

T.C.
ANTLAYA BILIM UNIVERSITY
INSTITUTE OF POSTGRADUATE EDUCATION
BUSINESS ADMINISTRATION
THESIS PROGRAM

**UNDERSTANDING THE COGNITIVE DISSONANCE ON WOMEN
POST PURCHASE BEHAVIOR: A STUDY BASED IN TUNISIA**

DISSERTATION

Prepared By
Rihab Glai

Antalya - 2021

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ANTALYA BİLİM UNIVERSITY INSTITUTE OF POST-GRADUATE EDUCATION

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ÖZET

Tüketici davranışı çalışması, mevcut sosyoloji çalışmalarıyla alakalı hale geldi. Tüketici satın alma davranışı, nihai tüketici satın alma davranışını ifade eder. Müşteriyi, özellikle karar verme sürecinde, tercihlerinde, satın alma davranışında, satın aldığı ürünlerde, gittiği mağazalarda veya perakendecilerde çeşitli özellikler ve faktörler etkiler. Ek olarak, bilişsel uyumsuzluk kadın davranışında da çok yaygındır ve birçok pazarlamacı, kadınların satın alma sonrası davranışlarını incelemeye çok ilgi duyar. Bu nedenle çalışma, bilişsel uyumsuzluğun satın alma sonrası kadınlar üzerindeki etkisini değerlendirmeyi amaçlamaktadır. Bu makale Tunuslu kadınlar için karar satın alındıktan sonraki uyumsuzluğu araştırıyor. Özellikle kadınların karar verme kalıplarına ve satın alma sürecinden sonraki tepkilerinin psikografik, sosyoekonomik ve davranışsal özelliklerine göre genel bir bakış sağlar. Bu araştırmanın amacı doğrultusunda, Tunus'ta 402 kadından birincil veri toplamak için bir yöntem olarak nicel bir anket kullanılmıştır. Bu anket, yakın zamanda bir giyim ürünü satın alan kadınlar arasında yapıldı. Sweeney ve diğerleri tarafından geliştirilen çok boyutlu bir ölçek. (Mayıs 2000) uyumsuzluğun büyüklüğünü ölçmek için kullanıldı. Cevaplar Google Form kullanılarak toplandı ve veriler SPSS-25 ve Amos-24 Systems ile analiz edildi. Sonuç olarak, tüm kadınlar için yaş, medeni durum ve çalışanın durumu gibi demografik faktörlere bağlı olarak bilişsel uyumsuzluk düzeylerinde anlamlı bir fark olmadığını, bekar ve evli kadınlar arasında duygusal uyumsuzluk üzerinde olumlu bir etkiye sahip olduğunu göstermektedir. Ayrıca, bu araştırmanın bulguları, kadınların çoğunun son satın alımlarından memnun olduklarını ve bu nedenle bilişsel uyumsuzluk seviyesinin düşük olduğunu göstermektedir. Bu nedenle, bu araştırmanın temel amaçlarından biri, insanlık durumunun bir parçası olarak değerlendirilebilecek bilişsel ve davranışsal sistemler içindeki uyumu göstermektir.

Anahtar kelimeler: Bilişsel uyumsuzluk, tüketici davranışı, satın alma sonrası, dürtü satın alma ve satın alma dürtüsü.

ABSTRACT

Consumer behaviour study has become relevant in the present marketing and sociology studies. In fact, several characteristics, specificities and factors influence the customer especially woman in her decision-making process, preferences, buying behaviour, the products she buys, the stores or retailers where she goes. In addition, the cognitive dissonance theory is mostly used to explain consumer behaviour, focusing on the dilemmas faced during various stages of purchasing behaviour. Hence, the study aims to investigate the state of cognitive dissonance after buying decision was made for Tunisian women. Specifically, it provides an overview of the decision-making patterns of women and the stage of their reaction after buying process according to their psychographic, socioeconomic and behavioural characteristics. For the purpose of this research, a quantitative survey was used as a method to collect primary data in Tunisia from 402 women. This questionnaire was conducted among the women who had recently purchased a luxury apparel product. A multidimensional scale developed by Sweeney, Hausknecht, & Soutar (2000) was used to measure the magnitude of dissonance for female, besides two other constructs were additionally added which are the impulsive buying and the purchasing decision involvement. The answers were gathered using Google Form and the data was analyzed by SPSS-25 and Amos-24 Systems. The results show firstly that there is no significant difference in the levels of cognitive dissonance due to demographic factors such as age, marital status and employee's status for all women, while it had a positive bearing on emotional dissonance amongst all women. Secondly, there is no significant effect for the impulse buying and the purchase decision on post purchase dissonance. Third, the findings of this research indicate that most of the women were satisfied with their last purchases and therefore, the level of cognitive dissonance is low. Hence, one key aim of this research is to demonstrate the harmony within cognitive and behavioural systems that can be adjudged as a part of the human condition.

Key words: Cognitive dissonance, women, consumer behaviour, post purchase, impulse buying and purchase decision.

PREFACE

The hereby master's dissertation of Business Administration covers the importance of understanding the dissonance of consumer post purchase behaviour, which is one of the most relevant interest in the marketing and sociology fields. Within the framework of this study, a literature review has been made and various studies regarding the topic have been analyzed.

This whole work had been successful and fruitful with the help and guidance of many people who have been guiding me with my thesis in the right way. First, I would like to thank Prof. Dr. Ibrahim Sani MERT for his time and immense knowledge, who had supported and guided me with the information and tools that were required to complete this research. I would like also to show my gratitude to Assoc. Prof. Dr. A. Mohammed ABUBAKAR who helped me to learn using the software for data analysis.

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26 / 12 / 2020

Rihab Glai

Signature

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LIST OF ABBREVIATIONS

CBI	: Customer Buying Intention
CDT	: Cognitive Dissonance Theory
CFA	: Confirmatory Factor Analysis
COD	: Concern over Deal
EFA	: Exploratory Factor Analysis
PDI	: Purchase Decision Involvement
SEM	: Structural Equation Modelling
WOP	: Wisdom of Purchase

CHAPTER 1. INTRODUCTION

The first chapter is about giving an insight into research theory. It provides an overall explanation of the main objectives and goals of the study.

1.1 Introduction

Consumer behaviour is one of the marketing concepts that have been studied the most. More the firm understands its customers; the more likely it will become marketplace effective. Consumer behaviour awareness would be one of enormous help in the preparation and execution of marketing strategies. In fact, the marketer has to understand how the consumers think, feel, and choose from alternatives such as goods, brands, and how consumers are affected by their environment, comparison groups, economic, financial, personal, and psychological influences. Consumer's behaviour has a role to play in a number of marketing-critical things. It also ultimately resumes the appraisal of an item by a customer and represents positive, negative feelings and patterns of behaviour, which can be affected by several additional functions. Furthermore, psychologists and marketers, for instance (Linder, Cooper, & Jones, 1967; Oliver, 2010; Hunt, Geiger-Oneto, & Varca, 2012), recognize that attitudes of consumers are the mixtures of behaviours, beliefs and emotions that result in favourable buying responses.

In this regard, one of the most widely researched phenomena in the history of psychology is cognitive dissonance, which defines a psychological state in which the perception of an individual's beliefs, attitudes and behaviours opposed to each other (Festinger, 1957). Thus, this theory proposed by the researcher Leon Festinger and it is defined as a feeling of psychological discomfort caused by two cognitive elements discordant, and immersing the individual in a state which motivates him to reduce this uncomfortable feeling. Dissonance theory is a proven paradigm in the field of psychology and according to Festinger, the theory says that people have internal conflict when they are obliged to choose.

The cognitive dissonance theory has an importance in the field of psychology and marketing; indeed, many marketers have an interest in studying the post purchase

behaviour of consumers such as (Mugge, Schifferstein, & Schoormans, 2010; Hasan and Nasreen, 2012; Bolia et al., 2016). As a matter of fact, the interaction of cognitive dissonance and consumer behaviour has been the focus of valuable research. Moreover, post-purchase dissonance can be defined as a situation of psychological discomfort in which the consumer finds himself after having made a purchase (Mao and Oppewal, 2010). This post-purchase dissonance can appear for example when an individual thinks he/she has made the wrong choice by having finally bought a product which only responds imperfectly to his/her need or when he/she regrets having been influenced by a seller who oriented towards a higher quality and more expensive product (Telci, Maden, & Kantur, 2011). According to Hinojosa et al. (2017), cognitive dissonance is experienced when a person suffers from the unpleasant and conflicted state of being 'in two minds about something', in other words, concurrently holding two or more contradictory cognitions (i.e., perceptions, attitudes or beliefs).

In a marketing context, cognitive dissonance is a situation of psychological or mental discomfort that the consumer can feel with regard to a purchase or an advertisement. In the case of a purchase, the phenomenon of dissonance can result in a form of regret or even resentment towards the brand or the seller that can have consequences in terms of loyalty or reputation (Tsiros and Mittal, 2000). Accordingly, the interest to address Festinger's theory within a post-purchase context has become universally embraced by marketing practitioners, to the point where terms such as 'buyer's remorse' (Sigall, 2017) and 'consumer regret' (Tzeng and Shiu, 2019; Charles, 2014) have now become common parts of the marketer's vernacular. Indeed, we are considering the cognitive dissonance as a unifying theory for marketing when an uncomfortable state arises from the conflict between two entities (Festinger, 1957). This can help marketers for better understanding the confusion of customers while facing the conflict of information before purchase decision making.

The post-purchase dissonance must be taken into account in the context of the loyalty problems of a product because it can cause more or less conscious feeling of resentment towards this brand. It is possible to prevent or limit post-purchase dissonance for example, by advocating with sales teams a real sale advice tailored to needs or by taking actions intended to reassure consumers that they have made the right decision purchase (Connolly and Zeelenberg, 2002). The consumer can for example be

comforted by a few words from the seller after the decision has been made or by subsequent messages coming to congratulate and reinforce the customer's decision. Unconsciously, the consumer can sometimes seek to avoid a state of dissonance post-purchase and cause a bias of rationalization (Mao and Oppewal, 2010).

The theory of cognitive dissonance was essentially used to study post purchase behaviour. An empirical study in the context of apparel products from 402 respondents show that this psychological discomfort can also occur following exposure to inconsistent information before purchase and that it affects reactions, attitude and the purchase intention. These results aim to better understand the cognitive consequences and effect of inconsistency as a differentiation strategy. This paper aims to present an empirical analysis of the impact on the three major sources after purchase at dissonance rates. Thus, the article specifically discusses the level of dissonance and the emotional behaviour after purchasing among Tunisian women. The goal is to ensure that the marketing industry has a way of understanding women attitudes and behaviour among a post-commerce dissonance, and giving some recommendation in order to reduce this phenomenon.

1.2 Aim of the Research

The objective of this study is to show that cognitive dissonance occurs after purchase, following exposure to inconsistent information with cognitions already ingrained in the consumer; this dissonance negatively affects the intention to repurchase. For that, it will be necessary to define the theoretical status of the dissonance, in its cognitive and affective components, to clarify the foundations of informational dissonance and to propose an empirical validation of the construct in a post-decision situation. On the academic plan, this research will open up new perspectives by broadening the cognitive dissonance framework for post-purchase situations, but also to specify the emotional, attitudinal and behavioural impact of the decision-making by women.

The first part of this article will therefore be devoted to the presentation of the conceptual framework of research and body of hypotheses that it underlies. The second will present the research method and the third will be dedicated to the empirical validation of the proposed model. For this, due to the absence of robust and shared

measures (Sweeney, Hausknecht, & Soutar, 2000), a measurement scale of cognitive dissonance will be developed, and then tested on apparel products in the context of exposure to inconsistent information before and after the decision. These results will finally be the subject of a theoretical and managerial discussion.

As explained above, this research aims to study the factors of cognitive dissonance after last purchasing of any apparel products and explaining the relationship between cognitive dissonance and its effect on Tunisian women behaviour. Furthermore, this research contributes to understand the possible impact of the customer buying intention, which should be specified on the impulse buying and the purchase decision involvement on measuring the three cognitive dissonance dimensions (emotional, wisdom of purchase, and concern over deal).

Hence, this study will examine the following objectives:

- To understand the theory of Cognitive Dissonance.
- To understand the women behaviour theoretically.
- To understand consumers post purchases attitudes and behaviours .
- Analyzing some factors that create cognitive dissonance among women behaviour after purchasing.
- Analyzing the customer buying intention and the purchasing involvement phases, as factors for the appearance of the cognitive dissonance.

The following questions are further addressed in this study:

- To what extent do emotions affect women behaviour after purchasing in Tunisia?
- What are the main factors in the process of customer decision-making that lead to the stage of post purchase dissonance?
- Can consumer attitudes change in the phase of post purchase dissonance?
- What is the effect of cognitive dissonance on the post purchase behaviour?

The scope of this research will include the phenomena of cognitive dissonance and in particular the women behaviour in post-purchasing phase. In fact, the study is not

about discussing practical solutions for cognitive dissonance after purchasing, but rather focuses on which Tunisian women behaviour will be.

1.3 Assumptions of the Research

Many marketers and psychologists recognize that the consumer's behaviours are a mixture of values, emotions and habits, which contribute to different reactions (Bose and Sarker, 2012; Sharma, 2014; Keiningham et al., 2016; Tao and Jin, 2017). Since dissonance is a psychological concept, it becomes a human tendency to doubt the validity of consumer's behaviour post purchase (Tao and Jin, 2017). First, according to many researches (Stone and Cooper, 2001; Telci, Maden, & Kantur, 2011; Power and Jack, 2013; Rohde et al., 2016) about this psychological phenomenon, the CDT assumes that dissonance begins when people commit behaviour and then assess the meaning of the behaviour against a standard for judgment. In this regard, the women who have participated in the survey of the present study will be sharing their experience of apparel purchases especially their emotions after the decision of buying was made. In fact, an object assessment by women after purchasing reflects either positive or negative emotions or behavioural patterns. Moreover, it is safe to assume that the extent of the customer's involvement in his purchasing decision will have an imperative effect on the dissonance he feels after buying, which could also direct his potential consumer actions. Second, based on other assumption, the behavioural relation of customer does not always hold; several factors may influence the consumer's actions such as the frequency of buying the product, the purchasing decision involvement and customer loyalty. Third, the CDT based up on a general assumption that people always attempt to appear reasonable and thus they need to ensure that their behaviour is consistent with their attitude (Jermias, 2001; Stalder and Anderson, 2014). For that reason, when they act in a way that is inconsistent with their opinion, they experience tension and dissonance. Psychological researches (Jackson and Hogg, 2010; Rohde et al., 2016) support this assumption by showing that when dissonance creates an aversive state of arousal that people interpret as psychological discomfort; they attempt to justify their action by reducing this tension.

Finally, the relationship between the variables in this study can offer marketers valuable clues: for example, if buying impulses will generate further cognitive

dissonance, the same conditions are provided for dissonance after purchase, which would minimize marketing interventions. It is therefore very important to recognize the factors that generate cognitive dissonance and to ensure the positive attitude of the customer towards their respective decision. This study will help service organizations identify the determinants of cognitive dissonance that are dominant in the development. The research would also help to identify possible problems in terms of cognitive dissonance to the challenges faced by the service sector.

1.4 Limitation of the Research

While this study makes some important contributions to the literatures on selective exposure and credibility, like all research it has some limitations. Firstly, since this study focuses on the dissonance of women in purchasing luxury fashion products, which could be a shortcoming because emotional and rational components can result in different responses. In fact, the idea of testing the post-purchase dissonance for the category of this product is very limited and the results may be different with tangible goods. Thus, the suitability for the scale could be empirically tested with other products than apparel products. Secondly, since the majority of responses were from the new generation (between 15 & 25 years old), the sample may be not enough to define the results for those categories. Secondly, there is another limitation involved, the selection of a single geographical context of Tunisian consumers as a sample frame, and women seem to have a relative preference for products from their own country. Therefore, based on cultural preferences the data could be collected from different geographical locations for the stability of findings. Further, conducting the questionnaire in another country or amongst different demographic groups might have yielded entirely different results. Lastly, this study is limited by the use of only the dichotomous variables that is related to customer buying intention and his decision; so in future research, a different method, such as a large-scale survey for two customer samples and for two different types of stores selling durable goods could be conducted to better understand the relationships proposed in the present research model.

1.5 Rationale of the Study

Dissonance has always been a paradoxical term for the marketers' world over. For decades, businesses may have sought to dig into the deep-seated understanding that

customers' minds are protecting and shaping their purchasing decisions through this psychological concept. Since the service industry is a growing industry, successful business largely depends on delivering goods and services efficiently and satisfying customers. Therefore, satisfying customers is the ultimate objective of every marketer in all categories of goods and service. However, before deciding whether the customer is satisfied or dissatisfied, they have to encounter a stage termed as cognitive dissonance, even though the marketer may not get any direct role. At the same time, marketers should remain careful about their promotional messages so that it does not create any kind of confusion in the mind of target customers, because there is a powerful motive to every individual for maintaining cognitive consistency, which gives rise to irrational and sometimes maladaptive behaviour (Festinger, 1957).

Thence, it is very much important to identify the factors that create cognitive dissonance and ensure positive customer's attitude towards their respective choices. This study will sprinkle light the research gaps pertaining to dissonance and its implications in post purchase behaviour. Finally, it will help the service organizations to find out the determinants, which are dominant in creating cognitive dissonance, and to find out the probable solutions of the problems faced by the service industry in terms of cognitive dissonance.

CHAPTER 2. LITERATURE REVIEW

This chapter provides detailed background information about the theories used in the research; cognitive dissonance theory, its prior research and measurement, the planned behaviour theory and the reasoned action theory to explain the consumer behaviour post purchase.

