
A model of fashion-oriented impulse buying behaviour – a case study of Portuguese consumers

Daniela Alves da Silva Ferreira Santos

Dissertation
Master in Economics

Supervised by
Diogo Campos Monteiro de Melo Lourenço

2019

Biographic Note

Daniela Alves da Silva Ferreira Santos was born on July 14, 1993, in Porto, Portugal. She was raised in the city of Vila Nova de Gaia and completed the Bachelor in Economics at Faculdade de Economia do Porto of University of Porto (FEP) in 2016, prior to enrolling the Master in Economics at the same institution. During that time, she was part of Grupo Coral da FEP and a member of AIESEC.

For most of her Master, she worked as an Internal Auditor at Mota-Engil, in Porto, but is now looking forward to a new challenge.

Acknowledgments

This thesis would not have been possible without the collaboration of several people.

First and foremost, I would like to thank Professor Diogo Lourenço, from whom I received a great deal of expertise and assistance through the journey of writing this thesis. For all the hours of effort, feedback and professionalism, I appreciate it.

I thank all the respondents to the survey, who gave a few minutes of their time and precious information to contribute to my thesis.

To my grandmothers, who always give me the strength to pursue my dreams.

To my grandfathers, whom I miss and are always with me.

To my mother, my father and my brother who incessantly support me through all times and especially during the preparation of this project, and that never stop believing in me and my competences.

I would like to thank my family who sticks together no matter what and that constantly have my back.

I would also like to thank all my friends, special gratitude to Tatiana, Andreia, Eduarda, Elisa and Filipa who kept pushing me and giving me the strength to keep working without forgetting to have fun in the meanwhile.

To the universe, that conspired and eventually made all the events lead to the right direction towards finishing my thesis.

Abstract

Consumers' impulse buying behaviour has been for many years one of the areas of study of behavioural economics. Recent developments in the behavioural economics' theory show the importance there is to conduct research on the departures from the *homo economicus* portrayed in mainstream economics and neoclassical theory to show a more complete picture of decision-making. Building on an existent model on fashion-oriented impulse buying from Joo Park et al. (2006), this study aims to determine whether involvement, especially involvement with fashion clothing and hedonic consumption tendency leads to a more fashion-oriented impulse buying behaviour from the consumers. Based on a review of the literature on impulse buying, fashion involvement, and hedonic consumption tendency, an online questionnaire was administered to a convenience sample of 276 individuals in Portugal. Respondents were asked to answer questions on their sociodemographic profile and 5-point Likert-type questions on the subject that is being studied. Analysis of the responses demonstrated that an individual with a higher hedonic consumption tendency is more likely to engage in fashion-oriented impulse buying and also that an individual with a higher degree of fashion involvement has a higher hedonic consumption tendency. Further research is suggested to not only identify other motivations that lead to fashion-oriented impulse buying but also to raise awareness of the importance of the field of behavioural economics in getting a bigger picture of consumer behaviour.

Key-words: behavioural economics; fashion-oriented impulse buying; Portugal; SEM.

