2007). The concepts listed below are not standardised but are helpful in supporting and promoting sustainable furniture development (Fiksel, 1996; James, 1997; Tres, 2000; Ljungberg, 2003):

- Eco-design
- Design for the Environment (DFE).
- Design for material substitution, allowing the substitution of materials with high environmental impact to more superior materials in terms of sustainability.
- Design for dis-assembly (DFDA). A product should be easy to disassemble with, e.g., snap fits, mechanical locks, etc., in order to recycle as many of the materials as possible.
- Design for reusability. Focuses on the possible reuse of different components in a product. The reused parts could be 'freshened up' and reused.
- Design for energy recovery. Designing using materials suitable for burning with a minimum of toxic or harmful emissions.
- Design for life extension. Reduced waste through designing long life for components or products.
- Waste source reduction design. Reducing the amount of material, both in terms of the product itself and packaging.
- Design for substance reduction. Minimising the use of undesirable substances used during the products life cycle.
- Design for recycling (DFR). DFR focuses on maximum recycle-ability by designing a high content of recycled material in the product. Different materials should not be mixed if not required and different parts should be labelled for easy material separation.
- Design for disposability. Assures that non-recyclable parts or materials can be disposed of in an ecological way.

This research will investigate whether any of these sustainable and environment concepts available in the KSA furniture market, and whether these furniture are imported or locally manufactured?

For furniture production to be sustainable it has to be produced using non-toxic, organic materials and Forest Stewardship Council (FSC)-certified woods<sup>5</sup> (Dennis, 2011). Some furniture products are already built sustainably without consumers realising it (Luchs et al., 2011). A lot of the European fabric manufacturers produce things in a way that is different to a lot of Asian, and even American, manufacturers, due to countries adhering to different regulations (PEFC, 2011). To reiterate this further, some of these countries for example: use natural dyes, they do not use any fire retardants or chemicals that are toxic. Even if they do not label their products as organic, when checking their practices there are signs of sustainable production processes (Dennis, 2011; PEFC, 2011). Linking back to the KSA furniture market, see Figure 4.3.

**Figure 4.3.** Saudi Arabia Main Countries of Origin of Furniture Imports, 2011-2013. Million USD<sup>6</sup>.



Source: Saudi Arabia Furniture Outlook (2014)

<sup>5</sup> (FSC) Stands for Forest Stewardship Council are logos on wood or wood-based products to ensure they FSC certified forests or from post-consumer waste.

<sup>6</sup> Conducted every five years.



Figure 4.3 clearly explains that the main furniture imports to the KSA come from China. Chinese furniture supplier dominates over 40% of the furniture market in imported into the KSA, while the European furniture import only 18% of the total imports (Saudi Arabia Furniture Outlook, 2014). There is a question of whether these products can be sustainable, due to low prices and China having been associated with low labour costs. It could thus be assumed, that the sustainable furniture offering in the KSA may be limited.

#### **4.2.6 Eco-labels**

Eco-labels can be defined as an official symbol given to a product (goods or services) that shows it has been designed to be more environmentally friendly than similar products (GEN, 2004). The International Organisation for Standardisation (ISO), identify the overall goal of eco-labels as: "through communication of verifiable and accurate information, that is not misleading on environmental aspects of products and services, to encourage the demand for and supply of those products and services that cause less stress on the environment, thereby stimulating the potential for market-driven continuous environmental improvement" (GEN, 2004, p. 1).

Eco-labelling can be categorised into three main themes Standards, Certification, and Labelling (Waide et al., 2008; Watanatada & Mak, 2011).

##### **4.2.6.1 Standards**

Standards are defined by the ISO (2014) as "documented agreements containing technical specifications or other precise criteria to be used consistently as rules, guidelines or definitions, to ensure that materials, products, processes and services are fit for their purpose". It is clear from the definition that standards are not only used for standardisation, but they also act as guidelines (Liu, 2003). Within standards ISO have developed three types of environmental labels: Type I, Type II, Type III (OECD, 1997; Allison & Carter, 2000; ISO, 2009).

**Type I** standards are based on a set of criteria by third party and are multi-issue, allowing access to a product's lifecycle impact (Allison & Carter, 2000; Day, 2002). The awarding body can be either government organisations or private non-commercial entities (Day, 2002). Examples of a Type I are the Forest Stewardship Council (FSC) and EU Flower.

**Type II** standards are based on informative self-declared claims by manufacturers, suppliers, companies regarding environmental information of their goods (Day, 2002; GEN, 2004; Lindgreen et al., 2016). An example of Type II label is product packaging stating the percentage of recycled materials.

**Type III** "claims use life cycle analysis to generate quantified product information" (Day, 2002, p. 216). Companies provide consumers with a set of parameters regarding a products environmental impact throughout its life cycle (ITC, 2003; Williams & Curran, 2010). Allowing the consumer to judge the product (ITC, 2003). Examples of Type III label is SMaRT<sup>7</sup>.

SMaRT created standards, to be followed to help create sustainable products (Willbank et al., 2015):

- All materials, process inputs and outputs are safe for human and ecological health in all phases of the product life cycle.
- All energy, materials, and process inputs come from renewable or recycled sources.
- All materials are capable of returning safely to natural systems.
- All stages in the product life cycle actively support the reuse or recycling of these materials at the highest possible level of quality.
- All product life cycle stages enhance social well-being.

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<sup>7</sup> Sustainable Materials Rating Technology.

#### **4.2.6.2 Certification**

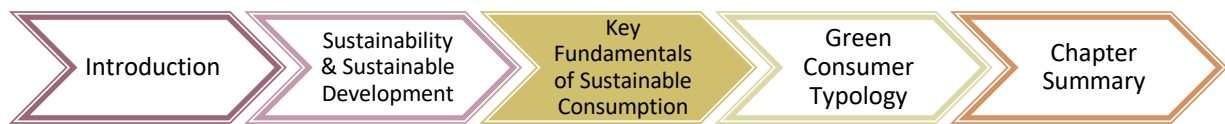
Certification provided by a third party, the certifying body, providing written assurance that a product/service meets certain standards (Watanatada & Mak, 2011). The certificate indicates to a potential buyer of a product or service that the supplier (organisation, who was seeking to get certified) meets with certain standards, this 'unbiased' third party opinion is more convincing to a buyer than a supplier with an obvious vested interest providing the assurance (Dankers, 2007).

#### **4.2.6.3 Labelling**

A certification label is a label or symbol given to a product/service indicating that compliance with standards has been verified (Liu, 2003). The difference between the certificate and label is that a certificate "is a form of communication between the seller and the buyer, the label is a form of communication with the end consumer" (Dankers, 2007, p. xvi). For this communication to be effective, the label must be meaningful. To have a meaningful label not only means having a good certification system, but also having a transparent system. Information on the content and the organization behind the label must be accessible and there should be opportunities for public comment. It is also vital that the meaning of a label is consistent across the range of products that carry that label (Rangan, 2002 as referenced by Liu, 2003). For example, DyStar helps to improve the dyeing process and therefore reduces the environmental footprint of its customers. Through its partnership with DyeCoo®, DyStar uses recycled CO<sub>2</sub> gas instead of water to permeate textiles with dyes (DyStar, 2015). Based on the Furniture Industry Research Association, that all labels must be securely attached on the furniture product, ensuring that these labels are on the furniture product is primarily the responsibility of the first supplier (furniture manufacturer or importer). But it is also the responsibility of the retail to ensure such labels are on their products when supplied to consumers (FIRA, 2018).

Each of these themes, Standards, Certification, and Labelling, is provided “to help consumers to distinguish environmentally friendly products from those which are not” (Muthu, 2014, p. 51). All three terms will be used in this research, as they all refer to eco-labelling. This research considers the impact of eco-labelling as it is one of the main aspects that the UNEP (2010) ten-year framework programme stated and can lead to sustainable consumption. This research investigated which if any of these labels are used in the furniture industry in KSA.

### 4.3 Key Fundamentals of Sustainable Consumption



#### 4.3.1 What is sustainable consumption behaviour?

In the last decade, there has been growing concern regarding the environmental impact products and services have on the natural environment, together with the impact of growth in the global population (Scott & Vigar-Ellis, 2014). Thus, consumer awareness of environmental concerns generally has resulted in an increase in green products in the market (Juwaheer et al., 2012). High global population and over-consumption has resulted in consumers using 50% more resources than the Earth can provide (WWF, 2012). Green products or environmentally friendly products are an important approach to minimising a negative impact on the environment (Pujari & Wright, 1996). Although many green products are available in the market, such as organic foods, recyclable paper, eco-light bulbs, eco-friendly detergents, purchasers’ responses and awareness of sustainable consumption needs to be increased (Juwaheer et al., 2012). This is because consumer behaviour is seen as a cornerstone to the impact that society has on the environment.

Sustainable consumption and production has been on the international agenda since Agenda 21 identified unsustainable patterns of production and consumption as the major cause of the continued deterioration of the global

environment (Schäfer et al., 2011). The Oslo Symposium in 1994 defined sustainable consumption and production (SCP) as "the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of further generations" (UNEP 2010, p. 12). At the World Summit on Sustainable Development (WSSD) (2002) sustainable consumption and production was identified as one of the three overarching objectives of, and essential requirements for, sustainable development, together with poverty eradication and the management of natural resources to foster economic and social development. It was acknowledged that fundamental changes in the way societies produce and consume are prerequisites for achieving global sustainable development. The Johannesburg Plan of Implementation also called for all countries to promote sustainable consumption and production patterns, with the developed countries taking the lead and all countries benefiting from the process, taking into account the so-called Rio principles: a 10-year framework of programmes (10YFP) on sustainable consumption and production patterns was adopted at the Rio+20 Conference, Paragraph 226 (UN, 2014).

The concept of sustainable consumption (SC) has evolved over time and different organisations have contributed to the definition, with some modifications in scope. For example, the Organization for Economic Cooperation and Development (OECD, 2002, p. 16) defines sustainable consumption as, "the [household] consumption of goods and services that meet basic needs and quality of life without jeopardizing the needs of future generations". This is based on the Brundtland Commission's definition of sustainable development (NGO Committee on Education, 2011).

Definitions of SC have the following common features:

- Satisfying human needs
- Favouring a good quality of life through decent standards of living

- Sharing resources between rich and poor
- Acting with concern for future generations
- Minimizing resource use, waste and pollution (Madhavi et al., 2007)

The users' (individuals or organisations) life-styles and behaviour are important parameters to attain the features of SC, as outlined above. This research seeks to understand consumer behaviour as the first stage. The next part seeks to identify the main factors that affect consumer behaviour toward green consumption as well as international policies to support the SC.

Literature that discusses sustainable consumption, such as Ottman (1993) and Singh (2011), focuses on two main themes.

- The first is the role of users (householders or individuals) to achieve sustainable consumption because their satisfaction is one of the main manufacturing targets. If individuals are convinced about the importance of sustainable consumption, then this will be a considerable step toward their changing behaviour.
- The second theme is production, as it is a starting point in the transition to sustainable consumption.

Strong (1998) suggested a group of factors behind the growth of green consumption, which includes media coverage; a wide range of substitutes from traditional to green products; increased level of information helping green consumers make their decisions; using green themes in advertisement; consumers' values moving towards environmental and societal concerns; and an increase in marketing and merchandising among environmental and social charities. However, research (DEFRA, 2006; Mayekar & Sankaranarayanan, 2014) suggests that 30% -33% of consumers who are aware and concerned about the environment issues do not translate that concern into green product purchasing behaviour. See Table 4.1 for the main factors that affect the consumer behaviours toward green consumption.

**Table 4.1.** The main factors that affect the consumer’s behaviours toward green consumption.

<b>Factors</b>	<b>Themes of the factors</b>	<b>Sources</b>
Media; a wide range of substitutes from traditional to green products; information; advertisement; consumer’s values;	- Media - Products alternatives	Strong (1998)
Price, income, age, Personal biases and gender Social norms or peer pressures, status and identity	Socio-economic characteristic of the consumers	OECD (2008 a,b)
Labelling, branding and design	Marketing and eco-	OECD (2006)
Trust in marketer and labelling	labelling	Mayekar & Sankaranarayanan (2014)
Available time and space	Consumer value and time	DEFRA (2006); Mayekar & Sankaranarayanan (2014)

(Source: Author’s own creation)

Mayekar and Sankaranarayanan (2014) found that the main reason preventing consumers from buying green products is a lack of trust in the marketer and labelling. They suggested that the governments of developing countries in particular need to raise consumer awareness of the importance of green consumption for a healthy life.

Moreover, the OECD (2008a) identified those variables having the greatest impact on a consumer’s sustainable consumption are: price, income, age, personal bias and gender. These factors need to be considered when creating an effective policy, as these are adjusted, dependent on the issue, existing legal frameworks and the social and cultural environment.

A question raised here is: are there any sustainable consumption behaviours

happening in general and in relation to the furniture market specifically in the KSA?

#### **4.3.1.1 Price & Income**

In regard to the price, if the price of a green product falls within the expected market norm, then the attributes of a sustainable product will become attractive to consumers (Gittell et al., 2012). For sustainable products such as organic food, which are often retailed at a premium price, for the consumer to accept this product it has to be priced within the market norm (Ottman, 1993; OECD, 2008a). The price of a sustainable product should not be prohibitively high nor require a significant change in lifestyle (Ottman, 1992; Carlson et al., 1993).

A second factor is income. Veblen and Bourdieu (2003) explain how financial wealth is a factor in determining not only how much is spent, but also what is consumed. Studies have shown that families and individuals differ in their consumption habits depending on their income and/or social and cultural factors. The wealthier household is more likely to purchase sustainable products (OECD, 2008a).

#### **4.3.1.2 Age**

There is a relationship between age and an interest in sustainable consumption habits (OECD, 2008a). Younger age groups are more conscious about the impact of their consumption on the environment (Vermeir & Verbeke, 2008; Panzone et al., 2016; Bulut et al., 2017) and believe their generation is consuming too much, so want to reduce their consumption by choosing sustainable products (UNEP/UNESCO, 2001). Behavioural bias is an important variable influencing consumption as people may not behave 'rationally' when making purchasing and lifestyle decisions. Biases stem from habits and customs, susceptibility to advertising and product promotions, brand loyalties, risk aversions, and peer pressure, as well as other factors. An example is a bias against items manufactured from recycled materials because of concerns about reliability and performance (Salam, 2009; Wong et al., 2010). The word 'waste' has a negative connotation and may lead consumers to associate terms such as wastepaper or



waste oils with risky or inferior products (OECD, 2006). Successful sustainable consumption approaches try to make biases work in their favour. Consumption is a way of expressing status and identity, causing consumers to be very conscious of their purchasing choices and how any decision is perceived by family, friends and peer groups. Consumers may be 'locked' into unsustainable patterns of consumption by social norms or peer pressures which dictate more purchases, more frequent purchasing and higher-priced goods. Further to this, labelling, branding and design are factors that aid consumer choice when specific information about the sustainability of the purchase is conveyed. Sustainable consumption is hugely influenced by gender owing to the different consumption patterns of men and women (OECD, 2008a). While women make consumption decisions on basic household goods, clothing and food (Yavas et al., 1994), men on the other hand consume more expensive goods such as cars, homes and electronics (OECD, 2008a). Women are generally more sustainable consumers than men as they tend to recycle, buy organic food and choose eco-friendly products (OECD, 2008a). This further justifies focusing on an all female sample for this PhD research.

#### **4.3.1.3 Policy**

Regarding policies that support a transition to sustainable consumption and production (SCP), different approaches have been recommended by United Nations Environment Programme (UNEP, 2004). These policies support supply and demand through starting to promote recyclable goods, making consumers more aware of product life cycles and being aware of social and environmental impact. From the production stage to the consumption stage, reducing emissions and waste in production methods, providing easy access to consumer information through eco-labelling, and addressing the well-being of consumers within the UN Guidelines on Consumer Protection (UNEP, 2004) are important. OECD policies have been created to support sustainable consumption matters, such as waste generation and recycling, energy use, personal transport choices, food consumption, and water use (OECD, 2008b), as well as the fashion industry (McNeill & Moore, 2015). The furniture market on the other hand has only more

recently seen an increase in growth within the KSA, with individuals having more disposable income, and thus, being able to spend more and with increasing frequency on indoor domestic home furniture (Leslie & Reimer, 2003; Global Information Inc., 2016; Statista, 2018). Sustainable consumption policies in regard to the furniture market have not yet been established, especially in the developing countries.

#### **4.3.2 Environmental, social and economic aspects of consumption**

Sustainable consumption promotes environmental, social, and economic aspects affecting the sustainable consumption process (purchase, use and dispose) of a product to enhance both the needs of the present and future generations (Princen, 2001; Luchs et al., 2011).

##### **4.3.2.1 Environmental aspects**

Environmental problems caused by consumption are very clear and easily determined. Humans globally are over-consuming materials and energy, which threatens aspects of the environment (Princen, 1999; WEF, 2018). As such, it is important to put measures in place that visualise the impact over-consumption has on the natural environment, as only if someone is directly affected and sees the effects they act upon it (Murphy & Cohen, 2001; Wilk, 2002). A recent example being the BBC Blue Planet 2 documentary, which raised awareness of plastic pollution in oceans. Whilst plastic pollution is not new *per se* seeing what it can do to the natural environment has a great impact on consumers (Sustainable Brands, 2018). Linking this back to this research's context of the furniture industry, whilst the environmental impact during the usage stage may be minimal, depending on raw materials used to produce the product, environmental issues can emerge. To reiterate this further, endangered plants may be used to make a table top, or plastic to create chairs, this in turns further impacts the post-consumption stage, when a product is to be recycled (Parikka-Alhola, 2008).

Starting with the manufacturing or production stage, as Kroll (2010) states,

accomplishes a sustainable approach and, with furniture manufacturing, it starts at the design stage. Making products that support the environment and sustain individual and society's wellbeing can be a daunting task and there are numerous terms used to describe products that are 'good' for the environment: green, sustainable, eco-friendly, environmentally conscious and others. Manufacturers have to undergo green testing and rating systems to understand the impact a product will have on the ecosystem. For this, a Life Cycle Assessment is used (Willbank et al., 2015).

Life Cycle Assessment (LCA) is an aid to identifying those products that are environmentally preferable, in that they "have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose" (Federal Register, 1998, p. 1). This may apply to raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, or the disposal of the product or service (Federal Register, 1998).

#### **4.3.2.2 Disposal and recycling**

Waste is defined as "unwanted remains, residues discarded, and material or by products which are no longer required by the initial user" (Yemaneh et al., 2017) and problems associated with the existence of waste arise when there are human inhabitants (UNEP, 2005). Waste can further include items that have reached the end of their useful life for one individual, who seeks to discard of it, which may be used by someone else to create something new, also known as upcycling (Lomax, 2013).

The KSA's transformation to a consumer society is "due to the increase in national income, absence of taxes, public job availability, emerging middle class, liberal import policies, increased female participation in family purchase decisions, a burgeoning youth market, and increased per capita income" (Assad, 2008, p. 73). High income households, whether it be in developing or developed countries, are more likely to adopt unsustainable behaviour (UN, 2013). This

contradicts what has previously been highlighted in the literature in Section 4.3.1.1 and is an aspect that needs to be explored. As the OECD (2008a) points out that wealthier households are more likely to purchase sustainable products.

“Modern society remains largely ignorant, often wilfully so, of the inevitable end that the once cherished and shiny new objects of consumer society will find... all things are waste in the making” (Boradkar, 2010, p. 201). Datschefski (2001, p. 17) notes that “thirty tons of waste are produced for each ton of goods reaching the consumer, and 98% of those goods end up being thrown away within six months”. Park and Ha (2014) conclude that communicating with consumers regarding recycling has value and influences subjective norms. Communication increases recycling intention by shaping attitudes, activating personal obligations and reducing consumption through illustrating and educating consumers on the many difficulties involved with recycling. Thus, key questions that emerge include whether there are any recycling, habits or intentions happening in KSA, what factors influence these, and how are they translated?

#### **4.3.2.3 Social Aspects**

Environmental concerns regarding consumption are the main contributors to giving the environmental aspect a social meaning (Burgess et al., 2003). Many of the environmental problems in relation to consumption are deeply embedded in the social context (Briceno & Stagl, 2006). When studying sustainable consumption with regards to social aspects, it is important to consider individual behaviour regarding their needs and requirements (Moreno-Beguerisse, 2013). Individuals consume goods based on their social, cultural and geographical context (Briceno & Stagl, 2006). Sidawi (2008) states that identifying individual’s current needs and future preferences will guarantee a sustainable solution. Adas (2001, p. 12) stated, “the increase in people’s income opened the door to various ways of life with new requirements different from what they (were) use(d) to. There followed environmental changes in the living and working conditions.” Figures 4.4 and 4.5 illustrate how floor seating in KSA has changed over the years based on income, needs and requirements.

**Figure 4.4.** Traditional /old-style seating arrangements in Saudi Arabia.



Source: Binhalail (2014)

**Figure 4.5.** New seating arrangements in Saudi Arabia



Source: Research's Family House

Figures 4.4 and 4.5 illustrate how the quality of fabric has changed over the years based on taste, desire, fabric availability and income. Moreover, over the years and because of health reasons the dimensions of these floor seating have changed.

#### **4.3.2.4 Economic Aspects**

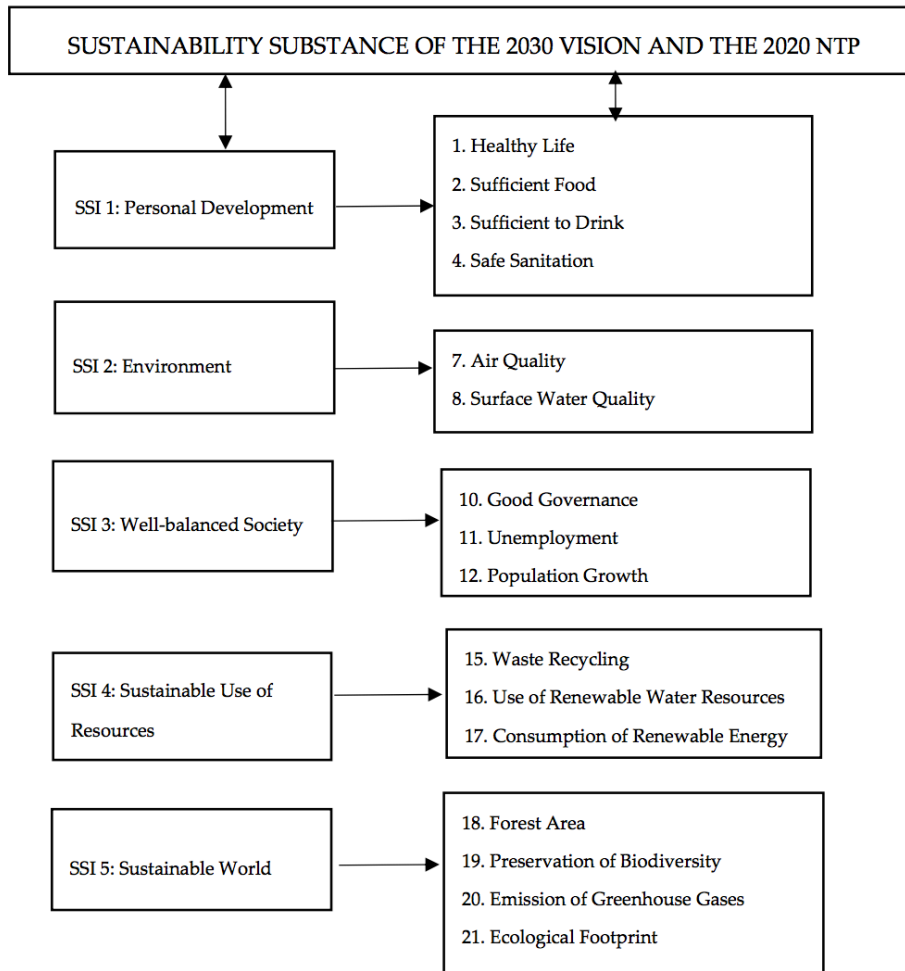
'New Economics' is an alternative broad theoretical approach to environmental

governance and sustainable consumerism (Ekins, 1986; Daly & Cobb, 1990; Boyle, 1993; Henderson, 1995). New Economics is founded on the belief that economics cannot be separated from its environmental and social context, and that sustainability requires a realigning of development priorities away from the primary goal of economic growth and towards individual's wellbeing instead (Jackson, 2004; Dobson, 2007). While the approach to sustainable consumption depends on 'green consumers' playing their part in the market, New Economics addresses an 'Ecological Citizen' who behaves ethically, both in public and in private, to reconfigure the patterns of their lives with the aim of reducing the environmental and social impact on others (Dobson, 2003).

New Economics considers supply and demand factors, which influence both 'software', how consumers think and feel: economic and social instruments, eco-taxes and public awareness campaigns; and 'hardware', what they do: regulatory instruments, correcting markets, influence producers, providing a choice for consumer, eco-efficiency. This will develop an ecological market-based approach, with individuals consuming more efficiently, rather than just changing their lifestyles (Seyfang, 2009).

The assessment of the sustainability substance of the 2030 Vision is done through the lenses of environmental, social and economic sustainability (Alshuwaikhat & Mohammed, 2017). Van de Kerk and Manuel (2008) have created indicators for measuring sustainability within a society that is called Sustainable Society Index (SSI), a breakdown is set in five broad categories, personal development, clean environment, well-balanced society, sustainable use of resources and sustainable world. These indicators for a sustainable society (see Figure 4.6) are employed to measure the sustainability substance of the 2030 Vision.

**Figure 4.6.** Sustainable Society Index (SSI).



Source: Adapted and modified from Van de Kerk & Manuel (2010); UN (2015), cited in Alshuwaikhat & Mohammed (2017, p.4)

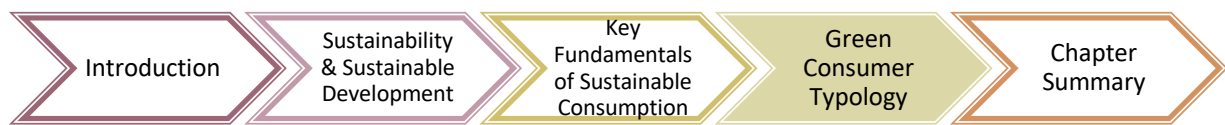
It is further highlighted that the SSI is grounded in the Brundtland report (WCED, 1987) definition:

- It is highlighted that GDP per capita is not included in the definition, same as in Brundtland report definition.
- The SSI is based on a quantitative methodology expressed on a Likert scale 0-10, as this has been criticised by Van de Kerk and Manuel (2010), as this quantitative scale does not allow people to express their opinion very clearly.