2.1 Cognitive Dissonance Theory

2.1.1 *Theoretical Framework of the CDT*

The literature review indicated that the cognitive dissonance theory has been performed and proposed since 1957 by Leon Festinger. Other researchers have been carried out as we can mention some of them (Brehm and Cohen, 1962; Oshikawa, 1968; Hunt, 1970; Cummings and Venkatesan, 1976; Aronson, 1992; Harmon-Jones and Mills, 1999; Sweeney et al., 2000; Soutar and Sweeney, 2003; O'Neill & Palmer, 2004; Egan et al., 2007; Young, 2011; Telci et al., 2011; Powers and Jack, 2013; Rohde et al., 2016). However, many other researchers tried to refine and modify the cognitive dissonance theory like (Chapanis, 1964; Rosenberg, 1965; Linder, Cooper, & Jones, 1967). Indeed, some other researchers like Carlsmith (1968) added new concepts for this theory such as human beliefs, behaviour and self-esteem. In 1972, Duval and Wicklund added the term self-awareness, then the concept of unwanted consequence by Cooper and Fazio (1984), and moral integrity by Steele (1988). Hence, CDT is one of the psychology theories most widely debated in history, a number of important research studies include the idea of cognitive dissonance and its effect on the consumer behaviour.

According to Festinger, cognitive dissonance refers to a sense of mental distress when people are conscious of differences in their attitudes and actions or multiple attitudes. In addition, Festinger (1957) demonstrates that people are motivated, either by streamlining a belief or a behaviour that diminishes its value or by finding knowledge selectively which reinforces their belief or behaviour, to reduce or prevent dissonance. Furthermore, cognitive dissonance constitutes a discrepancy between individual information and a negative personal state or dissonance that motivates a person to search out and establish a strategy to mitigate that state (Festinger, 1957; Cooper and

Fazio, 1984; Elliot and Devine, 1994; Oliver, 1997; Sweeney, Hausknecht, & Soutar, 2000). They found out that dissonance involves both the logical component of the term cognitive dissonance and the emotional dimension that many meanings include the original definition of Festinger. Moreover, they have mentioned that the cognitive dissonance is an elusive construct, and it has been measured in terms of indicators such as physiological reactions following dissonance arousal or through changes in attitude to chosen and non-chosen alternatives that were initially similarly valued (Sweeney, et al., 2000).

Since Festinger (1957) had formulated his theory, Cummings and Venkatesan (1976) who have been researching cognitive dissonance literature found a number of papers focused on experimental conditions and the difficulty of imagining a real world as problem but affirmed that evidence in favour of dissonance theory in consumer behaviour literature looks good. They noticed that the decision must be significant, irrevocable and voluntary in terms of talking about dissonance. Although, cognitive dissonance is a relevant phenomenon in marketing for instance, Menasco and Hawkins (1978) wrote about cognitive dissonance and the marketing of services and they have suggested advertisers that would help consumers minimize cognitive dissonance, provide good protections or assurances, improve services and make comprehensive brochures accessible on how to correctly use their goods. Therefore, other researchers have used cognitive dissonance theory extensively in the marketing field to tackle consumers' behaviour after buying in different stages as to how it was managed or minimized and here we can mention some researchers like (Hunt, 1970; Cummings and Venkatesan, 1976; Soutar and Sweeney, 2003; Cheah, Phau, & Liang, 2015). Researchers tried to design measures to deal with cognitive dissonance (Bell, 1967; Mattock and Hawkins, 1972; Hunt, 1970; Korgaonkar and Moschis, 1982), and the measure with a greater number of items was developed by reviewing literature and proper empiric validation (Montgomery and Barnes, 1993; Sweeney, Hausknecht, & Soutar, 2000).

2.1.2 The Cognitive Dissonance and Demographic factors

Customer engagement and retention strategies are an imperative part of any organization and dissonance could put a strong motivator for customers to make their purchases in slightly different way that mostly lead to a loss (Jamwal and Pandey,

2016). The customer is constantly influenced by the pre-purchase preferences and the advantages provided by the former rival, so he is hesitant to reconsider the purchase, whether it was a smart or pathetic option. After buying a product, consumers usually think of their advantages and disadvantages and they are also forced to repeatedly think of choices (Pandey and Jamwal, 2015). People have differential dissonance risks, as well as different anxiety thresholds, consumer dissonance does not always occur. However, since the consumer mind largely analyses all these information after each purchase, many researchers (Oliver, 1997; Sweeney and Soutar, 2003; Jamwal and Pandey, 2016) measured the cognitive dissonance with some demographics such as age and gender. Sweeney, Hausknecht, & Soutar (2000) developed the scale and collaborated with two consumer classes. They found that there are three categories of cognitive dissonance, at least in the markets for consumer goods: “strong dissent”, “low dissonance” and “needing to buy”. Firstly, their study reveals that there is dissonance in a significant proportion of customers (27% and 40% in 2 product groups examined in the study). Young consumers are more likely to experience a high degree of dissonance because they are typically more active and have higher expectations. By using the same scale, Soutar and Sweeney (2003) concluded that older consumers in the low dissonance group were more common, while the high dissonance group had relatively younger consumers. Further, there were no major differences between gender, although there were proportionately more women in the low dissonance and more males in the high dissonance group. In the article “Are There Cognitive Dissonance Segments?”, the authors also concluded that consumers are now more likely to encounter dissonance and to have a strong call for management attention to dissonance given that customer capability, in particular the young consumers, has greater participation and greater service demands, including that of retail stores. In other study by Jamwal and Pandey (2016), the gender showed a significant relationship with the various dissonance groups identified, and female were more prevalent in the high dissonance group category as compared to male. Therefore, the first hypothesis can be advanced as the following:

H1: There is a significant difference in the magnitude of Cognitive Dissonance due to age groups, marital status, and employee status.

2.1.3 Previous Measurement of Cognitive Dissonance

Many researchers (i.e. Soutar and Sweeney, 2003; Koller and Salzberger, 2007; Mills and Harmon-Jones, 2009), were interested for the study of cognitive dissonance; indeed, this study took into account many variables in various dimensions that clearly demonstrate the different types of factors that generate cognitive dissonance after purchasing. In 1967, Bell used elements related to the decision's malaise and correctness. In 1970, Hunt added things related to other structures such as post transaction anxiety. In 1993, the concept of cognitive dissonance was developed by Montgomery and Barnes as “those thoughts, attitudes and emotions which consumers experience or express as they experience dissonance and situations and circumstances in which dissonance occurred” (Montgomery, 1993, p. 206). Through these psychological interactions, they attempted to capture the field of cognitive dissonance and they included support and reassurance. Although the Montgomery’s scale is a commendable effort to explain dissonance and following the scale of creation process, so the present work reflects a more systematic approach to measuring dissonance. In 1993, Montgomery and Barnes established a ten-piece metric and checked it by testing its meaning, validity and quality of the material, according to them, they gave “POSTDIS” as a name to the scale and it was explained by two main factors “correctness of decision” (an individual’s concern if he has taken the right decision and not got influenced by the salesperson) and “Support” (An individual looking for reinforcing its decision by supportive information and actions in favour of the decision). Moreover, Elliott and Devine (1994) argued that since the dissonance cycle was triggered by anticipation, psychological distress as originally conceptualized by (Festinger, 1957) should be included in the conceptualization and evaluation of dissonance. They suggested three items scale of affects and called for empirical validation of the dissonance aspect of psychological distress. About the measurement issue, Oliver (1997) has argued that a sound dissonance scale needs to be established for consumption study. Indeed, the writer concluded a chapter on his book “Satisfaction: A behavioural perspective on the customer” about the cognitive dissonance with the hope “that the construction, validation and dissemination of comprehensive dissonance measures will be forthcoming” (Oliver, 1997).

However, many other researchers (Sweeney et al., 2000; O'Neill and Palmer, 2004; Bose and Sarker, 2012; Bolia, 2016) did not use the same scale. Hence, the multidimensional scale is planned to tackle this need and the creation of scales starts with an analysis of the context of cognitive dissonance. The latter included cognitive measures (e.g., emotional, wisdom of purchase, or concern over deal) and psychological measures (e.g., fear, relaxation, and feelings) as well as behavioural measures intended to assess dissonance reduction. Therefore, the marketers filled this void with a multidimensional scale and they motioned at the beginning of the article “the concept of cognitive dissonance has been discussed widely in the consumer behaviour literature, yet paradoxically, there is no well-established scale to measure it” (Sweeney, Hausknecht, & Soutar, 2000, p. 369). This scale would quantify dissonance and resolve some significant management problems, such as whether all consumers are in dissonance or whether all consumers encounter dissonance in the same fashion. They established a multi-dimensional scale concerning the cognitive dissonance after purchasing based on 22-items and consisting of three dimensions, which are “Emotional”, “Wisdom of Purchase” and “Concern over deal”. In fact, many of emotive elements reflecting the emotional dimension of dissonance contribute to an unpleasant, irritated, unhappy and depressed nature of pleasure. Some objects reflect the higher end of angry, excited and annoyed dimensions. Furthermore, cognitive objects relate to the feelings surrounding the wisdom of purchasing decision. Lastly, concern over deal is mostly related to the salesperson. The emotional dimension (15 items) reflects psychological discomfort after the purchase decision, the wisdom of purchasing (4 items) dimension represents cognitive uncomfortable actions as regards the need to purchase or the suitability for option among other alternatives, and the concern over deal (3 items) dimension is mostly related to the impact of salesmen on the purchasing decision. The existence of segments of various degrees and forms of dissonance was further analyzed by Soutar and Sweeney (2003). Sweeney, Hausknecht, and Soutar (2000) in their research paper found that emotional aspect of dissonance is closely related to consumers’ difficulty in judging the quality of the product. Concern over deal is also found a great impact on perceived value and satisfaction (Sweeney, Hausknecht, & Soutar, 2000). Through four focus groups studies, an initial 100 items were produced. These tests are then the information evaluated by 12 consumer behaviour experts and 36 cognitive and emotional dimensional assessments are then maintained. The authors also

obtained data from two separate samples and performed exploratory and confirmatory factor analyzes to test the psychometric properties of the scale. Results confirmed the building's multidimensional design.

According to the review above, it is important to understand and explain the three dimensions of cognitive dissonance proposed by (Sweeney, Hausknecht, & Soutar, 2000) in their multidimensional scale.

2.1.2.1 The emotional nature of Cognitive Dissonance

The theory of cognitive dissonance was formulated during the rise of cognitive psychology, which evaded the role of emotions during many years. Indeed, the literature on the cognitive dissonance is thus tainted by a paradox, and Festinger (1957) never made it clear since he defined whether the dissonance was cognitive or emotional in nature. For instance, Festinger (1957, p. 260) has stated that “for some people, dissonance is an extremely painful and intolerable thing”. Many other researchers (Cooper and Fazio, 1984; Joule, Mugny, & Perez, 1988; Elliott and Devine, 1994) have focused on this paradox which can be resolved by examining the terminology used to describe the process of cognitive dissonance which seems to include 1) a cognitive dimension corresponding to the individual's awareness of inconsistent relevant cognitions and 2) a dimension emotional corresponding to the resulting anxiety-provoking psychological discomfort. According to Joule, Mugny, and Perez (1987), the psychological discomfort results from the awakening of dissonance would correspond therefore to the perception of the inconsistency relation that would generate the state of dissonance. For Elliott and Devine (1994), psychological discomfort corresponds to the frustration and the anxiety state. Harmon-Jones (2009) distinguishes the cognitive inconsistency, referring to the relationship between cognition (cognitive discrepancy), and the dissonance which corresponds to the emotional and motivational state it induced. Other scholars such as Kruglanski and Shteynberg (2012) described the cognitive dissonance as a state of tension, and an unpleasant feeling or a state of aversive arousal by Proulx et al. (2012). Thus, the cognitive dissonance would not necessarily be a state of uncomfortable tension, but also a state of excitement capable of being reinterpreted in many ways (Martinie and Joule, 2004). For this to be emotion there must be a conjunction of physiological, behavioural, expressive, neurological and

subjective processes (Derbaix and Poncin, 2005). Similarly, recent work on this psychological discomfort arising from the awakening of dissonance is also a non-specific nature in marketing, which may encourage the person to impute what he feels to causes other than the original inconsistency (Vaidis and Bran, 2019). In another perspective, several researchers have for instance considered guilt (Wallace et al., 2011), surprise (Noordewier and Breugelmans, 2013), the most relevant predictor of dissonance effects. Finally, Vaidis and Bran (2019) in their recent study have declared that while these contradictory views coexist in the literature, the essence and specificity of cognitive dissonance has not yet been addressed explicitly. Overall, concentrating on one particular effect or on a cocktail of effects to capture the essence of cognitive dissonance appears inappropriate, depending on the variety of specific emotions examined (Vaidis and Bran, 2019). From the above review, the following hypothesis could be analysed:

H2: There is a high level of dissonance for women regarding their emotions.

2.1.2.2 Wisdom of Purchase

The concept of wisdom of purchase (Sweeney, Hausknecht, & Soutar, 2000) has been described as “a person who has recognized that they may have not needed or selected the appropriate product after the purchase”. This aspect is consistent with the complexity of the buying decision mentioned by many other authors. For instance, Kassarian and Cohen (1965) noted that a person often faces uncertainty about his decision, even after a decision is made. That is, the complexity of the decision represents the positive features of the alternatives rejected compared to the negative features of the alternative selected, leading to a reasoning contradiction between cognitive elements (Festinger 1957). In addition, Kotler and Keller (2012) clarify that purchasing choices are the way people, groups or organizations pick, purchase, and use items, services, ideas and experiences to meet the needs of desire. However, consumers may not be aware of the reasons of their preferences or, in some cases, choose not to reveal these reasons (Telpaz, Webb, & Levy, 2015). According to Mou et al. (2017), purchasing decisions are the measures taken by consumers to assess the option of goods and services to be purchased. Finally, the purchase decision is related to consumer

conduct whether making a purchase or repurchase (Mick, Spiller, & Baglioni, 2012). Therefore, from the above explanation a third hypothesis could be developed:

H3: There is high level dissonance due to the wisdom of purchase for women.

2.1.2.3 Concern over Deal

Cognitive dissonance is a situation of psychological stress resulting from a person's incompatibility with attitudes, actions, convictions and awareness or from preferring desirable or repulsive alternatives. This is the purchaser's remorse which a sense of guilt combined with questions as to how recommending a buying decision is when you make a costly buying (Sweeney, Hausknecht, & Soutar, 2000). The CDT indicates that in marketing, cognitive dissonance creates a customer dispute or discomfort about a purchase of a product. It typically leaves the customer unhappy and generally leads to the buyer taking the money elsewhere or to guilt about buying. Marketers are seeking to deal with these issues with helpful details such as testimonials; cash back protection and after-sales operation. For that reason, Sweeney, Hausknecht and Soutar (2000, p. 380) described the third dimension of dissonance, which was called "concern over deal", a person's awareness that the sales workers may have been affected by their own belief. In fact, more buyers seek and expect higher quality at lower costs and expect the increase in the value for money invested (Kacen, Hess, & Walker, 2012). Consequently, perceived value is a deciding factor that influences the behaviour, appraisal and subsequent purchasing decisions of the customer (Kusumah, 2015). In recent studies, several researchers point out on the perceived value. Hansen et al. (2018) argue confidence is key factor in the decision-making of consumers, while perceived risk tendency directly affects behavioral intent. Moreover, Moody et al. (2017) emphasize that online relationships involving electronic dealings are influenced by trust and lack of confidence. Ozturk et al. (2017) added that customer loyalty relates to faith and perceived risk. According to Fu, Yan, and Fing (2018) who found out that the perceived utility, happiness, and confidence transfer of customers are greatly affected by both external and internal similarities, which ultimately affect consumer-shopping behaviors. Additionally, Bleier et al. (2019) found that the form and brand reliability of a produced commodity influences the impact of each factor of experience

on the buying decisions of consumer. Thus, from this review another hypothesis could be proposed;

H4: There is a high level of dissonance due to concern over deal.

2.1.4 Factors of Cognitive Dissonance

A state of dissonance arises when someone faces new technologies or knowledge that is inconsistent with his or her current cognition (Festinger, 1957), because dissonance can lead to psychological distress for instance. According to Festinger (1957), selective knowledge access that reinforces current cognitions is an important outcome of dissonant management technique. Cognitive dissonance is a term commonly used to explain emotions and feelings of divergence, which typically lead to inconsistencies between two convictions and to the feeling of discomfort that result from holding two conflicting beliefs (Bose and Sarker, 2012).

The cognitive dissonance that involves norms, beliefs, values, traditions, emotional response, behaviours, social status, and community or group impact is determined by different factors in different societies and common ideologies. People living in a particular culture may hold a strong belief that he or she should purchase that product that must be accepted by that particular culture. In purchasing products, conflict may arise regarding whether to purchase or not. In fact, conflicting ideas that emerge when a product is purchased and most people think whether it is acceptable in their own society and they might be asking; will it be accepted by my society? This situation creates cognitive dissonance (Bose and Sarker, 2012). Hence, the culture is one of the most important factors, which are responsible for generating cognitive dissonance. For instance, customers with cultural factors assume that a brand that is appropriate in their culture will purchase a product. In accordance with Harmon-Jones and Mills (2019), who noted that ‘‘the dissonance exists simply because the culture defines what is consonant and what is not’’ (p. 12). In addition, those who live in a specific culture may have a deep conviction that the product they need to embrace from a particular culture should be purchased, it can exist a disagreement in purchasing goods as to and create cognitive dissonance (Wicklund and Brehm, 2013). A variety of causes contribute to cognitive dissonance, some of them include beliefs, opinions, actions, traditions, political ideology, emotional reaction, norms, community, status of society, power of

peers etc. Culture has been found to have significant influence on consumer's behaviour, including purchase involvement, purchase decision, and post-purchase feeling and behaviour (Chung and Darke, 2006). In a cross-cultural cognitive study, Hoshino-Browne et al. (2005) posit that culture is a key to the arousal and reduction of cognitive dissonance. Kitayama and Tompson (2015) in their study "A biosocial model of affective decision making: Implications for dissonance, motivation, and culture", has mentioned that values and expectations of people tend to be consistent, and individuals, ideologies and practices may have different principles that can generate dissonance in the case of buying goods. Finally, emotions and social status often influences the idea of buying and its role in predicting cognitive dissonance (Hasan and Nasreen, 2012). From this discussion, the following question is proposed:

Research question: What are the main factors in the process of customer decision-making that lead to the stage of post purchase dissonance?