JEL Classifications: D90, D12, L67

Resumo

O comportamento de compra impulsivo por parte dos consumidores tem sido por muito tempo um dos focos de estudo da economia comportamental. Desenvolvimentos recentes na teoria da economia comportamental demonstram a importância do estudo dos desvios ao *homo economicus* retratado na economia tradicional e teoria neoclássica com o objetivo de fornecer uma visão mais completa do processo de tomada de decisão. Com base num modelo existente de compra impulsiva de roupa de Joo Park et al. (2006), este estudo tem como propósito compreender de que forma o envolvimento, em particular o envolvimento com roupa/moda bem como a tendência de consumo hedónica podem levar a um comportamento de compra mais impulsivo por parte dos consumidores de roupa. Através de uma revisão de literatura em compra impulsiva, envolvimento com roupa/moda e tendência de consumo hedónica, foi construído um questionário e posteriormente aplicado a uma amostra de conveniência de 276 indivíduos em Portugal. Aos inquiridos foi pedido que respondessem a um conjunto de questões sociodemográficas e a questões em escala de Likert que medem as dimensões a estudar. A análise das respostas sugere que um indivíduo com uma maior tendência de consumo hedónica é mais provável de se envolver numa compra de roupa impulsiva. Adicionalmente, um indivíduo com uma maior tendência para estar envolvido na compra de roupa é mais suscetível à tendência de consumo por motivos hedónicos. Futuras investigações são sugeridas para não só identificar outras motivações que possam levar à compra impulsiva de roupa, mas também para consciencializar outros investigadores para a necessidade de se desenvolverem mais trabalhos na área da economia comportamental permitindo assim a obtenção de um panorama mais alargado sobre o comportamento do consumidor.

Index of Contents

Introduction	1
Part I - Literature review	3
1. Theory of consumer choice and Neoclassical economics	3
2. Bounded rationality and behavioural economics	5
3. Fashion-oriented impulse buying	10
3.1 Impulse buying	11
3.2 Involvement and fashion involvement	15
3.3 Hedonic consumption tendency	18
4. Consumption of fashion clothing in Portugal	21
Part II – Methodology	25
1. Investigation model and hypotheses	25
2. Research method	26
2.1 Questionnaire	27
2.2 Data collection	28
Part III – Results	29
1. Validation	29
2. Internal consistency	32
3. Sample characterization	34
4. Descriptive analysis	36
5. Investigation model and hypotheses	39
Conclusions	48
Bibliographic references	50
Annexes	60
1. Annex A – Research questionnaire (English)	60
2. Annex B – Research questionnaire delivered (Portuguese)	63
3. Annex C – Bibliography of the items composing the questionnaire	67
4. Annex D – Sample characterization	67

Index of Tables

Table 1 - Clothing and footwear (%) in terms of total consumption in Europe.....	22
Table 2 - Portuguese textile and clothing industry indicators	23
Table 3 - Percentage of total variance explained by the three primary factors	31
Table 4 - Communality and principal components of the scale.....	32
Table 5 - Internal Consistency	34
Table 6 - Results obtained for the dimension of fashion involvement	37
Table 7 - Results obtained for the dimension of hedonic consumption tendency.....	38
Table 8 - Results obtained for the dimension of fashion-oriented impulse buying	39
Table 9 - Non-parametric tests regarding age, gender and level of education.....	42
Table 10 - Non-parametric tests regarding employment status, NUTS II and monthly net income.....	43
Table 11 - Non-parametric tests regarding frequency of purchase, season of the year and average expenditure per shopping trip on new clothing.....	44
Table 12 - Goodness of fit indexes of the estimated model	46
Table 13 - Hypotheses results	47

Index of Figures

Figure 1 - Conceptual model of Fashion-oriented impulse buying.....	25
Figure 2 - Representation of the estimated SEM	45
Figure 3 - Results of the estimation of the SEM	46

Introduction

Behavioural economics has been gaining importance in the last decades. A recognition of this can be found in 2017's Nobel prize, which was awarded to Richard Thaler on his contributions to this subject. As the Committee wrote: *"Economists aim to develop models of human behaviour and interactions in markets and other economic settings. But we humans behave in complex ways. Although we try to make rational decisions, we have limited cognitive abilities and limited willpower."* (The Committee for the Prize in Economic Sciences in Memory of Alfred Nobel, 2017).

Human beings make choices. Even though, in general, individuals try to make the best decisions (through their view at least) when purchasing goods or services, human reasoning is far from perfect and often is guided by emotion, leading to decisions that are not maximizing their utility (Mankin, 2014; Soukup, Maitah, & Svoboda, 2015) .