- According to the SSI there is no country that is fully sustainable. As Norway is currently on top of the SSI ranking list with 7.0., yet they are still not fully sustainable.

This implies that the SSI is rather ambitious and sets targets in a way that may seem almost unattainable. Yet it could encourage countries to strive to implement new policies and measures to come on top of the rating scale.

#### 4.4 Green Consumer Typology



Over the past decade, concerns about environmental sustainability and climate change have dramatically increased, which has affected how the consumer behaves (Bergin-Seers & Mair, 2009). Thus, more consumers are becoming aware and educated about environmental impact (Sena, 2016). The concepts of sustainable consumption and the green consumer have appeared within a wide range of literature, including social psychology, sustainable development and marketing. Although these discourses use different terms to signify the individual's response to sustainable consumption, these terms have the same broad meanings (Bergin-Seers & Mair, 2009).

The typology of green consumerism is an approach to classify individuals, based on their behaviour and preference for products, which have the least impact on the environment as well as supporting forms of social justice. The following section is organised into three parts, which address 1) the different shades of green consumers, allowing to explore consumption decisions; 2) McDonald et al.'s (2006) typology, which was utilised as an analysis tool in this PhD research; and 3) factors that are affecting the typology.



#### 4.4.1 The Different Shades of Green Consumers

A majority of consumer consumption decisions concerning a product or service have environmental, ethical and community implications. These consumption decisions may or may not be linked to or underpinned by an individual's culture, behaviour, and/or values, which can also be influenced by others (McDonald et al., 2006b). As such, there is the potential for any decision to contribute to a more or less sustainable pattern of consumption. Identifying the characteristics of green consumers and the different classification of individuals toward this aim could help improve the response of the individual to sustainable consumption. In linking this to this research's context and to elaborate this further, if the KSA government understands how consumers make decisions and why they may choose more 'sustainable' options and/or act 'sustainably', they can provide triggers to further enhance this behaviour. For example, if consumers actively look for eco-labels, which were explored in **Section 4.2.6**, organisations could be encouraged to label their products and adhere to these standards. With more products on the market that are seen to be more environmentally friendly than their counterparts in the same product category consumers then have an opportunity to make an informed and more conscious decision (Case, 2006; Koos, 2011; Henninger, 2015).

The main principle of the green consumer relates to individual responses to sustainable consumption. This concept is labelled using different terms based on the norms of the literature of which the study is a part. For instance, the literature of sustainable development refers to 'ethical consumers', consumers who prefer products or services which have the least negative impact on the environment as well as those which support forms of social justice (Harrison et al., 2005). However, the marketing literature termed the same notion of consumers as 'green and ethical consumers. This description would include individuals who are interested in ethical issues such as fair trade (McDonald et al., 2006a).

Research into green consumerism is difficult owing to the gap between green

consumerism values and actions that translate these values into purchasing decisions. Therefore, there is a volume of research attempting to identify and segment these consumers (McDonald & Oats, 2003; Harrison et al., 2005; McDonald et al., 2006 a,b; Bergin-Seers & Mair, 2009; Young et al., 2010; McDonald et al., 2012). The first approach of researchers was to explain green consumers in demographic terms, but this produced contradictory results due to the fact that consumers' consumption cannot be predicted by demographic, socioeconomic or psychographic characteristics (McDonald et al., 2006a). The second approach was to focus on consumer's concerns and their knowledge of the environment. However, this also proved to be inconsistent in isolating those who made green purchases. Both approaches concluded that beliefs do not necessarily translate into purchasing selection, making it difficult to segment green consumers by demographics and/or values (Bergin-Seers & Mair, 2009). The inconsistency and unpredictability of green consumers has been of interest to a number of researchers, such as Peattie (1998), Harrison et al. (2005), McDonald et al. (2012), Young et al. (2010), and Moraes et al. (2012) and attempts were made to present green consumers in terms of shades of green – from 'very dark green' to 'no green at all' (or 'grey').

Different typologies indicate differences in consumers' awareness and knowledge of green issues, as detailed in Table 4.2. In the first initiative, an individual's consumption was categorised into two separate groups. For instance, researchers in marketing literature categorised the consumers as either 'grey' or 'green' (Van Liere & Dunlap, 1980). On the other hand, in the recycling literature researchers (Young, 1989, McDonald & Oates, 2003) classified people as 'recyclers' and 'non-recyclers'. Both conceptualised these categories as mutually exclusive, black and white, or good and bad. Both fields attempted to label the consumers based on their demographic, psychographic and socioeconomic attributes, but this strategy, as some researchers such as Wagner (1997), and McDonald et al. (2006a) emphasised, did not produce clear evidence to identify these groups in practice. This has led to the development of new,

intermediate categories of green consumer, such as 'light' versus 'dark' green or 'shallow' versus 'deep' green (Dermody, 1999).

The most famous initiative in marketing literature was provided by the Roper Organisation in 1992, which created multiple dimension typology bases for distinguishing consumer groups. As such, this typology was avant-garde in that it used multiple dimensions as opposed to a single dimension, which its predecessor was (Kuijlen & van Raaij, 1979). Thus, it provides more flexibility and a broader perspective on green consumers, due to evaluating multiple aspects.

The Roper Organisation's (1992) typology has been adopted by others, such as Ottman (1993). Five categories of green consumers were identified: 1) '*true-blue greens*' are the most environmentally aware individuals and show high levels of behavioural change in purchase, consumption and disposal patterns; 2) '*green-black greens*' are individuals, who are committed to some green decisions (e.g. purchasing Fair Trade coffee), but not as committed as the true-blue greens; 3) '*sprout*' denotes individuals who are starting to acknowledge the need to change as they begin to adjust their behaviour; 4) '*grouzers*' believe it is the companies' responsibility to make responsible environmental decisions; and 5) '*basic browns*' are individuals who do not think they can make a difference with their behaviour, or that they just do not care (Iyer & Banerjee, 1993). Although this is graduated schema, it has not helped in identifying green consumers in practice (McDonald et al., 2006b).

Social science and consumer literature have adopted a different approach to categorising consumers according to their intentions towards sustainable consumption. Elgin and Mitchell's (1977) typology is one example that is explained further in the following. The authors start the article by highlighting that:

Voluntary simplicity appears to be an emerging life style [...] The essence of voluntary simplicity (VS) is living in a way that is outwardly simple and inwardly rich. This way of life embraces frugal

consumption, a strong sense of ecological urgency, and a dominant concern with personal growth (p. 13).

Elgin and Mitchell (1977) outlined four categories of Voluntary Simplifiers (VS) and three categories of Beginner Voluntary Simplifiers (BVS). VS groups included: full and partial, sympathizers and those that are indifferent (unaware or opposed). Full Voluntary Simplifiers prefer “organic gardening, recycling, natural foods, simple clothing, biking to work, backpacking on vacations, engaging in meditation or other growth processes” (Elgin & Mitchell, 1977, p. 208). The Partial Voluntary Simplifiers were defined as people who have adopted some of the VS lifestyle principles, but not others. Sympathizers are people who espouse the values of the movement but have not yet changed their lifestyles. Lastly, the indifferent (unaware or opposed) group includes people who are concerned with material success and may even regard VS as a threat. Sub-categories of BVS are: Apprentice BVS, people who are learning to be voluntary simplifiers, but have not completed their journey; Partial BVS, individuals who have incorporated some aspects of a voluntary simplifiers’ lifestyle, but who have deliberately stopped short of all aspects and; Accidental BVS, people who participate in sustainable consumption activities, but not to achieve sustainability: for example, they might eat organic food for taste or health reasons or cycle to work to keep fit (Elgin & Mitchell, 1997; McDonald et al., 2006b).

These studies sought to investigate and categorise different kinds of intentions, rather than just the number of times products or services were bought. An example that carried out this concept into more research was McDonald et al. (2006b), as they built a typology based on reviewing empirical work of Elgin and Mitchell (1977). Their typology included three main groups; Beginner Voluntary Simplifiers (BVS), a group which falls between the extremes of Voluntary Simplifiers, leading a simplified lifestyle and practices, based on the reduction of consumption principles, and Non-Voluntary Simplifiers, who include grey consumers. These groups should not be conceptualized as static or coherent

lifestyle groups, but treated as overlapping and inconsistent streams of purchase and non-purchase decisions (McDonald et al. 2006b).

Further to these typologies, a key typology based on Ottman (1993) is found in McDonald et al. (2006a) where a typology has been developed with a strong theoretical background and based on empirical findings collected across multiple product categories. They presented three distinct ways of green consumer strategies and greening consumer behaviour and introduced each of these categories into their typology. It employed empirical data to explore sustainable consumption practices, through examining consumer's search and decision-making processes for recent purchases of five categories of goods/services: "white goods (such as fridges and washing machines), small electrical products (such as TVs and computers), fast moving consumer goods (such as foodstuffs and household products), green energy tariffs (such as electricity from renewable sources) and tourism (such as flights)" (McDonald et al., 2009, p. 137). They concluded that "none of these three consumer approaches is uniformly green in their [sic] actions and lifestyles" (McDonald et al., 2006a, p. 6). The typology was represented in three approaches: Translators, who are green in some aspects of their lives, but grey in others (McDonald et al. 2012); Exceptors, who are predominantly green, but have at least one aspect in their lives where they act as grey consumers and overall are the greenest out of the three types identified (ibid); and Selectors, who are the most inconsistent consumers in their purchases and whose behaviour in terms of green purchases can be unpredictable (ibid). The characteristics of each category is summarised below.

**Table 4.2.** Green Consumer Typologies.

Author	Journal	Typology	Product	Parameters/factors	Methodology	Key findings
Elgin and Mitchell (1977)	The Futurist, International Journal of Consumer Studies	VS includes four sub-categories: full, partial, sympathizers, and indifferent (unaware, or opposed) BVS includes three sub-categories Apprentice Partial Accidental		Examine intention		Five key, inter-dependent values of voluntary simplifiers: Material simplicity, Human scale, Self-determination, Ecological awareness, Personal growth
Van Liere and Dunlap (1980)	Marketing Literature	Grey or green consumers		Demographic, psychographic and socioeconomic attribute		
Young (1989)	Journal of Environmental Systems	Pro-recycling attitude, frugality, extrinsic motivation, trivial, perceived difficulty	Newspaper, glass, metal	Attitudes, motivation, behaviours and satisfaction	<ul style="list-style-type: none"> <li>- Direct observation of peoples recycling behaviour</li> <li>- Interview and survey instrument</li> <li>- Qualitative and quantitative research methods</li> </ul>	The five typologies were used to explore the difference between recyclers and non-recyclers
The Roper Organisation (1992)	Journal of Consumer Marketing	True-blue greens, green-back greens, sprout, grousters and grousters	Biodegradable/recycled products, recycling bottles, cans and newspapers	Demographic, psychographic and socioeconomic attribute		
Peattie (2001)	Journal of Strategic Marketing and	How 'equal' green and non-green (or		Socio-demographics		The degree of compromise and the

	Resources, Conservation and Recycling	'grey')			degree of confidence
McDonald and Oates (2003)	Resources, conservation and recycling	Recyclers and non-recyclers	Paper	Demographic, psychographic and socioeconomic attribute	<ul style="list-style-type: none"> <li>- Content analysis</li> <li>- Qualitative approach with quantitative instrument (allowing participants to offer their own answers)</li> </ul>
McDonald et al (2006b)	Psychology & Marketing	Beginner Voluntary Simplifiers(BVS), Voluntary Simplifier (VS) and Non- Voluntary Simplifiers (NVS)	such as buying fair-trade coffee or recycling domestic waste	Examine intention	<ul style="list-style-type: none"> <li>- Survey</li> <li>- Quantitative research methods</li> </ul>
McDonald et al (2006a) and McDonald et al (2009)	A Clear Route to Sustainability Psychology, Marketing Management, Social science, Consumer Studies & Sustainable Development	Translators, Exceptors and Selectors	technology-based products: grey or white goods, regular shopping for food and household products	Brand, price, availability, examine intention, individual living in single household or live independently in multiple households, Information, and knowledge	<ul style="list-style-type: none"> <li>- Interviews</li> <li>- Qualitative and quantitative research methods</li> </ul>

Source: Author's own creation

#### **4.4.2 Typology of Green Consumers, McDonald et al (2006a)**

The typology of McDonald et al. (2006a) is a key typology that further developed findings from the Roper Organisation (1992) and Ottman (1993), whilst furthermore bases its results on empirical evidence collected across five groups of products/goods and tourism in the UK (McDonald et al., 2006a, b). An interesting finding from their study is that there seems to be a change in the way consumers discuss greening strategies, especially in terms of their life style (McDonald et al., 2006 a,b; Bergin-Seers & Mair, 2009). Identifying and understanding this incremental change in an individual's life style towards sustainable consumption will be one of the bases for creating a typology of Saudi society and drawing routes toward more sustainable consumption in KSA. McDonald et al (2006a) identified three distinct 'types' within their typology, which are further discussed in the following, (see Table 4.3.):

**Translators:** This group are not green all the time. They are green in some aspects of their lives but grey in others. This group are open to change, as they are prepared to make green choices based on product-by-product and process-by-process, rather than seeing the big picture of sustainability and rearranging their lives according to the sustainable habit they have accumulated (McDonald et al., 2012). The problem is that they are extremely passive in their information seeking. This means that word-of-mouth and the views of their leaders are key sources of information about behaviour change. They tend to be much less critical of information and will treat it in a straightforward way and implement little behaviour change. Translators sometimes concentrate on the most tangible aspects of sustainability, such as reducing waste or lowering domestic energy and water (McDonald et al., 2006a).

**Exceptors:** although being the greenest group in the typology, McDonald et al. (2006a) have termed these consumers Exceptors because they have found consumers in this group have at least one aspect of their lives in which they



behave like grey consumers. The consumers, of this group have the most understanding of the complexity surrounding sustainability issues. Sustainability is a priority in every aspect of their lives. They are change seekers but make conscious decisions which have specific justifications (McDonald et al., 2012). Exceptors are the most actively information-seeking and information-literate group. They favour and trust more specialist media, such as The Ethical Consumer Magazine (McDonald et al., 2006a).

**Selectors:** are described as the most inconsistent consumers in their purchases. Their purchase choices are contextually based, which means they are unpredictable because their behaviour changes from purchasing one product to another (McDonald et al., 2012). McDonald termed them Selector because they act as green consumers in only one aspect of their lives. This group probably represented the mainstream of society in the UK at that time (McDonald et al., 2006a).

**Table 4.3.** Typology Ways for Being Green Consumers.

<b>Translators</b>	<b>Exceptors</b>	<b>Selectors</b>
<p>For this group, awareness usually translates into action:</p> <p>They feel very guilty about not doing it before.</p> <ul style="list-style-type: none"> <li>- They gradually include more and more activities.</li> <li>- Their concern is often at the level of products rather than companies or industries.</li> <li>- They are prepared to make some sacrifices and are open to change if they can see the impact of their actions.</li> <li>- Their information seeking is largely passive.</li> <li>- Word of mouth and opinion leaders are important to this group.</li> <li>- They are uncritical of information sources.</li> </ul>	<p>Sustainability is a priority.</p> <p>This group has a complex understanding of a wide range of interdependent sustainability ideas:</p> <ul style="list-style-type: none"> <li>- They are change-seeking.</li> <li>- Their information seeking is active, company level and very critical.</li> <li>- They are comfortable with non-mainstream outlets, products and information sources.</li> </ul> <p>BUT: There is one exception to their green lifestyle:</p> <ul style="list-style-type: none"> <li>- This is usually a conscious exception.</li> <li>- It is usually a 'small' exception.</li> <li>- During the purchase process for this item they will completely ignore their usual green and/or ethical criteria.</li> <li>- They will have a specific justification for this purchase which allows them to be happy with their decision.</li> </ul>	<p>This group is green or ethical in one aspect of sustainability only – Green- peace OR recycling OR green energy OR organic:</p> <ul style="list-style-type: none"> <li>- Probably the most common group.</li> <li>- This would explain why green marketing fails and green marketing research can give conflicting results.</li> <li>- Support for Peattie's notion of a context-dependent portfolio of (possibly inconsistent) purchases.</li> <li>- Could be a starting point for the other groups.</li> <li>- Information seeking is selective, ad hoc and can be active, depending on the issue.</li> </ul>

Source: Adapted from Bergin-Seers & Mair (2009, p.111) based on McDonald et al. (2009a)

When considering how consumers start to develop as a green consumer, McDonald et al. (2006a) asserted that there is a change in the way consumers talk about greening their lifestyle. They concluded that consumers can start out as being Selectors and slowly evolve until they become Exceptors. They also added that consumers who worry about not being green enough are more likely to change their behaviour than those who are less concerned or do not think about being green. Researchers, such as Stern (2000) and Steg et al. (2005),

emphasized that in their green behaviour model this change to green is mainly based on value-beliefs-norms. Values are thought to activate beliefs in relation to the human- environment, which then affect specific beliefs about consequences of behaviour. They also assumed that green behaviour results from a general belief about the relationship between humans and the environment (Bergin-Seers & Mair, 2009).

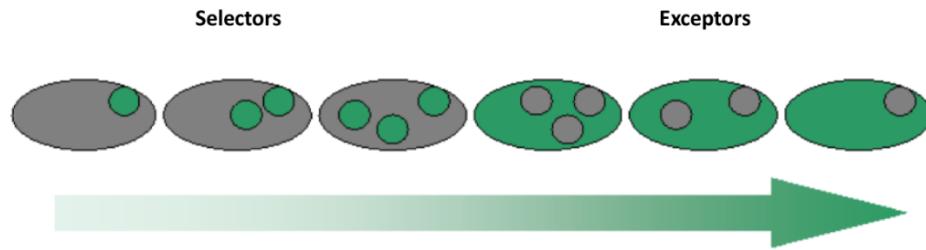
### **Key aspects of this typology approach**

There are various ways to be a green consumer. A green consumer is balanced between grey and green consumption, and each group will choose a different solution to resolve this tension (McDonald et al., 2006a). Even the greenest consumer has grey aspects of consumption in their lifestyle because late capitalism characterises the global economies. The differences between consumer categories cannot be predicted by the demographic, socioeconomic or psychographic characteristics of individuals, but rather by how they approach the problem of green or ethical consumption ( McDonald et al., 2012).

The practical data investigated by McDonald et al.'s (2006a) research shows that individuals falling into the Selector and Exceptor groups are seen at opposite ends of a continuum (as seen in Figure 4.7.). It is possible to conceptualise distinct groups of consumers ranging from the 'lighter green' position of a Selector, through various manifestations of multiple Selectors towards a situation best described as a multiple Exceptor, and eventually to the 'darker green' position of the archetypal Exceptor.

The arrow in Figure 4.6. illustrates progressive greening of categories from left to right, rather than the direction of incremental movement for the consumers. It is possible for individuals to move from dark green position to light green ones on this continuum (McDonald et al., 2006a). Consumer recruited into (McDonald et al., 2006a) typology are self-proclaimed green consumer.

**Figure 4.7.** A Continuum of Green or Ethical Consumers.



Source: Adapted from McDonald et al. (2006a, p. 12)

To reiterate this further, this study did not seek to replicate McDonald et al.'s (2006a) study, but rather use it as a tool of analysis. This research selected female Muslim consumers based on the following criteria: acting head of household for key purchasing decisions, married, and between the ages of 25-59. McDonald et al. (2006a) in their study recruited self-reporting ethical consumers rather than looking at the 'general public'. With sustainability becoming increasingly important in the KSA, as demonstrated through the 2030 vision, understanding whether sustainability is understood, influenced by Islam and is impacting on the decision-making process of purchasing indoor domestic soft furniture becomes increasingly important. This is addressed in this research.

#### **4.4.3 The main factors that affect the typology**

There are several factors that affect the way consumers can seek sustainable consumption in different practices. Research shows how green consumption is affected by price (Harwood, 2005 cited in McDonald et al., 2012). In Saudi society, spending is affected more by what one can afford to enhance and live up to social expectations (Assad, 2007). Meanwhile, research shows that availability and brand also contribute to the relationship between green intentions and green purchase behaviour. Another factor that McDonald et al. (2006a) found has a direct effect on individual's green consumption habits is the individuals' living situation. Individuals can be affected by the people they live with, whether they are part of a single household or live independently and interact with

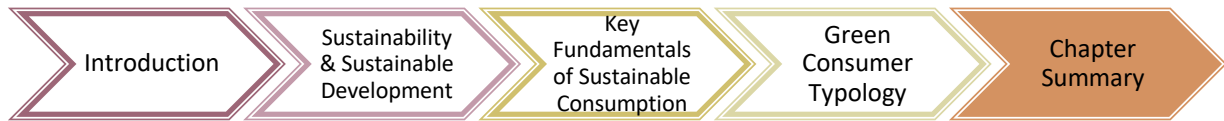
multiple households. This important factor contributes significantly in the Saudi Arabian context (see **Chapter 2**).

In Saudi culture an individual lives with his or her family, which is why family factors are such an important part of Saudi society (Al-Khateeb, 1998). Being part of a family contributes to an individual's purchasing decisions, which suggests that McDonald et al.'s (2006a) research findings would be supported in the Saudi culture. Families also affect the decision-making processes of relatives, friends, and neighbours, as they tell each other about new products and encourage purchasing decisions based on imitation and a wish to be current within society (Al-Shanbary, 1998). Further to this, McDonald et al. (2006a) used knowledge and information about the impact of using the products and services on the environment, as well as the way users deal with this information passively or critically, as one of the factors to classify a sustainable consumer.

McDonald et al. (2006 a,b) found that an approach to consumers' green consumption cannot be predicted by the demographic, socioeconomic or psychographic characteristics of individuals, but rather by how they approach the problem of green consumption. On the other hand, Haanpää, (2007) argues that social, cultural and economic factors of a specific society are assumed to be a framework for an individual's green consumption because each country has its own traditions, norms and taboos. The research by Haanpää (2007) pointed out the main factors for green consumption are lifestyle, identity, ideology, choice, moral, ethics, responsibility, quality of life and health issues.

As was previously highlighted, this research uses McDonald et al.'s (2006a) typology as a tool to analyse this research findings and investigates whether there are any greening strategies that emerge within the KSA, and more specifically Riyadh City and the context of the indoor domestic soft furniture consumption. Furthermore, it will be investigated whether Haanpää's (2007) research allows identifying factors for sustainable furniture consumption in Riyadh City, KSA.

## 4.5 Chapter Summary



This chapter reviewed different aspects of sustainability and a number of so-called green consumer typologies. This research will use McDonald et al. (2006a) typology to analyse sustainable consumption behaviour in a different context, cultural, and research settings.

## CHAPTER FIVE: METHODOLOGY

### 5.1 Introduction



This chapter discusses research methodology, including theoretical perspective, relevant paradigms, approach and techniques for data collection and analysis, adopted in the research. The sections on research design and research processes aim to outline how the research describes the research process in depth, as well as providing adequate justification for the research methodologies that will be used.

### 5.2 Research philosophy



Research philosophies are important as they help in validating the research theory, research questions and how to interpret the findings (Crotty, 1998; Easterby-Smith et al., 2015). Philosophies clarify the assumptions made about the nature of reality (Ontology) and the acquisition of knowledge (Epistemology) in the research process (Bryman, 2016). There is an on-going debate about ontology and epistemology amongst philosophers (Easterby-Smith et al., 2015), as they are the key research philosophies in a social science research to which they inform research strategy and design.

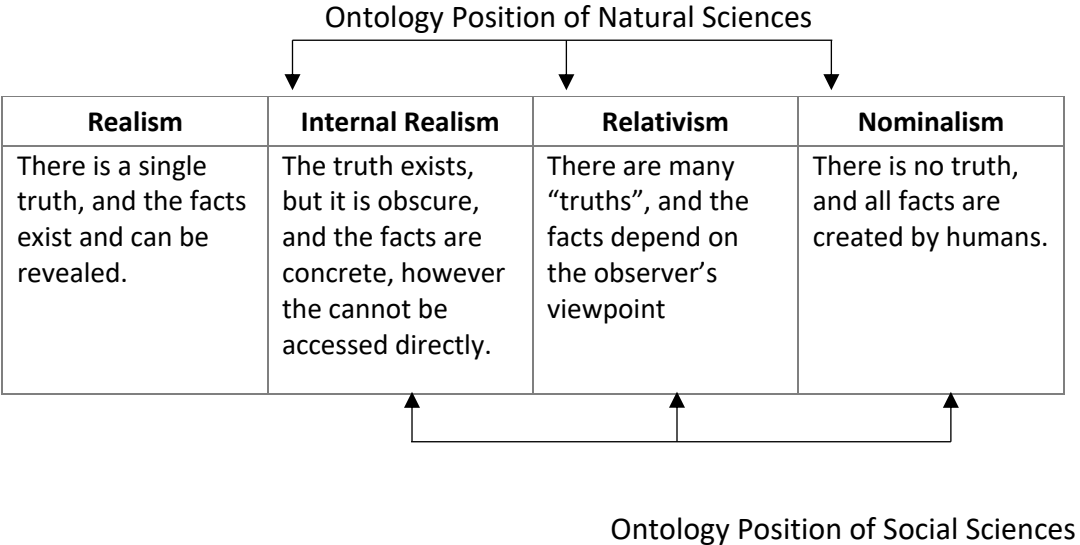
#### 5.2.1 Ontology

The word ontology is derived from the Greek words '*Ontos*', meaning being, and '*logos*', meaning treatise or study (McAuley et al., 2007) which means the study of being (Blaikie, 1993; Marsh & Stoker, 2010). As a philosophical discipline,

Ontology concerns itself with examining and clarifying the nature of reality (Crotty, 1998; Easterby-Smith et al., 2015; Bryman, 2016). However, in the context of social enquiry, Blaikie (1993, p. 6) defines ontology as “the claims or assumptions that a particular approach to social enquiry makes about the nature of social reality” and as Crotty (1998, p. 11) remarks “this is no longer ontology in its philosophical sense”.

Easterby-Smith et al. (2015) identifies four key ontological positions adopted in the natural sciences and social sciences along a continuum. At one end of the continuum is realism then internal realism, followed by relativism, and ending with nominalism at the other end; see Figure 5.1.