2.2 Cognitive Dissonance Theory from new perspective

The CDT in recent years has inspired more researchers (i.e. Power and Jack, 2013, Metzger et al., 2015; Levy, Harmon-Jones, & Harmon-Jones, 2017; McGrath, 2017; Vaidis and Bran, 2019). In fact, Vaidis and Bran (2019) mentioned that "CDT is an old and respectable theory, but at the same time is still under construction". It is only by understanding the precise nature of the cognitive dissonance that the field will be able to construct an internally consistent instrument for its assessment (Bran and Vaidis, 2020). They revealed also that CDT suggests that cognitive inconsistency leads to a motivational state that promotes regulation, which comes mainly through a change of opinions or behaviours. In other hand, the theory implies that when people conduct themselves in a contradictory manner, they feel excitement of dissonance. Indeed, dissonance is a disturbing state that functions in an intrinsically gratifying manner in which people feel encouraged to lower the excitement (Ewoldsen, 2020). According to Montecinos (2020), cognitive consistency is usually recognized as a core characteristic of the human mind. Dissonance theory indicates that when cognitions are in conflict (e.g. when behaving against one's attitude), people are negatively affected. This affective reaction encourages people to adopt numerous strategies to eliminate dissonance (e.g. attitude change).

Dissonance can also be induced by a lack of confidence in the accuracy of the beliefs, as a result of seeing information which challenges one's mindset, most possibly from sources or information which upholds opposing ideologies (Power and Jack, 2013). Dissonance may result from exposure to a news source or information that contradicts the behaviour. Dissonance could arise from the behaviour of supporting (e.g., giving viewership to) a source that advances an opposing ideology (e.g. providing vision for) a source advancing an opposing philosophy could result in dissonance (Metzger et al., 2015). According to Festinger (1957), selective exposure is most likely to occur in situations where a moderate amount of cognitive dissonance is aroused. Where there is little or no dissonance, he says people will not be inspired to look for additional details, and when the dissonance is too strong, they will change behaviours rather than prevent conflict. These findings contradict the theory of cognitive dissonance for selective exposure and give a new explanation focused on expectations of reputation rather than psychological drawbacks with knowledge that question attitude. This theory predict a selective exposure technique that avoids dissonance. It follows from it that people are more likely to experience cognitive dissonance when they are exposed to attitudinal knowledge than if they are exposed to information supporting their belief (Metzger et al., 2015).

Additionally, since Sweeney and Soutar (2003) argued that dissonance is not stimulated in every purchase but needs certain conditions, Powers and Jack, 2013 has mentioned that first, it must be a decision important to the consumer, possibly because a substantial amount of money or psychological cost has been invested and the purchase matters personally to the consumer. Second, the consumer must make the buying decision voluntarily. Third, the decision must be irreversible; this means that once a product is bought, the consumer is committed to the decision. Cognitive dissonance may result when a consumer makes a post purchase comparison of what was purchased versus the other alternatives that were available, if this comparison is not favourable, the consumer may experience psychological discomfort (Powers and Jack, 2013).

Dissonant consumers are likely to experience low levels of expected satisfaction with a product and dissonance may therefore lead to eventual dissatisfaction with their purchase (Montgomery and Barnes, 1993). It is logical to suppose that the more positive or optimistic consumers' expectations are, the higher the probability of experiencing

higher levels of post purchase dissonance (Wilkins, Beckenuyte, & Butt, 2016). Bran and Vaidis (2020), examine the CD within the framework of the PAD model (Russell, 1974) which proposes a categorization of emotions on three independent dimensions: pleasure, arousal and dominance. Pleasure refers to the general positive and negative feelings experienced, arousal refers to the level of alertness and physical activity, and dominance refers to the feelings of control, non-restriction and autonomy. The occurrence of cognitive dissonance or consonance state is explained with the following circumstances; individuals encounter with new situations along with their former beliefs. If their old beliefs do not have any inconsistency with new information, a sense of supportive feeling occurs because of the reciprocal harmony with the previous knowledge (Çalışkan and Gökalp, 2020).

2.3 Theories of the research

2.3.1 Theory of Reasoned Action (TRA) and Planned Behaviour (TPB)

The TRA and the TPB focus on theoretical constructs concerned with individual motivational factors as determinants of the likelihood of performing a specific behavior (Montaño and Kasprzyk, 2015). First, the theory of reasoned action (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975) posits that behavioural intentions, which are the immediate antecedents to behaviour, are a function of salient information or beliefs about the likelihood that performing a particular behaviour will lead to a specific outcome. Recently, Azjen (2020) in a study with a title ‘‘the theory of planned behaviour: Frequently asked questions’’, this theory proposes that the human behaviour is preceded by intentions, which are formed from the attitude of consumers and perceived subjective norms. The attitude reflects the favourable feeling or unfavourable behaviour of the individual and the subjective norms state that people often act based on their perception of what others (family, peers, authority figures and the media) think they should do (Salhi, Abdellaoui, & Smida, 2018). Second, the theory of planned behaviour extends the boundary condition of pure volitional control specified by the theory of reasoned action. This is accomplished by including beliefs regarding the possession of requisite resources and opportunities for performing a given behaviour. The more resources and opportunities individuals think they possess, the greater should be their perceived

behavioural control over the behaviour (Han and Stoel, 2017). As in the case of behavioural and normative beliefs, it is also possible to separate these beliefs and treat them as partly independent determinants of behaviour (Madden, Ellen, & Ajzen, 1992). Finally, TRA asserts that the most important determinant of behaviour is behavioural intention. Direct determinants of individuals' behavioural intention are their attitude toward performing the behaviour and their subjective norm associated with the behaviour. TPB adds perceived control over the behaviour, taking into account situations where one may not have complete volitional control over one behaviour (Montaño and Kasprzyk, 2015).

2. 3.2 Paradox of the choice

The Paradox of Choice, Schwartz (2004) in his book, argues that in today's society, we are overwhelmed with a multitude of choices about everything from buying toothpaste or deciding what to watch on television to major life choices about schooling, careers, life partners, and so on. The main point put forward by Schwartz is that while choices are definitely good in most cases, it can also have a negative effect on our overall happiness, wellbeing and satisfaction in our lives by the sheer number of options that penetrate almost all aspects of the world today (Brockett, 2006). Therefore, Schwartz refers to this problem as choice overload, and "the fact that some choice is good doesn't necessarily mean that more choice is even better" (2004, p. 3). In addition, Schwartz (2004) suggested that when self-determination is overemphasized as a process of rational choice, it can lead to confusion, frustration, and even depression. He notes that "when self-determination is carried to extremes, it leads not to freedom of choice but to tyranny of choice" (p. 80). In other words, if any constraints are not imposed on what we consider feasible choices, we will overpower the options and thereby reduce the chances that we will make a proper choice. As Schwartz (2004, p. 2) describes such situations, "choice no longer liberates, but debilitates". Thus, we can become controlled by the choices that surround us rather than the other way around.

2. 3.3 Perceived risk

Perceived risk is defined as the perception of uncertainty about the consequences negative potential associated with an alternative of a service or a good, and in particularly, towards its consequence (Brosdahl and Almousa, 2013). It refers to the

nature and amount of the risk incurred by a consumer when considering a purchase decision (Cox and Rich, 1964). Risk factors influencing online shopping behaviour have made the subject of numerous studies in the literature (i.e. Wu et al., 2010; Hong & Cha, 2013; Alyami and Spiteri, 2015; Yu, Lee, & Damhorst, 2012; Punj, 2012). According to Brosdahl and Almousa (2013), there are five types of perceived risk: social, psychological, economic, performance and time. The possibility therefore of being disappointed or in front of family or friends by making a bad choice described social risk (Salhi, Abdellaoui, & Smida, 2018) while psychological risk is danger to the ego of an individual for not being successful in their choices. The perceived risk of time is experienced by the consumer when faced with the potential time wasted researching before purchasing a product (Hong and Cha, 2013). But the risks most frequently cited and associated with purchases online mainly include financial risk, product risk, and protection risk personal information (Bezes, 2011). In other words, risk factors play a critical role in ethical decision-making. In fact, perceived risk involves the assessment of the certainty of consequences and the negative consequences associated with the behaviour (Yu, Lee, & Damhorst, 2012). According to the perceived risk theory, people tend to focus on reducing the likelihood of making mistakes instead of maximizing utility in the process of committing a risky behaviour.

2.4 Tunisia: Purchase Power and Consumer's Behaviour

In light of the highly significant contribution of this sector to national and international economies, a number of marketing research studies have sought to refine the understanding of the consumer's behaviour toward products and brands. In the case of sales, Tunisian customers usually have become harder: they seek substantive data on the goods they wish to buy, their availability, their brand and their value for money. Indeed, before buying, they can equate the quality of goods with similar products, and they respect the choice they make (Salhi, Abdellaoui, & Smida, 2018). In positioning a product and reassuring the customer, brand image has become important; as well the word-of-mouth of the family and friends of a customer has a powerful effect on the buying decision. Without local representatives, local consumers are not very aware about new products and brands (Salhi, Abdellaoui, & Smida, 2018).

According to ‘‘ Export Entreprises SA’’ website, the GDP per capita (PPP¹) in Tunisia is estimated at USD 11,201 (2019, World Bank). A person working in Tunisia typically earns around TND 914 per month. The latest ‘‘Households and living conditions report’’ from the National Institute of Statistics shows that the average annual expenditure per household stands at TND 15,561, with food and accommodation having the higher share. Nevertheless, people living in urban areas tend to have higher consumption levels than those in rural areas. Indeed, Tunisian consumers have generally become more demanding when making purchases: they seek substantive information on the products they are interested in purchasing, their availability, the brand and the value for money. They will also compare the quality of goods with competing products before buying. They value having a variety of choices. Brand image has become fundamental in positioning a product and reassuring the consumer. Word-of-mouth from a consumer's family and friends has a particularly strong impact on the decision to buy. Local customers are not very confident with new products and brands without local representatives. Direct selling is a significant phenomenon for Tunisia and direct sales leaders in all cities and communities have brand members. Consumers can purchase the latest goods in urban and rural areas without going to major cities. With the growth of the channel, retailers are expanding their product range to raise their brand recognition through loyalty and special discount deals, specially the second-hand clothing market. The new products are being pursued by Tunisian consumers as well as the environmental protection. Tunisia's young consumers, well-educated and internationally linked, will in the next few years drive the creation of a new consumer culture.

2.5 Women and Consumer Behaviour

In order to provide valuable insights about women and their purchasing behaviour, it is important to analyze it from the perspective of the Theory of Planned Behaviour (TPB) and the Theory of Reasoned Action (TRA). In fact, the researchers noted that ‘‘The TRA posits that behaviour is a function of behavioural intentions that are, in turn, a function of attitudes and subjective norms, the TPB took the components of the theory of reasoned action but added perceived behavioural control as an

¹ GDP per capita (PPP based) is gross domestic product converted to international dollars using purchasing power parity rates and divided by total population. An international dollar has the same purchasing power over GDP as a U.S. dollar has in the United States.

additional factor predicting both behavioural intentions and behaviour” (Nisson and Earl, 2020).

Consumer behaviours’ principles and theories are based on various fields such as psychology, sociology, social psychology, cultural anthropology and economy. Consumers who like shopping are predominantly female and are viewed as a big player in the retail industry (Ramprabha, 2017). Women think differently from men because there are biological, neurological, and behavioural variations between the brains of men and women and these differences in turn make an impact on their shopping behaviour (Ramprabha, 2017). According to Kotler and Kimmer (2012), consumer shopping behaviour is the study of how individuals, groups and organizations select, buy, use and dispose of goods, service, idea, or experiences to satisfy their needs and wants. Consumer buying behaviour is the sum total of a consumer's attitudes, preferences, intentions, and decisions regarding the consumer's behaviour in the marketplace when purchasing a product or service (Berman, 2005). More recently, Bakshi (2012) found that every marketer, today, has realized the fact that gender has become one of the major factors and basis of segmenting a market and targeting the customers (Sridhar, 2019). The manuscript revealed that shopping is a more exciting activity for women with respect to men. Female consumers feel more independent when they do shopping in accordance with men and women consider shopping as a social need whereas male consumers pay importance to main function of a product instead of secondary function (Sinha and Uniyal, 2005) .

Several research to determine the causes of apparent differences have been performed in consumer behaviour, hence everything is in the brain, as it turns out (Dulabh, Vazquez, Ryding, & Casson, 2018; Sridhar, 2019). From various references, it is known that the human brain is divided into two main parts, namely the right and the left (Aco, 2018). Sperry in 1981, he is first who introduced the right brain and left-brain domination theories. In fact, the left-brain hemisphere analyzes visual imagery and interprets meaning whereas the right hemisphere is responsible for rational thought. Men prefer to take decisions in the left hemisphere, while women use both sides. This explains why they are often inconclusive and confusing (Sudarto and Agus, 2018). While the purchasing behaviour of customers is a great attempt to learn and understand, it's very hard to identify why women buy and prefer one product or service to another.

This is because consumers sometimes formulate purchasing decisions based on their emotional beliefs which they even themselves are not well aware of (Ramprabha, 2017). For that reason, it is necessary to talk about the paradox of choice, which was described by Barry Schwartz (2004) as the fact that a large number of choices are often linked to welfare and freedom, but too many choices produce a sense of less happiness and fulfilment and may even paralyze. Therefore, the paradox of choice is that having many choices can trigger stress and make decisions more difficult. According to Schwartz, “the fact that some choice is good doesn’t necessarily mean that more choice is even better” (2004, p. 3). The paradox of choice has been recognized as one of the major sources of mass confusion in context of the B2C online mass customization (Piasecki and Hanna, 2011). From this theoretical discussion, the following research question could be formulated:

Research Question: Why is it important for marketers to focus on women shopping intentions and their purchasing behaviours?

2.6 Cognitive Dissonance and Consumer’s Attitude and Behaviour

Since its origin, CDT has been widely adopted into marketing literature. The theory is mostly used to explain consumer behaviour, focusing on the dilemmas faced during various stages of purchasing behaviour. In fact, there has been substantial studies in marketing on the disparity between behaviours and attitudes, particularly in the decision process leading to sustainable or ethical behaviours, it has been considered a central issue (Verbeke and Vackier, 2005). The behavioural intentions of consumers are mainly based on attitudes, subjective norms and perceived management of the behaviour in question, according to Ajzen (1991) and the main claims of planned behaviour theory (PBT) and the Theory of Reasoned Action (TRA). Hence, these theories have been widely used as a framework for consumer behaviour in marketing research.

Since customer behaviour and its thorough research have become a backbone of any company's marketing strategy, a systematic and comprehensive analysis of all its facets becomes essential for an organization's success. Thus, the idea of cognitive dissonance and its impact on customer behaviour has also been a part of numerous major research studies (Bose and Sarker, 2012; Harmon-Jones, E., Harmon-Jones, C., &

Levy, 2015). Furthermore, dissonance exists after a decision has been taken because before a person has the option of adapting to any attitude or action that he/she considers correct according to his/her preference but once a decision has been made, an agreement has been made between the buyer and the customer where the buyer cannot further adapt and is liable to stick to his/her decision (Sweeney, Hausknecht, & Soutar, 2000).

Cognitive dissonance is defined as an inconsistency in the mind or unpleasant state of a person when he simultaneously has two contradictory feelings (Liu and Keng, 2014). When you think about that sort, you perceive a disparity between positive and negative outcomes. Many scholars, in particular in the field of psychology (Murray et al. 2012), offered that in all personalities cognitive dissonance occurs, but the degree can be different (Liu and Keng, 2014). According to Çalışkan & Gökalp (2020), the occurrence of cognitive dissonance or consonance state is explained by saying that individuals encounter with new situations along with their former beliefs; if their old values are not incompatible with new facts, the reciprocal harmony with previous knowledge provides a sense of support. This state refers to a consonance in which the current order does not vary or contrast. Nevertheless, if this cognitive process results in a reversing state, a sense of disharmony happens between the new condition and previously held beliefs, and thereby causes the increase of discomfort and unpleasant condition creating contradiction in mind, which is called cognitive dissonance (Cooper, 2007). Subsequently, individuals experiencing such an internal inconsistency feel psychologically uncomfortable and looks for ways to reduce the cognitive dissonance to regain the comfortable state (consonance). In a study conducted by Séré de Lanauze and Siadou-Martin (2019), they shed light on how consumers integrate external dissonant information into their decision process when the arguments presented are dissonant to their own past consumption behaviour. They highlight also that the psychological distress will develop in particular, as the consuming pattern is stronger anchored in patterns and experience and as the behavioural variations become stronger. The relation between psychological discomfort and behavioural change of consumer revealed that the difference between attitudes and actions is not a state of equilibrium (the Action-Identification Theory).

In brief, the creation of dissonance may serve as a manipulative force by changing individual's existing beliefs and attitudes (Çalışkan and Gökalp, 2020).