The idealized consumer, which mainstream economics presents to us while studying this discipline is often far from behaving consistently. The theory of consumer choice (utility maximization) and the theory of the firm (profit maximization) are two of the paradigms that can be found within the Neoclassical economics that rest upon the assumption that agents behave according to *homo economicus* (Urbina & Ruiz-Villaverde, 2019).

Here, it is addressed one of the many deviations from idealized behaviour, and this is *impulse buying*. In particular, I wish to address this matter by adopting a view of rationality that is informed by recent contributions of behavioural economists.

This dissertation aims to be an empirical contribution to the development of the concept of impulsiveness existent in economics. Although there are many studies about impulsiveness, these mostly focus on the marketing side. The focus is rather to understand consumer behaviour and a couple of motivations that lead to impulse buying, in the fashion-clothing context using a Portuguese sample. The motivations considered to this thesis are fashion involvement and hedonic consumption tendency.

Since impulse buying consists of a broad concept within behavioural economics and consumer behaviour, there are many questions still to be discussed on this topic. I am convinced that there is a wide gap to be filled and that this dissertation may contribute to fill in a small part of that gap, especially in the Portuguese context. Additionally, this thesis also aims to generate interest in future possible investigations within the area of behavioural economics, raising awareness of the need to bring closer the relationship between the fields of economics and psychology.

This thesis is divided into five components. After this brief introduction which allows to clarify the pertinence of this thesis and to contextualize the nature of this investigation, Part I introduces the theoretical framework relevant to the concept of impulse buying.

It begins with a brief review of the theory of consumer choice and Neoclassical economics moving on to the concept of bounded rationality and behavioural economics. This is followed by the discussion of the existent literature on the concept of impulse buying and fashion-oriented impulse buying, fashion involvement and hedonic consumption tendency. And ends with a short review on the state of fashion clothing consumption in Portugal.

In Part II it is presented a description of both investigation model and hypotheses and continues with the methodology. The research method used was a questionnaire and the collection of the data and further details on the questionnaire are also given in this part.

In Part III, the results obtained from the questionnaire are subject to an extensive analysis, with a previous validation and internal consistency analysis before proceeding to the sample characterization and results analysis.

At last, the conclusions of this thesis will be presented, together with the limitations associated with this investigation, pointing to potential future improvements and suggestions for later investigations being made concerning this scope.

Part I - Literature review

1. Theory of consumer choice and Neoclassical economics

Economics is a social science that has been evolving for centuries. It is a diverse science, with different schools of thought. At the beginning of the 20th century, the term Neoclassical economics was introduced by Thorstein Veblen in his book *'Preconceptions of Economic Science'*. He used it to classify Marshall's economics (Lawson, 2013). But Neoclassical economics has been associated with the use of mathematics and of marginalist reasonings, i.e. with the work descended from the Marginalist Revolution (Colander, 2002; Weintraub, 2002). The continuous rise of marginalism and the works of economists such as Jevons, Walras or Marshall created the conditions for the development of modern economics (Morgan, 2016).

It is claimed that Neoclassical economics dominates modern microeconomic thought. According to Hall & Lieberman (2012), Microeconomics studies the behaviour of individuals (households or firms) on an economic basis. It is concerned with human choice and the way individuals interact and make transactions with each other.

Neoclassical economics' approach is based on several assumptions. Among them, we find methodological individualism, which essentially states that economic phenomena should be explained in terms of the behaviour of economic 'agents' (the units). A second assumption is that it works towards understanding the reaction of individuals to a set of prices, that while aggregated lead to the market equilibrium. Thus, it is important to comprehend the circumstances under which it is possible to find this equilibrium and whether it is stable (Himmelweit, Simonetti, & Trigg, 2001). The last assumption is that *"all individual behaviour is 'rational' according to a very specific definition of the term"* (Himmelweit, Simonetti, & Trigg, 2001, p.19).