**Figure 5.1.** A Continuum of Ontology Positions in Natural and Social Sciences.



Source: Adapted from Easterby-Smith et al. (2015)

The debate in natural sciences on the nature of reality is between realism and relativism (Easterby-Smith et al., 2015); whereas, the debate in social science is primarily between internal realism, relativism and nominalism (Easterby-Smith et al., 2015). Since this research is in social science, the following sections provide an overview of the different ontological (Internal Realism, Relativism, and Nominalism) positions in social science outlined by Easterby-Smith et al. (2015).



### **5.2.1.1 Internal Realism**

(‘Naïve’) Realism maintains there is one single reality where objects have an existence independent of the observer who has direct access to facts about these objects (Easterby-Smith et al., 2015; Bryman, 2016), however, Putnam (1987) challenges this claim, noting that, often the facts are not always be directly accessible. Internal realism maintains that there is a single reality with concrete facts that are not always directly accessible; accordingly, ‘truth’ may be obscured. An internal realist theory perceives truth to be an objective, naturalistic concept of epistemic rightness (Ellis, 1988). The position assumes that inter-subjectivity regarding questions of truth and falsity can in principle be reached in a non-coercive manner. It argues that the possibilities about the truth are grounded in our common human nature as people who are responding to the same world; thus, truth is constituted from those epistemic perspectives envisaged by science (Ellis, 1988). In research, it therefore means that the only way to prove reality and existence would be through obtaining indirect evidence, but once scientific laws are identified to be absolute and independent of further observation, these laws are accepted by internal realists (Easterby-Smith et al., 2015).

### **5.2.1.2 Relativism**

Relativism is a position, which suggests reality is subjective. From the perspective of relativism, scientific facts and laws are not seen as being out there to be discovered, but rather, they are to be created and agreed upon by people (Easterby-Smith et al., 2015). The position views people to hold different views and opinions, which will be accepted by others depending on their status and reputation (Easterby-Smith et al., 2015). Truth, in the sense of what objects exists, what constitutes these objects and the relationships among them, is thereby reached and accepted through continuous debates and discussion; and the development of theory is under constant exposure to researchers' and other's subjective thoughts, opinions and reasoning (Easterby-Smith et al., 2015). Similarly, in social sciences, the constitution and nature of social reality is

continuously being accomplished by social factors, produced through social interactions that are constantly being revised (Bryman, 2016).

#### **5.2.1.3 Nominalism**

Nominalism is primarily debated among social scientists (Easterby-Smith et al., 2015), where the position suggests there is no truth to explain nature of social realities, and facts are established by people using various social factors. In this position there is no truth, and all the different versions of truth are attempts by people's different views and opinions (Easterby-Smith et al., 2015). To reiterate this further, nominalists argue that what constitutes reality and thus truth depends on the language and discourse used to describe; abstract concepts and labels used to describe reality neither exist in reality nor correspond to it (Easterby-Smith et al., 2015; Bryman, 2016).

#### **5.2.1.4 Ontological Position Adopted**

The ontological position chosen by the researcher acts as a pre-requisite for the epistemological decision made in this research (Malhotra et al., 2012). The following section highlights the ontological position chosen. This PhD research seeks to understand the extent of sustainability and sustainable consumption behaviour, in females residing in Riyadh City, the Kingdom of Saudi Arabia, with a particular focus into indoor domestic soft furniture. As was highlighted throughout the literature review section, sustainable consumption behaviour and Islam (which emerged as a key finding) are under-researched, as such it is vital to understand what sustainability means for individuals and how they interpret their environment. Thus, this PhD research is based on a relativist ontology (Easterby-Smith et al., 2015). This implies that there are multiple 'truths', which depend on the observer's viewpoint and interpretations.

#### **5.2.2 Epistemology**

Epistemology is derived from two Greek words: '*episteme*' meaning knowledge or science; and '*logos*' meaning treatise or study (McAuley et al., 2007). Epistemology deals with the theory of knowledge, by questioning "How we know

what we know” (Crotty, 1998, p. 8), and provides a useful foundation to research design along with ontological philosophy to assist or improve the power of explanation, predictions, and understanding of research outcomes (Malhotra et al., 2012). Flowers (2009) further describes epistemology as a set of claims or assumptions about the ways in which it is possible to gain knowledge of reality, how what exists may be known, what can be known, and what criteria must be satisfied for something to be described as knowledge. Taking a theoretical perspective, philosophy should guide researchers on how to view the world around them in different ways, helping them select their research strategy and design as well as the appropriate research methodology (Crotty, 1998; Saunders et al., 2009). There are a number of epistemological positions and different authors often have different terminologies to identify these; for example, Crotty (1998) distinguishes objectivism, constructionism, and subjectivism. Bryman (2016) contrasts positivism and interpretivism. As can be seen from Crotty (1998) and Bryman (2016), authors typically contrast epistemological positions inspired by natural sciences, which assume that knowledge is acquired through empirical and rational means, with epistemological positions that claim that knowledge is constructed by the interaction of subject with object within a social context, which first came to prominence in the context of social enquiry in works such as “The Social Construction of Reality” (Berger & Luckmann 1967). To clarify the research approach taken here, is the ‘model’ proposed by Easterby-Smith et al., (2015), the epistemological position lie between two key positions positivism and social constructionism. Table 5.1. presents a summary and comparison of the two positions and their research characteristics.

**Table 5.1.** Comparison of Positivist and Social Constructionism Research Characteristics.

	<b>Positivism</b>	<b>Social Constructionism</b>
<b>Aim</b>	Discovery	Invention
<b>Starting Point</b>	Hypotheses	Meanings
<b>Reality</b>	Objective	Subjective
<b>Development of Theory</b>	Deductive	Inductive
<b>Researcher and Participant</b>	Independent	Interactive
<b>Research language</b>	Formal and impersonal	Informal and personal
<b>Value</b>	Value free (unbiased)	Value-laden (bias)
<b>Analysis/Interpretation</b>	Verification	Descriptive and subjective meanings, Understanding and insight, Sense-making
<b>Data Collection Approaches</b>	Quantitative	Qualitative
<b>Sample</b>	Large number	Small number
<b>Research Design</b>	Static: Experiment, Controlled variables, Prediction, Hypothesis testing	Dynamic: Case study, Observation of settings and natural context and behaviours, Documenting patterns and change
<b>Structure</b>	Highly structured for replicability	Low structure
<b>Techniques</b>	Laboratory, Experiment, Representative surveys	Natural environment, Ethnography, Focus groups, Interviews

Source: Adapted from Gill & Johnson (2010), Malhotra et al. (2012), Easterby-Smith et al. (2015).

The following sections discuss the two perspectives and outline the epistemological position adopted in this study.

### **5.2.2.1 Positivism**

Positivism is a research approach that assumes that in the area of investigation ‘the facts’ are objective (Myers, 2013). The idea of positivism is that the world exists externally, and its properties are measured using objective methods rather than subjective methods such as sensations, reflection or intuition (Easterby-Smith et al., 2015). Positivists typically follow what has become the ‘natural sciences approach’: developing and testing theories and hypotheses, where the data either confirms or disconfirms the theories or hypotheses (Myers, 2013).

Positivist research is mainly based on quantitative research methods, which implies that there is a single truth that can be revealed (Benton & Craib, 2010; Easterby-Smith et al., 2015). In this approach the researcher treats perceptions of the social world as objective interpretations in the context of the research (Holloway & Wheeler, 2010). Positivists separate themselves from the world they study (Healy & Perry, 2000); however, this research deals with the understanding of human behaviour, experience and interactions towards sustainability in a specific setting. Moreover, Healy and Perry (2000) maintain that a positivist approach is insufficient when approaching social science studies, which involve humans and their real-life experiences. The characteristics of a positivist research design is summarised in Table 5.2 (above).

#### **5.2.2.2 Social Constructionism**

Social constructionism is an approach to epistemology that is driven by people rather than objective and external factors (Easterby-Smith et al., 2015); it assumes that there is no absolute or objective truth: rather, there are many truths (Easterby-Smith et al., 2015). Social constructionism focus on understanding meaning and intentions of people being studied (Myers, 2013), it focuses on how people make sense of the world, through interaction with each other (Creswell, 2013; Easterby-Smith et al., 2015). This implies that contrarily to positivism knowledge is not discovered through an objective, dispassionate interplay of experiment and reasoning (theory), it is constructed through the interactions of subject and object. Crotty (1998, p. 58) states "... social constructionism emphasises the hold our culture has on us: it shapes the way in which we see things (even the way in which we feel things!) and gives us a quite definite view of the world". Unlike positivism, the enquiry of knowledge in social constructionism is not grounded on the basis of facts and scientific laws but derived from the researchers' interpersonal experiences and subjective views (Gill & Johnson, 2010; Easterby-Smith et al., 2015). In research practice, a social constructionism approach is therefore subjective about reality and utilises qualitative techniques to make sense of meanings and to explain underlying reasons that quantitative studies fail to clarify (Malhotra et al., 2012; Easterby-

Smith et al., 2015). Therefore, the goal of social constructionism research is to understand and interpret the meanings in human behaviour rather than to generalize and predict causes and effects (Hudson & Ozanne, 1988; Neuman, 2000). Table 5.1 summaries the characteristics of social constructionism research approaches.

### 5.2.2.3 Epistemological Position Adopted

This PhD research overall aligns with and adopts a social constructionist stance as its guiding philosophical underpinning. With a philosophical position grounded on a subjective view of reality and the way to enquire knowledge about the world, this research is based on the belief that multiple truths exist, which depend on the researcher’s viewpoint. This in turn links to a realist ontological stance. To reiterate thus further, this research seeks to investigate the KSA consumers’ sustainable practices and their decision making in relation to furniture consumption, this is purely subjective as these evolve through interaction of subject with object the very foundation of social constructionism (Crotty, 1998). This information can be developed by asking participants for information, understanding and choice making. This will provide the researcher insight of the customs, morals and habits of the given society.

## 5.3 Research Approach



The approach to theory development in research is determined by deductive or inductive reasoning (Maholtra et al., 2012). The following section reviews the two types of reasoning for this study and outlines the approach adopted.

### 5.3.1 Deductive Approach

A deductive reasoning begins with “the general and ends with the specific” (Trochim, 2006, p. 1); this can be called a ‘top-down’ approach (Burney, 2008). A deductive research approach typically begins with an existing theoretical

framework and uses this to test the validity of a set of hypotheses (Creswell & Plano Clark, 2007). Deductive research is commonly associated with quantitative approaches to research (Onwuegbuzie & Leech, 2005) intending to test collected data, which a researcher deductively searches for evidence to either support the hypotheses to be true or reject the hypotheses to be false with suggestion for improvement on the theory conducted (Feeney & Heit, 2007; Snieder & Larner, 2007).

### 5.3.2 Inductive Approach

Trochim (2006, p. 1) defines an inductive approach as “moving from the specific to the general”. An inductive researcher is someone who works from the “bottom-up, using the participants’ views to build broader themes and generate a theory interconnecting the themes” (Creswell & Plano Clark, 2007, p. 23). This approach is commonly associated with qualitative research, through the process of gathering data from individuals to identify themes aiming to develop a theory or pattern of meaning (Creswell & Plano Clark, 2007). In an inductive approach, the themes identified are strongly linked to the data because assumptions are data-driven (Boyatzis, 1998). This means that analysis and theory development occur without trying to fit the data into a pre-existing model or frame.

The differences between deductive and inductive approaches are summarized in Table 5.2.

**Table 5.2.** Differences between deductive and inductive research approaches.

Deductive Approach	Inductive Approach
Scientific Principles	Gaining an understanding of the meanings which people attach to events
Develop a theory and hypothesis, then design a research strategy to test the hypothesis	Collect data and develop the theory as the result of the data analysis
Theory driven	Data driven
Quantitative data collection	Qualitative data collection
The researcher is independent of what is being researched	The researcher is part of the research process
Samples of sufficient size for generalisation are required	Less concerned with the need to generalise

Source: Adapted from: Saunders et al. (2015)

### 5.3.3 Research Approach Adopted

The major difference between deductive and inductive research approaches is centred on how they view the nature of reality (Onwuegbuzie & Leech, 2005). Selecting the appropriate approach between them generally depends on the researchers' epistemologies (Crowther & Lancaster, 2008).

The research approach adopted for this study is a relativist ontology and an inductive epistemological philosophy adopted in **Section 5.2.**, to meet the research aim and objective enabling the researcher to identify patterns and themes from the collected data. Overall the research interview questions were guided by the literature. These interview questions are broad to support the inductive research approach. Having open ended question will enable participants to express their experience and knowledge in relation to sustainable practices and their furniture consumption habits. Researchers using an inductive approach are likely to collect qualitative data and to use a variety of methods to collect these data in order to establish different views of the phenomena under examination (Easterby-Smith et al., 2015).

### 5.4 Research Design



A research design is a framework for conducting a research (Malhotra et al., 2012). It is aimed at providing detailed information on how best to solve the specific research problem (Blumberg et al., 2008; Malhotra et al., 2012). The most appropriate research design depends on the nature of the research; whether it is trying to test, create or discover a theory (Gill & Johnson, 2010). Malhotra et al. (2012) have classified two broad research design categories: exploratory research and conclusive research. The following sections reviews the two categories and the design adopted for this study.



#### **5.4.1 Exploratory Research**

Exploratory research is about finding out what is happening or aiming to seek ideas and insight regarding a specific phenomenon (Saunders et al., 2015). Authors have agreed that exploratory research can be used to obtain information about a phenomenon when little is known about a problem (Malhotra et al., 2012; Burns & Bush, 2013). Moreover, exploratory research is used to clearly identify and explore concepts to develop new theories, beliefs, opinions, patterns, attitudes, and motivation in behaviour; and finally, develop structures for these constructs (Malhotra et al., 2012). Exploratory research design is not limited to one specific paradigm as it could be for a qualitative or quantitative exploration (Burns and Bush, 2013).

#### **5.4.2 Conclusive Research**

Conclusive research is defined as testing of hypotheses of a research problem formulated from exploratory research (Panneerselvam, 2004). It is meant to provide information that is useful in drawing definite conclusions for implementation (Panneerselvam, 2004). Malhotra et al. (2012, p. 89) notes that "the objective of conclusive research is to describe specific phenomena, to test specific hypothesis and to examine specific relationships". For example, conclusive research is used in studies which seek to describe the characteristics of certain groups, for example, consumers, organisations or target market; or determine the perceptions of product or service characteristics; or to measure decision-making regarding variable marketing information (Malhotra et al., 2012).

#### **5.4.3 Research Design Adopted**

A summary of the characteristics of exploratory and conclusive research design are presented in Table 5.3. Adopted from Parasuraman et al. (2006) and Malhotra et al. (2012), the table presents a comparison between the two-research designs in terms of their objectives, data (needs, collection and analysis), samples and example methods utilised. Based on the nature of the study and the research philosophy adopted, this thesis utilised an exploratory

research design. The aim of the research is to understand the extent of sustainability and sustainable consumption behaviour in the context of females in the Kingdom of Saudi Arabia, with a particular focus into indoor domestic soft furniture. In addition, there is little research that investigates sustainability and sustainable consumption behaviour in the context of furniture consumption in the context of the KSA. As previously outlined, exploratory research is often conducted when little information is known about the phenomenon of interest (Parasuraman et al., 2006; Malhotra et al., 2012; Burns & Bush, 2013): exploratory research can be used to gain familiarity and understanding about a phenomenon (Malhotra et al., 2012).

**Table 5.3.** Comparison between exploratory and conclusive research design.

	<b>Exploratory Research</b>	<b>Conclusive Research</b>
<b>Objective</b>	<ul style="list-style-type: none"> <li>- To provide insight and understanding of the nature of marketing phenomena</li> <li>- To understand</li> </ul>	<ul style="list-style-type: none"> <li>- To test specific hypotheses and examine relationships</li> <li>- To measure</li> </ul>
<b>Data needs</b>	<ul style="list-style-type: none"> <li>- Vague</li> </ul>	<ul style="list-style-type: none"> <li>- Clear</li> </ul>
<b>Data collection</b>	<ul style="list-style-type: none"> <li>- Open-ended</li> </ul>	<ul style="list-style-type: none"> <li>- Usually structured</li> </ul>
<b>Sample</b>	<ul style="list-style-type: none"> <li>- Relatively small</li> <li>- Subjectively selected to maximise generalization of insights</li> </ul>	<ul style="list-style-type: none"> <li>- Relatively large</li> <li>- Objectively selected to permit generalization of findings</li> </ul>
<b>Data analysis</b>	<ul style="list-style-type: none"> <li>- Qualitative or quantitative</li> </ul>	<ul style="list-style-type: none"> <li>- Quantitative</li> </ul>
<b>Methods</b>	<ul style="list-style-type: none"> <li>- Expert surveys</li> <li>- Pilot surveys</li> <li>- Secondary data</li> <li>- Qualitative interviews</li> <li>- Unstructured observations</li> <li>- Quantitative exploratory multivariate methods</li> </ul>	<ul style="list-style-type: none"> <li>- Surveys</li> <li>- Secondary data</li> <li>- Panels</li> <li>- Structured observations</li> <li>- Experiments</li> </ul>

Source: Adopted from Parasuraman et al. (2006); Malhotra et al. (2012)

### 5.5 Data Collection Approach



Qualitative and quantitative approaches are the two main forms of data collection approaches. Depending on the nature of the research question, the researcher will typically favour either qualitative or quantitative research methods (Malhotra et al., 2012). The decision to adopt either qualitative or quantitative methods can also be guided by the ontological and epistemological positions made by the researcher (Easterby-Smith et al., 2015). The following sections review the two approaches and outlines the approach adopted in this study.

### **5.5.1 Quantitative Approach**

Quantitative research uses data collection techniques and analysis that generate numerical data to quantify research findings (Saunders et al., 2015). It is thereby about showing 'hard evidence' to compare variables and develop statistical relationships between them (Easterby-Smith et al., 2015). Since the investigation is supported by calculated quantities, it minimises the possibility of researcher potential bias (Smith & Noble, 2014). Quantitative research approaches often reflect a positivist epistemology by taking a deductive approach in theoretical reasoning and theory development, so findings can be tested and retested for validity and reliability (Bryman & Bell, 2015).

### **5.5.2 Qualitative Approach**

Qualitative research approaches utilise data collection techniques and analysis generate qualitative data, such as words, rather than numerical data (Saunders et al., 2015). Qualitative research approaches attempt to understand phenomena through observing behaviour, reflections and expression of views which cannot be meaningfully quantified (Saunders et al., 2015); for example, to understand processes, motivations and thoughts (Malhotra et al., 2012). Qualitative research approaches fit research designs with social constructionism research philosophies, as the nature of qualitative research is interpretive. For example, Kothari (2009) outlines that in a qualitative research, researchers make subjective assessments of attitudes, opinions and behaviour, derived from the researchers' insights and impressions. Qualitative research is therefore about seeking to understand and interpret meanings about reality or phenomena (Easterby-Smith et al., 2015).

### **5.5.3 Data Collection Approach Adopted**

The data collection approach adopted in this research is a qualitative method approach as this study aims to understand to what extend female in the KSA understand sustainability and sustainable practices in general and in relation to indoor domestic soft furniture. Utilising qualitative data collection methods will

therefore enable the researcher to understand consumers' behaviour toward sustainable consumption principles.

This PhD research initially was designed open in terms of participants, meaning that it anticipated recruiting both male and female participants. Yet, after starting this research project this proved to be challenging. The author of this PhD research is female, and thus only gained positive responses from female participants. An explanation that could be provided here are values that are deeply engrained in the cultural heritage. The challenge of recruiting opposite sex participants to the researcher's own lacks further investigations and exceeds the current PhD research. However, the researcher draws on Al Dossry (2012), who also indicated that the fact that he was from the opposite sex limited him to conduct his research with male participants.

As previously pointed out, there is a lack of research connecting sustainable consumption and Islam, which further justifies utilising a qualitative approach as it allows to gain in-depth insights into a less well research area

## 5.6 Data Collection Methods



There are different types of data collection methods to collect information for a qualitative research. Some of the qualitative methods include documents, archival records, interviews, direct observations, participant observation and physical artefacts (Yin, 2014).

The following Table 5.4., proposed by Yin (2014), shows the relative strengths and weaknesses of these six sources of data.

**Table 5.4.** Six sources of evidence: Strengths and Weaknesses.

Source of evidence	Strengths	Weaknesses
<b>Documentation</b>	<ul style="list-style-type: none"> <li>- Stable: can be reviewed repeatedly</li> <li>- Unobtrusive: not created as a result of the case study</li> <li>- Exact: contains the exact names, references and the details of an event</li> <li>- Broad coverage: long span of time, many events, and many settings</li> </ul>	<ul style="list-style-type: none"> <li>- Retrievability: can be slow</li> <li>- Biased selectivity, if collection is incomplete</li> <li>- Reporter bias: reflects (unknown) bias of author</li> <li>- Access: may be deliberately blocked</li> </ul>
<b>Archival Records</b>	<ul style="list-style-type: none"> <li>- (Same strong points as for the documentation)</li> <li>- Precise and quantitative</li> </ul>	<ul style="list-style-type: none"> <li>- (Same weak points as for the documentation)</li> <li>- Accessibility due to privacy reasons</li> </ul>
<b>Interviews</b>	<ul style="list-style-type: none"> <li>- Targeted: focuses directly on case study topic</li> <li>- Insightful: provides perceived causal inferences</li> </ul>	<ul style="list-style-type: none"> <li>- Bias due to poorly constructed questions</li> <li>- Response bias</li> <li>- Reflexivity: interviewee gives what interviewer wants to hear</li> </ul>
<b>Direct Observations</b>	<ul style="list-style-type: none"> <li>- Reality: covers events in real time</li> <li>- Contextual: covers context of event</li> </ul>	<ul style="list-style-type: none"> <li>- Time consuming</li> <li>- Selectivity: unless broad coverage</li> <li>- Reflexivity: event may proceed differently because it is being observed</li> <li>- Cost: hours needed by human observers</li> </ul>
<b>Participant Observation</b>	<ul style="list-style-type: none"> <li>- (Same strong points as for the direct observations)</li> <li>- Insightful into interpersonal behaviour and motives</li> </ul>	<ul style="list-style-type: none"> <li>-(Same weak points as for the direct observations)</li> <li>-Bias due to investigator's manipulation of events</li> </ul>
<b>Physical Artefacts</b>	<ul style="list-style-type: none"> <li>- Insightful into cultural features</li> <li>- Insightful into technical operations</li> </ul>	<ul style="list-style-type: none"> <li>- Selectivity</li> <li>- Availability</li> </ul>

Source: Yin (2014, p.102)

### 5.6.1 In-depth Interviews

Interviews can be structured, semi-structured or unstructured; in which they allow probing, so that the researcher can obtain meaningful responses and uncover any new and hidden issues and discover in greater depth the issues of

the topic (Malhotra et al., 2012). The in-depth semi-structured interview is an effective method providing people with an opportunity to explain their opinions and experiences about the research issues (Bryman, 2016). This research has not employed structured interviews due to the lack of in-depth engagement during the interview process (Ryan et al., 2009). Semi-structured interviews consist of predetermined questions, which do not need to be asked in a particular order (Bryman, 2016). The interviewer is able to vary the order of the questions, depending on the direction of the interview, as well as ask additional questions if needed (Bryman, 2016). This encourages the interviewees to talk in-depth regarding their thoughts, opinion, and experience to the interviewer (Malhotra et al., 2012). Conducting a semi-structured interview may have limitations regarding reliability and credibility (Zohrabi, 2013). To overcome this challenge, all participants in the semi-structured interviews were voice recorded and these recordings fully transcribed. This ensured that the researcher could go back to any raw data when needed during the analysis stage, for example, to ensure no missed details.

To fulfil all of the research aims and objectives, a qualitative approach was used in this exploratory study. Evidence are a review of the in-depth semi-structured interviews with consumers from different residential districts of Riyadh City, to understand and investigating the drivers behind their current consumption behaviour and whether it is sustainable or not.

### **5.6.2 Sampling**

Sampling is an important part of the research process (Malhotra et al., 2012). Sampling, in a qualitative research, is the process of selecting the individuals, units, and settings to be studied during the course of the study (Patton, 2001). There are two broad classifications of sampling techniques, these are non-probability and probability sampling (Malhotra et al., 2012).

#### **5.6.2.1 Non-Probability Sampling**

Non-probability sampling, also known as non-random sampling, uses techniques that do not use chance selection procedures to select the sample, but rather,

rely on the researcher’s judgement (Malhotra et al., 2012). Examples of non-probability sampling techniques include purposive sampling, convenience sampling, judgemental sampling, quota sampling, and snowball sampling (Malhotra et al., 2012; Saunders et al., 2015). A summary of each of these techniques are summarised in Table 5.5.

**Table 5.5.** Non-Probability Sampling Techniques.

<b>Sampling Method</b>	<b>Description</b>	<b>Reference</b>
<b>Purposive</b>	Researchers use their judgement to select participants who will be able to answer the research questions and objectives. It is a technique ideal for studies with small samples.	Saunders et al. (2015)
<b>Convenience</b>	Participants are selected based on their convenience. Participants are selected because they happen to be in the right time and the right place.	Malhotra et al. (2012)
<b>Judgemental</b>	A form of convenience sampling where the population elements are selected based on the researcher's judgement that they believe are representative of the population of interest or appropriate.	Malhotra et al. (2012)
<b>Quota</b>	A two-stage restricted judgemental sampling where the first stage concerns developing control categories or quotas of population elements; and the second stage is where the sample is selected based on convenience or judgement.	Malhotra et al. (2012)
<b>Snowball</b>	A process of finding on participant though another. Appropriate for cases which have desired characteristics.	Saunders et al. (2015)

Non-probability sampling fits with qualitative, exploratory research designs (Malhotra et al., 2012; Saunders et al., 2015), enabling the researcher to select the sample using their own subjective judgement (Malhotra et al., 2012).



### 5.6.2.2 Probability Sampling

Probability sampling is a procedure, which gives all members of a population of interest an equal chance of being selected (Malhotra et al. 2012). Examples of probability sampling techniques include simple random sampling, systematic sampling, stratified sampling, and cluster sampling (Malhotra et al. 2012). A summary of these techniques are outlined in Table 5.6 below.

**Table 5.6.** Probability Sampling Techniques.

Sampling method	Description
<b>Simple Random Sampling</b>	Using simple random sample, each subject has an equal opportunity of being selected, and are selected independently from the other subjects.
<b>Systematic</b>	Individuals are selected based on regular interval from the sample frame.
<b>Stratified</b>	A two-step process where the population is first divided into subsequent subpopulations, or strata; and participants are then selected from each strata using a random procedure.
<b>Cluster</b>	A two-step sampling technique where target population is divided into mutually exclusive and collectively exhaustive subpopulations or called clusters. Then a random sample of clusters are selected using a probability sampling technique e.g. simple random sampling.