Cancino-Montecinos (2017), in his study "Dissonance and abstraction: Cognitive conflict leads to higher level of construal", he took a closer look at how cognitive conflicts, as studied in dissonance research, might affect people's level of mental abstraction, and discuss this relationship from the perspective of Action-Identification Theory² (Vallacher and Wegner 1985; 1987; 1989; 2012). On the other hand, cognitive dissonance is a temporary condition, since it refers to a strong motivation to get over the unpleasant state. In fact, inconsistencies that individual felt result in psychological discomfort and this will prompt consumers to eliminate or reduce cognitive dissonance (Yap and Gaur, 2014). Therefore, researchers (Salzberger and Koller, 2010; Yap and Gaur, 2014) have given important attention to the drivers and consequences of post-purchase complaint intentions of consumers and their behaviours. However, the cognitive dissonance concept and its emotional and rational dimensions have not received much attention to evaluate with complaint responses of a consumer (Demirgüneş and Avcilar, 2017). Thus, the research question below could be obtained from the literature review above;

Research question: How the cognitive dissonance can change consumer attitudes and behaviours in the post purchase phase?

2.7 Cognitive Dissonance and Post-Purchase Behaviour

The pioneering work of Festinger on dissonance has inspired countless empirical studies, particularly by researchers in sociology and psychology (Mao and Oppewal, 2010; Harmon-Jones et al., 2011, Telciet al., 2011; Sharma, 2014; Rodrigues et al., 2018). Indeed, since value of knowledge and cognitive processes performing the analysis are restricted by social variables in any given social context, cognitive dissonance arises often while buying a highly engaged product, such as a shopping product or a specialty product because the degree of cognitive dissonance lies heavily with the significance of the choice, the attractiveness and the number of alternatives available, as well as the inter-similarities between the two (Telci et al., 2011). However, Gbadamosi (2009) found that cognitive dissonance is also present when buying low-

²The theory of action identification is a system of three principles explaining how people's thoughts of what they are doing relate to what they do. In a sense, the principles suggest an "operating system" for a human being—a program linking thought to action.

implication goods and that decision-makers experience cognitive dissonance, hence this point reflects the ubiquity of cognitive dissonance when making decisions. Consumers consider different goals when making buying decisions, but the four main ones include optimizing decision, minimizing decision commitment, minimizing negative emotions during decision making, and optimizing the ease of justifying a decision (Bose and Sarker, 2012). In consumer behaviour, cognitive dissonance is generally considered as a phenomenon that arises in the post-transaction process, after the transaction is over and customers face the actual output of the product and equate it with their expectations, thus experiencing duality or mental discomfort (Bose and Sarker, 2012). A point to note by Kotler and Armstrong (2010) is that as decision complexity increases, people seek to minimize uncertainty by using their own methods, or simply repeat their last decision to achieve a satisfactory amount. In addition, O'Neill and Palmer (2004) mentioned that customers seek to look for information and compare alternatives to make a decision, the problem of processing information comes up and they can sense the discomfort or dissonance described above intensifying.

Several specific models are available for the study of customer and cognitive dissonance trends including (Shultz and Leppers, 1996) and (Van and Jordens, 2002). Harmon-Jones (2002) conceived two empirical experiments to test the theory, and the findings seem to favour the concept based on experience. Soutar & Sweeney (2003) and O'Neill and Palmer (2004) used the scale developed by Sweeney et al. (2000) to facilitate further research into various rates and forms of dissonance within segments. Hettiarachchi et al. (2017) discusses how the principles of consumer behaviour, described as a multi-layered mechanism, can help to understand decisions which are the key aspect of a buying act. The degree to which the deficit is focused on consumer satisfaction, which is turned around, is defined by Kotler and Armstrong (2010). This is clarified by Hettiarachchi et al. (2017) as the deficit between what the consumer expects of the product or service and what they perceive to have provided. Just as Sharma (2014) briefly states, something must shift to dissonance if there is incongruity between ideas and acts.

Different writers like Pressey and Methews in 2000 researched the factors that promote marketing relationships and found that a high level of personal interaction and a high level of customer engagement encourage conditions for marketing ties (Pressey,

2000). Hettiarachchi et al. (2017) explain how concepts of consumer behaviour can aid the comprehension of decision-making, defined as a multiple-layered process of which the act of purchasing constitutes the key aspect. Kotler and Armstrong (2010) extend this by explaining that any post-purchase actions are driven by customer satisfaction which in turn is steered by what Hettiarachchi et al. (2017) describe as the deficit between what the customer anticipates from the product or service and what they perceive they have received. In other words, the customer feels satisfied with the purchasing experience in such conditions that leads to satisfaction. Thus, the cognitive dissonance is a precedent to prevent frustration, promote satisfaction and empower the individual to justify the decision. As Sharma (2014) briefly clarifies, something must change in order to eliminate dissonance when there is discrepancy between ideas and behavior. As mentioned by Al-Adamat (2019), any cognitive dissonance that arises following a purchase is called dissonance post purchase. This phenomenon usually occurs after the purchasing decision has been drafted if there is some cognitive disparity; hence, the dissonance is actually very common after purchase (Al-Adamat, 2019).

Research Question: What is the effect of cognitive dissonance on the post purchase behaviour?

2.8 Customer Buying Intention; the Impulse Buying

Early literature on marketing defines the impulse buying as essentially unplanned purchases (Cobb and Hoyer, 1986). The impulse buying is the act of randomly shopping (Rook and Fisher, 1995). An impulse purchase is not planned by nature, but more than that it implies that we need to buy it. Indeed, this desire is powerful and sometimes irresistible. By the same token, Rook (1987) describes purchasing urge as “the immediate, often strong and lasting desire of a customer to purchase something right away”. A research by Rook and Fisher (1995) shows that the impulse buying behaviour is partially psychological, at least, in a situation different from one another, does not display the same degree of impulsiveness. According to Engel et al. (1982), the impulse buying is a purchasing behaviour that has previously been recognized or buying intention before entering the store without any issue. In addition, O'Guinn and Faber (1989) noted that impulse buying is not only buying goods

or services from a purchased product, but also obtain a sense of fulfilment through the buying process itself, however this left a great deal to be desired and was criticized in literature (Rook and Hoch, 1985; Rook and Gardner, 1993). A variety of other researchers analysed the effects of the impulse purchasing on post-commercial customers, in this context Wood (1998) noted in his research that the unplanned purchases, in most cases resulting in regrets and anger after purchase. Moreover, Hoch and Loewenstein (1991) concluded that impulsive purchases arising from the low level of customer engagement in the purchasing decision offer a feeling of regret after purchase. Unreflective behaviour characterized the general feature of impulsivity according to many writers (Eysenck, Pearson, Easting, & Allsopp, 1985). Therefore, the impulse purchase is often unreflective when buying without much assessment. Customers who are buying an incentive are less likely to look at the ramifications or think carefully before they buy (Rook, 1987). Instead of solving a problem or locating the item to fulfil an advanced need, the individual focuses his attention on the immediate satisfaction of reacting to the need to purchase. Earlier researchers have suggested that people are different in their willingness to purchase products with certain customers who have a high tendency to buy on impulse while others prefer to buy on impulse relatively low (Rook, 1987; Rook and Gardner, 1993). In accordance with Natarajan and Goff (1991) who showed, empirically, that there is general continuum regulation over the purchase, the reactions to the impulse buying propensity scaling will fit into a normal distribution. Weun (1998) proclaimed that impulse buying can be differentiated from the often studied concept of compulsive buying, above all, the motives behind the two acts vary significantly (O'Guinn and Faber, 1989); impulse buying typically stems from a purchase desire (Rook, 1987; Hoch and Loewenstein, 1991) whereas psychological benefits arising from the purchasing method rather than a desire for such goods are a motivation for compulsive purchasing (O'Guinn and Faber, 1989).

In addition, several researchers previously and subsequently view "impulse buying" features, including inappropriate, unintended and careless features (Leong, Jaafar, & Ainin, 2018). Impulse purchasing is the emergence of an intense and powerful urge to purchase a commodity if the customer is triggered externally, and it's a sudden and unthoughtful move (Lim, Lee, & Kim, 2017). The impulse buying includes such

cognitive aspects as lack of preparation and discussion, and emotional aspects as feelings of excitement, anticipation, anxiety, loss of control and the probable regret (Verplanken and Herabadi, 2001). More recently, Verplanken and Sato (2011) suggests that impulse purchasing is actually a self-concept and not an environment concept since it involves the human self's capacity to change its states. The impulse character is high in many individuals, as it gives them gratification and anticipation that expected transactions is difficult to provide (Wu and Lee, 2016). Moreover, the pattern of the impulse purchasing was described as the degree to be able to buy items without intent or immediate and reflective thinking. For instance, the shopping of a basic reminder piece, which is simply off-stock at home, cannot be taken into account; indeed, our concept means that the shopper did not intend to purchase the item before reaching the shopping area, and is not an impulse buying to carry out the intended task, such as purchasing a gift (Luo, 2005; Rasheed et al., 2017). We concentrate on the buying act because we interpret the desire to buy impulsively as a precursor to it, therefore, the principle of impulsivity, which includes reckless action without taking full account of the consequences (Rasheed et al., 2017).

Although the impulse behaviour can occur in any setting, purchasing impulses by consumers is a detailed regular context. Spontaneous impulses to purchase and consume on the modern market often clash with the practical necessity of delaying the instant gratification provided by purchasing (Kalla and Arora, 2011). Adding to this, Kalla (2016, p.99), mentioned that ‘‘with a strong and supporting economy, impulse is no longer seen as a leakage in the control. In addition, it is also not seen as a lapse in regulatory mechanisms of self. Hence, it can be said that impulse in buying scenario is becoming more legitimized now’’. Impulse buying characteristic and purchasing behavior should be distinguished: purchasing characteristic refers to the trait of individuals who are typically impulsive in purchasing, however, impulsive behaviour purchasing, even though there are no high impulsive characteristics, may be rarely shown (George and Yaoyuneyong, 2010). In accordance with Jung (2017) in his article ‘‘Impact of motives on impulsivity and compulsivity in compulsive buying behaviour’’, many that have higher momentary characteristics can also increase their contrasting tendency after buying the comparatively high levels of excitement and pleasure, and consequently, they are more likely to regret more about the purchase decision than

others. It is interesting to note that, in consumer research, repentance frequently emerges as an important characteristic of impulsive buying trait.

In 2017, a study conducted by Jhawar and Kushwaha, in which they have mentioned that because the impulse purchase is a common feature and the target for designing a strategic marketing plan for customers, identifying variables that can affect the impulse of buying motive and decision making for buyers is necessary for retailers to thrive in an increasingly competitive market and try to monitor these influencing variables through strategic marketing plans and merchandising activity. The scholars therefore found a significant argument that the purchase behaviour of the consumer is undoubtedly affected by visual merchandising methods (Jhawar and Kushwaha, 2017).

Finally, some researchers (Odlag and Grant, 2010; Jung, 2017) think that purchases that are so-called impulsive are not really stimulating: consumers might not be able to express their buying selection process but that doesn't mean there is a selection process. These dynamic, intangible selection processes occur during a non-linear phase of subjective sensation. At the same time, purchasing impulses are perceived to be causing highly emotional behaviours rather than reasonable control and highly spontaneous response. Nevertheless, it does not prove that all customers are unreasonable in unplanned shopping decisions (Leong, Jaafar, & Ainin, 2018). Other researchers like (Lazim et al., 2020) adopted the CDT to explore how consumers overcome post-purchase regret of online impulse buying, and they found that Impulse buying positively influenced post-purchase regret and was moderated by materialism. For instance, according to their findings the consumer who purchases online impulsively tends to experience post purchase dissonance, which is caused by post-purchase anxiety of possible unexpected consequences (Lazim et al., 2020). Based on the above discussion, Hypothesis 5 is derived as follows:

H5: The impulse buying is statistically significant in explaining the cognitive dissonance dimensions.

2.9 Purchasing Decision Involvement

An academic attention has been increased in the last two decades concerning the buying decision in general and the choice of customers in particular, through more

systematic methods. Most external search literature on the marketing side discusses how consumers search for information and test potential options before they make decisions on purchases (Beatty and Smith, 1987; Schmidt and Spreng, 1996). Marketing researchers has provided a significant amount of literature on different aspects of consumer behaviour since the 1960s, and the most renowned model of customer procurement decision making is Engel, Blackwell, and Miniard (1995). In 1956, the researcher Brehm explained the paradigm of choice or decision in which participants are asked to choose between two alternatives whose appeal is relatively equivalent.

In 1947, involvement was described by Sherif and Cantril as an organizational condition whether there is some stimulus that is central to the ego, or if there is a conscious or unconscious interaction between a stimulus and the ego. They showed that many different kinds of involvement can be developed by people including events, artefacts, feelings, social issues, etc. In fact, the involvement was also explained in various forms, for instance according to Sherif and Cantril's (1947) it was defined as the intervention in the general interest of an object and the centrality of the object to the ego-structure of an individual. Similarly, to Mitchell (1979) who described the involvement construct as a “variable within the state, which shows the level of excitement, interest or drive evoked by a particular stimulus or situation”. Cohen (1983) has considered this concept as a level of activation of a person at a given time. The common feature in these earlier definitions is the fact that involvement is the degree to which a person is interested in an object, Mittal (1983). This target object can be a product itself, giving us the involvement of the product; or it can be the buying decision, a purchase decision. According to Slama (1985), the buying involvement is a promising marketing variable; this means that customer groups should be defined in terms of their degree of buying involvement and that the marketing approach should be tailored to the combined effects of goods, situations and purchasing involvement of customer behaviour. In the meantime, it should also be coupled with product and circumstance involvement to justify the customer buying behaviour. Zaichkowsky (1985) defines involvement as “a person’s perceived relevance of an object based on inherent needs, values and interests” (p. 342). The concept of purchasing involvement is possible to be closely connected to the customer personality, and probably to the set of buying

practices, and exactly for describing customer habits. A way to understand what drives people to make logical decisions is to research (Moogan, Baron, & Harris, 1999).

Kotler and Keller (2009) have indicated that at the time of the assessment, consumers would ultimately make preferences among brands on a choice desk, but two factors can interfere between buying intensity and purchasing decision - the other's attitude and unexpected situational factors. Attitudes of others may result in a re-adjustment of the consumer's purchasing intent in view of the negativity of another person to the preferred alternative or unwillingness to comply (Kotler and Keller, 2009). Unanticipated situational factors may influence the intention to buy; for example, an unforeseen purchase that is more urgent than the purchase was originally encouraged to purchase, which means that choice and purchase intent might not be served as completely dependable predictor of purchase behaviour (Kotler and Keller, 2009). Based on other marketing theory, the characteristics of the customer determine how certain external stimuli affect him/her; for instance, costs, quality, product brands, ads, friend or family reviews, disqualifications and previous buying experience are the main stimulus that leads customers in a dynamic business environment to make their purchasing decisions (Hinz et al., 2011). Furthermore, the process of consumption decision and the purchasing process refers to the steps that a customer takes in the purchase of a goods or products, it includes stimulation, issue awareness, knowledge quest, assessment of alternatives, acquisition and post-acquisition behaviour, (Blackwell, Miniard, & Engel, 2006). In social psychology, the concept of involvement has defined as the effort, the investment and the engagement used in the purchase process.

The level of purchase decision involvement affects consumer behaviour (Sang, Xue, & Zhao, 2018). The consumers' involvement is the level of personal importance and interest that stimulates a particular purchasing situation (Chae, Black, & Heitmeyer, 2006), and it includes an emphasis on an acquisitions process that needs a specific acquisition to be taken into account. Moreover, the level of involvement is also related to the degree of the regret after purchase; in fact, a customer would most likely be regretted after the purchase if he/she did not take the time to go through all phases of consumer decision-making, leading to the purchase of a brand lower than the preferred stock. In most situations, the purchases of a product may cause great guilt to the

customer, resulting in cognitive dissonance if the buyer makes little effort, for example, to seek information (Hajipor, 2020). Research found that the lower the involvement of a buyer in a purchasing decision the greater the likelihood that the customer is at odds, since a regrettable product can be purchased (George and Edward, 2009).

Consumer decision-making remains an important subject of consumer research as industry patterns continue to change, such as the rise in access-based consumption. (Lawson, Gleim, & Hartline, 2021). As Zhang and Dong (2020) declared that most of the purchase decisions are reasoned actions, therefore, intention in the purchase decision-making process refers to conscious intention, and one can consider motivation as the direct determinant of the purchase decision. Every day, customers must make endless choices and increasing information overload must therefore be treated. In today's industry, brands are the most common thumb rule, in fact they encourage many decisions about purchases and provide reassurance, as current and future decisions relate to experience, satisfaction and expertise (Keller, 2008; Kapferer, 2008). Brands thus play an important role in decision-making by consumers and direct consumers through a purchasing decision (Hutter, Hautz, Dennhardt, & Füller, 2013). On the other hand, a study presented by McClure and Seock (2020), in which they conducted that involvement on social media is becoming increasingly relevant in consumer shopping and purchase behaviour can significantly influence consumers' attitude toward the company or by the attitude toward the brand's social media that consumers' active social media involvement drives their future purchase intention from the brand through attitude toward the company's social media pages.