Agents' rationality depends on the choices they make. As consumers, they are rational if their consumer behaviour can be represented as maximizing a utility function. The concept of utility first arose in the work of the philosopher Jeremy Bentham in the 19th century: *"An action then may be said to be conformable to the principle of (...) utility, (meaning with respect to the community at large) when the tendency it has to augment the happiness of the community is greater than any it has to diminish it"* (Bentham, 1996, p.12). Benthamite utility was thus the tendency of an object or action to increase or decrease overall happiness. According to utilitarians, like Bentham or John Stuart Mill, utility was a measure of well-being and therefore the ultimate objective of all public and private actions (Mankin, 2014).

Utility is an abstract measure of satisfaction or happiness, which reflects consumer's preferences. The Marginalist Revolution of the 1870s, with contributions of Jevons, Menger, Walras and Marshall, showed the importance of comparisons of utility rather than absolute levels of utility. Also, the law of diminishing marginal utility became a central hypothesis. Marginal utility is the additional amount of utility a consumer receives from the consumption of an additional unit of a certain good. Thus, what the diminishing marginal utility states is that there is a point after which an additional unit of a good will provide less utility to the consumer than a previous unit (Mankin, 2014; Salvatore, 2005).

Early conceptions of utility could be expressed in terms of a unit and was measurable. This is called cardinal utility and the idea was to provide an index of satisfaction for the individual which could represent observable choice (Abdellaoui, Barrios, & Wakker, 2007; Salvatore, 2005). In the 1930s, mostly as a result of Hicks and Allen's (1934) work, economists understood that a consumer theory was possible with a notion of utility that was ordinal, i.e. subject to ranking rather than measurement. This advance owed much to the previous contributions of Vilfredo Pareto.

In the Hicks-Allen theory, preferences are defined over all goods, i.e. complete. Given two bundles of goods, the consumer either strictly prefers one or the other, or is indifferent between the two. Preferences are monotonic, i.e. the individual always prefers to have more goods than less. Preferences are consistent. This means that given bundles A, B and C, if the consumer prefers A to B, he will not prefer B to A. And if he prefers B to C, he will prefer A to C, since he prefers A to B. Lastly, preferences are subject to the law of diminishing marginal rate of substitution (Mankin, 2014; Wong, 2006).

While this theory was being developed, Paul Samuelson offered an alternative theory of consumer behaviour. He intended to eliminate the concept of utility or its surrogate, preferences, which were not directly observable. Samuelson developed his '*Revealed Preference Theory*', based on a postulate of consistency of behaviour (Houthakker, 2016; Keita, 2012; Wong, 2006). In this theory, preferences are given by choice behaviour, and not the other way around. Samuelson used a 'choice structure' to model individual behaviour. In his work, he postulated that: "*if an individual selects batch one over batch two, he does not at the same time select two over one*" (Samuelson, 1938, p.65) and this has since become known as the Weak Axiom of Revealed Preference (Heufer, 2009; Mas-Colell, Whinston, & Green, 1995; Varian, 2005). In greater detail, the Revealed Preference Theory states that given two different bundles of goods and corresponding prices (A and B for example) and given a budget constraint, if a

consumer chooses bundle A over bundle B, we say that A is revealed preferred to B. The Weak Axiom of Revealed Preference says that if A is ever chosen over B, when B is available, then there is no budget set containing both alternatives for which B is chosen and A is not (Mas-Colell et al., 1995).

The Weak Axiom rests upon a postulate of consistency, according to which there can be no conflicting evidence to the individual's preference between two observations of choice behaviour (Mas-Colell et al., 1995). But Samuelson's theory did not exhaust the classical, preference-based approach. This was only achieved with Houthakker's (1950) extension of the Weak Axiom, his 'Strong Axiom of Revealed Preference'. As an example of this, there are now three bundles of goods: A, B and C. A is chosen over B as the previous example. But now the combination of C is chosen over A. Then C is revealed preferred to A, as A is revealed preferred to B. Given this, what is the relation between C and B? This axiom adds the property of transitivity, in this case, the idea of indirectly revealing preferences. With this property, if C is revealed preferred to A and A is revealed preferred to B (regardless of the reasons), it is possible to conclude that C is indirectly revealed to be preferable to B (Heufer, 2009; Mas-Colell et al., 1995; Varian, 2005).