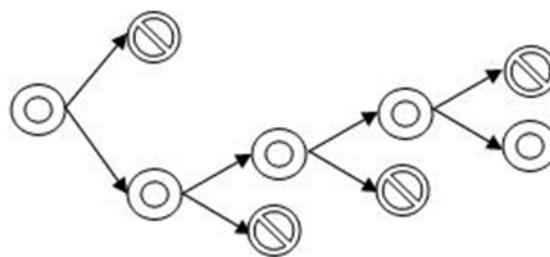
Source: Adapted from Malhotra et al. (2012); Saunders et al. (2015)

### 5.6.2.3 Sampling Technique Adopted

This study adopted a non-probability sampling approach. The nature of this study is exploratory and non-probability sampling techniques suits researches that are exploratory in nature (Malhotra et al., 2012; Saunders et al., 2015). While a snowball sampling strategy was used for participants, this was only for those who met the selection criteria for investigation (women, acting as head of household, married, between the ages of 25-59). The particular sampling approach adopted in this research was Exponential Discriminative Snowball Sampling (Etikan et al., 2016) (see Figure 5.2.); this sampling method is

inexpensive and efficient and allows the researcher to reach a population that are difficult to reach (Basiouka & Potsiou, 2014). In particular, Exponential Discriminative Snowball Sampling was adopted to counter some of the limitations of standard snowball sampling, such as the similarity of the participants' demographic background. More detailed sampling criteria for the study are outlined in **Section 5.8.2**.

**Figure 5.2.** Exponential Discriminative Snowball Sampling.



Sources: Dudovskiy (2016)

## 5.7 Data Analysis Method



Qualitative research provides large volumes of data in non-numerical format; these data need to be organized to identify themes or patterns for further exploration to be able to draw or verify conclusions (Saunders et al., 2015). The raw data deriving from the interviews was examined using template analysis (Brooks et al., 2015); here, signifying a particular style of thematic analysis (Brooks et al., 2015) that falls between content analysis and grounded theory (Easterby-Smith et al., 2015): a preliminary set of codes on sustainable consumption behaviour and religiosity were derived from the literature review; this preliminary set of codes comprised the initial template which was then

applied to the data and developed organically through an iterative coding and re-coding within the following procedure (Brooks et al., 2015):

1. Familiarization with the accounts to be analysed and processed.
2. Preliminary coding. In contrast to grounded analysis, template analysis allows a set of a priori codes that were derived from literature (Easterby-Smith et al., 2015).
3. Clustering of emerging themes. Here the application of the a priori codes admits of patterns of these that seem to recur and give rise to clusters or themes that may also include additional (emergent) codes.
4. Definition of an initial template. Here the key themes deriving from a subset of the data (for example, a handful of the interviews) are clarified and synthesized into a template that is then used to engage with additional data.
5. Application of the template to further cases and modification. This template is applied to fresh data and how well it provides an account of, i.e., captures and represents key phenomena within, these fresh data is assessed. Discrepancies are carefully discussed and reviewed; and the template is modified as necessary; for example, if the new data does not readily 'fit' with the themes defined, a new theme may be identified. Notwithstanding, the focus from this stage forward in the process is on the application and refinement of the template rather than its reconstruction; so, for example, a singular discrepancy would not typically lead to a revision of the template at this stage, but would be noted.
6. Finalization the template. While there is never truly a 'final' version of a template, there comes a point where it is considered sufficient to the project at hand, given the resources available (Brooks et al., 2015).

## 5.8 Research Study



The following sections give a fuller account of the research design for this research.

### 5.8.1 Research Design and Procedure

The study employed a qualitative exploratory approach utilising in-depth semi-structured interviews. In this research, telephone interviews were the most practical and most acceptable technique to collect the data; during the pilot interview, most of the interviewees rejected the use of video calls via Skype to guarantee their privacy. Moreover, it is believed that utilising telephone interviews increased the quality of interviewees' responses, as prior research suggests that interviewees express their opinion and thought in telephone interviews better than in face-to-face interviews (Sturges & Hanrahan, 2004). It is also known that telephone interviews can provide access to harder-to-reach participants (Creswell, 2007), as well as being a cost-effective method for data collection when compared to face-to-face interviews (Miller, 1995). Since the researcher is based in the UK, interviewing participants in the KSA over the phone is beneficial. As stated earlier, this research was conducted with an all-female sample. During the pilot study of this PhD research it became apparent that females were inclined to participate in the project, if they can ensure that their identity is complete anonymous and almost hidden from the research, whilst they were reluctant and rejected participation in the project, if interviews were to take place face-to-face. Although no sensitive issues were asked, the fact that the researcher would have been able to see 'private spaces' (e.g. the living room) was seen as being too intrusive by a majority of participants. As such, telephone interviews insured easy access to them. Limitations of using telephone interviews are that they deprive the researcher from seeing participants' informal, nonverbal communication (social cues) (Opdenakker, 2006; Creswell,

2007). Although the social cues in the form of gestures are unavailable, other social cues such as voice intonation are still available and are enough for conducting a telephone interview without any problems (Mann & Stewart, 2000).

Interviews in this research were conducted in either English or Arabic depending on the interviewee's preference. Any data collection, following King (2005), was preceded by a discussion regarding participant's confidentiality and to secure permission to record and save data. Participant's signed a consent form that was sent before the interview (See Appendix One). All telephone interviews were conducted with interviewees in Riyadh City over the period of four months. During the interview sessions, a notebook and voice recorder were used, with the permission of participants, each interview was recorded, to ensure responses are accurately recorded and saved. Since most, or all, of the interviews were conducted in Arabic, effective note taking is critical, while voice recording will enable the researcher to translate and organize the data in a systematic manner.

### **5.8.2 Research Sample and Study Population**

The sample size relates to the number of units, here participants, employed for the research (Bryman & Bell, 2015). Marshall (1996, p.523) highlights that "an appropriate sample size for qualitative study is one that adequately answers the research question". Sampling, in a qualitative research, is the process of selecting the individuals, units, and settings to be studied during the course of the study (Patton, 2001). The aim is to generate a sample that enables an understanding of the social process of interest (Patton, 2001). The research focused on Riyadh City as the sample city for two reasons. First, Riyadh is the capital city of the Kingdom of Saudi Arabia (KSA) with the largest representation of the population. Second, Riyadh City has the most diverse subcultures in the Kingdom of Saudi Arabia and reflects most of the customs and traditions of different backgrounds (Aina et al., 2008).

Though a non-probability sampling approach was employed, this took the form

of a (exponential) discriminative snowball sampling strategy (Etikan et al., 2016) to promote a diversity within those participants meeting the selection criteria; to facilitate this, Riyadh City was divided into four living districts (North, South, East and West) and a balance sought among these. The criteria for selection were that participants should be female, married, aged 25-59, reside in Riyadh City, and act as the head of the household, i.e., have the primary responsibility for making purchasing decisions. The respondents were selected initially through the researcher's existing social networks, built up during her career as an interior designer in local projects in Riyadh City. A researcher might not know how many participants are needed at the beginning of the study to answer the research questions posed; nevertheless, once no new insights were derived from the interviews, as the emergence of new themes came to a natural end, referred to as data saturation (e.g., Willig, 2001; Bryman & Bell, 2015), no further participants were recruited. A total of 26 female Saudi women between 25-59 years old were recruited for the study.

As previously alluded to, this research focused on an all women sample, which could be recognised as a limitation for this research. As from previous research (Al Dossry, 2012) and confirmed by this research (in the pilot study stage), it is difficult for the opposite sex to gain access to the other gender for research purposes. This PhD research found that the topic at hand was either not an interesting topic for the man to discuss indoor furniture, which meant that they referred this PhD researcher to their wife's, whilst others just did not want to be interviewed by a female and rather have the interview been conducted with a male researcher.

Although the above limitation has to be recognised, this research can justify its sample, as past research has indicated that women have a higher level of sustainable consumption behaviour than men (Khan & Trivedi, 2015; Keleş, 2017). Women hold stronger attitudes towards the environment than men (Jain & Kaur, 2006; Terlau & Hirsch, 2015). And research by Yavas et al., (1994) states that Saudi women are the main influencers in household goods consumption.

The specific age range of 25 to 59 years was chosen for two reasons: Saudi women falling into this age group start to work and retire in the government sector (Public Pension Agency, 2017) allowing them to be financially independent, which suggests that they could make sustainable consumption choices; and many within this age category marry, which enables them to make their own household consumption choices. Women and men in the KSA live at their parents' homes until they get married. Previous research found that females between 30 to 44, who are well-educated, with a high household annual income are more sustainable in their consumption than their male counterparts (e.g. D'Souza et al., 2007; Banyte' et al., 2010), which provides additional justification for the research sample of female Muslims living in the KSA.

To ensure confidentiality and anonymity of participants, a random ID system was used: participants are identified using a number. Various coding cycles have been performed, which allowed patterns to emerge naturally. This implies that patterns of themes could be found across the interviews and sub-themes were developed.

### **5.8.3 Pilot Study**

A pilot study is a small-scale study conducted in preparation for a main study, to ensure that particular methods and ideas will work as expected in practice (Van Teijlingen & Hundley, 2002). Kim (2010, p. 191) mentions the "benefit of conducting a pilot study is that it provides researchers with an opportunity to make adjustments and revisions in the main study". The advantage of conducting a pilot study is to test and ensure that the research approach works effectively (Simon, 2011) and to check issues, such as participant's understanding of the questions (Strydom & Delpont, 2005).

As highlighted in the introduction, this PhD research has changed its focus over its duration, moving from a design focus to a consumer behaviour focus. The pilot study was conducted in three phases, whereby the question pool was carefully reviewed each time to reflect key themes that emerged from the

interviews. The following statements summarise and provide a brief overview of the pilot study results that have changed this PhD research:

- **Methodology:**

- The researcher progressed from Skype interviews, in which the researcher would have been able to see the participants to telephone interviews, due to Saudi women's privacy matter.
- Saudi women did not feel comfortable being on video when answering research questions.
- The pilot study confirmed the choice of sample.

- **Theoretical:**

- The furniture design aspect and potential of co-creating items was rated as unimportant by participants.
- Discussions naturally evolved and turned towards sustainability and current behaviours.
- It has also been confirmed that Saudi women are much more engaged with sustainable behaviour.
- Saudi women make a substantial contribution to, and have an influence upon, families' consumption behaviour, especially in the selection of household goods.
- The pilot study found that Saudi families living room furniture is changed yearly. (This will be further discussed in **Chapter 7**).

#### **5.8.4 Demographic and Consumer Profile**

As noted in many places above, previous research on sustainable consumption has identified that sustainable consumers are mainly females, well-educated, living in a household with a high annual income (e.g. D'Souza et al., 2007; Banyte et al., 2010). Yavas and Babakus (1994) state that Saudi women's employment and educational level has a big impact on the consumption behaviour of a family. This research confirms previous research finding on the sample selection, even though these studies were conducted in different countries than the KSA, they



have represented the same sample criteria as this research. (This will be discussed in **Chapter 6**). Table 5.7. demonstrates that participants are educated with a minimum bachelor's degree, with the majority having middle to high annual income. All participants own their homes with 22 participants owning a villa and 4 an apartment. Table 5.7. presents an overview of the participants demographic characteristics.

**Table 5.7. Profile of Interviewees.**

ID #	Age Group	Occupation	Income	Education Level	Living District	House Type
01	25 - 29	Student	Less than 3000 SR	Bachelor's Degree	East	Villa
02	25 - 29	Student	Less than 3000 SR	Bachelor's Degree	East	Apartment
03	40 - 49	School headmistress	More than 21000SR	Bachelor's Degree	West	Villa
04	30 - 39	House wife	7,000SR - 12,000SR	Bachelor's Degree	North	Apartment
05	30 - 39	House wife	7,000SR - 12,000SR	Master's Degree	North	Villa
06	50 - 59	Doctor	More than 21000SR	Master's Degree	North	Villa
07	50 - 59	Retired Teacher	7,000SR - 12,000SR	Bachelor's Degree	East	Villa
08	50 - 59	Retired headmistress	14,000SR-21,000SR	Bachelor's Degree	East	Villa
09	25 - 29	Lawyer	More than 21000SR	Master's Degree	East	Apartment
10	30 - 39	Dentist	More than 21000SR	Master's Degree	North	Villa
11	30 - 39	Working at human rights commission	7,000SR - 12,000SR	Bachelor's Degree	North	Villa
12	25 - 29	CEO of Rabat Manzel (A Saudi brand)	7,000SR - 12,000SR	Bachelor's Degree	North	Apartment
13	40 - 49	House wife	Less than 3000 SR	High school	North	Villa
14	30 - 39	School Secretary	7,000SR - 12,000SR	Bachelor's Degree	West	Villa
15	40 - 49	University Administrator	7,000SR - 12,000SR	Bachelor's Degree	North	Villa
16	25 - 29	Government employee	7,000SR - 12,000SR	Bachelor's Degree	North	Villa
17	50 - 59	Doctor	More than 21000SR	PhD	West	Villa
18	25 - 29	Lab Technician	3,000SR - 6,000SR	Bachelor's Degree	North	Villa
19	30 - 39	House wife	7,000SR - 12,000SR	Bachelor's Degree	North	Villa
20	25 - 29	ABA Therapist	7,000SR - 12,000SR	Bachelor's Degree	South	Apartment
21	50 - 59	Dentist	14,000SR-21,000SR	PhD	West	Villa
22	30 - 39	Doctor	14,000SR - 21,000SR	Bachelor's Degree	North	Villa
23	30 - 39	Free Lance Designer	14,000SR - 21,000SR	Master's Degree	North	Villa
24	40 - 49	University Administrator	7,000SR - 12,000SR	Bachelor's Degree	South	Villa
25	25 - 29	Lawyer	More than 21000SR	Master's Degree	North	Villa
26	25 - 29	Accountant	7,000SR - 12,000SR	High school	East	Villa

As Table 5.7. summaries, all women participant are head of households whom live in Riyadh City. A full analysis about the Demographic and Consumer Profile will be presented in **Section 6.2**.

### 5.8.5 Interviews

The interviews generated a significant portion of evidence in this research; the reasons being as follows:

- The need for flexibility in discussing the consumption behaviour of the KSA citizens, in order to determine the drivers behind the frequency of domestic soft furniture consumption and to identify the extent to which

sustainability and sustainable practices is a consideration in householder's decision-making processes regarding the purchase and disposal of these goods.

- An interview provides access to a range of experiences. Situations and knowledge are hard to interpret from other forms of evidence, such as documents. Therefore, interviews will be used to represent a wide range of consumer's consumption behaviour. Interviewees include the KSA citizens from different districts in Riyadh city.

#### **Consumers Interview:**

The final interviews were conducted with 26 female heads of household in Riyadh City. This research has centred around in-depth semi-structured interviews, with open-ended questions to generate answers to a fixed range of questions and allow a more in-depth discussion of interviewee's interpretation of the research issues (Rapley, 2004). The semi-structured interview also provides the researcher with the flexibility to adjust the order of the questions according to interviewees' answers to clarify any ambiguities, and thereby gain high-quality information (Bryman, 2016).

#### **Furniture Store Interviews:**

As previously highlighted, this research initially focused on the interaction between consumers and the furniture industry and how broadly speaking furniture can be co-created in a more sustainable manner. Thus, it was anticipated to conduct interviews with representative from top five furniture stores located in Riyadh City. These interviews were going to identify the potential of, and challenges to, sustainable consumption behaviour and will form the base for developing practical recommendations for consumers and policy makers to close the gaps between citizen's current consumption behaviour and more sustainable consumption behaviour in relation to domestic soft furniture consumption in the KSA. However, while conducting the research, and after contacting 20 furniture store representatives in Riyadh City, this stage did not happen due to emerging challenges. First, all the store representatives are non-

Saudi, secondly, they do not want to engage in such a research, and finally they are not willing to contribute or share information regarding their store and furniture products. Therefore, the research will focus on the consumer's interviews, and get furniture store insight through secondary data resources see **Section 5.8.7.**

#### **5.8.6 Interview Topics**

Key interview topics were identified and were used as a checklist for the researcher to ensure the key topics were covered during the interview. Depending on the flow of the discussion with the participants, there was no particular order of topics in terms of when they were discussed. Table 5.8. summarises key topics covered in the interviews and highlight how they link to the overall research aim and objectives. It has to be highlighted here that interviews were conducted either in Arabic or English, depending on the participants' preference. Any interviews that were conducted in Arabic were carefully translated into English and back into Arabic in order to ensure that no meaning was lost in the translation process. Table 5.8. provides a list of possible questions to initiate the discussion or probe interviewees (e.g. Saunders et al., 2009). An example of the probing questions were when participants are asked about 'What does sustainability mean?' as participants had no idea, the researcher then had to provide example and alternative definition for the participants to understand and for the interview to be carried out smoothly.

**Table 5.8.** Interview Topics.

	Topic	Adopted from	Objectives
<b>Demographic</b>	- What is your age?	McDonald & Oats (2006); Bergin-Seers & Mair (2009); Mayeker & Sankaranarayanan (2014)	Theme one, Two, Three and Four
	- What is your occupation?		
	- What is your income per month?		
	- What is your education level?		
	- What is your living district?		
	- What is your house type?		
<b>Defining Sustainability</b>	- Number of occupants excluding employees?	Johnstone & Tan (2015) Young et al. (2010) Johnstone & Tan (2015)	Theme one and Theme two
	- What does sustainability mean to you?		
	- In which context, have you come across green and/or sustainable products?		
	- How far do you feel sustainability is becoming important in Saudi Arabia?		
	- How can you be sustainable in your surrounding environment?		
	- To what product/concept are you sustainable?		
<b>Sustainability &amp; Eco-label</b>	- How easy/difficult, is it?	Young et al. (2010)	Theme two and Theme three
	- Have you ever considered purchasing furniture that are classified as being sustainable? Why (not)?		
	- Show interviewee sustainable labels?		
	- Have you ever seen any of these labels?		
	- Where may you have seen these labels?		
	- What do these labels mean to you?		
<b>Furniture Consumption Pattern</b>	- If these labels were on furniture products, how would you feel about this?	Young et al. (2010)	Theme one
	- Would you purchase them?		
	- When you shop for furniture what are the key aspects you are looking for?		
	- Talk me through your journey of purchasing furniture? (starting from pre-purchase to post purchase)		
	- Where do you normally buy your furniture? Why?		
	- How did you come across this store?		
<b>Buying Process</b>	- Why do you purchase your furniture there?	Yavas & Babakus, (1994); Kozients (1999) Yavas & Babakus (1994)	Theme one
	- Drivers for purchasing your living room furniture? Ex. Moving to a new house, number of children, visitors/family gathering.		
<b>Furniture Re-using, Second Hand and Disposal</b>	- Who chooses/selects the furniture items?	Fiksel (1996); James (1997); Tres (2000); Ljungberg (2003) Handfield (1997); Guiot & Roux (2010) Ekmekçioğlu et al. (2010)	Theme one and Theme two
	- Who pays the furniture items? why?		
	- Did you think of reusing your current furniture?		
	- Have you ever considered purchasing second hand furniture?		
<b>The KSA 2030 Vision</b>	- Why not? Are there any advantages/disadvantages of buying second hand furniture?	Vision2030 (2016) Vision2030 (2016)	Theme Four
	- What did you do with your previous furniture? / Your furniture disposal method?		
	- 2030 vision? Have you heard about the 2030 vision?		
	- Do you know what is the 2030 vision about?		

### 5.8.7 Furniture Store Secondary Data Analysis

As the researcher was not able to get interviews from furniture store representatives as discussed in **Section 5.8.5**.

Using this raw documentary secondary source of data can be important source of data, but when combined with the actual study they can produce much richer data information (Saunders et al., 2009). These secondary data can be included in a qualitative and quantitative data format (Saunders et al., 2009).

An in-depth investigation was conducted by the researcher on all furniture stores located in Riyadh City. Collecting and analysing secondary data from all 295 furniture stores, gives an in-depth overview of the current furniture market. Two main categories were generated by the researcher (Full table – see Appendix Two) online presence and manufacturing location. This supportive information helped in understanding potential barriers for customers wanting to make sustainable furniture purchasing choice, these finding are disused in **Section 6.7. Furniture Stores Findings**.

## 5.9 Ethics



When conducting any research, it is vital to consider potential ethical implications. Saunders et al. (2009) has defined research ethics as the appropriate behaviour of the researcher to conduct a research in a moral and responsible way in relation to the right of those being the subject of the study. Various authors have emphasised on the need to consider ethical consideration based on the research carried out (Saunders et al., 2009; Easterby-Smith et al., 2015). In a social science research ethical issues show “difficult[y] to conduct much research at all without running into ethical arguments” (Coolican, 1992, p. 249). This research has considered a utilitarian framework, which incorporates three main concepts: avoidance of harm, confidentiality, and informed consent

(Flinder, 1992). The University of Manchester ethics form was approved and updated throughout the research process.

### **5.9.1 Avoidance of Harm**

The first concept is avoidance of harm. It has been argued “weighing potential harms against benefits before research is carried out becomes an exercise in creativity” (Cassell, 1982, p. 14). For this research this was not a challenge, as participation in this research project was solely on a voluntary basis. In relation to the researcher’s own personal safety, all interviews were conducted over the phone. The researcher had no physical contact with interviewees, thus there was no risk of physical harm to either the researcher or the participants.

### **5.9.2 Confidentiality**

The second concept is confidentiality, as this allows the research participants remain anonymous. As well as their data are protected from inappropriate and unrestricted access (Easterby-Smith et al., 2015). Even though this PhD research’s main focus is not on any sensitive issue or information it is important to protect those who are participating in the research (Flinders, 1992). To ensure confidentiality and anonymity of this research participants, all participants names were changed to a random ID system: as all participants are then identified by this number. All participants were assured that their interview responses will remain anonymous in accordance with the confidentiality agreement signed by them. Furthermore, as some interviews were conducted in Arabic Language, they were carefully translated into English Language by the researcher as she is fluent in both languages, to ensure safeguarding the meaning of individual passages a translator checked both scripts. This enhances the trust between the interviewer and the interviewees. Participation in this research was in a voluntary basis only, as no financial aid was given.

Data collected were stored in a safe and secure manner. All interview recording was saved on the research Google Drive as well as on an external hard drive and deleted from other devices. To access both storage system a password is

required, that is only known by the researcher. All notes taken by the researcher were digitally copied and saved on the researchers Google Drive as well as on an external hard drive. After this PhD research is complete all interview recordings will be kept for the period of 5 years, and deleted after that, as all participants have been informed in the consent form.

### 5.9.3 Informed Consent

The third concept, informed consent is based on legal requirements (Saunders et al., 2009; Nijhawan et al., 2013). This requires explaining the research in detail to all participants being involved, making sure that they are aware of the full research information and details about the purpose of the research, its, aims and objectives, how data will used and kept. Furthermore, all participation was on a voluntary basis.

Participants have the capacity and ability to give consent and freely given this. Having capacity relates to mental health and legal age; you have the freely given aspect covered with voluntary participation. The researcher had the participants sign a consent form (Detail consent form found in Appendix One) that included a data protection clause stating that the research participant will remain anonymous. All participants were provided with an information sheet, explaining the research as well as how to get in touch with the researcher.

## 5.10 Chapter Summary



This chapter reviewed the research philosophies and different methodological techniques for this research. In terms of research philosophies, social constructionism was the epistemological position adopted to guide the research methodology used for this research. An inductive research approach was adopted for the study, which was exploratory, seeking to develop a rich understanding of the KSA female’s sustainable knowledge and practices in



general and in relation to indoor domestic soft furniture consumption.

# CHAPTER SIX: SUSTAINABLE CONSUMPTION BEHAVIOUR IN THE KSA, ANALYSIS AND RESULTS

## 6.1. Introduction



The following chapter presents the findings of the qualitative study, which explored sustainable consumption behaviour towards indoor domestic soft furniture consumption. The structure of this chapter mirrors, to some extent, the structure of the interviews (see Table 5.8); as the discussion of template analysis and coding iterations, and how the codes ‘developed/emerged organically’ and were used, to inform subsequent interviews. As highlighted previously cognitive dissonance emerges as the dominant theme and helped in the analysis of the collected data.

Prior to exploring the findings of this PhD research, it is vital to introduce two new literature reviews, one on cognitive dissonance and one on the influence of Islam on sustainable behaviour. When analysis the findings these two areas emerged dominantly within the data set and provide an opportunity to explain the findings. As such, it was decided to provide the new set of literature review prior to the findings.

### **Cognitive Dissonance**

The theory of cognitive dissonance was first expounded by Festinger (1962, p. 3); he explained that: “cognitive dissonance can be seen as an antecedent condition which leads to activity oriented towards dissonance reduction”. Cognitive dissonance theory suggests that a person has inner need ensure that their beliefs and behaviours are consistent. When there is inconsistency between attitudes and behaviour something must change to eliminate this dissonance (Festinger, 1962).

The importance and role of cognitive dissonance arose during data analysis. In particular, data highlighted that participants are strongly influenced by their core values and beliefs, which come from Islam, to act in a more sustainable manner. Muslims experience a mediated relationship with God, which implies that God only responds to those who “follow prescribed rituals in order to remove sin” (Miner et al., 2014, p. 91). Islam plays a vital role in the everyday life of a Muslim and informs everyday activities. To gain salvation, Muslims need to obey the words written in the holy Quran, which, owing to the mediated relationship, is carefully adhered to. The need to act in ways that are consistent with Islam led to the emergence of cognitive dissonance as a key theme that both clarifies motives underpinning sustainable behaviour and offers insight into other themes.

Cognitive dissonance, or rather the desire to avoid this and attain ‘cognitive consistency’, implies that Muslims seek inner balance by closing the attitude behaviour gap to accord with their religious belief system (cf. Festinger, 1962). Dissonance connotes a negative stress that emerges when an individual experiences two or more inconsistent ‘cognitions’ (attitudes, behaviours, and/or beliefs) (Hinojosa et al., 2017). The theory of cognitive dissonance is based on three fundamental assumptions: 1) a person is sensitive to inconsistencies, which can emerge between actions and beliefs, for example: in this research sustainable practices, such as the ability to recycle products could be seen as an action, which may be part of religious value systems, but may not be acted upon as infrastructures are not present; 2) if an inconsistency is identified and causes dissonance, attempts are made to reduce this dissonance, actions taken to be able to act upon their belief system; 3) three potential outcomes can be achieved either a change in beliefs, a change in actions, or a change in perceived action. Each of these outcomes can eliminate or even remove dissonance for an individual (Cooper, 2007; Baumeister & Bushman, 2008; Harmon-Jones et al., 2015).