In addition, involvement may also be regarded as a driver for information processing, whereby a customer uses the information required to facilitate the motivation of behaviour (Solomon et al., 2014). According to Qonitah & Nuraeni (2020), increasing levels of involvement contribute to a greater cognition of incoming word of mouth information, because customers who have a high level of involvement in a service tend to more actively search for relevant information. Jung and Yoon (2012) point out that consumers are very interested in taking decisions and seek a wide variety of product knowledge where they are highly active in making the buying decisions; this high level of involvement can therefore have an important influence on their potential buying behaviour. Similarity to Liu et al. (2020) in their study " Exploring consumers'

buying behaviour in a large online promotion activity: The role of psychological distance and involvement”, speculated that customers who have a higher level of engagement in purchasing decisions are pretending to buy more goods. In contrast, research conducted by Hasan and Nasreen (2012) shows that higher involvement in decision-making by family and imitation classes is likely to make the customer more vulnerable to dissonance. However, when choices are thorough, dissonance will prevail, but not knowledge. As suggested by Li and Lai (2014), it is considered feasible to seek social help in buying decisions, and they have suggested, pursuing social support in purchasing decisions is deemed a viable solution.

The level of customer involvement in purchasing decision-making is considered to play a significant role in customer buying conduct. This is what Al-Adamat (2019), insinuates when he explained one aspect of the human condition can be defined by the need to sustain harmony between cognitive and behavioural systems. Individuals seek agreement in their views and ideas and any disparity contributes to discomfort. The relationship between dissonance and consumer behaviour has been the subject of valuable research. As Hasan and Nasreen (2012) emphasize, the idea attracted the attention of collective marketing imagination worldwide. Therefore, by studying the impact of social support resources on post- purchase dissonance, Al-Adamat (2019) has mentioned that reducing dissonance is sought by reducing the alleged desirability of refused options and increasing the professed importance of the alternatives selected. If you cannot complement the confirmation of the choice with knowledge, you can change your attitudes so that they fit the choice (Al-Adamat, 2019). Accordingly, the following hypotheses have been proposed:

H6: The purchasing decision involvement is statistically significant in explaining cognitive dissonance dimensions.

H7: The purchasing decision involvement will mediate the relationship between the impulse buying and the cognitive dissonance dimensions.

CHAPTER 3. METHODOLOGY

The third chapter provides information about the research model, the sample, data collection, the questionnaire structure, and the adapted constructs to measure the cognitive dissonance.

3.1 Research Model

Women may be in a cognitive dissonant state during the buying process and may not be completely satisfied with their purchase and some variance in cognitive dissonance among customers is to be expected. Therefore, the post-purchase process is chosen as the key focus for the purpose of this study and which is very important to see the various degrees of dissonance. The paradigm used in this research is about to explain first the customer buying intention which is manifested exactly on the impulse buying that can create a high level of dissonance. Second, the importance of purchasing decision involvement to increase the dissonance level for women after their last purchases. Though, this situation will let women think about their purchasing choices after the product was purchased. In other words, this same satisfaction and anticipation in the after-buying situation is likely to be combined with a great deal of cognitive dissonance. Thus, we find it worth empirically analyzing the following relationship in light of these conflicting possibilities:

H1: There is a significant difference in the magnitude of Cognitive Dissonance due to age groups, marital status, and employee status.

H2: There is a high level of dissonance for women regarding their emotions after buying last products.

H3: There is high level dissonance due to the wisdom of purchase of women.

H4: There is a high level of dissonance due to concern over deal.

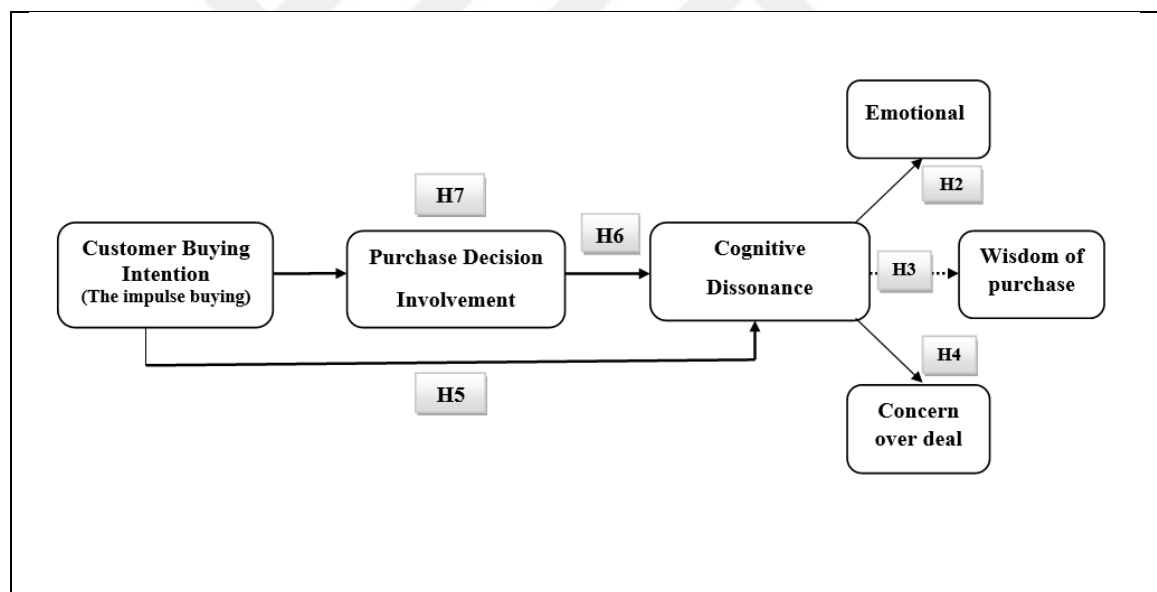
H5: The impulse buying is statistically significant in explaining the cognitive dissonance dimensions.

H6: The purchasing decision involvement is statistically significant in explaining cognitive dissonance dimensions.

H7: The purchasing decision involvement will mediate the relationship between the impulse buying and the cognitive dissonance dimensions.

According to the performed literature review above, we can maintain a new research model based on three main variables inspired from other previous researchers which are the impulse buying scale (Weun, 1998), purchasing decision involvement scale (Slama and Tashchian, 1985) and the cognitive dissonance scale (Sweeney, Hausknecht, & Soutar, 2000). The figure below is clearly explaining the relationship between the variables:

Figure 1. Research Model



3.1.1 Descriptive method of the Research Model

In order to obtain evidence concerning mere-measurement-effects³, two items measuring cognitive dissonance were additionally presented at the beginning of the questionnaire, which are “Customer Buying Intention: the Impulse Buying” and

³ The mere-measurement effect is when measuring an individual's intentions or anticipated changes his or her subsequent behavior.

“Purchasing Decision Involvement”. In fact, the impulse buying was measured by three indicators and it is adopted from Weun, Jones, & Beauty scale (1998). Besides, the purchasing decision involvement included five questions, which were selected from Slama and Tashchian scale (1985). The questions for these variables were measured by asking respondents for their frequency in buying apparel products by using a Likert-type scale; rating from strongly disagree to strongly agree, and the main elements which affected their final decision of purchasing by using 5-point continuous scale (never; rarely; sometimes; often; frequently). The responses to these items have been compared to responses to identical questions of all dissonance items (emotional, concern over deal and wisdom of purchase) in the multidimensional scale of Sweeney, Hausknecht & Soutar (2000), which were administered later in the questionnaire.

This research used the original measurement scale developed by Sweeney, Hausknecht, & Soutar (2000), to measure cognitive dissonance which covers three dimensions. The emotional aspect of dissonance is captured by 10 items. In contrast, this emotional facet is negatively worded and referred to feelings such as depression, anger, despair, etc. It is defined as “A person’s psychological discomfort subsequent to the purchase decision” (Sweeney, Hausknecht, & Soutar, 2000, pp. 380). Wisdom of purchase is captured by 4 items, indicated the judgments whether the product is the right choice and whether the other alternatives are better, and it is about to define the awareness by an individual after buying that they did not need the product or have not chosen the appropriate product (Sweeney, Hausknecht and Soutar, 2000). While, concern over deal is measured by 3 items, which supposes some degree of external attribution in the role of the salesperson at the purchasing stage, and it is described “A person’s recognition after the purchase has been made that they may have been influenced against their own beliefs by sales staff” (Sweeney, Hausknecht, & Soutar, 2000, pp. 380). Questionnaire items were rated at a Likert scale of five points from 1 to 5, rating from strongly disagree to strongly agree. The questionnaire comprises 31 questions including questions for demographics, impulse buying, purchase decision, emotional, wisdom of purchase, and concern over deal. Since the independent variables are continuous, this study relied mainly on correlation, regression and mediation methods in data analysis.

3.2 Material and Methods

The research is a quantitative study to understand and measure the cognitive dissonance post purchase in the context of apparel industry. The multidimensional scale developed by Sweeney, Hausknecht, and Soutar (2000) was used with three dimensions for this study; ‘Emotional’ ‘Wisdom of Purchase’ and ‘Concern over Deal’ with total of 17 items. Additional measurable elements regarding customer buying intention; the impulse buying, purchase decision involvement, and demographics information were also garnered in the beginning of the survey. Hence, the questionnaire is a self-administered survey, constructed of 31 questions and divided on main 4 parts.

The analysis involved a deductive approach and quantitative analysis techniques were used, due to the strong concise and explanatory nature of the work undertaken to examine the phenomenon of cognitive dissonance. Therefore, reliability of the standard instrument of cognitive dissonance has been mapped along with the analysis of the data using the exploratory factors analysis on SPSS. Besides, the scale was modelled graphically using the confirmatory factor analysis (CFA) and the structural equation modelling (SEM). The development of the scale is the systematic way of designing and validating a construction according to predetermined standards and procedures (Farooq, 2016). In fact, a quantitative methodology research was undertaken to explore the empirical validation of the model. The central premise of the study was to understand the concept of cognitive dissonance, an idea which had strong literature support. The study started with extensive literature review on cognitive dissonance. This understanding helped the researchers in categorizing the scale development process into three different dimensions; ‘Emotional’, ‘Concern over Deal’ and ‘Wisdom of Purchase’ to arrive at a suitable measure for cognitive dissonance.

The empirical study was undertaken for Tunisian women concerning fashion products. This product category was chosen for their last purchase and it is typically important enough to potentially trigger cognitive dissonance. The questionnaire was administered online using Google Form. The research is confined to target group, exactly women because their demand for fashion products on the apparel industry these days is at its peak, which has caused a paradigm shift in the consumers’ preferences and the retail industry. However, the responses were leading to a final sample of n=402. The

sample size, albeit not extraordinarily large, allows for insight into the development of dissonance after purchasing.

The survey of this research is divided into four main parts. First, there are six questions for demography in order to know the main information about the target group which is Tunisian women. In fact, we asked about their age, marital and employee status, job and their monthly income, as well the number of children. The purpose of these questions helping us to understand the level of cognitive dissonance and to explain if it is the same for all the women or it can be changeable depending on the mentioned information. The second part is about the customer buying intention; “the impulse buying”, which has three questions adopted from Weun, Jones, and Beatty scale (1998). In fact, the buying intention for women is different from woman to another and it can be impulse buying for instance they can do unplanned purchases, or buying things that they never intended to purchase. Other women have different thoughts, for instance, the spontaneous shopping is fun activity or they can buy items that interest them without considering the consequences. A Likert-type scale was used on this part of the survey, ranging from 1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5= strongly agree. Third, five questions were selected from Slama and Tashchian scale (1985) to measure the purchasing decision involvement which are based on the top standards; for instance, price, quality, recommendation of peers (family/friend), advertisement and brands name. In this part, women have to indicate the level of scale based on their last purchase, by choosing one of the 5-point scale (1 = never; 2 = rarely; 3 = sometimes; 4 = often; 5= frequently). The main objective of asking these questions is to measure the relationship between the different criteria for making the decision of purchase and how it can create the cognitive dissonance for women. The last part is “the cognitive dissonance after the purchase decision was made” and this is the main part of the questionnaire in which the multidimensional scale of Sweeney, Hausknecht, & Soutar (2000) was used, in order to evaluate the level of cognitive dissonance after purchasing apparel products for Tunisian women, and for analyzing the high and low level of dissonance by focusing on the emotional factor. First, ten from fifteen questions from the scale have been chosen in the emotional items, which are reflecting the negative aspect of emotions like anger, depression, and frustration. For instance, “I was in despair”, “I felt scared”, “I felt angry”, “I felt annoyed”, “I felt sick”... Second, four

items were related to the second dimension wisdom of purchase. For example, “I wonder if I really need this product”, “I wonder whether I shouldn't have bought anything at all”, “I wonder if I have made the right choice” and “I wonder if I have done the right thing in buying this product”. Therefore, these questions are based on self-attribution and to show if really the customer made the right choice of buying the product. Third, the last dimension of cognitive dissonance is “concern over deal” which has also three questions for instance “I wonder if I had been fooled”, “I wonder if they had spun me a line” and “I wonder whether there was something wrong with the deal I got”. This is referring to the customer that may have been influenced against their own beliefs by sales staff. The answers of participants were on a Likert-type scale; (1 = strongly disagree; 2 = disagree; 3 = neutral; 4 = agree; 5= strongly agree).

3.3 Data Collection and Samples

The data was collected during two months, and it was undertaken for Tunisian women in the context of apparel industry. The survey was performed in Tunisia and an online method was utilized in order to obtain the data. Indeed, women were asked to evaluate their last purchasing of fashion clothes and to share their dissonant experiences after purchasing decision was made. First, the respondents selected their buying intention according to their needs to buy these products. Second, they evaluated their purchase decision on the importance of the price or quality, recommendation of peers, advertisement and the brand name. Third, women rated their dissonance levels after buying the last apparel product according to the three dimensions of cognitive dissonance. Finally, the answers were gathered using Google Form and the data was analyzed by SPSS-25 and AMOS-24.

3.3.1 *Sample size*

This refers to the number of women to be selected from Tunisia to constitute a sample. Indeed, the sample size is 402 for women, providing response rates of 100% respectively. The majority of the respondents explained their age between 15 and 25 years old (Gen Z), and more than the half of participants are singles and employed (54%).

3.3.2 Sampling Technique

The study employed the probability sampling technique, it is a reliable method which guarantees a completely randomized selection procedure and its primary advantage is the accuracy of the statistical methods after the experiment. In particular, stratified random sampling was selected because it is commonly used when one or more of the strata in the population have a low incidence relative to the other strata. Hence, this approach is obtained to ensure the presence of the key subgroup within the sample. In the current research, the participants are mostly big fun of shopping and more specifically impulse buyers which they represent a big community in Tunisia.

3.4 Data Analysis

Special attention has been given to effectively answering all the research questions through the data analysis process in order to make the study effective and goal-oriented. The questionnaire method permits a fast collection, coding and consideration of data. The data analysis was performed using this quantitative technique and it has conducted with the application of SPSS and AMOS software. Therefore, many applicable statistical testing methods were considered and ultimately descriptive statistics, Cronbach's coefficient Alpha method, cluster analysis, reliability, the correlation and regression analysis, the discriminate and convergent validity were chosen as the most effective for addressing the current research goals. They were used to determine the validity and reliability of the measurement model (CFA) and to test the hypotheses in the structural model (SEM). Besides, using the cluster analysis in the beginning of this research is in order to test the variance of dissonance in the population; with some demographic items such as age, marital status and employee status, "Cluster analysis is a technique to group similar observations into a number of clusters based on the observed values of several variables for each individual" (Sinharay, 2010, p. 5). Correlation is a statistical tool used for determining the intensity of the association between two quantitative variables; this methodology is specifically related to the linear⁴ regression analysis. Regression analysis is a quantitative research method which is used when the study involves modelling and analyzing several

⁴ It is a linear approach to modeling the relationship between a dependent variable and one or more independent variables.

variables, where the relationship involves a dependent variable and one or more independent variables. In addition, two-stage structural equation modeling methods were employed. In fact, Confirmatory Factor Analysis (CFA) and Standard Equation Modeling (SEM) were considered in this study as proper analysis technique to be utilized to validate the proposed model and examine the research hypotheses. The first step was to obtain the calculated value using the Confirmatory Factor Analysis (CFA), which will assess the degree of the model fit in the SEM, the variances, the uniform residual for the measurement variables, and the suitability of the factor loading. Secondly, in the measurement model (SEM) stage, model goodness of fit, constructs reliability, and validity were all tested. Third, validation of the conceptual model and testing of the research hypotheses were targeted in the next stage, which is the structural model.

3.4.1 Demographic breakdown

The demographic profile of the participants is presented in Table 1. In fact, the 402 valid surveys were collected online from the respondents in Tunisia. All the participants consisted of female (100%); more than half of the respondents (52.7%) explained their age between 15 years and 25 years, which means that the research will be studying the cognitive dissonance for the generation Z which is the placeholder for the youngest people around the world whereas, the rest have the age between 25 and 45 years old. Furthermore, the majority of the participated women in this questionnaire were single (54 %), 35% were married and 11% of the respondents were mentioned their status as separate and divorced. In terms of number of children, nearly 60% reported that they don't have children, 15.7% they have one or two and 10% more than four kids. In addition, among participants of the questionnaire, nearly 56% of them indicated that they are employed and self-employed, and approximately 37% are unemployed while most of them reported their job as students, (56%). Concerning the average of monthly income is about 40% between 500 – 1000 Tunisian Dinar and below 13% of the respondents' monthly income is more than 2000 Tunisian Dinar.