After Houthakker's contribution, Samuelson (1950) asserts in his paper 'The Problem of Integrability in Utility Theory' that thanks to Houthakker's research his goal was achieved. There was finally a revealed preference theory equivalent to the ordinal utility theory (Wong, 2006).

2. Bounded rationality and behavioural economics

Whether in the preference-based or revealed preference approach, the idealized consumer proposed by microeconomic theory is a self-interested individual, who has a complete knowledge of the market, is perfectly informed about all choice alternatives, and behaves as if maximizing expected utility while minimizing costs (Soukup et al., 2015; Wood, 1998). However, many of the assumptions upon which the decision theory of Neoclassical economics is based are repeatedly violated, as many behavioural economists have discovered in their works (Baumeister, Sparks, Stillman, & Vohs, 2008). Despite seeming rational, cautious and reflective in their actions, real people are still '*homo sapiens*' and not '*homo economicus*'. Human reasoning has imperfections and is frequently led by emotion rather than reason, which until a few years ago was neglected (Mankin, 2014).

Herbert Simon, one of the most responsible authors for the renewed interest in topics on behavioural economics due to his outstanding contributions to economics and psychology, among other fields of study (Cartwright, 2014; Sent, 2004), studied reasoning imperfections. In 1955, the economist published a paper where he alternatively proposed the concept of *bounded rationality*. In his point of view, the Neoclassical models were incapable of portraying human choice behaviour accurately (Muramatsu, 2009). This difficulty was, according to him, due to various human *cognitive limitations*. He recognized that humans face limitations when it comes to their thinking capacity, available information and time (Barros, 2010; Cartwright, 2014; Samson (ed.), 2014). Simon believed that there is a “*disparity between the complexity of the world and the fitness of human computational capabilities, with or without computers*” (as cited in Kalantari, 2010, p.512). The major flaw in the Neoclassical model is that it considers the person who makes the decision an observer instead of an actor in the process of decision making. To Simon, despite being a powerful and useful tool with its assumptions of rationality, the classical theory “*fails to include some of the central problems of conflict and dynamics with which economics has become more and more concerned*” (Simon, 1959, p.255). Also, he was able to identify multiple limits of rationality such as incomplete information about alternatives, complexity, risk, and uncertainty (Schiliro, 2011).

The concept of *bounded rationality* is part of a much broader subject, which has been continuously growing interest among economic researchers and that is *Behavioural Economics*. *Behavioural economics* can be defined in many distinct ways. This concept is about understanding human behaviour when it comes to their economic actions and choices (good or bad), its consequences and how to make better choices (Berg, 2014; Cartwright, 2014). “*It is about working constructively with the standard economic model to get a better understanding of economic behaviour*” (Cartwright, 2014, p.4). The subject is focused on the connection between concepts existent in both economics and psychology. In 1998, Matthew Rabin published an article stating the importance of linking psychological findings to economics. The way he sees it, psychology can give a new insight to the way that humans are traditionally defined by economists, since its main objective is to analyse human behaviour and judgement (Rabin, 1998; Sent, 2004).

It is claimed by Cartwright (2014) and Thaler (2016) that despite only more recently the interest in this subject has been growing, the history of behavioural economics can be traced back to Adam Smith’s contributions. In 1759, he published a book called *Theory of Moral Sentiments*, in which he defended that human behaviour could be determined both by what he called “*passions*” and the “*impartial spectator*” and also where the concept of invisible

hand firstly arose (Ashraf, Camerer, & Loewenstein, 2005). Furthermore, with this book, it is possible to acknowledge many ideas that have recently become major issues in behavioural economics (Cartwright, 2014; Thaler, 2016).