This research found that sustainable consumer behaviour could resolve 'cognitive dissonance', a key contribution that is further discussed in **Chapter 6**.

## **Religion**

Religion has been documented as a universal factor that has a significant influence on people's beliefs, attitudes, values, and behaviours at both individual and societal levels (Schwartz & Huismans, 1995; Inglehart & Baker, 2000; Roccas et al., 2002; Tarakeshwar et al., 2003; Essoo & Dibb, 2004; Mokhlis, 2009). Religion plays an important role in influencing and shaping an individual's behaviour, knowledge, attitudes, values, and beliefs, and within daily living (Worthington et al, 2003; Essoo & Dibb, 2004; Rehman & Shabbir, 2010). For example, religious rules prohibit Muslims and Jews from the consumption of pork, and Hindus from consumption of beef (Poria et al., 2003; Rehman & Shabbir, 2010). This demonstrates how religion has an influence on what consumers believe, their attitudes, and every day life (Rehman & Shabbir, 2010). Kotler (2000) states that religion is part of a culture that shapes an individual's behaviour. According to Poria *et al.* (2003) the effects of religion (Islam, Christianity, and Judaism) on consumer behaviour comes from two main sources. First, explicit and clear guidelines on prohibited and non-prohibited things and actions influence decisions as well as behaviour (Rehman & Shabbir, 2010); for example, haram (forbidden) activities such as consuming alcohol and gambling are clearly mentioned in the holy Quran (Battour et al., 2011). Second, there is a strong influence of religion in shaping culture, behaviour, and values of society. Essoo and Dibb (2004) demonstrated the influence of religion on consumer behaviour by identifying the differences in shopping behaviour between Muslims, Hindus and Catholics. Their research confirms that different religions have different impact on a consumer's consumption behaviour. They have also found that religion has an influence on people's consumption behaviour.

Different religions such as Islam, Christianity, Buddhism and Judaism have different belief systems (Rehman & Shabbir, 2010). Islam is not just a religion, it is a way of life. In other words, Islam guides Muslims in every aspect of their life,

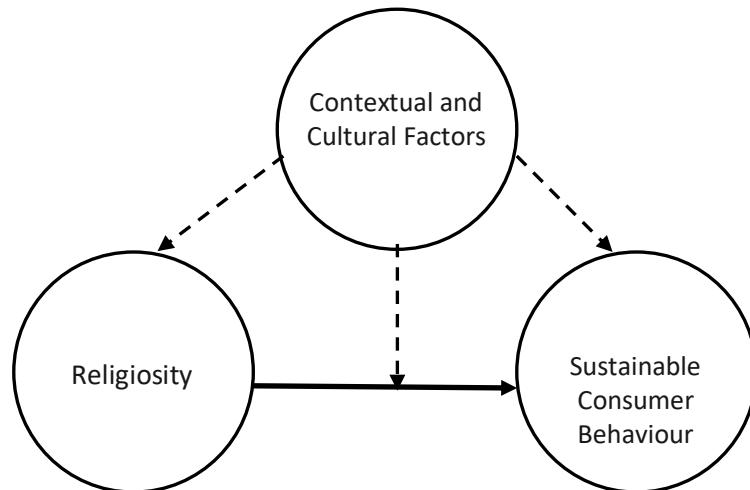
not just in specific acts of worship (Alam & Hisham, 2011). This research focuses on Islam due to Islam being the only religion governing the KSA (Husain & Bunyan, 1997) and the KSA families look to the Islamic paradigm to guide and influence all of their behaviours (Al-Farsy, 1990; Norris & Inglehart, 2012). The research further explores in how far Islam impacts on sustainable behaviour using cognitive dissonance as an underpinning concept to analyse the data.

### **Religiosity and Sustainable Consumption Behaviour**

Religious commitment, often termed as religiosity is defined by Johnson et al. (2001, p. 25) as “the extent to which an individual is committed to the religion he or she professes and its teachings, such that the individual’s attitudes and behaviours reflect this commitment”. McDaniel and Burnett (1990) defined religiosity as a belief in God accompanied by a commitment to follow principles believed to be set by God. The concept of religiosity has been of interest to social scientists for over a century in part because religion appears to influence one’s behaviour, well-being, and life in general (Durkheim, 1912; Poloma & Pendleton, 1990; Woods, Antoni et al., 1999; Ebaugh, 2002; Francis & Kaldor, 2002; Weaver & Agle, 2002). Evidence further suggests that religion has an influence on sustainable consumer behaviour (Hirschman, 1981; Wilkes, Burnett, & Howell, 1986; Delener, 1994; McDaniel & Burnett, 1990; Burroughs & Rindfleisch, 2002; Mokhlis, 2006; Kahle et al., 2016). Mokhlis (2009, p. 78) further found that there is a “causal link between religion and consumer behaviour, both in terms of cognitive and conative behavioural aspects”. Figure 6.1. summarizes previous research on religiosity in the field of sustainable consumer behaviour by showing the presumed effects of religiosity on sustainable consumer behaviour and the possible effects of a consumer’s contextual factors (e.g., country-specific factors, commercial environments) and cultural factors (e.g., religion, ethnic background) (Moschis & Ong, 2011). The impact of religion on consumption behaviour is predominantly associated with restrictions in food and beverages. For example, Muslims and Jews are prohibited from eating pork, Hindus from eating beef, and drinking alcohol is forbidden among Muslims, strict Protestants, and Jews (Deng

et al., 1994; Liu & Yen, 2016). Kolter (2000) states that religion is part of a culture that shapes an individual's behaviour.

**Figure 6.1.** A Conceptual Model of Religiosity Effects on Sustainable Consumer Behaviour.



Source: adapted from Moschis & Ong (2011, p. 9)<sup>8</sup>

Religiosity is an important factor, as it influences an individual cognitively and behaviourally (Alam et al., 2012) this links to the previous **section on 3.2.1.2 Cognitive Dissonance**, and the attitude behaviour gap. Bailey and Sood (1993) examined the effects of religious affiliation on consumer behaviour and found that Muslim consumers were comparatively more impetuous shoppers, but less likely to be informed or risky shoppers. Mokhlis (2009) discovered significant differences in consumer shopping behaviour with highly religious individuals most likely to be concerned with price, i.e., they look for deals, and quality in a product when shopping; and less likely to make impulsive purchase decisions. This aspect is indirectly addressed in this research, as sustainable consumption behaviour implies that consumers need to be aware of sustainable issues and actively search for information. This research has looked into Islam and its

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<sup>8</sup> Note: Solid line: effects of religiosity; dotted lines: possible confounding effects of contextual and cultural factors on religiosity.

impact on sustainable consumption behaviour, within the context of the KSA, as this area is not only under-researched, but also provides an interesting research context, especially as the environment is mentioned explicitly in the Quran; for example, “eat and drink from the provision of Allah, and do not commit abuse on the earth, spreading corruption” (Quran, ND, p.9). This reiterates an early statement made in that Islam is not just a religion, it is a way of life (Alam et al., 2011), devoted to protecting the environment by stating: “devote thyself single-mindedly to the Faith, and thus follow the nature designed by Allah, the nature according to which He has fashioned mankind. There is no altering the creation of Allah” (Quran, ND, p.30, cited in BBC, 2014). This implies that Muslims are seen as guardians, who look after Allah’s creations as “whoever plants a tree and diligently looks after it until it matures, and bears fruit is rewarded” (Hadeeth, cited in BBC, 2014, p.2). The notion of being a guardian within Islam contrasts starkly with other religions, which see humans as having ‘dominion’ over nature and the environment (Mostafa, 2007; Clements et al., 2014), rather than being ‘protectors’. Minton et al. (2015) have highlighted that future research should look into the relationship of religion on sustainable consumption behaviour beyond the two religious groups they have explored in their study (Buddhists and Christians); this gap is addressed in this research by focusing on Islam. The influence of Islamic religion is currently missing from research in sustainability and related behaviours (cf. Doran & Natale, 2011; Minton et al., 2015). Moreover, existing research, whilst instructive, has not explored the sustainable consumption behaviour of female Saudi Muslims, instead focusing on other world religions and sustainable behaviour Table 6.1.

**Table 6.1.** Word Religions and Sustainable Behaviour.

Religion	Area of Investigation	Influencing factor	Country	Method used	Reference
Buddhists and Christians	Link between religion and sustainable behaviours	More religious people (Buddhists) are more likely to behave sustainably	South Korean and US	Survey	Minton et al., (2015)
Muslims	Influence of religion on the purchase of halal labelled non-food products	Religiosity is significantly related to intention to purchase Halal labelled non-food products	Malaysia	Survey	Ibrahim & Ismail (2015)
Muslims	Religious beliefs and boycotting international Danish brands	Strong relationship and a clear link between religiosity in Arabic/Islamic collectivist cultures and consumer behaviour	Saudi Arabia	Interview & case study	Al-Hyari et al., (2012)
Jews, Hindus, Buddhists, and Christians.	Relationship between religion and fair-trade consumption	Religious beliefs as a criterion in consumption behaviour is what linked religion to fair trade consumption	Online	Survey	Doran & Natale (2011)
Muslims, Hindus and Hindus	Effects of religiosity on shopping orientation	Three shopping orientation factors, namely quality conscious, impulsive shopping and price conscious were consistently related to religiosity	Malaysia	Survey	Mokhlis (2006)
Hindus, Muslims and Roman Catholics	Influence of religion on consumer television choice	Consumers different level of religiosity have a noticeable difference in shopping behaviour	Island of Mauritius	Survey	Essoo & Dibb (2004)

Table 6.1. further highlights that the majority of research conducted is quantitative in nature and seeks to generalise, with only one study focusing on boycotting behaviour in the KSA being qualitative. In order to better understand the underlying factors of Islam and sustainable consumption this research is qualitative in nature, which is further justified in the methodology chapter (**Chapter 5**). This research focuses only on Islam, as it is the sole religion governing the KSA (Husain & Bunyan, 1997) and Saudi families look to the Islamic



paradigm to guide and inform all of their behaviours (Al-Farsy, 1990; Norris & Inglehart, 2012). This research will further explore how far Islam impacts on sustainable behaviour using cognitive dissonance as an underpinning concept to analyse our data.

There is currently a lack of research on religion and sustainable consumption/behaviour, with only more recently journals, such as the *International Journal of Consumer Studies* calling for more research to be conducted on the area. Currently research seems to be almost inconclusive on whether there is a link between religion and sustainable behaviour and how strong it is. Religion, whether working through taboos and obligation or through its influence on the culture and society, is known to affect the behaviour of consumers (Mokhlis, 2006). Looking into world religion and their relationship to sustainable behaviour, as highlighted in Table 6.1 there is significant influence between religion and sustainable behaviour (Essoo & Dibbs, 2004; Minton et al., 2015). The link between them varies depending on a number of factors such as the specific religion group, country, product consumed, or service used.

## 6.2. Demographic and Consumer Profile



In order to gain a better understanding of who participated in this PhD research, Table 5.7 (previously presented in **Chapter 5**) provides an overview of who the participants are, what their occupation is, and the highest education level achieved.

**Table 5.7.** Profile of Interviewees.

ID #	Age Group	Occupation	Income	Education Level	Living District	House Type
01	25 - 29	Student	Less than 3000 SR	Bachelor's Degree	East	Villa
02	25 - 29	Student	Less than 3000 SR	Bachelor's Degree	East	Apartment
03	40 - 49	School headmistress	More than 21000SR	Bachelor's Degree	West	Villa
04	30 - 39	House wife	7,000SR - 12,000SR	Bachelor's Degree	North	Apartment
05	30 - 39	House wife	7,000SR - 12,000SR	Master's Degree	North	Villa
06	50 - 59	Doctor	More than 21000SR	Master's Degree	North	Villa
07	50 - 59	Retired Teacher	7,000SR - 12,000SR	Bachelor's Degree	East	Villa
08	50 - 59	Retired headmistress	14,000SR-21,000SR	Bachelor's Degree	East	Villa
09	25 - 29	Lawyer	More than 21000SR	Master's Degree	East	Apartment
10	30 - 39	Dentist	More than 21000SR	Master's Degree	North	Villa
11	30 - 39	Working at human rights commission	7,000SR - 12,000SR	Bachelor's Degree	North	Villa
12	25 - 29	CEO of Rabat Manzel (A Saudi brand)	7,000SR - 12,000SR	Bachelor's Degree	North	Apartment
13	40 - 49	House wife	Less than 3000 SR	High school	North	Villa
14	30 - 39	School Secretary	7,000SR - 12,000SR	Bachelor's Degree	West	Villa
15	40 - 49	University Administrator	7,000SR - 12,000SR	Bachelor's Degree	North	Villa
16	25 - 29	Government employee	7,000SR - 12,000SR	Bachelor's Degree	North	Villa
17	50 - 59	Doctor	More than 21000SR	PhD	West	Villa
18	25 - 29	Lab Technician	3,000SR - 6,000SR	Bachelor's Degree	North	Villa
19	30 - 39	House wife	7,000SR - 12,000SR	Bachelor's Degree	North	Villa
20	25 - 29	ABA Therapist	7,000SR - 12,000SR	Bachelor's Degree	South	Apartment
21	50 - 59	Dentist	14,000SR-21,000SR	PhD	West	Villa
22	30 - 39	Doctor	14,000SR - 21,000SR	Bachelor's Degree	North	Villa
23	30 - 39	Free Lance Designer	14,000SR - 21,000SR	Master's Degree	North	Villa
24	40 - 49	University Administrator	7,000SR - 12,000SR	Bachelor's Degree	South	Villa
25	25 - 29	Lawyer	More than 21000SR	Master's Degree	North	Villa
26	25 - 29	Accountant	7,000SR - 12,000SR	High school	East	Villa

Further key aspects that need to be highlighted are:

The research sample comprises 26 participants, with 14 participants residing in the North District, this means that more than half of the sample in this PhD research is from the North District, with only two of the participants residing in the South District. Thus, while this research uses exponential discriminative snowball sampling diversified the sample, there is still an inherent bias. But this could also confirm that the North District is the largest, oldest and most developed living District in Riyadh City (see section 2.2.1.2) (Riyadh Municipality, 2015). 6 of the participants are from the East District, which is the second largest district in Riyadh City. Although not all living districts are equally presented in this PhD research, would be expected within a quantitative piece of work, all four living districts in Riyadh City have been captured and, in a way, reflect the difference in the living district size.

It is also interesting to note that there are four housewives, all of whom reside(d) in the North District.

This research confirms that age, education level and income have a link to sustainable behaviour (Terlau & Hirsch, 2015; Keleş, 2017). As more than half of the participants are between 30 and 59. In this research 24 participants have a minimum of a bachelor's degree, with three of the participants (students/housewife) having an income of less than 3000SR. This allows to further explore an earlier remark made in the literature review (UN, 2013).

### 6.3. Definition of Sustainability



A number of sustainability questions were asked to understand participants' general knowledge and understanding of the sustainability concept. First participants were asked to define the Arabic word 'Estidamh' (meaning: sustainability), some participants recognized the term right away and were able

to define it. The following statements illustrate participants' definition of the term 'Estidamh' (sustainability):

*Al estidamh means that something would live with me for a longer period of time, it is similar to aldawam<sup>9</sup>, right so it will live with me. [P9]*

*...Keeping the product for a really long time. [P5]*

*Meaning something would stay with you for as long as you live... [P6]*

Even though participants were able to give a definition for 'Estidamh', they were not able to elaborate or provide examples of how they can be sustainable in their environment. After providing a few examples, some participants were able to give their own examples of certain sustainable behaviours they perform, as illustrated in the following statements:

*I take all the leftover food and send it to my family's farm. [P19]*

*I would reuse my jam or honey jars to store other products such as grains. [P25]*

*I use my own coffee travel glass mug instead of using stores paper cups. [P26]*

Furthermore, some Arabic words are self-explanatory as the word 'Estidamh' means the ability to maintain something for a very long period of time. And this could be how participants were able to define 'Estidamh' (sustainability) without understanding the parameters of what the concept holds.

Interviews were conducted in either Arabic or English language, depending on the interviewees preference. In order to get better scope of participants' knowledge and understanding of sustainability, all interviewees were asked to define sustainability in English. Only 2 out of the 26 participants actually knew the meaning of sustainability, as they have defined it:

*Sustainability is to sustain something is to preserve the resources, to have it for longer. [P3]*

*Keeping things, not throwing them away, reusing them in a different way. Recycling. [P10]*

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<sup>9</sup> Aldawam means something that would last forever.

However, some participants were unaware of the Arabic and the English term/definition of sustainability, as the following statements illustrates:

*I have never heard of both the Arabic nor the English word. [P18]*

*I don't know it in Arabic nor in English [...] I might have done or came across different aspects of the terms. But never have I come across the term itself. [P4]*

*Yes, I feel I heard of it before is it in the psychology field? [P11]*

Even though some participant were able to provide a definition to the word 'Estidamh' (sustainability), the majority of participants were unaware of what the phrase sustainability meant in both Arabic and English regardless of the discipline or context. Although participants were unable to provide definitions and explanations for 'sustainability' they did act sustainably, through recycling practices – which is explored in the following **Section 6.3.2**. A noteworthy remark that can be made here is however, that consumers do not always link their actions to being sustainable, which indicates that they may be sustainable, yet do not self-proclaim to be. That said, the population's lack of understanding in relation to the sustainability phrase, could be challenging to the 2030 Vision. As the country's 2030 Vision is built on the assumption that the population has an understanding of the sustainability phrase. Thus, rather than just simply exploring how sustainability and/or 'Estidamh' are defined, it is vital to investigate whether the participants act upon sustainability principles, which is explored in the next section.

Furthermore, the 2030 Vision assess sustainability through the lenses of environmental, social and economic sustainability, and translates the term sustainability to the Arabic term 'Estidamh' throughout the entire agenda. In order to achieve the goal of having a sustainable country by 2030, the 2030 Vision needs to set parameters in educating the population, making them aware of what 'Estidamh' (sustainability) means across the variety of discipline in order for them to act on it.

### 6.3.1. Sustainable Behaviour

Participants were asked if they consume or behave sustainably in their everyday life. Even though participants were unaware of what the term sustainability meant, after providing some probing questions, such as exploring everyday activities, for example 'what do you look you look out for when shopping?' or 'what do you do with products that you no longer use?', participants were able to further engage in the interview discussions. After the probing questions were asked, the research indicated that the examples given by the participants can be classified as 'sustainable', two common behaviours have been identified by participants, organic product consumption and recycling papers; this will be explored and discussed in the sections below.

#### 6.3.1.1 Organic Product Consumption

Data suggest that participants are increasingly more aware of sustainable products (e.g. organic food, organic products, Fairtrade coffee) and actively seek to consume these as the following statements highlight:

*When I shop in the supermarket, I choose organic food. [P2]*

*[...] I buy organic products; and organic food. So, I can mainly say that I face or use organic products in my kitchen. [P5]*

*[...] I buy organic food, Fairtrade coffee and organic products. [P12]*

*Buying organic food. [P20]*

*From living abroad, I got into buying organic food and cleaning products, but they are not easily found in Riyadh. [P23]*

*I buy organic food and cleaning products. It's hard to find them in the market right now, but once I see them I stock up on them. [P25]*

Interviewees insist that grocery stores in Riyadh City provide dedicated sections of organic food and products, thereby providing consumers with a choice to either purchase organic products or not. P2 insists "there are also stand-alone shops that only sell organic food from local producers and the products vary from fresh goods to deserts". P5 mentions that she buys organic food and only uses organic products in the kitchen, with P20 and P21 agreeing that buying organic

food is good for their own health and that of their families. P12 embraced sustainable consumption as she mentions: *“I only buy organic food, Fairtrade coffee, and organic products”*. Findings highlight that the interviewees actively look for grocery stores that offer sections with organic food. This suggests an increased awareness among these women in terms of understanding the difference between organic and non-organic products, as well as associating these with health benefits, well-being and environmental responsibility. As participant 11 highlighted:

*After a lot of illness and pollution arising a lot of people are going towards organic products. But not a lot of people are going towards it just because it is expensive. Some people... her life style is healthy she goes to the gym, so she tries to eat healthy such eats organic food. Some people have illness such a person whom I know she has MS. So, she has changed her life style and eating habit to organic food because of her illness.*

The findings describe the general importance of sustainability (in terms of organic food products), as well as illustrating a link between religion and sustainable purchases, in relation to consumers' consumption of organic food products. Although not explicitly stated, interviewees' religious beliefs and value system ensures that they are acting in the best interest of their families and themselves, whilst at the same time looking after God's environment. This underlines that Islam fosters sustainable behaviour: consuming organic products contributes to looking after the environment and respecting God's resources. As mentioned in the Quran *“eat and drink from the provision of Allah, and do not commit abuse on the earth, spreading corruption”* (Quran, ND, p. 9).

Looking at the sample, it is interesting to note that no matter which district the individuals are currently residing in, whether it is the North, the East, the South or the West, all highlight that there is increased availability of organic food and that they are actively seeking to purchase more organic/sustainable products due to health benefits. It is noteworthy to highlight this aspect, as this also indicates that no matter what the income, the educational background, or the geographic location of the participant is, they all seek organic options. This is an aspect that will be returned to in the discussion section.

### 6.3.1.2 Recycling Paper

Unlike the previous **Section 6.3.2.1** where consumption can only implicitly be linked to religion, in this section it is explicitly linked to religion. The findings in this section describe the impact of religion on product recycling. Several interviewees mentioned recycling paper, specifically newspapers as they all have the name of God on them. It is regarded as disrespectful in Islam to throw away paper that has the name of Allah (God) on it, or the Quran (Islamic holy book), or hadeeths - a collection of sayings from prophet Muhammed with accounts of his daily practice, that constitutes a major source of guidance for Muslims in addition to the Quran - of the Messenger of Allah prophet Mohammed (blessings and peace of Allah be upon him) (Bin Baaz, 2008). To prevent any disrespect, individuals within some communities have organised bins for recycling paper, located next to the local Mosque. It is interesting to note that not all districts appear to have these recycling bins, as it is a community effort initiated by individuals living in the same area; it is noteworthy that only participants living within the Northern and Eastern districts of Riyadh City mentioned these containers. As detailed in **Chapter 2**, the Northern living district is the oldest residential district in Riyadh City, which also has the greatest number of residents, followed by the Eastern living district. It is suggested that there is a link between religion and sustainable consumption, as the religious values of individuals has led to members in the community to organise these recycling bins as highlighted by P26: *Some living districts in Riyadh city have big containers located by the mosque where you can recycle paper and clothes*. It is noteworthy to highlight that although participants insisted they bring papers to the recycling bins, they did not link this to sustainable behaviour, but are rather driven by religious factors as P4 stated: *papers or books stuff that had GOD's name instead of throwing them out you put them in this container*. People living in the North and East districts are characterised as religious and committed to their belief system.



In order to understand these findings and interpret them, it was vital to draw on a new stream of literature that focuses on *cognitive dissonance*. Cognitive dissonance theory suggests that a person has inner needs that ensures that their beliefs and behaviours are consistent. When there is inconsistency between attitudes and behaviour something must change to eliminate this dissonance (Festinger, 1962). This is further highlighted in an additional literature review, which was added to the beginning of this chapter.

In linking the previously mention findings to cognitive dissonance it can be implied that the magnitude of dissonance, or the level of psychological stress exerted on individuals (Festinger, 1957), deriving from the need to recycle papers with God's name on and the opportunity to do so, will be much higher in these districts. This suggests that recycling bins in these districts were introduced in order to give individuals an opportunity to reduce their dissonance and gain harmony. This is further supported by the interview data, as it was highlighted that these recycling bins are part of the communities' effort and not sponsored or supported by the government. With Muslims praying five times a day, the recycling bins have been placed in a prominent position right next to the mosque, which guarantees high visibility and thus, ensures that individuals cannot overlook these facilities and reduce their dissonance by actively recycling paper. Interviewees highlight that the convenient location of these recycling bins make them utilise these facilities:

*[...] papers or books stuff that had GOD's name instead of throwing them out you put them in this container. [P4]*

*[...] paper container by the mosque to collect recyclable paper. [P6]*

*[...] some neighbourhoods have containers by the mosque that you can recycle your paper. [P9]*

*I regularly recycle newspapers, in the bin next to the mosque. [P13]*

*[...] there is like a big container near the mosque to recycle the paper. [P16]*

This indicates the community has created an infrastructure that allows reducing their members' dissonance by providing recycling facilities in a visible place that is conveniently located and visited regularly.

Muslim individuals' concern regarding the disposal of any document containing God's name is not only associated with the Islamic faith, but also reflects Muslims' behaving in a responsible and considerate way in relation to their communities and environment. Awareness of environmental issues does not typically motivate people to commit to more sustainable behaviours (e.g. Pickett-Baker & Ozaki, 2008; Banyte et al., 2010). Yet, this research found that Muslims have indeed changed to a sustainable behaviour in their lives when it can contribute to saving God's earth resources and this derives directly from their Islamic values and beliefs, as P4 highlighted: *because these documents have the name of GOD on them 'haram' I throw them just like that*. This provides a novel contribution of this research, as the research found that religion is affecting an individual's intention to be more sustainable, which they need to act upon and translate it into behaviour.

Other participants claimed a willingness to recycle, if the city or the government provided bins/facilities. P10 separates and collects paper, as papers have the name of God in them; however, the absence of a governmental organisation where she can send the paper means that her efforts to recycle is wasted and she feels frustrated. P2 states *"I started dividing my bin, into recycling and non-recycling items as well as having a separate bin for the baby's diapers. Unfortunately, in the end they all go to one bin"*.

An interesting finding here is that only participants living in the North and the East district mentioned recycling bins, which, as already alluded to could be due to these two districts being the oldest ones and generally seen as being more traditional. It is further interesting to point out that participant 10, who is residing in the North is either not aware of bins provided close to the mosque, or that her mosque does not have these facilities. Individuals in the community initiate recycling bins, as such there is a likelihood that P10's mosque may not have one. The frustration that is expressed by both P10 and P2 further highlights the emergence of cognitive dissonance. This further highlight that although there

is an intention among consumers to commit to sustainable behaviour, follow through is not always possible as facilities are lacking.