Table 1. Reponsesnt's Profile

	Frequency	Percentage
Age		

15 25	212	52.7
25 35	80	19.9
35 45	60	14.9
45 or more	50	12.4
Total	402	100.0
Marital Status		
Single	214	53.2
Married	141	35.1
Separate/divorced	47	11.7
Total	402	100.0
Employee Status		
Employed	148	36.8
Self Employed	83	20.6
Unemployed	143	35.6
Retired	28	7.0
Total	402	100.0
Monthly Income		
Less than 500 TD	156	38.8
500 – 1000 TD	103	25.6
1000 – 2000 TD	92	22.9
More than 2000 TD	51	12.7
Total	402	100.0
Number of Children		
1 - 2	63	15.7
2 – 3	63	15.7
4 or more	40	10.0
None	236	58.7
Total	402	100.0

Note. Detailed result of the analyses of survey instrument

3.4.2 Cluster Analysis

In order to test the hypothesis 1 “There is a significant difference in the magnitude of Cognitive Dissonance due to age groups, marital status, and employee status”, a cluster analysis has been applied based on the dimensions of cognitive dissonance scale (emotional, wisdom of purchase, concern over deal) in order to understand the difference on the level of dissonance post purchase. Indeed, the K-mean cluster was performed as a method to classify the level of dissonance into two groups. The descriptive statistics is represented in the table 3, so the emotional dimension has the lowest mean 2.80, wisdom of purchase 2.82 and the concern over deal has the highest value 3.61. In the second table, the result is showing 2 clusters which are classified as high and low level of dissonance; in fact, there is no big difference on the number of responses between the low (202) and high dissonance (200).

To look for the difference between the low and high level of dissonance depending on some demographic information, the k-mean cluster was employed to compare between the means of age, marital status, employee’s status with the three factors of the cognitive dissonance. Hence, the statistics in the third table reveal that there is no significant difference in terms of demographic information on emotional and wisdom of purchase, which have the lowest F value 0.62 and 0.28. In addition, the findings in the second table show there is only high level for “concern over deal” dimension (4.16).

Therefore, from the specific findings on table 3 it is clear that the respondents did not express their high level of dissonance towards their last purchase, which means that most of the customers are satisfied. Cognitive dissonance would be expected to appear more on the emotional feeling, but the results did not support this. The demographic information was measured in this part of the analysis in order to see the degree of satisfaction of women is related for instance to their age (mean is 1.87) or marital status (mean is 1.58), but the results reveal there is no importance for these items to check the dissonance level for Tunisian women. This provides a rejection for the first hypothesis.

Table 2. K-mean Cluster Analysis

Cluster	Emotional	Wisdom of Purchase	Concern over Deal	Number
1- Low Dissonance	2.44	2.14	3.08	202
2- High Dissonance	3.17	3.49	4.16	200

Note: the scale range from 1= Strongly Disagree (low dissonance) to 5= Strongly Agree (high dissonance)

Table 3. Descriptive Statistics and F Test

Low dissonance: n= 283	High Dissonance: n = 119		Total: n=402	
	Standard			
Variables	Mean	Deviation	F	Sig.
Zscore(Age)	1.87	1.07	697.569	.000
Zscore(Marital Status)	1.58	0.69	476.868	.000
Zscore: Employes Status	2.13	0.99	124.886	.000
Zscore(Emotional)	2.80	0.68	.624	.430
Zscore(WisdomPurchase)	2.81	0.91	.287	.593
Zscore(ConcernDeal)	3.61	0.99	13.358	.000

3.4.3 Exploratory Factor Analysis (EFA)

Using the method of Factor Analysis by helping to decrease number of items in order to simplify the data in measurement model hence, it is achieved by searching for unobserved variables expressed in the manifested variables. In fact, twenty-five questions relating to the effect of cognitive dissonance on women consumer behavior divided into five factors analyzed using the principal component analysis (PCA) with varimax rotation for all items. In Table 4, the results indicate that all factors were

significant and the data were suitable with twenty-five items, so there are no deleted items. In fact, the Kaiser-Meyer-Olkin (KMO) measuring of sample adequacy was 0.87 percent above the commonly recommended value of 0.7 and Bartlett's test of sphericity resulted in the value of 6648.301. Moreover, in order to identify and compute composite scores for the factors, principal components analysis has been applied as we can see in Table 5. Then, the communalities were all above .4 percent further confirming that each item shared some common variance with other items. Concerning the initial Eigen-values showed respectively that the first five factors explained 28.90 %, 15.02%, 10.07%, 9.18% and 7.23% of the variance. Hence, the factors explained 70.41 percent total of variance. In addition, the factor loadings of the items ranged from 0.63 to 0.93 percent with Eigen-value greater than 1. Finally, the internal consistency was tested by using Cronbach Alpha for each of the scales which was higher than the cut-off level of 0.70.

Table 4. Factor Analysis Results; KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.879
Bartlett's Test of Sphericity	Approx. Chi-Square	6648.301
	Df	300
	Sig.	.000

Note. Detailed result of the analyses of survey instrument

Table 5. Factor Analysis Results

Scale Items	Extraction	% of Variance	R. Component
Customer Buying Intention		28.903	
CBI 1	.874		.934
CBI 2	.788		.887
CBI 3	.823		.901
Purchasing Decision		15.021	
PDC 1	.471		.683
PDC 2	.821		.905

PDC 3	.788	.884
PDC 4	.806	.896
PDC 5	.818	.902
Emotional	10.073	
EMO 1	.480	.664
EMO 2	.555	.703
EMO 3	.506	.692
EMO 4	.645	.759
EMO 5	.706	.820
EMO 6	.670	.808
EMO 7	.690	.775
EMO 8	.453	.643
EMO 9	.469	.665
EMO 10	.539	.632
Wisdom of Purchase	9.183	
WOP 1	.846	.868
WOP 2	.817	.856
WOP 3	.822	.844
WOP 4	.707	.773
Concern Over Deal	7.236	
COD 1	.863	.916
COD 2	.843	.894
COD 3	.804	.884

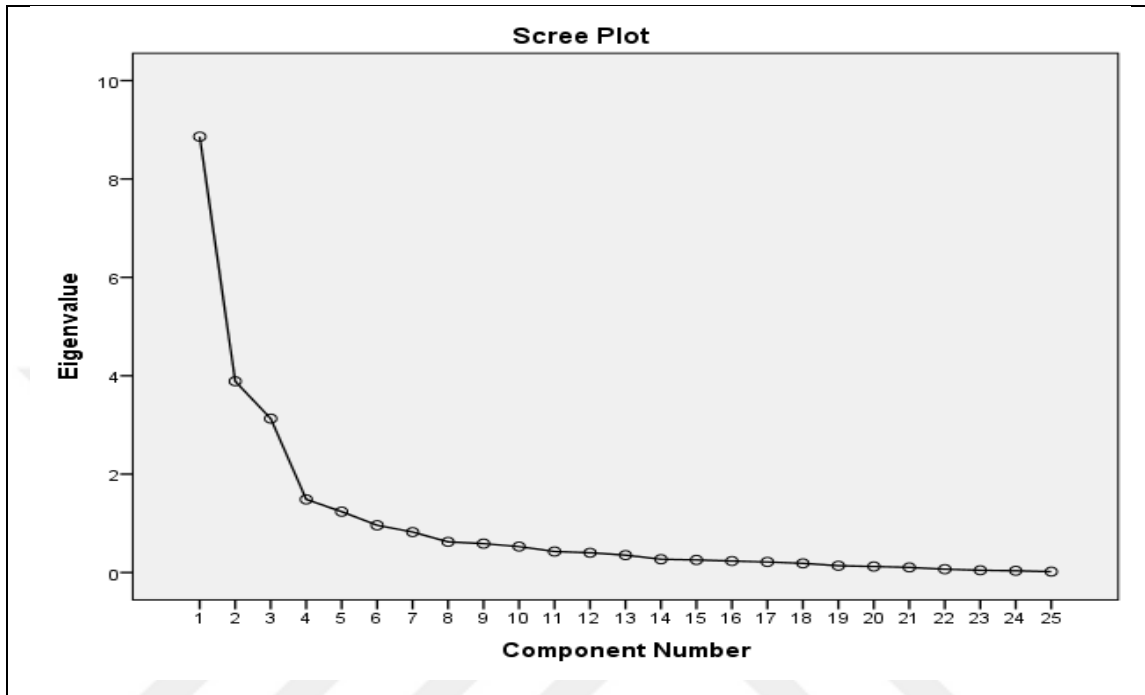
Note. Detailed result of the analyses of survey instrument; KMO (Kaiser-Meyer-Olkin Measure of Sampling Adequacy) = 0.87; Bartlett's Test of Sphericity = 6648.301; df = 300; Sig = .000; The total variance is explained by all factors.

3.4.3.1 The Eigen Value

The Scree Plot diagram below represents the Eigen-value against the number of items. These values can be seen immediately above in the first two columns of the table 5. As it is shown above, from the third item (EMO), the value of variance is getting low. In the figure below, you will observe that the line is essentially flat starting from the

factor 4 which means that smaller and smaller quantities are represented by each successive factor.

Figure 2. Scree plot of Eigen-value



3.4.3.2 Cronbach Alpha Test

Cronbach's Alpha is a metric to assess a set of measurement and to make sure that all variables or test items are accurate. In fact, the following table explains how Cronbach's Alpha depends on the number of items in the study, the average inter-pair covariance and the variance in the overall ranking. Thus, in order to check the evidence of internal consistency and the discriminate validity, the alpha value should be higher than the cut-off level (0.70): as a matter of fact, in the Table 6 the results were above the commonly recommended value 0.70 percent as the following: 0.89 for customer buying intention (3 items), 0.91 for purchasing decision (5 items), 0.90 for emotional (10 items), 0.91 for wisdom of purchase (4 items) with the higher value and 0.90 for concern over deal (3 items). To conclude, the values of coefficient alpha indicate the strength of the consistency and reliability concerning the five factors of creating dissonance for women after purchasing their last cosmetic product.

Table 6. Items' Number & Cronbach Coefficient

	Number of Items	Cronbach's Alpha
Customer Buying Intention	3	.895
Purchasing Decision	5	.910
Involvement	10	.908
Emotional	4	.916
Wisdom of Purchase	3	.904
Total	25	.906

Note. Detailed result of the analyses of survey instrument

Table 7. Reliability Statistics

	Mean	Std. Deviation	N	of Variances
CBI 1	4.17	1.064		
CBI 2	3.93	.996		
CBI 3	4.14	1.021		
Scale Statistics	12.25	2.801	3	7.848
PDC 1	3.77	1.030		
PDC 2	3.56	1.187		
PDC 3	3.77	1.104		
PDC 4	3.63	1.092		
PDC 5	3.53	1.134		
Scale Statistics	18.26	4.764	5	22.692
EMO 1	2.86	.867		
EMO 2	2.92	.948		
EMO 3	2.79	.928		
EMO 4	2.86	.961		
EMO 5	2.59	.906		
EMO 6	2.60	.933		

EMO 7	2.92	.909
EMO 8	2.85	.899
EMO 9	2.62	.987
EMO 10	3.01	.923

Scale Statistics

28.00 6.858 10 47.032

WOP 1	2.85	1.065
WOP 2	2.94	.987
WOP 3	2.83	1.001
WOP 4	2.64	1.029

Scale Statistics

11.25 3.648 4 13.306

COD1	3.60	1.168
COD2	3.58	1.028
COD3	3.67	1.064

Scale Statistics

10.18 2.991 3 8.943

Note. Detailed result of the analyses of survey instrument

3.4.4 Correlation

The table below is showing the analysis of the linear relationships between the variables. In fact, the highest mean obtained for customer buying intention is 4.08 and it has 0.93 score of standard deviation and that indicates the value is spread out from the expected average. In addition, concerning the mean of purchasing behaviour is 3.65 however, the standard deviation is very high i.e. 0.95 and almost the same score concern over deal with 3.61 for the mean and the highest value for the standard deviation i.e. 0.99. However, the variable of emotional has the lowest value for the mean (2.80) and the standard deviation (0.68).

Further, the customer buying intention is relevant to measure the factors of cognitive dissonance which explained a bit high mean and standard deviation ($\mu = 4.08$; $\sigma = 0.93$). Thus, there is a perfect positive correlation between customer buying intention and the first dimension of the cognitive dissonance ($r = .31, p = \leq .01$), negative correlation for Wisdom of purchase ($r = -.20, p = \leq .01$), but for Concern over deal, a Pearson's r data analysis revealed a very weak negative correlation ($r = -.009, p = \leq .01$), and that indicate both of the variables that were moving oppositely.

Moreover, the purchase decision criteria are a dominant variable in creating the cognitive dissonance for women hence, the results show that it has a negative linear correlation with the factor of Emotional ($r = -.01, p = \leq .01$) and wisdom of purchase ($r = -.06, p = \leq .001$). Whereas, a strongly positive correlation appears between the purchase decision and concern over deal ($r = .05, p = \leq .01$) Therefore, the correlation's table clearly shows that the customer buying intention (.53 \ .69 \ .86, $p = \leq .00$) and purchasing decision (.78 \ .21 \ .31, $p = \leq .00$) are not statistically significant with the cognitive dissonance and just accord by chance.

Concerning the factors of the cognitive dissonance, the results reveal a strongly positive correlation between Emotional and wisdom of purchase ($r = .54, p = \leq .01$) and concern over deal ($r = .25, p = \leq .01$). Second, the wisdom of purchase is correlated so positively to emotional ($r = .54, p = \leq .01$) and concern over deal ($r = .22, p = \leq .01$). Third demission also positively related to emotional ($r = .25, p = \leq .01$) and wisdom of

purchase ($r = .22, p = \leq .01$). This is clearly explaining the significant relationship between the three factors and how strongly the variables are related.

Table 8. Descriptive Statistics

Variables	Mean	SD	N
1. CusBuying	4.0829	.93382	402
2. PurDecision	3.6522	.95273	402
3. Emotional	2.8005	.68580	402
4. WisPurchase	2.8128	.91193	402
5. ConDeal	3.6177	.99686	402

Note. Detailed result of the analyses of authors' survey instrument

Table 9. Correlations

		CBI	PDI	EMO	WOP	COD
CBI	Pearson Correlation	1	-.011	.031	-.020	-.009
	Sig. (2-tailed)		.828	.538	.696	.862
	N	402	402	402	402	402
PDI	Pearson Correlation	-.011	1	-.014	-.062	.051
	Sig. (2-tailed)	.828		.784	.217	.311
	N	402	402	402	402	402
EMO	Pearson Correlation	.031	-.014	1	.547**	.252**
	Sig. (2-tailed)	.538	.784		.000	.000
	N	402	402	402	402	402
WOP	Pearson Correlation	-.020	-.062	.547**	1	.221**
	Sig. (2-tailed)	.696	.217	.000		.000
	N	402	402	402	402	402
COD	Pearson Correlation	-.009	.051	.252**	.221**	1
	Sig. (2-tailed)	.862	.311	.000	.000	
	N	402	402	402	402	402

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

Note. Detailed result of the analyses of survey instrument

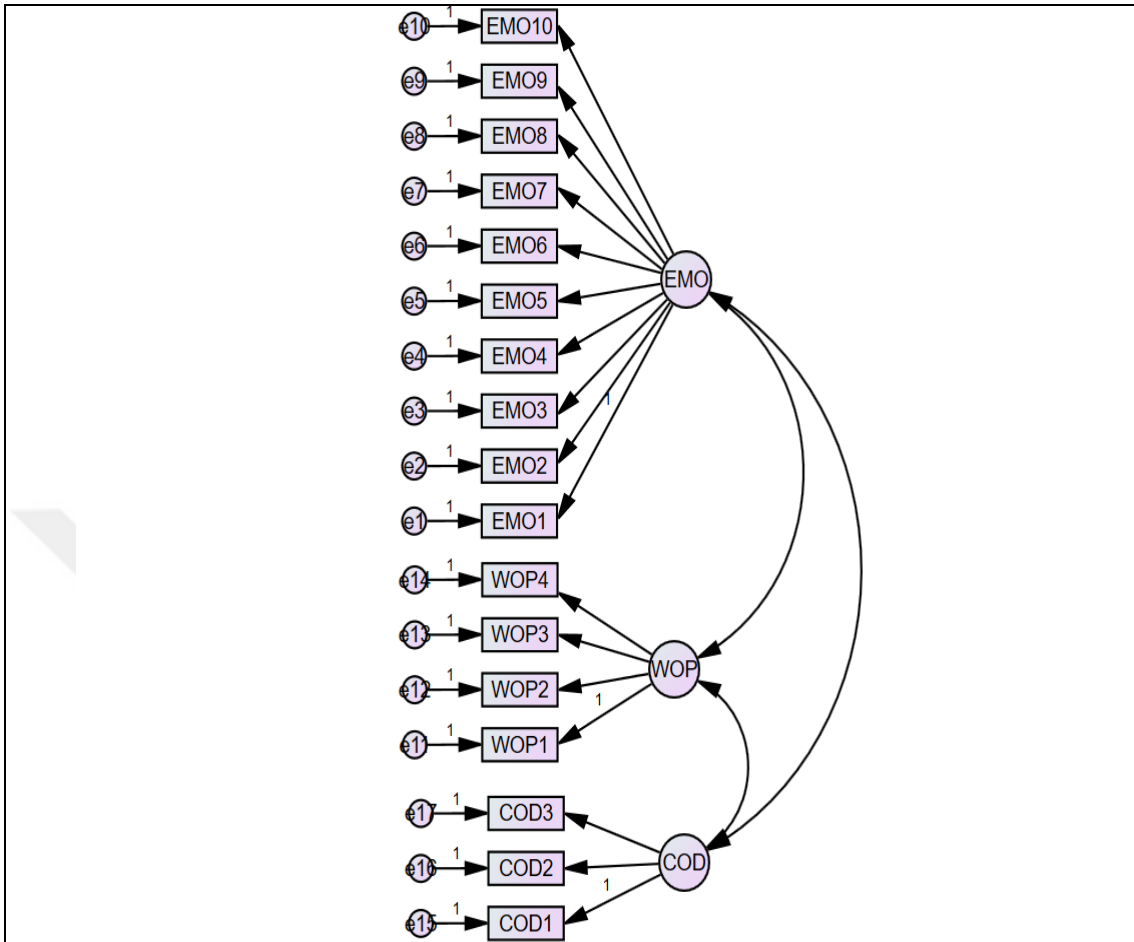
3.4.5 Confirmatory Factor Analysis (CFA)

CFA is a crucial part for the measurement model in SEM that is used to obtain the acceptable model fit before modeling the structural model. The objective of CFA is to test whether the data fit a hypothesized measurement model. In fact, a certain degree of model fit is necessary before the testing of the general model is done (Mulaik and James, 1995). According to Mueller and Hancocks (2008), a very good model fit well since $RMSEA < 0.08$ (Steiger, 1990), $CFI > 0.90$ (Joreskog and Sorbom, 1993) and χ^2/df 1.00 - 5.00 (Kline, 2011), $IFI > 0.90$ (Bollen, 1990). Based on suggestion by Hair et al. (2010), at least three indices must be fitted well to determine the model fit. In fact, the model fit for the cognitive dissonance reported in the following table and it is showing the overall fit indices for the CFA model were acceptable, with $\chi^2/df = 3.257$, $RMSEA = 0.075$, $RMR = 0.048$, IFI and CFI have the same value = 0.939, $NFI = 0.915$, $PGFI = 0.682$. Figure (3) shows the complete CFA measurement for the model.