Regardless of having different specific motivations, the behavioural economists that emerged at the same time as Herbert Simon but were part of different streams studying this discipline all agreed they were dissatisfied with mainstream economics and were craving for an alternative. In this regard, Sent (2004) provides a straightforward distinction between what he called mainstream economics, an approach that establishes a connection between rationality, utility and profit maximization and the old behavioural economics more directed to the departure of behaviour from neoclassical assumptions. This first establishment of behavioural economics as a subject was labelled as “*old behavioural economics*” with the purpose of distinguishing it from the advances that were made more recently, and which are part of the “*new behavioural economics*” as mentioned in Sent (2004) and Agner & Loewenstein (2012).

The *new behavioural economics* and the current debates on its status can be mostly traced to the works of Daniel Kahneman and Amos Tversky. The main difference between Simon’s work and the one that these two psychologists developed is that the first had a radical departure and sought to develop behavioural economics as an alternative to mainstream economics, while the latter use the existent economic hypothesis as a baseline and then consider some deviations to the model (Sent, 2004; Thaler, 2016). Since the work developed by Herbert Simon (1955) on people’s cognitive limitations, Tversky and Kahneman (1974) developed a model of heuristic judgement which considers these limitations or biases. In this model, they describe three heuristics used to assess probabilities and to predict values, namely: representativeness, availability, adjustment, and anchoring (Tversky & Kahneman, 1974). *Heuristics* are cognitive shortcuts used by people on a daily basis to reduce mental effort in decision making. Despite heuristics being helpful in many situations, since “*these rule-of-thumb strategies shorten decision-making time and allow people to function without constantly stopping to think about their next course of action*” (Lishman, Yuill, Brannan, & Gibson, 2014) they lead to systematic cognitive biases or errors in judgement.

The existence of heuristics can be related to the way individuals process information in the decision-making process. Kahneman can recognize the complexity of decision-making in the book, “*Thinking, Fast and Slow*”. This book, which gathers his main researches, adopts the two-system model of processing from Stanovich and West (2000), which has been described in different ways but can be referred to as dual-process theory (Baumeister et al.,

2008; Shleifer, 2012). According to this theory there are two thinking systems which can be denoted as *System 1* and *System 2*. The *System 1* processes fast and automatic decisions with no sense of voluntary control whereas *System 2* decisions require attention, mental effort and occur more slowly (Kahneman, 2012).

Additionally, the decisions occurring in *System 1* can be described as intuitive and impulsive and originate impressions and feelings which are the sources of the beliefs and deliberate choices of *System 2*. *System 1* is based on associations, stereotypes and metaphors. In contrast, decisions in *System 2* tend to be reflective, deliberative and analytical and often associated with rational choice. This system is in charge of self-control, particularly one of its tasks is to control the impulses formed by *System 1* (Baumeister et al., 2008; Kahneman, 2012; Stojanovic, 2013; Thorgeirsson & Kawachi, 2013).

Kahneman is able to conclude that self-control requires attention and effort, which means this is a form of mental work. One theoretical model on self-control is the limited-resource model which states that the effort of will or self-control is tiring (Kahneman, 2012). In other words, the capacity for self-control is limited and therefore gets depleted. When this occurs, it is called *ego depletion*. The American social psychologist Roy Baumeister alongside a group of researchers conducted several experiments to show the *ego depletion* effects (Baumeister, 2003; Baumeister et al., 2008). The experiments typically involved two tasks: the first one would reduce the ability of self-control and later they were given a difficult cognitive second task. One of the many indicators that was discovered as being a sign of the depletion of self-control was impulsive purchases (Kahneman, 2012; Vohs & Faber, 2007).