### **6.3.2. Sustainability and Riyadh City, KSA**

Since the study is conducted in Riyadh City, KSA it is important to see how sustainable behaviour is emerging within Riyadh City and more generally the KSA. Williams and Dair (2007) argue that without changes in an individual's built environment sustainable consumption behaviour cannot take place. To persuade individuals to behave sustainably is not easy, as sustainable consumption usually benefits society in general rather than a consumer as an individual (Kronrod et al., 2012). Participants commented on this, by stating that it is important to behave sustainably, but the Saudi population is unaware of sustainability. This is confirmed by participants:

*...but not a lot of people have understood and broaden the idea. Not everybody in the country knows about sustainability. Social media and people who travel abroad, are the ways of how people are being introduced into the concept of sustainability. Even in school it is still not very common for a child to understand such a concept because it is not very much taught in schools. [P8]*

*Slowly not really noticeable, there isn't that much awareness [...]. [P20]*

*I feel there isn't that much knowledge. Then again there might be, but I don't know about it. But within my community I don't see it. I feel there is lack of knowledge that is why we don't see it. [P22]*

In addition, participants noted that there is a lack of government support in regard to helping the population behave sustainably.

*It's difficult because the government doesn't provide any recycling services. [P14]*

*[...] it is very difficult. Because there is no support from anybody even the government to practice such a thing. [P8]*

It is interesting to note that participants from all four districts believe that there is not a lot of governmental support available to act more sustainably, whilst furthermore highlighting that a majority of the population is unaware of what sustainability is. A question that emerges here is how individuals know that the population is unaware of sustainability and sustainable practices, as the majority

of research participants did not fully understand what sustainable practices entail. As the following statements highlight:

*I have never heard of this word or concept before.* [P13]

*I don't know what they mean [...]* [P22]

Moreover, whilst participants in the North and East have facilities that allow them to recycle paper, these facilities seem to be centred around certain areas within these districts, and thus, not accessible to all people. There also seems to be a lack of awareness in terms of community initiatives, as individuals participating in this research project did not seem to know that some communities have recycling facilities, whilst others do not.

In linking this to the 2030 vision, the country has an opportunity to foster already existing practices of consumers' sustainable behaviour and enhance them further. Yet further improvements need to be made in terms of sustainable awareness and infrastructure improvement. For example: waste management, awareness-raising campaigns, payment for environmental services and ease of access to recycle waste bins.

#### 6.4. Furniture Shopping Behaviour



To provide further background, in the KSA the living room plays a key part in the household, as it is *the* room in which everyday life is lived, conversations are held, and families come together as detailed in Chapter 4. Seating arrangements consist of large sofas that can accommodate an average of 8 people, thus, it may not be surprising that purchasing furniture for this room is of great importance. A number of furniture shopping behaviour questions were asked, aiming to explore whether Saudi consumer furniture shopping behaviour is sustainable or not. First participants were asked to describe their furniture shopping process starting from pre-purchase to post purchase behaviour. All 26 participants stated

that they never buy a piece of furniture without doing research first; either online, by browsing different websites or social media accounts for inspiration, or by walking into a physical store. P18 highlights:

*[...] I have to go to more than one furniture store, maybe sometimes I search online look at Instagram accounts I go through the pictures, if I like any then I would go to the store to see it live, if it worked for me then I will ask about the price, if the price is good then I would get it, if not then I will look for something within my budget that works for the space I'm working with.*

Participants remarked that while the actual furniture buying process is lengthy, by taking great care and carefully making the purchase decision they can eliminate waste and keep their furniture for a long time. As the following statements highlight:

*[...] I go around shops to compare items. [P11]*

*[...] we determine the places we want to buy the furniture for in the house, then what are the possible stores we need to check. Then we go and check all of them like literally all of them, then we make a decision which ones we like, we buy that [...] [P3]*

*I compare prices between different stores, and see what is in my budget. [P26]*

*First of all, I have to go to more than one furniture store, maybe sometimes I search online look at Instagram accounts I go through the pictures, if I like any then I would go to the store to see it live [...] [P18]*

The finding is not supportive of Assad's (2008) finding, stating that the KSA is a consumer society, (e.g. due to oil prices booming there was an increase in national income and absence of VAT) as this is not the case anymore, currently there is no increase in national income due to decrease in oil prices and all GCC countries have agreed on introducing VAT on January 2018 (PwC, 2016; MOF, 2018). As the previous participants statement, it is clearly shown that Saudi's are much more aware of their consumption behaviour. Purchasing furniture is a long process that is carefully considered and requires a lot of research on the consumer side.

Furthermore, participants linked their furniture purchase and disposal behaviour to religion, highlighting that making these careful decisions would eliminate

waste. In Islam it is prohibited to waste goods. P14 mentions how it is “Haram” (taboo) to waste:

*Me personally I have to go around the shops [...] it will take me weeks to look around, I'm not the type of person if I found something I would buy it. I want to buy it and keep it for a longer period of time. “Haram” to waste products.*

Muslims are told by God not to waste. As Allah (God) says in the Quran “*certainly He (Allah) likes not Al-Musrifun (those who waste by extravagance*” (Quran, ND, p. 154). For individuals to think about their waste/disposal process is linked to religious factors. Even though waste is an environmental issue, participants are not thinking of these environmental perspectives of throwing away their furniture. They are linking their behaviour of elimination of waste as an act of being a good Muslim in following God’s instruction.

When it came to asking participants, who does the furniture selection, it was found that 23 years later from Yavas et al. (1994) study conducted on Saudi’s, women still dominated when it came to furniture selection and decision-making. Even though, all women participants come from various levels of education, they have all dominated the decision-making process. This supports research stating that education and employment has given women the power in making household decision-making (Yavas et al., 1994; Sager, 2004; Al-Khateeb, 2007). As this was highlighted in the following participants quotes:

*It has always been me. [P2]*

*Me. Of course. [P8]*

*I always make the decision of what furniture we buy. [P15]*

*It would be mainly me. [P23]*

*I'm who decides to change and choose what I like to see in the living room.  
[P26]*

An interesting observation here is that the quotes all come from females residing either in the North or the East district of Riyadh City, which are the oldest and more religious parts of the city. Moreover, the women are highly educated, with all having at least a bachelor’s degree or a master’s degree. This finding could be seen as unexpected, seeing as these living districts could be described as more

'conservative', as religion and religious beliefs are more heavily engrained within these two living districts.

Even though women dominated in the concept of furniture decision-making process, they still relate their consumption behaviour to religion without noticing (see Alnesabory, 1997, p.550). As it has been clearly stated in the Quran "Men are in charge of women by [right of] what Allah has given one over the other and what they spend [for maintenance] from their wealth..." (ND, p.84). As the majority of participants have their husbands pay for the furniture. The following section will elaborate on. When asking participants who pays for the furniture item. The majority agreed that the husband pay for the furniture.

*Definitely him (husband). He is the person who deals with the budget and money of the family. [P2]*

*Of course, him (husband). Why? Because I'm a house wife. [P5]*

*Him (husband). Because it is his job. I would buy accessories, but he should buy the bulks. [P10]*

*My husband. He is spouse to pay for these things. [P12]*

*My husband. Why? Because he is the provider for the family. [P18]*

*My husband. He has the income. [P21]*

However, only two participants stated that they help their husband depending on their household income.

*Sometimes me sometimes him depending on who has the money at the time we want to buy the furniture. [P14]*

*Most of the time him, but maybe sometimes I help. [P24]*

These two quotes further highlight an interesting insight in that participants 2, 5, 10, 12, 18, and 21 highlights that their husbands are paying for furniture purchases, with the majority of these respondents residing either in the North or the East district, reiterating a more 'traditional' image of who is providing for the family. Respondents P14 and P24 on the other hand, who highlighted they share the financial burden, are from the West and the South districts. Although these findings cannot be generalised, they are interesting and could provide an area of future research. These finding highlight how religion has an impact on the

different gender consumption behaviour, whilst at the same time it highlights that change is coming. As in religion in Islam in specific, consumption is gendered (male) behaviour. In Islam a man should always provide for his family, and since this is a religious aspect he is rewarded good deed for it. As this is clearly stated in the Quran (ND, p.559) Suraht At Talaq, various 7: “Let a man of wealth spend from his wealth, and he whose provision is restricted – let him spend from what Allah has given him. Allah does not charge a soul except [according to] what He has given it. Allah will bring about, after hardship, ease”.

Even though women are educated, and they are active members in society as well as have their own income they are not the primary providers for a family. In relation to who pays for the furniture product, participants took the religious aspect in that a man should always provide for his family. Meanwhile, a man/husband has many responsibilities towards his family. And when it comes to Islamic culture they are more demanding. The only provider in Islam is considered to be the husband, as the wife has no responsibilities to provide for the family. The Prophet Mohammed peace and blessings be upon him, said: “Man is the guardian of his family and every guardian has responsibilities towards those under his guardianship” (Alnesabory, 1997, p.550).

#### **6.4.1. Second Hand Furniture**

The findings describe how the Saudi population is against consuming second hand furniture, and this has been evidently stated by all 26 participants:

*I haven't honestly thought about purchasing second hand furniture. Because it will not be clean. [P11]*

*Honestly, I never thought of buying second hand furniture. [P19]*

The concept of buying used furniture has not been part of Saudi Arabian culture, which is further highlighted by the lack of physical second hand stores or online shops. Although a limited amount of second hand furniture stores do exist, P13 highlights that they are usually only used by expats, who come to Riyadh City to work for a limited amount of time and do not want to spend a lot of money on furniture or vice versa, when Saudi residents become expats. However, within



the Saudi culture, purchasing second hand furniture is not very common, an explanation could be that it is associated with lower income and health and safety issues. However, while used furniture is not acceptable, consumers in the KSA accept the concept of second hand cars. This could be proven by the endless number of websites, such as sooq, dubizzle, souq dubaimoon, and other social media platforms all existing to serve the purpose of buying and selling second hand cars and their utilities.

A slightly contradicting finding however is the fact that participants were willing to accept second hand furniture, if they are classified as being antique.

*[...] I would buy second hand furniture if it was antiques. [P5]*

*[...] like antiques such as lighting or carpets. [P12]*

When participants are asked for the reason of not purchasing second hand furniture and whether there are any disadvantages or advantages to such furniture. It can be clearly interpreted from the findings that interviewees are not consuming second hand furniture due to health and safety issues, as interviewees stated:

*It's not a matter of advantages or disadvantages. I'm always afraid of health aspect of it. I don't know how the previous owners used their furniture. So, I don't like to bring these furniture to my home. [P21]*

*I used to buy second hand furniture when I lived in the United States but never in Saudi Arabia. Why not? I don't know anything regarding these items there are no certification associated with them there could be anything wrong with them, I need to know that, so my family don't have to face any health problems. [P17]*

Linking to the 2030 Vision, the government can set and enforce health and safety rules and regulations for all disposed furniture to second hand stores or charity organisation. As second hand furniture stores can only accept any domestic upholstered furniture and furnishing items to be sold, that are not only in a good clean condition with no rips, tears or stains, but also that meet the government safety standards. For example: in the UK in order to donate any upholstered furniture and furnishing items, they need to meet Furniture and Furnishings (Fire Safety) Regulations 1988/1989, 1993 and 2010 (Act, 1988). A suggestion made by this research would be to display labelling for products covered by specific

regulations, as well as provide suppliers' details, as P23 confirms: *No, I haven't seen any logos or labels on furniture products in Saudi Arabia.* Similar to the food industry, this could raise awareness and these labels could become more mainstream, meaning that consumers become more familiar with them and thus, may be inclined to actively seek out these furniture. This implies from consumers perspective they will be more aware of their furniture and furnishing product, have an easy and safe furniture recycling and disposal process. From the government prospective reduce the impact of furniture and furnishing waste on the environment.

#### **6.4.2. Furniture Disposal**

The finding describes the interviewees' process of furniture disposal and how it is linked to religion. While a few participants stated that they might re-use their furniture by re-upholstering it or changing its location around the house. As the following statements clarify:

*I would relocate it around the house. But once I'm bored I would give it to a charity organisation.* [P13]

*[...] by re-upholstering it. If the wood is still good and the shape I still like, and the sponge is still in contact and would be good to use again then yes, I would re-upholster it and reuse it. If it was damaged, then no I would just get rid of it.* [P14]

*Yes, I have done it once before and will never do it. I reupholstered my furniture, but it wasn't a good experience, maybe because my selection of fabric was not good. The fabric on its own is nice, but when it was reupholstered on the furniture it didn't look nice [...] I gave it to people who needed furniture.* [P21]

Other participant felt that once they are board of their furniture they would dispose of it.

*To be honestly I have not thought of re-using the furniture that I have or not, once I'm bored I get rid of it [...].* [P4]

*[...] We never re-upholster furniture whenever it we are done with it we get rid of it [...].* [P22]

*Once the whole family gets board of the furniture we give it to charity.* [P17]

Participant confirmed that they would dispose their furniture by giving it to

charity organisation or to poor people. As the following statements highlight:

*To charity organization. So, they would give it to people who need furniture.* [P2]

*I gave it to charity. These charity organizations that take the furniture from you clean it and give it to poor people.* [P8]

*[...] There is a lady who looks after orphan and poor people. So, either through someone or a charity organization.* [P9]

*My mom knows people whom are in need.* [P18]

*I gave it to charity.* [P20]

*But if I research that point of wanting to give away my furniture, their charity organization that take the furniture.* [P21]

This disposal pattern of participants, by giving their furniture to charity is clearly linked to Islamic values. Giving to charity is one of the five pillars of Islam and among its most important teaching. Muslims are required to give a small percentage of their wealth to charity every year, but charity does not always take monetary form. In fact, any good deed done for another person is an act of charity. The Messenger of Allah, Prophet Mohammed peace and blessings be upon him, said: Every good deed is charity. Verily, it is a good deed to meet your brother with a smiling face, and to pour what is left from your bucket into the vessel of your brother (At-Tirmidhi, 1970). Only one participant stated the link between the disposal behaviour and the religious aspect, as she stated:

*I gave it to charity. Sadaqah.* [P4]

This may not be surprising, seeing as this participant is from the North district, which is seen to be more religious and traditional. Sadaqah or Sadaka (in Arabic: صدقة) is an Arabic word meaning *charity*. And in the modern context has come to signify *voluntary charity*. Sadaqah is an act in which a person provides a voluntary offering, for example: help, money or goods to those who are in need (Ibrahim & Sherif, 2008). Linking this to cognitive dissonance it can be noted that individuals, who have a strong religious belief and faith, look for charity organisation to give their furniture to, instead of throwing them away, as this enables them to find emotional relief. This is further supported seeing as the majority of participants residing in the North district highlighted they give their

furniture away to charity. Dissonance is reduced by being able to dispose unwanted furniture items, whilst at the same time they have done a good religious deed.

### 6.4.3. Eco-labels

To gain deeper insights into participants' knowledge and awareness of eco-labels presented in the furniture industry. First, participants were presented with ten eco-labels used in the furniture, textile and food industry (can be found in Appendix Three). The research has gone through a variety of eco-label websites and picked the ten most popular labels within three industries, which are furniture, fashion and food. Only 4 out of the 26 participants have seen some of the labels before. The labels that were recognised by P2, P3, P8, P12, P22 are the NSF (National Science Foundation), the FSC (Forest Stewardship Council), Cradle to Cradle and Fairtrade. When asked where they have seen them only two participants answered stating:

*The FSC logo, I have seen it in water bottles. [P8]*

*I have seen Fairtrade and Cradle to Cradle in the grocery store. [P12]*

The findings indicate that participants are only aware of eco-labels that were used in the food industry, which may not be surprising seeing as a majority of consumers indicated that they are actively looking for organic and/or more sustainable food options. As indicated in **Chapter 4** eco-labels highlight that a product is more environmentally friendly than their counterparts within the same product category, thus by having a label on a product, consumers are able to make more conscious purchasing decisions.

Eco-labels started with the high environmental impact products, which are found in the food and beverage industry as they are daily consumed products (Czarnecki, 2011; EC, 2016). Then have moved to other industries such as textile, furniture and fashion but did not get as much attention as in the food industry. This could be due to the fact that such industries are not associated with environmental issues or health problems (Beard, 2008).

The noticeable finding is that out of these ten labels, which are commonly used in the textile, furniture and fashion industry, only two are specific to the furniture industry (Level and OKO Control). The remaining of the labels are found in furniture industry, but could be also found in various different industries, and across wide selection of products and services. Having a label across multiple industries can be beneficial, as consumers can easily identify and recognise these labels, on the other hand it could be argued that this could lead the consumer to confusion and distrust, whilst the mislead the consumer may have is a result in not being fully aware of the intended meaning of each individual label (Henninger, 2015).

Secondly, after the researcher explained what eco-labels are and what they stand for, participants were then asked, would they consume furniture that have eco-labels on them or not.

*If I have the ability to buy such products, I will buy them without hesitation.*

[P5]

*[...] I would acutely buy it [...] it would be for everyday living room, has to be comfortable for my kids and my family then I would defiantly buy it.* [P23]

*I will buy it right away.* [P21]

To get insights about the furniture market (as the researcher was unable to conduct interviews with managers in furniture store) and if they have sustainable or eco-labelled furniture in their stores, this information was collected through participants interviews. By asking participants where they shop for their furniture, 'key' stores were identified. Key stores here imply these have been commonly mentioned by a majority of participants. The researcher was able to visit these stores and found that they do not have any labels on their products and this can also be confirmed by the interviewees. As all participants agreed that sustainable furniture, as well as eco-labels are not commonly seen or noticeable in the furniture market in the Kingdom of Saudi Arabia, as two interviewees emphasised that:

*I have never seen it to be honest.* [P23]

*Yes. But I have never found any in the market.* [P2]

However, participant 14 mentioned that sustainable furniture is only available in traditional Saudi furniture:

*[...] the transitional Saudi furniture. They use materials from natural recourses. [P14]*

As previously detailed in **Section 4.2.6** the KSA's furniture history, in relation to the furniture history in KSA and how were they produced. This concludes that Saudi traditional furniture can be classified and sustainable furniture not only in materials but also in production.

A key finding is that Saudi consumers appear to have poor knowledge regarding eco-labels, this is due to two reasons, first people lack awareness and knowledge regarding eco-labels, second, they are not seen in the Saudi market. Since sustainable consumption polices in regard to the furniture industry have not yet been established, especially in the developing countries. Linking this back to the 2030 Vision – a simple way for achieving sustainable furniture consumption is for the government to force all furniture industries to provide clear labels on their furniture items. As this will help individuals to behave sustainably, as being able to clearly notice labels on sustainable products. As these labels are easy and clear way for sending information regarding the product (EC, 2011).

## 6.5. Saudi's Sustainable Consumer Typology



This section reports on the analysis of the data, exploring whether McDonald et al.'s (2006a) typology can be used as a tool to analyse sustainable consumption behaviour the context of Riyadh City, KSA and the indoor domestic soft furniture market. To gain deeper insight into the KSA participants' sustainable consumption practices, interviewees were asked a series of questions regarding

their understanding of sustainability, sustainable practices, as well as their furniture consumption behaviour process. As previously mentioned in **Section 6.2. Definition of Sustainability**, that women in Riyadh City are unaware of the meaning of sustainability. And as discussed earlier, all 26 participants mentioned that they never buy any piece of furniture without doing a thorough research on what is out there and what they like, whether it was physical by going to different furniture stores or virtual through online platforms.

When it came to asking participants, what are the key aspects they look for when shopping for furniture, all participants agreed on similar parameters such as comfort, colour, quality, and material. But none of the participants mentioned the concept of sustainability; such as purchasing furniture that are made of sustainable materials. Participants stated:

*The furniture should be comfortable, the filling of the sofa should be good [...] the materials are good quality [...].* [P11]

*Colour is the main aspect [...].* [P20]

*I don't know there was sustainable or green furniture before [...].* [P4]

*I never thought of it purchasing furniture made from sustainable materials.*  
[P18]

These findings highlight that this sample of Saudi consumers chosen for this research are unaware and/or not interested in the sustainability concept when purchasing furniture.

Meanwhile, this research indicated that Saudi women are not aware of any sustainable behaviour, even though some do act sustainably in their day-to-day life, but sustainability was never a factor when performing such a behaviour.

Although sustainability was not a factor, avoiding cognitive dissonance is, which can be achieved through obeying to rules highlighted in the Islamic belief system. Questions that could be posed here is whether there is a relationship between green consumers and strongly religious individuals and whether in this context proclaiming oneself as an ethical or green consumer is possible – seeing as

sustainable consumption acts are based on the believe system. Whilst this is slightly outside of the scope of this PhD research, it provides an avenue for future work. Further investigation revealed that religious values strongly guide the decision-making process and behaviour of Saudi women especially through the concepts of prohibited (haram) and non-prohibited (halal) actions. Even though Saudi consumers are unaware of sustainability, they exhibit sustainable behaviours that derive from their respect and belief in God.

The findings from these further investigations illustrate that a Saudi woman’s sustainable purchases and disposal are linked to religion. As explained earlier, the data suggest that interviewees are increasingly more aware of sustainable products (e.g. Fairtrade coffee, organic food, organic products) and actively seek to consume these (P2, P5, P12, P20, P23, P25). Although not explicitly stated, interviewees’ beliefs and value systems ensure that they are acting in the best interest of looking after God’s environment. This underlines that Islam fosters sustainable behaviour: consuming organic products contributes to looking after the environment and respecting God’s resources.

## 6.6. Kingdom of Saudi Arabia 2030 Vision



In April 2016, the KSA announced its 2030 Vision, providing ambitious targets to “create a more diverse and sustainable economy” (Vision2030, 2016). The KSA’s current economy is driven by the oil industry, yet a McKinsey report by Al-Kibsi et al. (2015) indicates that the country has potential to shift towards a more ‘sustainable’ (less polluting) economy by moving away from a government-led economic model to a market-based approach. When asking participants if they have heard about the 2030 vision, all 26 participants have agreed that they have heard about it. But when further investigation was made regarding what is the vision about, and what does it evolve around, only a few of the participants knew



what the vision is about as they have stated:

*It aims that the country would be self-sufficient in industries and commerce and other sectors to reach some point to them to be sufficient [...]. [P6]*

*[...] it a new perspective on what the country should be, in 2030 [...] big mile stones that they want to research and goals that they want to achieve a lot to do with every single sector. From education to health care [...] with different aspects moving towards the future in a short period of time. [P12]*

*[...] trying to move to be more energy sufficient as well as targeting all aspects of living health [...]. [P20]*

The majority of participants knew that is was regarding a better country as well as depend less on oil and more on equivalent resources, as participants highlighted:

*[...] it is change to the better. But I'm not sure what is it really about. [7]*

*It is mostly economical. [P14]*

*It is something in economics. [P22]*

Even though the majority of participant are not aware the 2030 vision and what it entails in relation the sustainability context, they still behaved sustainably in one aspect of their lives or another. As this will be discussed in more detail in **Chapter 7**.

## 6.7. Furniture Stores Findings

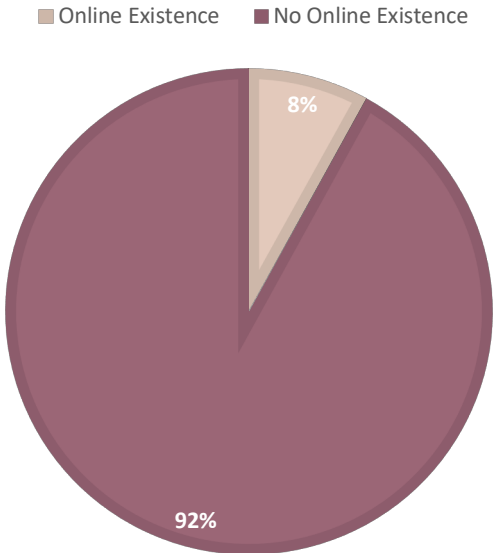


An in-depth investigation was conducted by the researcher on all furniture stores located in Riyadh City in regards to their physical and online presence, as well as whether they are displaying any labels that can be associated with sustainability. Collecting and analysing the data regarding the 295 furniture stores, has given an in-depth overview of the current furniture market. Two main categories were generated by the researcher (Full table – see Appendix Two) online presence and manufacturing location. First, as the Internet has a huge impact on people’s daily activity, such shopping, searching for product information and much more (Leung, 2010). This implies that consumers cannot do any research regarding what furniture is out there, except go into physical furniture stores. Out of the 295 furniture stores that the researcher investigated in Riyadh City only 8% had an online website, most of which was just a static website for the purpose of simply having an online presence. Having an online presence can encourage sustainable practices, yet these websites lack information regarding any sustainable products, this means they lack such products and/or descriptions and do not inform consumers on whether they are available in their stores.

On the other hand, furniture manufacturers were a little more diverse. 69% of stores opted to import their furniture from abroad, whilst 16% sold only locally manufactured furniture. The remaining 14% chose to sell both local and imported furniture to their customers see Figures 6.2. and 6.3. This could be a result of; first, the huge gap between domestic production and consumption, leading the furniture market to depend on imported furniture (Saudi Arabia Furniture Outlook, 2014), second, as the KSA consumers are exposed to other cultures from traveling, they acquire modern looking furniture (JFEMA, 2013). Having the KSA depend more on imported furniture will contribute to the 2030

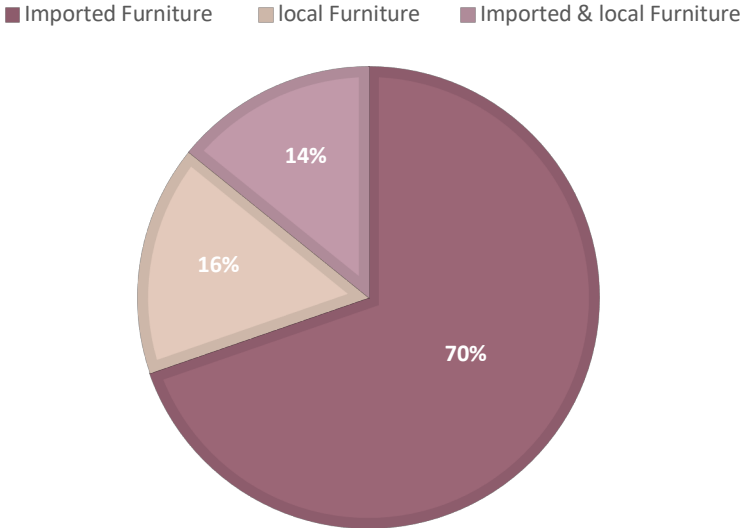
vision, as this implies that the country can set standards and policies regarding the furniture imported into the country such as eco-design furniture.