Table 10. Output of the Model fit

Fit Index	Recommended Value	Observed Value
CMIN/DF	1.00 - 5.00	3.257
RMSEA	< 0.08	0.075
RMR	< 0.08	0.048
AGFI	> 0.90	0.867
NFI	> 0.90	0.915
CFI	> 0.90	0.939
IFI	> 0.90	0.939

Figure 3. CFA for Cognitive Dissonance Dimensions



3.4.6 Constructs Convergent and Discriminate Validity

In the following table, the findings reveal that the convergent validity and reliability of the research variables has been established in the cognitive dissonance scale since the composite reliability (CR) of the dimension of emotional (0.909), wisdom of purchase (0.917) and concern over deal (0.906) are all above the benchmark of .70. Besides the average variance extraction (AVE) for the cognitive dissonance dimension are all greater than .50 (Fornell and Larcker, 1981). Concerning the discriminant validity has been established also through the value of the maximum shared variance (MSV) of the research variables which are below the AVE. Thus, we concluded that the values of AVE and MSV in the table below satisfied the criteria of the convergent and discriminate validity proposed by Fornell and Larcker (1981).

Table 11. Reliability and Convergent Validity

	CR	AVE	MSV	MaxR(H)	WOP	EMO	COD
Wisdom of							
Purchase	0.917	0.736	0.342	0.927	0.858		
Emotional	0.909	0.504	0.342	0.960	0.585	0.710	
Cocern over							
Deal	0.906	0.763	0.073	0.972	0.252	0.270	0.874

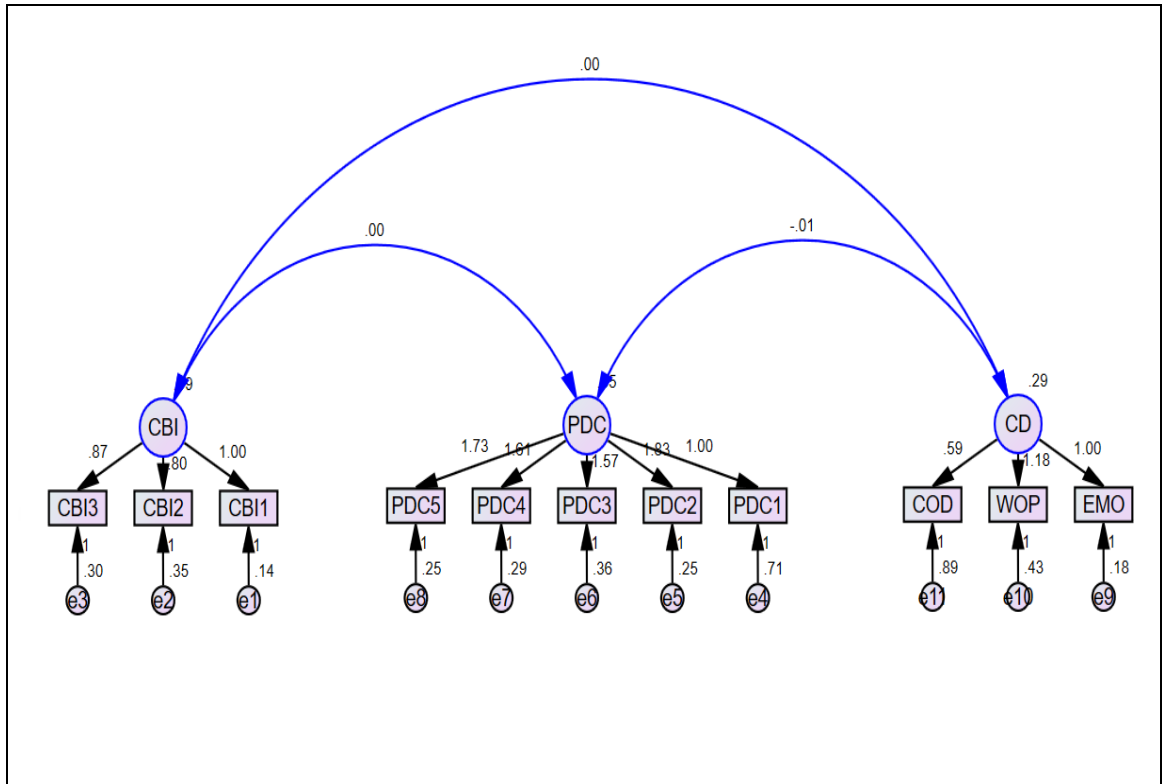
3.4.7 *Standard Equation Modeling (SEM)*

The measurement consistency requirements are fulfilled by reliability, convergence and discriminatory validity tests, and this is clearly show that the measurement model is sufficient to evaluate the path coefficients to determine the connections between the model and the analysis which have been theoretically established using AMOS version 24. The indices of the model fit reported that the overall fit were within acceptable range as can be seen in table 8; with $\chi^2/df = 1.654$, RMSEA = 0.040, RMR = 0.033, IFI and CFI have the same value = 0.989, NFI = 0.972, PGFI = 0.630. These values provided evidence of the all constructs validity; in fact Figure 4 shows measurement model.

Table 12. Goodness Fit on Three Factors Model

	X²/df	GFI	NFI	CFI	RMSEA	RMR
Three Factors Model	1.654	.630	.989	.989	.040	.033

Figure 4. Measurement Model during CFA



3.4.8 Common Method Bias

As the data of the current study is self-reported, there was a need to be sure that the current study data is free of the common method bias problem (Podsakoff et al., 2003). To address the related issues of common method bias, this study adopted Harman's single factor test (Harman, 1976). In fact, the one-factor test has been broadly recommended and applied by prior studies as mentioned by both Podsakoff et al. (2003). Therefore, in the current study, 3 constructs (IB, PDI, CD with 3 dimensions; EMOTIONAL, WOP, COD) with their 25 items were subjected to Harman's single-factor test by using AMOS. The main statistical findings of this test largely supported the fact that there is no concern regarding common method bias since the Chi-square value for the tested model (15.392) was significant and larger than the three factors model (1.654). Thus, the results highlight that common method bias is not a major problem in this study (Podsakoff et al., 2003, Podsakoff et al., 2012).

Table 13. Goodness Fit of One Factor Model

	χ^2/df	GFI	NFI	CFI	RMSEA	RMR
One Factor Model	15.392	.509	.378	.391	.189	.196

3.4.9 Structural modelling using maximum likelihood coefficient

The concurrent maximum likelihood coefficients from structural equation modelling present in Figure 5 and Table 13. In fact, the results below indicate no significant effect between the constructs. First, the path between the impulse buying and the purchase decision involvement is negatively not significant ($\beta = -.011$, $p = .828$). Second, the impulse buying has no effect on appearance of cognitive dissonance ($\beta = .007$, $\rho = .832$). Third, the purchasing decision involvement and cognitive dissonance is negatively not significant ($\beta = -.010$, $\rho = .752$). Thus, hypothesis 5 and 6 received empirical rejection.

Figure 5. Structural Model

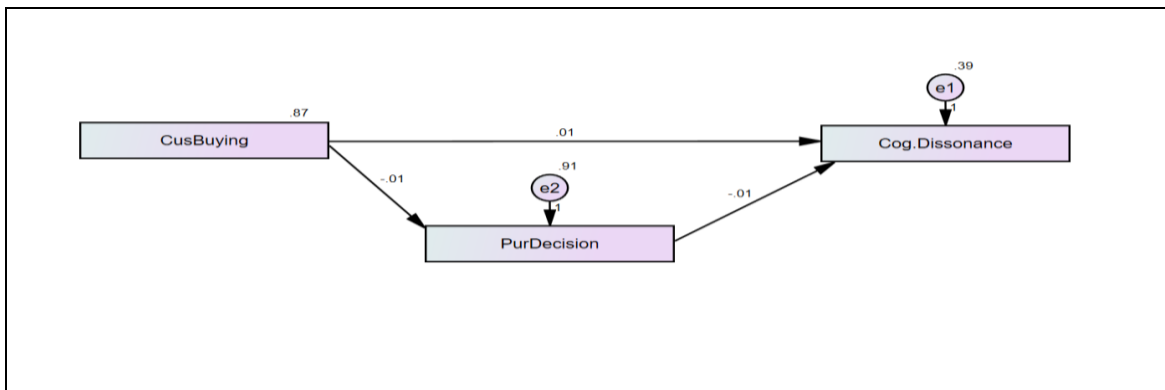


Table 14. Regression Weights

Effect from	<---		Estimate	S.E	C.R.	P
Purchasing Decision	<---	Impulse Buying	-.011	.051	-.217	.828
Cognitive Dissonance	<---	Impulse Buying	.007	.033	.212	.832
Cognitive Dissonance	<---	Purchasing Decision	-.010	.033	-.315	.752

3.4.10 Mediation analysis

According to the hypothesis 7 of this research, the purchasing decision involvement will mediate the relationship between the impulse buying and the cognitive dissonance. Therefore, in order to validate the indirect effect of impulse buying through the purchasing decision on cognitive dissonance, the Bootstrapping analysis was carried in Amos software, as an analytical tool commonly used in psychology to test the statistical significance of the indirect effect in mediation model (Koopman, 2014). In the table 17 the results reveal the absence of indirect effect of the customer buying intention on cognitive dissonance through the purchase decision involvement ($\beta = .007$, $p = .000$). Since there is only a direct effect for the impulse buying on the cognitive dissonance, thus hypothesis 7 is not supported.

Table 15. Breakdown of Total Effect of the Research Model

Exogenous Variables	Endogenous Variables	Total Effect	Direct Effect	Indirect Effect
Impulse Buying	Purchase Decision	-.011	-.011	.000
Impulse Buying	Cognitive Dissonance	.007	.007	.000
Purchase Decision	Cognitive Dissonance	-.010	-.010	.000

CHAPTER 4. FINDINGS

This chapter explains the different analysis used in this empirical study using SPSS and AMOS software.

4.1 Main Findings

Initially, some descriptive statistics were computed to determine the magnitude of dissonance for the respondents' profile. In fact, the low mean values for the age (1.87), marital (1.57) and employees' (2.13) status, shows a low dissonance across almost the whole sample. While, it seemed that concern over deal dimension was the dominant dissonance dimension which has the highest mean (3.16). Further, the results reveal that there is no difference in the magnitude of Cognitive Dissonance due to age groups, marital status, and employee status, only for the concern over deal, which is very high for Tunisian women. In addition, using the cluster analysis to set tow most appropriate number of clusters, which are the low and high dissonance. Indeed, the participant in this survey explained a high dissonance for the concern over deal, whereas for the emotional and wisdom of purchase they expressed their little dissonance which means they were satisfied with the last purchases and they were made the right choice. Therefore, the hypothesis 1, 2 and 3 are rejected while the forth one is supported.

In addition, in this research model the customer buying intention is a related construct which is established to measure the relationship with the cognitive dissonance. Using the correlation and regression analysis, this structure has been calculated to describe the effect of the impulse buying on women buying in order to check the magnitude of dissonance post-purchase. Indeed, there is a positive correlation between customer buying intention and emotional, but for wisdom of purchase and concern over deal, the finding revealed a negative and weak correlation. Whilst, the purchase decision has a negative linear correlation with the factor of Emotional ($r = -.01, p = \leq .01$) and wisdom of purchase ($r = -.06, p = \leq .001$), and a positive correlation appears with concern over deal. Subsequently, these constructs are not statistically significant with the cognitive dissonance and just accord by chance.

Further, this research is aimed at determining the relation between cause and effect of the variables, manipulating one or more independent variables and set the interplay between the causal variables in the research model (Abubakar and Sikayena, 2017). Indeed, the overall indices fit of CFA for the cognitive dissonance are acceptable since the convergent validity and reliability of the research variables has been established for the three dimensions (emotional = 0.909, wisdom of purchase = 0.917 and concern over deal = 0.906). Besides the average variance extraction (AVE) for cognitive dissonance dimension are all greater than .50 (Fornell and Larcker, 1981). Likewise, in order to determine the connection between the model and the analysis which have been theoretically established using SEM, the results above confirmed the good model fit since $\chi^2/df = 1.654$, RMSEA = 0.040, RMR = 0.033, IFI = 0.989, NFI = 0.972, and PGFI = 0.630. Besides, the three constructs with their 25 items were subjected to Harman's single-factor test by using AMOS, and the main statistical findings of this test largely supported the fact that there is no concern regarding common method bias since the Chi-square value for the tested model (15.392) was significant and larger than the three factors model (1.654).

Furthermore, the results in table of Regression weight in the structural model clarify the absence of the significant effect between the variables as the following; The impulse buying has no effect on the cognitive dissonance ($\beta = .007$, $p = .832$) and concerning the purchase decision involvement also is negatively has no effect on cognitive dissonance dimensions ($\beta = -.010$, $p = .752$). Thence, the hypothesis 5 and 6 were rejected. In the other hand, according to the findings in the mediation analysis, the results show that there is no indirect effect for the relationship between the impulse buying and the three dimensions of cognitive dissonance through the purchasing decision involvement. Indeed, there is only direct effect for the impulse buying and the cognitive dissonance. This provides no support for the hypothesis 7.

Finally, through the different analysis used in the empirical study the main findings of the applied analysis are not in the acceptance of the hypotheses in this research model, thus three main points can be concluded. First, the level of dissonance does not differ with age, marital and employees' status. Second, it has been discovered in this study that making an impulse buying does not necessarily lead to high level of dissonance after purchase. Third, the results confirm that the phase of the making

decision and consumers' involvement in the pre-purchase decision process do not actually determine the level of post purchase dissonance.



CHAPTER 5. DISCUSSION & IMPLICATIONS

This chapter presents elaborations of the findings in the present research, comparing the results with the previous studies and a brief explanation regarding the managerial and theoretical implications.

5.1 Discussion

For many marketers all over the world, dissonance was always a paradoxical concept and an obscure term for them who were always trying to correlate it as accurately as possible with the consumer's behaviours (Harmon-Jones and Mills, 2019). The theory of cognitive dissonance was widely accepted; however, the measurement had been an issue in services sector in the world where the significance of post purchase decision carries high importance due to increasing purchasing power of customers. Moreover, the author declared, “the development of dissonance over time is complex and does not seem to follow a uniform pattern” (Koller and Salzberger, 2012, p. 261). Indeed, while the results of the present study displayed the antecedents and outcomes of the cognitive dissonance after purchasing from the perspective of the theory of planned behaviour (TPB) and the theory of reasoned action (TRA) framework and provided valuable insights about consumer behaviour, there is also difference in the results of the hypothesis of this research with other studies from different perspective.

First, the physiological differences between women and men may be contended to contribute to various degrees of dissonance, for instance the writers noted that “men and women have different physiological patterns which means that the level of dissonance may differ based on gender” (Graff, Sophonthummapharn, & Parida, 2012, p. 37). Hence, men tend to be double minded and susceptible to dissonance, but women are often more rational and can easily build up dissonance logically (Graff, Sophonthummapharn, & Parida, 2012). Moreover, Jain, Khan, & Mishra (2017) declared that women have a more pragmatic perspective that can rationalize dissonance more easily, since the female population was found to dominate the luxury buyers’ market. Indeed, the perceived male tendency for less oriented and more active response could be seen as being related to a greater experience of dissonance (Soutar and Sweeney, 2003). The scholars ultimately found that younger consumers are more

disagreeable than mature consumers, and the age is an important factor since younger customers carry on more sophisticated purchasing habits with respect to technical products, but, older customers are more constantly approaching such transactions and placing greater trust in sales staff. Other investigation by Jamwal and Pandey (2016) with the title “Understanding the impact of Demographics on Post-Purchase Cognitive dissonance”, has found the importance of age to test the effect on dissonance, in fact they concluded that young clients are more likely to be dissonant than old clients. Comparing to the sample in this research paper, since the majority of the respondents were between the age 15 and 25 who normally do not buy high involving products, it is possible for them not to experience any post purchase dissonance. Statistically, the results further showed there is no difference on women age to determine the high or low dissonance, so the level of dissonance on Tunisian women post purchase an apparel product does not differ with their age or status. Therefore, this conclusion does not support other researchers’ results, such as those of Soutar and Sweeney (2003) and Jamwal and Pandey (2016).