According to Vohs and Faber (2007), when the self-regulatory resources become depleted there is an increase in impulsive spending. More specifically, *“When regulatory resources are low, people feel stronger urges to buy impulsively, are willing to spend more money for a product, buy more items, and spend more total money than when their regulatory resources are intact.”* (Vohs & Faber, 2007). Recently, this concept has been subject to controversy due to some reviews of the research, which advocate that *ego depletion* is not a real phenomenon. One of the first researchers to enquire this was Evan Carter who managed to repeat some of the experiments which were positive on *ego depletion* and reported that there is low evidence of its existence (Frieze, Loschelder, Gieseler, Frankenbach, & Inzlicht, 2018). Referring to the views of Carter, Kofler, Forster, & Mccullough (2015), which conducted a series of meta-analytic tests on *ego depletion*, concluded that the analysis *“does not support the proposition that self-control functions as if*

*it relies on a limited resource, at least when measured as it typically is in the laboratory”*¹.

Another approach to the study of impulsive buying is related to consumer's preferences. The standard economic theory is built upon the assumption that an individual's preferences are time-consistent (Della Vigna, 2009). To capture impatience, it is assumed by economists that people's streams of utility are weighted by an exponentially declining discount factor $d(t) = \delta^t$, where $1 > \delta > 0$.² (Camerer, Loewenstein, & Rabin, 2004, p.22; O'Donoghue & Rabin, 1992). However, research in this field suggests that the assumption of time consistency is not correct. In real life, people have a preference to avoid costs that seem to be closer in time while they are in for immediate gratification. What happens is that short-term emotions have such an impact on consumers' preferences resulting in a disregard for their long-term interests, which is related to how the impulse buying phenomenon works (Verplanken & Sato, 2011). Strotz (1956) was one of the first economists to study this question and to show that an individual's discount functions can be nonexponential through the formalization of a theory of commitment (Laibson, 1997). Even before, Jevons among other renowned economists had already recognized that individuals discount the future (Ainslie, 1975). Instead of an exponential function, it is proposed a hyperbolic discount function that is capable of modelling these inconsistent preferences (Laibson, 1998).

Hoch and Loewenstein (1991) go beyond the economic discounting perspective and alternatively recognize that time-inconsistent preferences are a result of a change in the consumer's *reference point* (Verplanken & Sato, 2011). As described by these researchers, the *reference point* “reflects the fact that people are less concerned with absolute attainments than with attainments relative to some psychologically relevant comparison point” (Hoch & Loewenstein, 1991, p.494). That is to say that utility should rather be measured in terms of gains and losses which are relative to the present state of wealth rather than being defined by final wealth state (Markowitz, 1952) (as cited in O'Donoghue & Sprenger, 2018). In the view of Hoch and Loewenstein (1991) impulsive purchases can be related to changes in the consumer's *reference point*. Assuming that the *default reference point* of a consumer is not having purchased any good, when the purchase has been made, the consumer's *reference point* is now owning a good (Hoch & Loewenstein, 1991; Verplanken & Sato, 2011). The feelings usually associated with impulsive purchases can shift this *default reference point* to one as if the consumer had already made that

¹ Further literature on the current debate on *ego depletion* can be found in Friese et al. (2018).

² The discount factor δ is usually expressed by $1/(1+r)$, where r is a discount rate.

purchase. The authors state that the consequence of this is that when the consumer tries to walk away from the desired good, there is a feeling of deprivation or loss of that good leading to a never-ending desire to its purchase or consumption sooner as possible in order to stop the feeling of deprivation (Hoch & Loewenstein, 1991; Verplanken & Sato, 2011).

The evaluation of outcomes as gains and losses from a reference point is also one of the main current subjects of behavioural economics. The reference point plays an important role in Kahneman and Tversky's *Prospect Theory* (Bruni & Sugden, 2007; Thaler, 2016). What Kahneman and Tversky offered in their 1979 paper was a theory of non-rational behaviour based on psychological assumptions as a complement to the established economic theories of decision making, namely the expected utility theory from von Neumann & Morgenstern (1947) (Bruni & Sugden, 2007; Thaler, 2016).