**Figure 6.2.** Furniture store in KSA, Website Exist.



Source: The Author

**Figure 6.3.** Furniture store in KSA, Place of Manufacturing.



Source: The Author

## 6.8. Chapter Summary



This chapter concludes the following findings:

- Community initiatives to foster sustainable behaviour (e.g. recycling bins) is stronger in the older districts (North and East).
- Not all areas (with in a living district) have community initiatives, and even in those that have (e.g. North) there is different from area to area.
- Cognitive dissonance plays a vital role, which fosters sustainable behaviour
- Even though sustainability and ‘Estidamh’ are ‘abstract concepts’ that are not understood by female participants, they are behaving in a sustainable manner.
- Females are key decision makers in the KSA, yet there is a difference on whether they contribute to purchase in terms of money traditional versus modern living district (e.g. West and South). This is area of future research.

## **CHAPTER SEVEN: DISCUSSION, CONTRIBUTION AND CONCLUSION**

### **7.1 Introduction**



The aim of this PhD research was to understand the extent of sustainability and sustainable consumption behaviour, in the context of females in Riyadh City, the Kingdom of Saudi Arabia (KSA), with a particular focus into indoor domestic soft furniture. This chapter analyses the results derived from the research data and discusses the meaning of the findings of the research into the relationship of sustainable consumption behaviour in relation to indoor domestic furniture. The questions this research aimed to answer are:

- What sustainable consumption practices exist in the KSA?
- What is the extent of sustainable consumption behaviours in the KSA?
- What are the sustainable practices happening in Riyadh City?
- What are the drivers for sustainable consumption behaviours in Riyadh City?

As indicated in **Chapter 1** this PhD research addressed the following research objectives:

#### **Theme One: Consumption Behaviour:**

1. To investigate consumers' consumption behaviour of domestic soft furniture in Riyadh City, KSA;
2. To investigate sustainable behaviour regarding furniture disposal and recycling;

#### **Theme Two: Awareness, Perceptions and Motivations:**

3. To investigate the awareness and perceptions of sustainability among females in Riyadh City;

4. To explore the motivations of engaging in sustainable consumption behaviour and determine whether patterns or types of consumer emerge;

**Theme Three: The KSA 2030 Vision:**

5. To identify key components of sustainability and sustainable practices within the 2030 vision.

The following section provides a discussion of the findings, whilst also reiterating the contributions of the PhD research and how the objectives were addressed.

**7.2 Discussion**



This PhD research aimed to understand the extent of sustainability and sustainable consumption behaviour, in the context of females in the Kingdom of Saudi Arabia, with a particular focus into indoor domestic soft furniture.

The research gaps were not only addressed in the aims, objectives and research questions, but also included in the research process by utilising the methodological tools that allowed the collection of rich data sets. The findings from the qualitative study have provided insights into sustainable consumption behaviour in the KSA in the context of indoor domestic furniture with key contributions that the study will presented. The following section presents the findings as presented in chapter six, with justification to key issues.

**7.2.1 The KSA Sustainable Consumer Typology**

There has been a number of literature looking into different typologies (e.g. The Roper Organisation, 1992; Ottman; 1993; Peattie, 2001), in regard to consumers

awareness and knowledge of green and sustainable issues (as detailed in Appendix Three). As the literature in **Chapter 4** highlights the significance of the green typology created by McDonald et al. (2006 a, b), due to it examining empirical study been conducted in five categories of goods/services: white goods, small electrical products, fast moving consumer, green energy tariffs and tourism. The study categorised consumers into three categories of green consumers developed by McDonald et al. (2006a): Translators, Exceptors and Selectors. This PhD research did not seek to replicate McDonald et al.'s (2006a) study, yet found that the typology, could not prima facie be adopted to the Saudi consumers in the context of furniture consumption. As the sample interviewed by McDonald et al. (2012, p. 451) comprised of consumers who knew that they are "green or ethical aspect to their consumption", consumers in three typology groups are aware of the sustainability concept and consume goods based on their level of involvement. Yet in this research consumers were not self-proclaimed. However, as highlighted in the findings the Saudi females interviewed all acted in one way or another in a sustainable manner.

There were no specific typology questions asked to the interviewees but rather the qualitative research findings such understanding participants' associations with and understanding of sustainability, and their lifestyle of purchase and non-purchase habits this has illustrated the incompatibility of the McDonald et al. (2006a) on KSA consumer and the indoor domestic furnishing context which is a key finding for this research.

The key reason for rejecting McDonald et al. (2006a) typology is due to:

- McDonald et al. (2006a) used self-proclaimed ethical consumers, in this research this was not specified, as such being a 'green' consumer was not one of the selection criteria;
- This research has used a different cultural context in which sustainability is an emerging phenomenon. The 2030 vision that has relatively recently been introduced seeks to bring sustainability at the forefront, yet, overall it is not as developed as in the country chosen in McDonald et al.'s (2006a) typology;

- The research findings highlighted religion as a key aspect in contributing to sustainable behaviour and consumption within this research's context, which is a novel contribution;
- The research sample could not be categorised into the three groups, as they are not self-proclaimed green consumers, and do not fit within these categories.

The typology developed by McDonald et al. (2006a) is not applicable to the KSA consumers and the indoor domestic furnishing context. This is due to the absence of some of the typologies fundamental assumption. The typology is not relevant to this research context due to a number of factors not only because McDonald et al. (2006a) typology was set up for different product categories (as mentioned earlier), but it was also set up to study greening strategies of consumers, who have already undertaking some kind of ethical behaviour commitment in some part of their life's. In contrast, this research is not rejecting McDonald et al., (2006a) typology, but rather found that the foundations are different. As this research's participants are not committed to an ethical behaviour and more importantly do not associate sustainable behaviour with sustainability, but rather religion. As such it is questionable whether any consumer would self-proclaim them as being green and ethical, as this is seen to be a key part of gaining a balance and removing cognitive dissonance. This research is that you have not just rejected the typology but found that the foundations are different.

To explain, the findings from the current study illustrate a more experience-based view of the typology. Even though the KSA consumers do not understand the concept of sustainability, but they have been acting sustainably in some aspects of their lives. Such as buying organic food or recycling paper (that contains the name of God in them).

As highlighted in **section 6.3.1.1** participants actively looked for organic food products due to associating these with well-being and health benefits. Moreover,



there was an implicit notion that Allah provides the essential raw materials and ensures that individuals can eat and drink. The Quran clearly states that the earth should not be abused, and no corruption spread (Quran, ND, p. 9), which can provide a potential explanation of why people seek organic products, as these are produced using less pesticides are more environmentally than their counterparts. This confirms Kalamas et al. (2014) findings and highlights that religion, and more specifically Islam, can be used as a trigger for sustainable consumption behaviour, as these Muslim women implicitly follow the Quran's command. Linking this further to current developments in the country and the 2030 Vision more specifically, it can be said that the government's decision to include the Islamic guidance in the document is not only important, but also could ensure that individuals will adhere to the goals set (Vision2030, 2016). As demonstrated in the findings section, the female sample in this research clearly draws upon their beliefs and value systems to inform their decision-making process, especially when it comes to purchasing organic food, which confirms existing research (Worthington et al., 2003; Essoo & Dibb, 2004; Rehman & Shabbir, 2010) in a similar research context. However, this research contributes to knowledge, as it further adds to the literature by investigating the relationship between Islam and sustainable consumption, which lacked research and emerged from this PhD research's data set. As will be highlighted in the following sections, cognitive dissonance is a further aspect that contributes to this relationship. As was indicated in **Chapter 1** Muslims experience a mediated relationship with God, which implies that God only responds to those who "follow prescribed rituals in order to remove sin" (Miner et al., 2014, p. 91). The participants in this research all actively looked for organic food, which can be explained seeing as Allah provides food and commands that the earth needs to be respected. Thus, it could be suggested, if these participants have an option to buy organic options they can gain a cognitive balance, as they have made a decision that aligns more strongly with aspects highlighted in the Quran.

Furthermore, **section 6.3.1.2** indicates recycling is an aspect that participants felt very strongly about, especially when discussing newspapers and/or other

documents that may contain the name of Allah or Prophet Mohammad. The findings highlighted that the geographic location of individuals played a key role in terms of whether they were able to recycle paper or not, as individuals in the community-initiated recycling bins close to the mosque, yet this was only the case in North and East district. Linking this back to the 2030 vision – a simple way of achieving a commitment to sustainability through, for example, recycling can be achieved if the infrastructure is provided. This may change in the future seeing as the government will be investing in efficient waste managements as well as establishing recycling projects (Alshuwaikhat & Mohammed, 2017). Due to individuals already wanting to act upon their Islamic faith of respecting God's name, they do not need to be convinced, but rather will partake in the behavioural action as it achieves harmony within their inner self and cognitive consistency. A further noteworthy contribution to this research is the fact that participants discussed an act of low involvement sustainable behaviour. Low involvement implies that an individual is acting upon a certain behaviour without having to deeply think about their action, as opposed to investing a lot of time and effort in acting out a task (high involvement). Thus, this research challenges the findings by various authors (e.g. Ryan & Deci, 2000; Rupp, Williams, & Aguilera, 2011; Joshi & Rahman, 2015; Minton et al., 2015), who claim that religions have influences only on high involvement sustainable behaviour (e.g. actively participating in a charity by volunteering time), rather than low involvement sustainable behaviour (e.g. recycling paper). This research found that low involvement sustainable consumer behaviour not only occurs within this specific setting, but also is linked to cognitive dissonance in that individuals, who are religious and have a strong faith value system, seek to recycle paper, as it enables them to find harmony. Dissonance is reduced by being able to dispose of unwanted products (e.g. newspapers), whilst at the same time ensuring that God's name is respected. As indicated, recycling facilities were a result of community effort rather than a controlled guideline enforced by the state through government regulation.

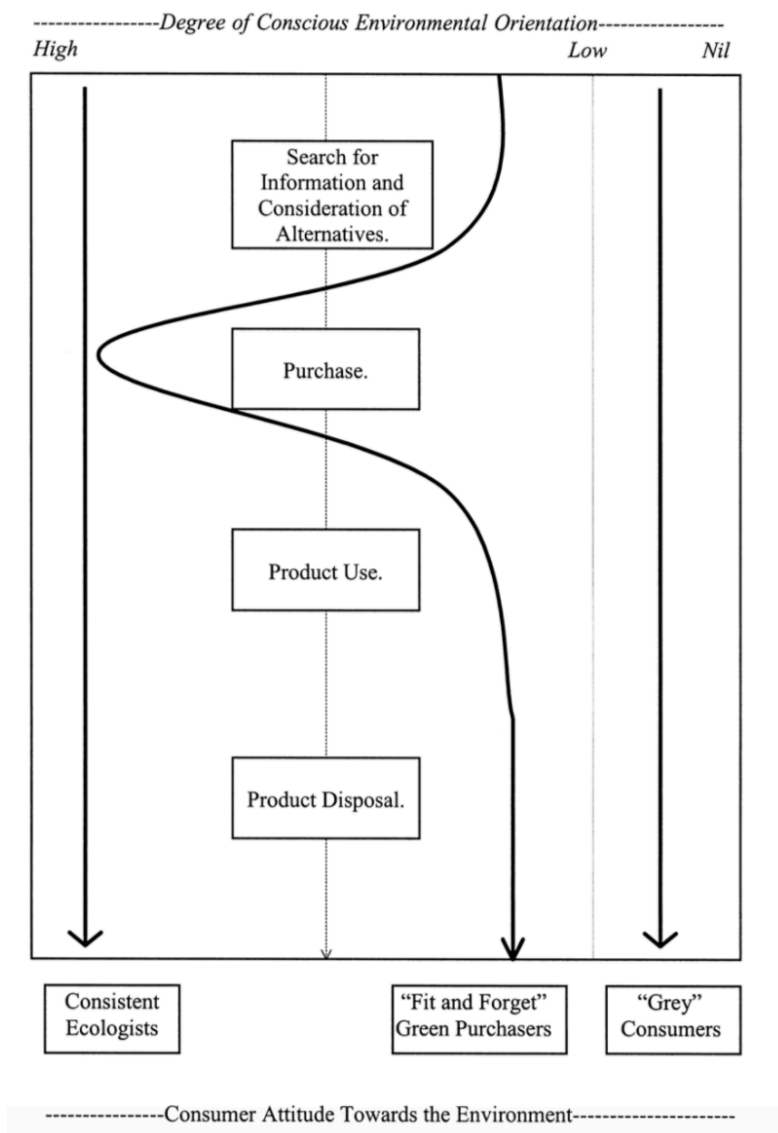
Religion plays a key part and has an informing role, even though it is not explicitly linked to sustainability, it links to the idea of Voluntary Simplifiers that they are not sustainable. The research found a strong link between religion and sustainable behaviour in the KSA context. To reiterate this further, this research supports Mokhlis's (2009) study indicating that religious consumers are conscious of their behaviours, and even if they are changing furniture more frequently, they still ensure that they spend enough time on the decision-making process to reduce waste.

This confirms Kalamas et al. (2014) findings highlighting that religion, and specifically Islam, can be used as a trigger for sustainable consumption behaviour. Several interviewees mentioned recycling paper, specifically documents that have the name of God on them. As it is disrespectful in Islam to throw away paper that has the name of God on it. Even though the government has not created any recycling bins, individual efforts in certain living districts have provided these; cf. the notion of a "facilitating effect" (Scott 2009 cited in McDonald et al., 2012). As Muslims pray five times a day, placing them near the mosque guarantees high visibility to ensure individuals' behaviour in recycling paper. This research found that Saudis have sustainable behaviour in their lives, when contributing to saving God's earth resources and this derives directly from their Islamic values and beliefs.

This research is contributing to knowledge by investigating another world religion with Islam that has previously not been focused on (Doran & Natale, 2011; Minton et al., 2015). As they have only behaved sustainably to certain products in relation to Islamic values that they hold. Going back to the parameters that the typology model conducted by McDonald et al. (2006a) was based on the work of Peattie (2001). Looking into Peattie (2001) three paths in Figure 7.1., on consumers' consumption behaviours towards the environment. Because the KSA consumer are neither *fully* committed to sustainable behaviours nor at all committed to sustainable behaviours. They can fit in Peattie's (2001) model, in the 'fit and forget' green purchasers' category. Where different shades

of green and grey consumers reflect on the different level's environmental orientation throughout their consumption process. In this research the Saudi consumers are *in and out* consumers in the model, and the consumption process is clearly linked to the religious values. (This can be a pathway for future investigation).

**Figure 7.1.** A Simplified Model of Environmental Orientation During the Consumption Process.



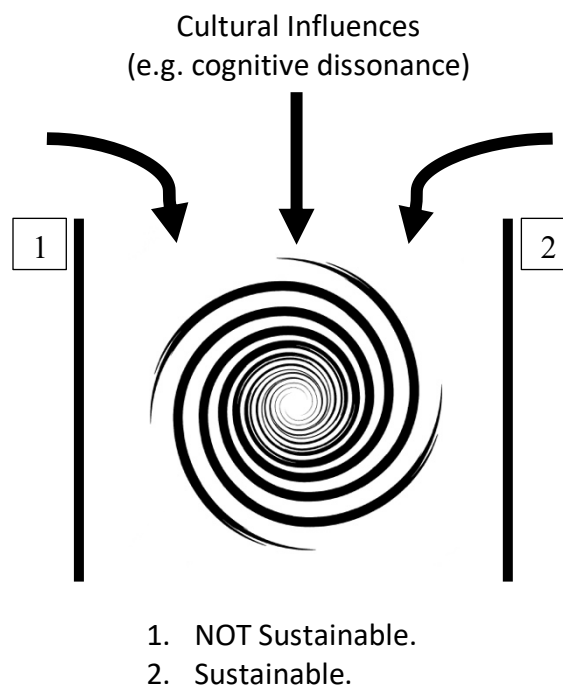
Source: Peattie (2001, p. 197).

Whilst Peattie's (2001) model is providing a helpful framework that allows to explain some aspects of this research findings, similarly to McDonald et al. (2006

a,b) it does not fully explain the findings, as the assumption remains that consumers are aware of whether they are green or not .

A key contribution of this research is a model for the KSA female's sustainable consumption behaviour (as illustrated in Figure 7.2.). Even though the KSA consumer are neither totally sustainable nor NOT sustainable in their behaviour. The KSA consumers fall between the two extremes. As these consumers culture influences their sustainable behaviour such as their religious cognitive dissonance. Even though these female consumers are unaware of what the terms sustainability means, they still may be acting sustainably.

**Figure 7.2.** Cultural Influence Framework for Sustainable Behaviour



Source: The Author.

Figure 7.2 sees sustainable and not sustainable behaviour as a continuum. In this case female consumers are influenced by the Islamic believe system to act either sustainably or not, depending if they can reach a state of harmony through their actions. This implies that Islam is a key driver of acting in a certain manner. Future research could look into whether there is a relationship between the

strength of religious values held by the individual and their sustainable consumption behaviour.

### **7.2.2 Cognitive Dissonance**

A key finding in this research is cognitive dissonance that arose through the iterative coding approach. Individuals attempts to reduce dissonance can have three potential outcomes that can be achieved either through a change in beliefs, a change in actions, or a change in perceived action. Each of these results can reduce dissonance for an individual (Harmon-Jones et al., 2015). As this research's participants seek to remove cognitive dissonance they are trying at the same time to fulfil their religious commitments. For example: participants mentioned recycling paper that contains God 'Allah' name on them, or the Quran (Islamic holy book), or hadeeths. To prevent any disrespect individuals organised bins to recycle these documents. By this behaviour these members are acting sustainably by looking after the environment, respects and protecting God's name and reducing their dissonance and gain harmony.

Linking back to **Section 3.2.2** Consumer Decision Making, low involvement implies that an individual is acting upon a certain behaviour without having to deeply think about their action, as opposed to investing a lot of time and effort in acting out a task (high involvement). Thus, this research challenges the findings by various authors (e.g. Ryan & Deci, 2000; Rupp et al., 2011; Joshi & Rahman, 2015; Minton et al., 2015), who claim that religions have influences only on high involvement sustainable behaviour (e.g. actively participating in a charity by volunteering time), rather than low involvement sustainable behaviour (e.g. recycling paper). This research found that low involvement sustainable consumer behaviour not only occurs within this specific setting, but also is aliened to cognitive dissonance in that individuals, who are religious and have a strong faith value system, seek to recycle paper, as it enables them to find harmony. The findings have highlight that these low involvement decisions, can have a huge impact on society, as members of the community have set up recycling bins in order to reduce cognitive dissonance this is the case in the

North District and the East District which are more religious. This could assume that the more religious individuals are the more they are wanting to align to the belief system and have a more balanced life. As their relationship with God is mediated it is vital for them to achieve this cognitive balance. For example, these members' dissonance is reduced by being able to dispose of unwanted products (e.g. newspapers), whilst at the same time ensuring that God's name is respected. As indicated, recycling facilities were a result of community effort rather than a controlled guideline enforced by the state through government regulation.

### **7.2.3 Religion**

As mentioned in **section 3.3** the main reason for looking into religion as an influencing factor for sustainable consumption behaviour in the KSA, was introduced when analysing participants interview. These qualitative interviews results indicated a link between Saudi woman's sustainable consumption behaviour and the Islamic religion influence. Due to Islam being the only religion governing in the KSA (Husain & Bunyan, 1997) and Saudi families look to the Islamic paradigm to guide and influence all of their behaviours (Al-Farsy, 1990; Norris & Inglehart, 2012), it may not be surprising that the interviews and also the findings mentioned Islamic values.

Religion was explored in **Chapter 2**, where the literature looked at it as background information to support this PhD research. And specifically choosing Islam was because it is the dominant faith in the KSA and influences both practices of worship and everyday lives.

Moreover, within Riyadh City there are 4 districts (North, South, East and West), with the North and East districts being more religious than the South and West, which provided further valuable findings and highlight that there is a relationship between religion and the strength of commitment to sustainable consumption. This is also an area that can be further explored in future research.

The literature also highlighted how it does not only shape individual's behaviour knowledge, attitudes, values, and beliefs (Worthington et al., 2003; Essoo & Dibb, 2004; Rehman & Shabbir, 2010). Religion in this research was only highlighted and emerged through the analysis of the findings. Islam as a religion in Saudi Arabia is inherent in the life of an individual and is often the values that has a clear link and affects the behaviour of the individual. Lindridge (2005) shares that all religions, either directly or indirectly have a link to consumption behaviour and purchase decision of their believers within the ethical framework of the religion, which governs the way of life. From the research findings it was clearly indicated that Saudi women are unaware of sustainability or sustainable practices. As religion exerts a significant influence within everyday life and thus, on the decision-making process. No matter of the product, an everyday essential, such as food, or a high involvement purchase, such as furniture, aspects of sustainability play a key part in the decision-making process, based on the belief and value system of the individual. To reiterate this further, sustainability is not *just* a key part based on an individual's beliefs, rather it is a fundamental tenet that an individual should not be wasteful (Haram) in custodianship of resources provided by God, which procures a commitment to being sustainable. This aspect makes sustainability an explicitly intentional behaviour and thus, more fundamental than a notion of simply doing the right thing.

This research also revealed practical implication even though participant engaged in sustainable actions, such as recycling paper that contains God 'Allah's' name on them, or buying organic food.

#### **7.2.4 Kingdom of Saudi Arabia's and the 2030 Vision**

Global awareness of environmental issues is steadily increasing and there is pressure on individuals to change their attitudes toward sustainable consumption and minimise the negative effects of consumption on both the natural environment and society at large (Steg & van der Werff, 2015). As a result, the KSA has incorporated this concern in their 2030 Vision stating: "by preserving our environment and natural resources, we fulfil our Islamic, human



and moral duties. Preservation is also our responsibility to future generations and essential to the quality of our daily lives. We will seek to safeguard our environment by increasing the efficiency of waste management, establishing comprehensive recycling projects, reducing all types of pollution and fighting desertification” (Vision2030, 2016). This statement indicates that the KSA government links sustainability to values and beliefs associated with Islam, an aspect that is explored in our research. With the emergence of the 2030 Vision there is an opportunity to foster already existing practices and enhance them further. That Islam was incorporated into official communications implies that the government understands the necessity to link religion if they want to achieve a shift in consumer behaviour and move towards sustainable consumption practices. If the government provides an infrastructure to support sustainable behaviour they would not only achieve buy-in, but also recognize the influence Islam has on the individual’s actions and their desire to overcome cognitive dissonance. Currently only the older parts of Riyadh City have facilities that allow its residence to act upon their moral duties, thus, it is essential to make further improvements in terms of the infrastructure provided for acting upon intentional sustainable behaviour.

A key finding from this research’s pilot study, was that Saudi females change their living room furniture yearly. To note that the pilot study was conducted prior to the countries 2030 Vision, and the research actual study was conducted after. Participants’ consumption behaviour has changed in a lot of aspects in the KSA. As the county has introduced the 5% VAT on a lot of goods such as: clothes, furniture, utility bills, hotel rooms...etc. (VAT, 2017). As this has been clearly demonstrated in participants’ consumption behaviour in relation to indoor domestic soft furniture. A majority of the participants interviewed in the pilot study, stated that they changed their living room furniture yearly. When conducting the actual study participants took a longer time before changing the furniture. Options such as re-upholstering were a choice that they did not consider before.

It is clearly seen that when a government enforces rules and regulation, towards achieving sustainable behaviour citizens would follow them.

### 7.3 Review of objectives



The research set out six objectives that are grouped into three main themes.

#### **Theme One: Consumption Behaviour:**

1. To investigate consumers' consumption behaviour of domestic soft furniture in Riyadh City, KSA
2. To investigate sustainable behaviour regarding furniture disposal and recycling

These two objectives were addressed in **Chapter 2, Chapter 4, Chapter 6** and the discussion in **Chapter 7**. In **Section 6.3.1**, sustainable behaviour, it was interesting what the findings have revealed. Although the research has looked into the context of indoor domestic soft furniture, the majority of the findings have evolved around either paper recycling, and organic food consumption and recycling. As these are activities that people are familiar with, as this has given the research an in depth insight into what consumers are actually doing in reading to sustainable behaviour. As mentioned in the findings that even though these consumers are not necessarily fully knowledgeable that their behaviours are classified as sustainable behaviour.

In **Section 6.4**, the findings have explored the consumption behaviour of indoor domestic soft furniture of Saudi women. These women have highlighted that the consumption of furniture is a very lengthy process and by doing the right research, waste can be eliminated, and the furniture can be kept for a longer period of time. Then **Section 6.4.1** and **Section 6.4.2** investigating what the

research participants do with the disposal and recycling of their old furniture. It was interesting to note that these women do not dispose of their old furniture, for example to second hand furniture stores. But rather give it to charity. As these charity organisation would re-upholster and clean the furniture before giving it to those whom are in need. This disposal behaviour of giving the furniture to charity organization is lined to religion, which is a key contribution to the research that is underpinned by cognitive dissonance.

### **Theme Two: Awareness, Perceptions and Motivations:**

3. To investigate the awareness and perceptions of sustainability among females in Riyadh City
4. To explore the motivations of engaging in sustainable consumption behaviour and determine whether patterns or types of consumer emerge

Objective 3 and 4 were explored in **Chapters 3, 4, and 6** and discussed in **Chapter 7**. The data highlighted that the majority of Saudi females are unaware of the phrase sustainability and 'Estidamh'. Even though these females are unaware of such a concept, after providing examples two common sustainable behaviour have emerged by the participants. As section 6.3.1 explores these sustainable behaviours, which are organic product consumption and recycling papers. Furthermore, it is noteworthy to point out that whilst participants are behaving sustainably, their behaviours are all individual efforts and/or community supported (e.g. providing recycling bins) and not government supported (see **Section 6.3.2.**).

In summary, an interesting finding is that emerged within this PhD research is the fact that the Saudi females' sustainable behaviour is clearly linked to Islamic religion. Furthermore, cognitive dissonance plays a vital role in guiding these sustainable behaviours.

### **Theme Three: The KSA 2030 Vision:**

5. To identify key components of sustainability and sustainable practices within the 2030 vision

The 2030 Vision was explored throughout the literature review and the findings of this PhD. In Section 6.6. it was interesting to note that the majority of the interview participants have heard of the 2030 vision, but were unaware of what the vision evolved around. It should be highlighted that part of the 2030 Visions initiatives, is to spread awareness regarding the sustainable activates the country is seeking. Early in 2018 the government has introduced an innovative website experience to support the 2030 vision. The website helped consumers to recycle their products by tracking and locating recycling facilities (Tadweer, 2018). As well as linking all these behaviours to being a good Muslim and doing a good deed.