Second, it would have been more difficult to expect high-dissonant customers in determining the quality of the product, which would result in lower levels of satisfaction (Sweeney, Hausknecht, & Soutar, 2000). In fact, the authors found that the difficulty of quality judgment was most linked to people's "concern over deal" as salespeople's guarantees can mitigate difficulties in assessing quality. The difficulty in making a quality evaluation was also connected to the "emotional" component of dissonance, but the contract or the deal also affecting perceived values and satisfaction more than other aspects of dissonance. Additionnaly, Sweeney, Hausknecht, & Soutar (2000) found that cognitive aspect, "wisdom of purchase" had a weaker link to the three related constructs; however, its connection to the quality of the good was strongest. Furthermore, Sweeney and Soutar (2003) added that “it is important to recognise that dissonance can be increased by sales staff, particularly given the nature of the “concern over the deal” dimension, which is based on a sense of being persuaded against one’s own will” (Soutar and Sweeney, 2003, p. 243). In the present research, the criterion-related validity of the cognitive dissonance scale was supported; women has high level of dissonance on concern over deal, and non-for emotional and wisdom of purchase. Hence, the findings in this study reveals that “concern over deal” was the most related

dissonant factor to women, which had a greater impact on perceived value and satisfaction than other dissonance dimensions. Furthermore, by using the same scale to measure the cognitive dissonance, Graff, Sophonthummapharn, & Parida (2012) in their article identified the level of dissonance after the purchasing phase by focusing on the industry of mobile phone, and their statistical results revealed that the respondents were seemingly pleased and satisfied, not so emotionally involved and there was a low degree of dissonance. Thus, the hypotheses related to the high level of dissonance on the three dimensions (emotional, wisdom of purchase and concern over deal) for the Tunisian sample are in accordance with the results of the previous researches motioned above (i.e. Sweeney, Hausknecht, & Soutar, 2000; Soutar and Sweeney, 2003. Graff, Sophonthummapharn, & Parida, 2012).

Third, by reviewing previous literatures of impulse buying and according to former studies, it seems that impulse buying is already a common phenomenon and that it has been an important issue in the shopping environment, which may lead to cognitive dissonance after the buying decision. Indeed, informed by prior theory, it was expected that impulsive individuals would experience a higher level of cognitive dissonance after an unplanned purchase than less impulsive individuals (George and Yaoyuneyong, 2010). In accord with Leong, Jaafar, & Ainin (2018), impulse buying would lead to product dissonance and emotion dissonance. Akbar et al. (2020) also showed that impulse buying behaviour enhances post-purchase cognitive dissonance; therefore, consumers would doubt the decision of their impulsive purchase behaviour, leading to emotion dissonance. Additionally, an empirical research conducted by Chen et al. (2020) is coherent with another study by Powers and Jack (2015) which verify that consumers would come up with return tendency when they express the reaction of product dissonance and emotion dissonance in case of getting afraid or upset after impulse buying behaviour. Thus, the hypothesis 5 received empirical rejection and the statistical results in this research is not in the support of the various studies mentioned above (i.e. Powers and Jack, 2015; Leong, Jaafar, & Ainin, 2018; Akbar et al., 2020). In the other hand, this research examined other significant theoretical link between impulse buying and cognitive dissonance. Besides to other researchers such as George and Yaoyuneyong (2010) used the same scale to measure the cognitive dissonance with the impulsiveness trait, and in their investigation, they concluded that cognitive

dissonance is significantly not predicted by the impulse buying, hence it was found that those with high degree of impulse buying get relatively less cognitive dissonance after purchasing. For that reason the writers have mentioned “these findings lead to a new theory, according to which, impulse buying behavior may be a coping strategy used to avoid discomfort associated with the possible disconfirmation of expectations (George and Yaoyuneyong, 2010, p. 291). Likewise, in the present research the results are showing that the impulse buying is not a factor to explain the dissonance post purchase for women especially for the emotional dimension since all the participants expressed their satisfaction even though were aware about the impulsiveness of purchasing apparel products.

In addition, it is important to study and explore the extent and effects of dissonance in the process of making the decision. Hasan and Nasreen (2012) deduced on their article “Cognitive Dissonance and its Impact on Consumer Buying Behaviour” that if the customer is more interested in making a choice that is, himself finds information about the likely product to be bought and chooses to buy on his own, the awkward feeling of dissonance is less likely to occur. Moreover, they concluded that in terms of buying luxury items, dissonance is more prevalent for consumer in the purchase decisions stage. Cheah, Phau, & Liang (2015) shed light on the relationship between the consumer’s behaviour and the degree of dissonance associated with the purchasing decision. Additionally, Lee and Li (2013) explored the relationship between cognitive dissonance, consumption value, word-of-mouth communication, and consumer’s anticipated satisfaction. The customer involvement can shift cognitive dissonance by constantly finding knowledge and changing attitudes (Kopalle and Lindsey-Mullikin, 2003). Additionally, consumers gain awareness of alternatives during their involvement, which can alter their attitude to product results (George and Edward, 2009). In fact, consumers prefer to be exposed to knowledge, which is selectively compliant with their previous product belief. Moreover, cognitive division can be linked to other factors in other studies, which have shown that inconsistencies between expectations or values may create dissonance (Proulx, Inzlicht, & Harmon-Jones, 2012), Other researchers such as Hoshino-Browne (2005) support the idea of the importance of social support and culture on cognitive dissonance. Jung and Yoon (2012) find that when customers’ purchase decision involvement is high, they show much interest in

their decision-making process and seek a lot of information on products; as a result, such a high level of involvement greatly influences their future purchase behaviours. In a more recent study, Liu et al. (2020) found the influence of purchase-decision involvement on consumers' total consumption. Whereas, the empirical data in the present investigation were found to directly contradict the previous view (i.e. Cheah, Phau, & Liang, 2015; Lee and Li, 2013; Liu et al., 2020). Thus, the results of this research imply that the purchasing decision involvement has no effect on explaining Tunisian women dissonance post purchase, because consumers may experience psychological discomfort if they are uncertain about their decision (Koller and Salzberger, 2012).

Finally, this research sprinkles light on the interrelationship between the impulse buying, the involvement of the consumer in the purchase decision and the level of dissonance attached with them. In fact, the research' findings offer a fresh theoretical and practical perspective of consumer's post purchase behaviour. On the one hand, it is important to conclude that the results in the present study revealed that women in the context of luxury fashion products showed their satisfaction with the low level of dissonance. Similarly, Salzberger and Koller (2010) explored in their investigation the interaction of cognitive dissonance and satisfaction and their impact on loyalty and complaint behaviour. They have provided a somewhat different perspective and have shown that the complementary mechanisms of the principle of cognitive dissonance and satisfaction are various aspects of the consumer's psychological condition in the post-purchase process and thus control a diverse array of behaviour. Cognitive dissonance seems to be a much more decisive determinant of complaint behaviour than satisfaction (Salzberger dan Koller, 2013). The findings related to the article "Investigating the Impact of Cognitive Dissonance and Customer Satisfaction on Loyalty and Complaint Behaviour", Salzberger (2010) indicated that dissonance and satisfaction are additional constructs that characterize various aspects of the customer's mental status after purchase. On the other hand, people tend to seek consistency in their beliefs and perceptions (Kumar and Sharma, 2017). A study by Hoshino-Browne et al. (2005) shows that while it is familiar with dissonance, the different cultural memberships of the people in both Western and Eastern cultures determine what the ways in which this dissonance occurs and is dispelled. Therefore, the strategic decision-making are affected

by the cultural and individual factors (Mert, Bayramlk, & Turgut, 2014). In more recent studies, Rodrigues et al. (2018) have shown the effect of culture on the contexts in which dissonance is caused or reduced, thus may be attributed to cultural backgrounds. Thence, based on the statistical results conducted in this research paper, consumers did not express their dissonance because of their impulse buying and the involvement to make their decision, but they confirm their satisfaction and this due to cultural circumstances, and beliefs.

5.2 Managerial Implications

This research offers a further insight into the post-purchase stage and the factors that contribute to understand the level of dissonance for women by examining their behaviour, emotions and attitudes. A theoretical structure clarified by the multidimensional scale of Sweeney, Hausknecht, & Soutar (2000) has been established in order to understand the level of cognitive dissonance post-purchase and its impact on women behaviour. Thence, discussing the customer buying intention and the purchasing decision involvement may help for better understanding the consumer behaviour.

In this empirical study, the findings above would be an eye-opener to various market researchers and academicians to know the importance of cognitive dissonance for making customers satisfied or dissatisfied. First, this research paper may have modulation for detecting any dissonance in the study sample after purchase. It is the intention of the researchers to add the caveat that lack of extant empirical investigation into this subject and the relative novelty of this field of research demands the adoption of a degree of caution when interpreting any findings. In addition, measuring post-purchase dissonance will assist marketers in designing effective customer retention and attraction strategies as well as enable managers to assess the dynamics of their sales system and to look for better customer feedback. Moreover, the study could help managers evaluate their sales customer interface dynamics and look for improvements towards higher customer orientation, devise appropriate strategies to retain and attract customers.

5.3 Theoretical Implications

The discussion in this research paper has given an overview to understand the importance of cognitive dissonance and the post purchase behaviour in today's competitive environment. In fact, the theory coined by Festinger (1957) is still relevant in explaining and predicting consumer behaviour, significantly, when they change their attitude or behaviour to accommodate the dissonance due to the impulsiveness or involvement in the decision-making. In fact, despite its rising importance, the literature is missing to explore the direct positive effect of the impulse buying behaviour on post-purchase dissonance for women. However, numbers of familiar studies have investigated the negative role of impulse buying in consumer behaviour especially from the emotional perspective such as consumer regret, remorse and complaints. Others researchers studied the purchasing decision involvement and its role to create the dissonance for consumer, for instance the influence of social support or other external factor on making the purchase which may cause a confusion for consumer with time like exchanging the product. Therefore, in order to fill this gap, it is time to test the magnitude of dissonance post purchase, redefine the structure and establish an operational measure for the concept of cognitive dissonance and examine the relationship with other constructions such as the impulse buying and the purchasing decision involvement. The findings of this study suggest that most of the customers show their satisfaction after post-purchase decision and it seems that women are psychologically aware about their buying intention as well by their decision. Accordingly, this thematic review paper can contribute to consumer behaviour literature by pointing on the impulsiveness of buying and the involvement on purchasing decision and how becoming increasingly relevant in consumer shopping and it has no negative effect on the consumer behaviour or attitudes. Further, one of the other apparent theoretical implications of CDT is that women's behaviour cannot be persuaded by changing their buying intention or even influenced through involvement in making the decision to contradict their cognitive state. Finally, the contribution of this finding to CDT literature, that cognitive dissonance being a psychological theory finds grounded in the personality of the consumer and in his culture as well.

CHAPTER 6. RESULTS & SUGGESTIONS

This part of the research explains and summaries the results of the empirical study, then giving some suggestions for future direction and researches.

6.1 Results

The theory of cognitive dissonance focuses on knowledge formation of essential individual psychological processes. It focuses on the connections between knowledge elements that people have about their actions, attitudes, expectations, values, feelings or environments. This theory has drawn interest and lead to substantial work in many academic fields as human behaviour because it is the main topic of all social studies. Therefore, the aim of this paper is to expand cognitive dissonance literature by finding areas which are not under investigation and to prepare for further work in theory. It would also be anticipated that recognition of existing gaps and suggestions for further academic inquiries would help to revive interest in the topics and increase its generalization by making greater use of them in information growth. In this regards, the following results was found accordingly to the above findings.

First, we found that the demographic information has no importance to make any difference on the level of dissonance amongst the women age, marital or employee's status. Indeed, according to the cross tabulation between emotional, wisdom of purchase and the profile information of women, there is no difference in the magnitude of cognitive dissonance.

Second, we detect that according to the research model, the buying intention (the impulse buying) and the purchasing decision have no impact on the level of cognitive dissonance and these factors cannot create customer complaints after purchasing their last products. In fact, the results confirmed that most of the participants in the survey questions indicated their satisfaction about their apparel purchases. Third, the affiliation between women buying intention and purchasing decision with the post-purchase cognitive dissonance is reported by one sample female group in the study, so this connection was reflected a low level of perceived cognitive dissonance after purchase among single and married women who were supposed to have an impulse buying because of the unplanned purchases, and they were not influenced by any support for

taking their decisions such as recommendation for peers, consumer report and the different brands information. In particular, we can understand that the involvement in the stage of making purchasing decision and the impulse buying are related to the culture of Tunisians and it seems that they are not the direct factors for rating the level of cognitive dissonance.

Finally, the results indicated that Tunisian women were satisfied with their last purchase, and we can understand that for this community there is no high cognitive dissonance post-purchase. Thus, the satisfaction of customer is the most exciting conclusion drawn from this research paper, and this may be due to cultural circumstances, as the authors has mentioned in the main reference article of this research “It is important to note that dissonance is not aroused in every purchase” (Sweeney, Hausknecht, & Soutar, 2000, p 374).

6.2 Suggestions

From a technical perspective, the cognitive dissonance measurement issues can be overcome. Firstly, the cognitive dissonance may occur well before the time of the purchase, as decisions are actually taken before the actual purchase, therefore it is better that cognitive dissonance can be seen at all phases in the entire consumption process. For this reason, the author claims, “a better understanding of the dissonance development process can be gained by examining the psychological responses at various stages of the decision-making process” (Soutar and Sweeney, 2003, p. 231). Secondly, evaluation of the post purchase dissonance for customers in other context, for instance an online retail environment, can be a potential path for good future study rather than an offline retail environment. Third, other researcher can focus on goods that are seen as costlier (i.e. Smartphone, Car) because dissonance in post-commercial products is frequently associated with more expensive goods as Koller and Salzberger (2012) examined products with lower financial losses and relatively low expenses. Moreover, in terms of further research in the future, another approach can be taken for the study of factors creating buyer’s remorse for both men and women to be able to compare and analyse the different reaction of consumer after purchasing any product or in case the buyer regret to not buy such other product. Finally, since service industry marketers in various business organizations today are rising rapidly, they are facing

enormous challenges in realizing their client satisfaction. It is therefore necessary to search for better ways to reduce dissonance post purchase.



CHAPTER 7. CONCLUSION

The main goals of the present study were to add reliable and relevant measures to the research on cognitive dissonance, to explain the conceptual basis of cognitive dissonance and its relationship with other marketing principles that form part of the further development of theoretical awareness in this field, besides to create a new systematic analysis in order to address all the above listed issues.

The research paper was to establish a proceeding model for cognitive dissonance post purchase in the context of luxury apparel products for women, especially for Tunisian. All aspects of cognitive dissonance developed by Sweeney, et al. (2000) covered the three same dimensions used in this study and provided valuable explanation by expanding the women behaviour after purchasing. This analysis focused on the post-purchasing behaviour of women whereas, the impulse buying and the purchasing decision involvement were explained clearly by comparable studies. Indeed, the used analysis in the research questions reveal that the cognitive dissonance does not rely on respondents' demographic properties except for a slight effect in the case of women who are expressing their dissonance on “concern over deal”. Considering the results of the SEM and mediation analysis which declare that no significant relationship between customers buying intention and purchasing decision with the cognitive dissonance. In addition, the level of cognitive dissonance for most of the participants was low which means that they were satisfied with their last purchase. The study demonstrates that the emotional component is endorsed positively and explicitly indicates that dissonance encompasses both cognitive and emotional dimensions as the heading suggests as other interpretations.

The most exciting conclusion to be drawn from this study is that dissonance is known to obey a personal decision but it is not confirmed in this study to appear throughout the stage of planning to the shopping and the buying intention as well the involvement in making the decision. Finally, it is hoped that the results will enable business analysts to understand the impact of cognitive dissonance on consumer behaviour and to strengthen marketing efforts in order to guarantee consumer satisfaction.

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APPENDIX

SAMPLE OF QUESTIONNAIRE

PART1 : Demography	
Age	15-25 25-35 35-45 More than 45
Marital Status	Single Married Separate/Divorced
Employees' Status	Employed Self Employed Unemployed Retired
Monthly Income	Less than 500 500 – 1000 1000 – 2000 More than 2000
Number of Children	1 – 2 2 - 3 4 or more None

PART 2 : Customer Buying Intention: THE Impulse buying						
Assessment Scale: 1= Strongly Disagree; 2= Disagree; 3= Neutral; 4= agree; 5= Strongly Agree						
1	When I go shopping, I buy things that I had not intended to purchase.	1	2	3	4	5
2	I am a Person who makes unplanned purchases.					
3	When I see something that really interests me, I buy it without considering the consequences.					

PART 3: Purchasing Decision Involvement	
Assessment Scale: (1 = never; 2 = rarely; 3 = sometimes; 4 = often; 5= frequently)	

1	Usually reading about products or asking people about them won't really help me make a decision.	1	2	3	4	5
2	Consumer Reports is not very relevant to me.					
3	Shopping wisely is a rather petty issue compared to thinking about how to make more money.					
4	The brands of goods I buy make very little difference to me.					
5	I pay attention to advertisements for products I am interested in.					

PART 4: Cognitive Dissonance Dimensions						
These questions are to be answered based on the most likelihood of the situation of your last apparel purchase.						
Assessment Scale: 1= Strongly Disagree; 2= Disagree; 3= Neutral; 4= agree; 5= Strongly Agree						
Emotional						
After I bought this product:						
1. I was in despair	1	2	3	4	5	
2. I resented it						
3. I felt disappointed with myself						
4. I felt angry						
5. I felt uneasy						
6. I felt I'd let myself down						
7. I felt annoyed						
8. I felt frustrated						
9. I felt depressed						
10. I felt furious with myself						
Wisdom of Purchase						
1. I wonder if I really need this product						
2. I wonder whether I should have bought anything at all						
3. I wonder if I have made the right choice						
4. I wonder if I have done the right thing in buying this product						
Concern over Deal						
1. After I bought this product, I wonder if I had been fooled.						
2. After I bought this product, I wonder if they had spun me a line.						
3. After I bought this product, I wonder whether there was something wrong with the deal I got.						