### **7.4 Contributions of this PhD research**



#### **7.4.1 Theoretical Contribution**

This PhD research contributes to knowledge by investigating an under-researched area – sustainable consumption behaviour in the context of Riyadh City and furniture. As it has brought forward a number of theoretical contributions:

- This First research to investigate Islam as world religion – in the context of the KSA, females and sustainable consumption behaviour.
- The findings clearly demonstrate that religion exerts a significant influence within everyday life and thus, on the decision-making process. Regardless of the product an everyday essential, such as food, or a high involvement purchase, such as furniture, aspects of sustainability play a

key part in the decision-making process, based on the belief and value system of the individual.

- The role of cognitive dissonance in underpinning this research findings.
- Religion has an influence on the act of low involvement sustainable behaviour (e.g. newspaper recycling) this is associated with individual's cognitive dissonance, enabling them to seek harmony.
- McDonald et al., (2006 a,b) typology was used as an analysis tool, on sustainable consumption behaviour in the context of the KSA consumers and indoor domestic soft furniture. As religion plays a big role in KSA and influences these consumers behaviour unconsciously, this religious influence has never been captured in any typology.
- A key contribution to this research is a model for the KSA female's sustainable consumption behaviour (as illustrated in Figure 7.2.). Even though the KSA consumer are neither totally sustainable nor NOT sustainable in their behaviour. The KSA consumers fall between the two extremes. As these consumers culture influences their sustainable behaviour such as their religious cognitive dissonance. Even though these female consumers are unaware of what the terms sustainability means, they still may be acting sustainably.

Thus, this research has added to the shared pool of academic knowledge by investigating sustainable consumption behaviour in the KSA and the indoor domestic soft furniture context as they are an under researched context. It has also expanded the existing body of knowledge on sustainable consumption typology created by McDonald et al.'s (2006 a, b). As well as capture the role of religion and its direct influence on this research context. This links to chapter one, indicating that this PhD has fulfilled the first potential outcome.

#### **7.4.2 Practical Contribution**

The practical contribution for this PhD are associated with the KSA, 2030 vision. As the country is seeking sustainability and consumers are unconsciously behaving sustainably due to religious factor. This could help the country achieve

their goal, as their population are already behaving in such a manner. These practical contributions were potential research outcomes (**Chapter 1**).

As highlighted in the finding regarding furniture end-of-life, the majority of participants noted that they donate it to charity while a few stated that they would throw it into the street. An idea that will be proposed to the country is to make consumer aware of furniture products life cycle, as well as their social and environmental impact.

The country also needs to promote recycling indoor domestic furniture in KSA. This can be achieved by educating consumers and informing them of where and how to recycle their used furniture. As interview participant 21 mentioned that she reupholstered her furniture, but she did not like the end result. The country can extend the community involvement by linking individuals and interior designers, to produce new furniture with professional help.

In summary, this PhD research has highlighted that in order for participants to behave sustainably, governments need to educate them on certain aspects of how to dispose or recycle their furniture. A new idea that has been introduced in the KSA in support with the 2030 vision goals. Is the website Tadweer (meaning recycling in Arabic) (<https://tadweer.org.sa>), it has launched earlier this year with the goal of recycling people's products such as: plastic, furniture, paper, wood, electrical goods, clothes. The website is supported by phrases from the Quran and the hadeeths (a collection of sayings from prophet). It all falls into individual's cognitive dissonance, of being a good Muslim and doing a good deed, as such this research would allow to further advise on this website in terms, so terminology of sustainability used. As this research found that participants may not necessarily be familiar with certain terminology, e.g. sustainability Estidamh.

### 7.4.3 Policy Contribution

The policy contribution for this PhD research are linked to the practical contributions, in that they are both linked to the KSA, 2030 vision focusing on achieving sustainable behaviour and consumption.

Eco-labels are a form to help consumers consume sustainably. These labels are designed to translate what an industry has done to produce this environmentally sustainable product, to set them apart from same products in the market (Morris, 1997; GEN, 2004). However, it has been noted by this research findings that these labels are unrecognised and not understood by consumers in KSA. This PhD suggests the following the government needs to educate the populations, regarding what do these labels stand for. Then start forcing institutions to clearly have these labels on their environmentally friendly products.

As the findings highlight that furniture stores do not have any sustainable or environment friendly furniture products in KSA. While various interviewees clearly stated their desire to purchase such items which are not available in the market. This can be achieved by the government forcing the furniture industry to provide more sustainable or environment friendly furniture, as well clearly labelling them with the correct standardization such as SMaRT standards to help create sustainable products. As mentioned in **Section 2.3.1** that traditional furniture in the KSA was a 'family trade' and made from local sustainable materials. This could be a venture for the government, for example, to encourage an investment or entrepreneurs in the resurgence of traditional manufacturing methods, that are inherently more sustainable; and as an avenue for reconnecting with the personal aspects of indoor domestic soft furniture.

Participants were all against second hand furniture. As a few of them states that is due to health issues. This contribution should be enhanced and enforce by the government across all furniture sector wither a consumer is buying or disposing

furniture they should all have a clear health and safety label. And without it second hand stores or charity organisation will not accept these furniture items.

In summary, it can be noticed that the policy contribution provided in this PhD research are clearly focused and associated with the KSA 2030 Vision. As the country is seeking towards sustainability in their vision, these rules and regulations can clearly set guidelines and implementation for sustainable practices, not only to furniture but also consumers. The research pilot study was conducted prior to the 2030 vision meanwhile, the actual study was conducted post the 2030 vision. One of the key finding is how people consumption behaviour has changed dramatically. Saudi women prior to the 2030 vision used to change their furniture once every year, however, post the 2030 vision their behaviours have changed to being more cautious consumer. Further analysis of the pre versus post 2030 vision data will be conducted after this PhD research is completed, which will allow to look at the impact of this policy on society.

## 7.5 Limitations and Areas of Future Research



This research was set in two specific contexts: indoor domestic soft furniture and Riyadh City. As highlighted in **Chapter 5**, employing only female participants might be seen as a limitation; however, existing research (also validated in this research) shows that Saudi women are the key decision makers for everyday and household products. Furthermore, they complement past research investigating the impact of other world religions (excluding Islam) on sustainable consumption behaviour; and with the 2030 vision having been introduced in the KSA, it is vital to explore potential means of translating it into action and how the values and beliefs of Islam could support this.



In this manner, this PhD research finding has various practical implications, with consumers willing to engage in sustainable actions, such as recycling or purchasing organic products, it becomes vital for facilities to be provided and/or products to be made available. Although community efforts in forms of recycling bins are made to enhance sustainable practices, thus far, there is a seeming lack public buy-in, in terms of providing these facilities in all districts. Yet, with the emergence of the 2030 Vision there is an opportunity to foster already existing practices and enhance them further. That Islam was incorporated into official communications implies that the government understands the necessity to link religion if they want to achieve a shift in consumer behaviour and move towards sustainable consumption practices. If the government provides an infrastructure to support sustainable behaviour they would not only achieve buy-in, but also recognize the influence Islam has on the individual's actions and their desire to overcome cognitive dissonance. Currently only the older parts of Riyadh City have facilities that allow its residence to act upon their moral duties, thus, it is essential to make further improvements in terms of the infrastructure provided for acting upon intentional sustainable behaviour.

Further research can explore areas such as:

- A limitation was that the research has looked into not only female participants. As the study specifically, researched females in Riyadh City between the ages of 25-59. Future research could include male participants sustainable consumption behaviour. Male consumption behaviour is very different to female's consumption behaviour and therefore it would be interesting for future research to discover this male market area.
- As stated previously the research was set to a specific context, future research can explore other cities in the KSA or even other Arab/Muslim countries and cultures.
- This research has investigated the consumption behaviour of female towards indoor domestic soft furniture and got really valuable data and

findings. Future research can investigate the consumption behaviour of other products.

- Related to the findings of this research, on how the consumption behaviour of females have changed towards furniture, before and after the 2030 vision. Furthermore, an academic could do a longitudinal research on the KSA consumer consumption behaviour, before and after the vision2030 and the VAT applied on goods and whether this effects their consumption behaviour in becoming more sustainable or not.
- Linking back to the findings of this research, Females are key decision makers in the KSA. Yet there is a difference on whether they contribute to purchase in terms of money traditional versus modern living district (e.g. West and South). Future research can investigate and compare other cities in the KSA.
- Even though this is a qualitative study, future studies could follow up this research and conduct a quantitative study with a bigger population and compare them to the consumption behaviour of other cities in the KSA.
- Future research can conduct an extensive understanding of the relationship between religion (different religions) and sustainable consumption behaviour in general or to a specific product.

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## **APPENDICES**

**Appendix one: Interviewees Consent Form.**

*Faculty of Engineering and Physical Sciences SCHOOL of MATERIALS*

**Participant Consent Form**

Please complete the Participation Consent Form to give consent to participate and email the forms back to the researcher Shahd Sahab at shahd.sahab@postgrad.manchester.ac.uk

**Title of Research Project:**

“An investigation into indoor domestic soft furniture consumption in the Kingdom of Saudi Arabia”

Please mark "X" in the box

- |    |   |                          |
|----|---|--------------------------|
| 1. | I confirm that I have read and understand the Participation Information Sheet for the above study and have had the opportunity to ask questions and had them satisfactorily answered. | <input type="checkbox"/> |
| 2. | I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason.   | <input type="checkbox"/> |
| 3. | I agree to the interview being recorded (by digital audio recording).   | <input type="checkbox"/> |
| 4. | I agree to the use of anonymised quotes of my interview in this PhD thesis and future publications.   | <input type="checkbox"/> |
| 5. | I agree that the researcher can store my interview results from the research study for a period of 5 years after the interviews have taken place.                                     | <input type="checkbox"/> |
| 6. | I agree to take part in the study.  | <input type="checkbox"/> |
| 7. | I agree for a translator to proof the researcher’s translation of my questionnaire and interview if done in Arabic.   | <input type="checkbox"/> |

**Name of Participant:**

**Signature:**

**Date:**

**Name of the Researcher: Mrs. Shahd Sahab**

**Appendix Two: Furniture Store Information list.**

Store information		Store service			
Store Name	Place of manufacturing	Website existence (Yes, No)	Website content	Online shopping (Available, Not-available )	Delivery method (Online, Off-line/in-store)
Asrar Alehteraf	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Abu Adeel	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Abu Fahad	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Abu Mohammed	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Abwab	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alahlam Furniture	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Algafary Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Atheer Alleel	Local and imported manufacturing	No	-	Not-available	Off-line/in-store delivery
Ajwaa Altamyoz for Furniture	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Last Design	Local and imported manufacturing	No	-	Not-available	Off-line/in-store delivery
Adfen	Local and imported manufacturing (USA, Phillipine, China and Lebanon)				
Argento	Imported furniture	No	-	Not-available	Off-line/in-store delivery

Asar Home	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Asahy	Imported furniture (Turky, USA, Eygpet)	No	-	Not-available	Off-line/in-store delivery
Astar	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Istanbul	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Osul Alfkhamah	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Judy Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Anma	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Anwar Alasalh	Imported furniture	No	-	Not-available	Off-line/in-store delivery
ID Design	Imported furniture	Yes	The website is about the store information. Stores's catalog can be viewed online.	Not-available	Off-line/in-store delivery
Ihome	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Ayar	Imported furniture	Yes	The website hasn't been updated since 2011	Not-available	Off-line/in-store delivery
IKEA	Imported furniture	Yes	The website is about the store information. All the companies product are available online with all there details. Company's catalog can be viewed online.	Not-available	



Elite Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Arokrya	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Green Wood	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alaro Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alanamel Almobdeaa	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Albena Alamar	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Elegant Home	Imported furniture	Yes	The website is about the store information. Only a few pictures to introduce the viewer about the companies product.	Not-available	Off-line/in-store delivery
Albeit Alalamy	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Classic Home	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Albayt for Decore	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alboyot	Imported furniture (USA, China)	No	-	Not-available	Off-line/in-store delivery
American Home	Imported furniture (Europe, USA)	No	-	Not-available	Off-line/in-store delivery
The Turkish	Imported furniture (USA, Turkey)	No	-	Not-available	Off-line/in-store delivery
Alturkey for Furniture	Imported furniture (Turkey), Local	No	-	Not-available	Off-line/in-store delivery

	Manufacturing				
Altuwajry	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Aljedaye	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Aljarbu	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Aljeraisy	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Aljeaydy	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alhazmy	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alhamdy	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alhabib	Imported furniture (China), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Golden Dream	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Gulf Furnishing Company	Local Manufacturing	Yes	The website is about the store information. Only a few pictures to introduce the viewer about the companies product and projects they have implemented.	Not-available	Off-line/in-store delivery
Altar Alsharqia	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Aldaham	Imported furniture (China, Spain, Turkey), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery

Aldorybe	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Aldraweesh	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Aldaleem	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Aldawaleeb Althabetah	Imported furniture (China), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Aldoleyah	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Aldoman	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Spring	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alraslani Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alrumaih Furniture	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alrawan	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alsalem	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alshaer Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alsorayai	Local Manufacturing	Yes	The website has detailed information about the company. A few sample pictures to introduce the viewer to products and there details.	Not-available	Off-line/in-store delivery

Alsaeed	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alsawsan Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alsowalim Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alsaif Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alshantaf Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alshaekh	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alsani Alawal for Furniture	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Sabban	Imported furniture	Yes	The website has detailed information about the company.	Not-available	Off-line/in-store delivery
Alsafawh	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Aldohayan	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alazmi	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alaamer Furniture	Imported furniture	Yes	The website has detailed information about the company and there services. Products pictures are available, no detailed information is available and the website hasn't been updated since 2012.	Not-available	Off-line/in-store delivery

Alabdulagder for Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alabdullatif Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Abdullwahid Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Aletibi	Imported furniture (China, USA, Spain), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alajmi	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alarabi for Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alerifi	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alatallah Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alaqeel Furniture	Imported furniture	Yes	The website has information about the store. A few sample pictures to introduce the viewer to products and there details.	Not-available	Off-line/in-store delivery
Aleqelan Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alamari	Imported furniture (China)	No	-	Not-available	Off-line/in-store delivery
Alomdah Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alomar	Imported furniture (China, Italy, USA)	Yes	The website has information about the store. A few sample pictures to introduce the	Not-available	Off-line/in-store delivery

			viewer to products and there details. The website hasn't been updated since 2012.		
Alomari	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alamoudi	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alangari	Imported furniture (USA, China, Malaysia)	No	-	Not-available	Off-line/in-store delivery
Alobathani	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Algardinia	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Algaith for Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alfayz	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Four Seasons	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alfaleej Furniture	Imported furniture (USA, Malaysia), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alfaleeh Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alfatamani Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alfouz Decore	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alfouz Furniture	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery

The Palce	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Elegant Pieces	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Turkish Moon	Imported furniture	No	-	Not-available	Off-line/in-store delivery
The Classic	Imported furniture (USA), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alkolthom	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alkayan	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Finishing Touches	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Almoatheth	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Almohsen	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Almodamg	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Almarasm	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Almosfer	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Almutlaq Furinture	Imported furniture	Yes	The website has detailed information about the company and there services. Companies products can be viewed online with there details. the website hasn't	Not-available	Off-line/in-store delivery

			been updated since 2013.		
Almamoon	Imported furniture	No	-	Not-available	Off-line/in-store delivery
The Gallery	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Dome Furniture	Imported furniture	Yes	The website has detailed information about the company, showrooms and there partners.	Not-available	Off-line/in-store delivery
Almamlakh Almotahedah	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Habitat	Imported furniture	Yes	The website provides all types of furniture the store has to offer. The website hasn't been updated since 2009.	Not-available	Off-line/in-store delivery
Almohawis	Imported furniture (China)	No	-	Not-available	Off-line/in-store delivery
Alanfea	Imported furniture (China, USA, Malaysia), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Turkish Star	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Star Furniture	Imported furniture (Turkey)	No	-	Not-available	Off-line/in-store delivery
Alnajady	Imported furniture (Turkey)	No	-	Not-available	Off-line/in-store delivery



Alneser	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alnafai	Imported furniture (China, Spain, USA), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alnahdi	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alyahyan Furniture	Imported furniture (Turkey)	No	-	Not-available	Off-line/in-store delivery
Alnawras	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alyousif	Imported furniture (China, Italy, Malaysia)	No	-	Not-available	Off-line/in-store delivery
Om Al Rabeaen	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Oak	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Prestige	Imported furniture (USA), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Platform	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Bin Mahfoth	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Bu Sabeet	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Borsa	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Beat Alehteraf	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Beat Alegtesad Aldowlyh	Imported furniture	No	-	Not-available	Off-line/in-store

					delivery
Emirate House	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Beat Altaghezat	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Bed House	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Dear House	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Touch House	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Haneen House	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Beatty	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Furniture Houses	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Traka	Imported furniture (France, Germany, Belgium, Lebanon), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Tempur	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Tanatel	Local Manufacturing	Yes	The website has a brief about the company. Images of all the companies implemented projects.	Not-available	Off-line/in-store delivery
Jaty	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Jwahr Alorobah	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery

Garden Palace	Imported furniture (China, Malaysia), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Kosoob	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Dar Akasya	Imported furniture (China, Philippine)	No	-	Not-available	Off-line/in-store delivery
Dar Alborj	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Dar Alhadaya	Imported furniture	Yes	The website has only one static page with an email for any store question. The website hasn't been updated since 2012.	Not-available	Off-line/in-store delivery
Dar Roma	Imported furniture (Italy)	No	-	Not-available	Off-line/in-store delivery
Dar Samargad	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Dar Fadak for Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Danat Almaskan	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Darb Alsaadah	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Dorat Aletifaq	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Dorat Alnokbah	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Droob Alriyadh	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Dalas for	Imported	No	-	Not-	Off-line/in-

Furniture	furniture			available	store delivery
Dogash	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Dome Deem	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Devano	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Shagen Decore	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Decorate Alswilem	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Demos	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Roaya for Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Raea	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Razan	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Raboui Alamal	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Rattan House	Imported furniture (Malaysia)	No	-	Not-available	Off-line/in-store delivery
Rokon Alsareer	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Rana Gulf	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Rawae Alebdaa	Imported furniture (Turkey, Eygpet), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alsharq for	Imported	No	-	Not-	Off-line/in-

Furniture	furniture			available	store delivery
Roche Bobois	Imported furniture	Yes	The website is not available for the Saudi Market Products	Not-available	Off-line/in-store delivery
Rawdat Alandalous	Imported furniture (Eygypt), Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Rawae Alqaser	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Roomz	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Royal Star	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Reesh Decore	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Zas	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Zaf	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Zamani for Furniture	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Zahrat Alabnous	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Zahrat Alkalig	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Zahrat Algoronfol	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Saj	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Sara and Yara	Imported furniture	No	-	Not-available	Off-line/in-store delivery

Spring Air	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Curtain Home	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Steal Land	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Sadeem	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Selection	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Sleep Royal	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Sleep Confort	Imported furniture (Malaysia, Spain)	No	-	Not-available	Off-line/in-store delivery
Sleep High	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Soft Dreams	Imported furniture	No	-	Not-available	Off-line/in-store delivery
CityW	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Shelymar	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Shams Alrayan	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alam Alsojad	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Sedar	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Sealy	Imported furniture (USA)	Yes	The website is not available for the Saudi Market Products	Not-available	Off-line/in-store delivery

Saudi World	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Yasser World	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Abas for Carpet	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alnawras Carpet	Imported furniture	Yes	The website has a brief about the store and the service they offer. Images of the stores products and their details.	Not-available	Off-line/in-store delivery
Kids Room	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Bed Rooms	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
My Room	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Gusen AlBan	Local Manufacturing	Yes	The website has detailed information about the company's history, showroom, only four pictures regarding the "latest products", and contact information.	Not-available	Off-line/in-store delivery
Fabsa	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Frotshy	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Curtain Idea	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Fahd Alftymani	Imported furniture	No	-	Not-available	Off-line/in-store delivery

Keba	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Creative Palace	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Dream Palace	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Turkish Palace	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alkhal Palace	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alsaraya Palace	Imported furniture	Yes	The website has detailed information about the company's history, showroom, branches, only few pictures regarding the store products and contact information.	Not-available	Off-line/in-store delivery
Gatam	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Gatam and Anoum	Imported furniture (USA)	No	-	Not-available	Off-line/in-store delivery
Gemat Alrawdah	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Cairo for Furniture	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Kardacs	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Kol Altafaseel for Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Kenz	Imported furniture (Europe)	No	-	Not-available	Off-line/in-store



					delivery
Konoz Alathath	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Kookh Alsharq	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Lamest Alsojad	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Lamar Interiors	Imported furniture (Italy)	Yes	The website provides information about the brand and there profile. As well as a list of there brand partners and the service they provide. Only a few pictures of the products are available. The website last update was in 2011.	Not-available	Off-line/in-store delivery
Lamasat	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Lamasat kasah	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Mahalat Bahabry	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Mahmoud Saeed	Imported furniture (China)	No	-	Not-available	Off-line/in-store delivery
Madinah	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Markaz Almafroshat	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Decor Line	Imported furniture	No	-	Not-available	Off-line/in-store delivery



Masharef Alriyadh	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Mashraqeyat	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Marad 80	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Ankara Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alharameen Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alkaeer Furniture	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alrajaa Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alsaree Furniture	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Alasemah Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alabdulwahab Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Alqahtani Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Algarni Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Allehedan Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Almarwah Alturkyah for Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Almosa Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Nomah	Imported	No	-	Not-	Off-line/in-




Furniture	furniture			available	store delivery
Hamad Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Rokon Ahlami Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Rawan Furniture	Imported furniture, Local Manufacturing	Imported furniture	No	-	Not-available
Renad Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Sama Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Tebah Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Meladora Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Mafroshat and Majales	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Yosif Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Manar Almohaml	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Manam	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Modern Home	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Modeco	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Moda	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Moyam	Local Manufacturing	No	-	Not-available	Off-line/in-store

					delivery
Midas	Imported furniture	Yes		Not-available	Off-line/in-store delivery
Miro	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Milan	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Meinos	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Nimshi for Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Nigwsh Almanzil	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Nawadr Alathath	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Noor Almshaal	Imported furniture	No	-	Not-available	Off-line/in-store delivery
High Point	Imported furniture	Yes	The website is still under development	Not-available	Off-line/in-store delivery
Harmoni for Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Hills	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Hams Alkareef	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Hoss	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Howydi	Local Manufacturing	No	-	Not-available	Off-line/in-store delivery
Hoyam	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery




Watheer for Furniture	Imported furniture	No	-	Not-available	Off-line/in-store delivery
Wardat Alsahiyah	Imported furniture, Local Manufacturing	No	-	Not-available	Off-line/in-store delivery

**Appendix Three:** Overview of eco-labels used in the participants interviews.

Label	Background	Key Features
<p><b>Fairtrade Foundation</b> (Fairtrade Foundation, 2018)</p>  <p><b>FAIRTRADE</b></p>	<ul style="list-style-type: none"> <li>- Found in the late 1980s in the Netherlands.</li> <li>- The first Fairtrade consumer label launched in 1988.</li> </ul>	<ul style="list-style-type: none"> <li>- Fairtrade minimum price.</li> <li>- Fairtrade that workers and farmers in developing countries get a better deal.</li> </ul>
<p><b>Green Circle Certified</b> (Green Circle Certified, 2018)</p> 	<ul style="list-style-type: none"> <li>- Established in 2010.</li> </ul>	<ul style="list-style-type: none"> <li>- Certified products claim validation for; <ul style="list-style-type: none"> <li>o rapidly renewable resource content</li> <li>o sustainable manufacturing practices</li> <li>o renewable energy use</li> <li>o recycled content</li> <li>o carbon footprint reductions</li> </ul> </li> </ul>
<p><b>FSC</b> (FSC, 2018)</p> 	<ul style="list-style-type: none"> <li>- Established in 1993.</li> </ul>	<ul style="list-style-type: none"> <li>- When seeing the FSC label on a product, it means that buying timber and other wood products, with confidence that there is no contribution to destroying of the world's forests.</li> </ul>
<p><b>GOTS</b> (GOTS, 2017)</p> 	<ul style="list-style-type: none"> <li>- Established in 2002.</li> </ul>	<ul style="list-style-type: none"> <li>- Textiles are produced from a minimum of 70% organic fibres.</li> <li>- functional <i>waste water treatment</i> plant is mandatory.</li> <li>- All dyestuff must meet environmental and</li> </ul>

		toxicological criteria.
<p><b>EU Flower</b> (DEFRA, 2018)</p> 	<ul style="list-style-type: none"> <li>- Established in 1992 to be recognisable environmental label across the EU.</li> </ul>	<ul style="list-style-type: none"> <li>- To provide consumers with netter information on environmental impact product.</li> <li>- To promote the design, production, marketing and use of products which have a reduced environmental impact during their entire lifecycle.</li> </ul>
<p><b>Cradle to Cradle certified</b> (Cradle to Cradle, 2018)</p> 	<ul style="list-style-type: none"> <li>- Established in 2005.</li> </ul>	<ul style="list-style-type: none"> <li>- Cradle to Cradle is a sustainability label that requires achievement across multiple attributes: <ul style="list-style-type: none"> <li>o Efficient use of water;</li> <li>o Use of renewable energy;</li> <li>o product and system design for material reutilization, such as recycling or composting</li> <li>o use materials that are safe for human health and the environment through all use phases.</li> </ul> </li> </ul>
<p><b>Level Certified</b> (Level, 2018)</p> 	<ul style="list-style-type: none"> <li>- Established in 2009.</li> </ul>	<ul style="list-style-type: none"> <li>- level addresses how a product is sustainable from multiple perspectives.</li> <li>- For example for a furniture production to be sustainable, they have to consider all aspect of company's social actions, human and ecosystem health impacts, material selection, energy usage.</li> </ul>
<b>Oeko-Tex Standard</b>	- Found in the	- Test textiles at



<p>(Oeko-Tex, N.D.)</p> 	<p>late 1992.</p>	<p>all stages of their production cycle for the use of harmful substance</p>
<p><b>NSF</b> (NSF, 2018)</p> 	<p>- Found 1944.</p>	<p>- When seeing the logo on products it ensures that it is constructed in a sanitary manner, during construction and assembly.</p>
<p><b>ÖkoControl</b> (Eco Label Index, 2018)</p> 	<p>- Established in 2009.</p>	<p>- ÖkoControl label is given to furniture that are made from sustainable, natural material</p> <p>- The label guarantees that low output of dangerous emissions.</p>