Throughout the history of behavioural economics, the subject of impulse buying emerged several times as an important departure from ideal consumption behaviour. Many researches have been conducted with samples gathered from different countries, explaining the factors or variables that may lead to impulsive buying behaviour. However, very few investigations have been found referring to those factors and motivations among the Portuguese consumers (Cardoso, Costa, & Novais, 2010) and therefore it is about time to address this issue.

3. Fashion-oriented impulse buying

Impulse buying is a significant aspect of consumer behaviour. Testament to its prevalence are the examples we come across, on a daily basis, of consumers buying something instinctively, something they do not need (Cobb & Hoyer, 1986; Hausman, 2000). This prevalence has led researchers from different areas, such as economics and psychology, to be interested in the study of impulse buying behaviour.

There is an extensive literature on different motivations that are related to the impulse buying behaviour. Motivations such as positive/negative feelings (Youn & Faber, 2000), proximity to the product (Peck & Childers, 2006), store environment (Mohan, Sivakumaran, & Sharma, 2013), hedonic (Hausman, 2000) and involvement (Jones, Reynolds, Weun, & Beatty, 2003) are among the most discussed.

In this thesis, firstly it is important to get an insight into the concepts of impulse buying, specifically the case of fashion-oriented impulse buying, as well as fashion involvement and hedonic consumption tendency. Impulse buying as it will be further explained can

be summarily described as the purchase of goods without a planned intention of doing so, as a result of a sudden urge or stimuli (Bayley & Nancarrow, 1998; Piron, 1991; Rook, 1987). Fashion involvement has been identified as a relational variable that helps to understand and predict purchase behaviour (O’Cass, 2000). This construct refers to the interaction between an individual and a product, with an unobservable state of interest or arousal provoked by the product. It has been found to lead to impulse buying (Kapferer & Laurent, 1985; O’Cass, 2000).

Therefore, one of the purposes here is to study if there is an influence of the dimension of fashion involvement in fashion-oriented impulse buying, like few researches have previously shown support for (Joo Park, Young Kim, & Forney, 2006). In other words, if fashion involvement is related to fashion-oriented impulse buying.

In like manner, other investigators suggest that clothing consumption is often related to hedonic motivations (such as fun, novelty and adventure) as opposed to utilitarian motivations (satisfying a need), and the first often leads to impulse buying behaviour (Cardoso et al., 2010; Hausman, 2000; Joo Park et al., 2006). And so, the other purpose is thus to study the influence of hedonic consumption tendency in fashion-oriented impulse buying.

3.1 Impulse buying

Every day, people find themselves or others behaving impulsively. Anyone can cheat in their diet by, on the spur of the moment, eating a tempting piece of cake, unduly prolong a cigarette break, or make a purchase and regret it moments later. Everybody can recall more than one time they acted impulsively.

To better understand this behaviour, there has been a concern, mainly from psychologists at first, in coming up with a definition of impulsivity. As it is possible to acknowledge many examples of impulsive behaviour, it is natural that there is more than one definition of this idea. And so, in line with Evenden (1999), impulsivity should not be seen from just one point of view, but rather according to the field people are working on (Evenden, 1999).

The focus of this thesis is on the impulse buying behaviour, in the definition of which there has been an interest for over sixty years. According to Stern (1962), impulse buying can be used to describe a purchase that was not previously planned, a synonym for unplanned buying. He argues that many factors influence impulse buying, such as time, location, economic, personality or cultural. With these factors in mind the author came up with

4 broad classifications of impulse buying: (1) *pure*, characterized by being a fresh or “getaway” purchase, which breaks with the regular buying pattern; (2) *reminder*, arises during a trip to the store when the shopper remembers to buy after seeing the item or recalls its advertisement; (3) *suggestion*, despite not having any previous knowledge of the item, the will to buy it arises with the product quality being evaluated at the point of sale; (4) *planned*, originated by a previous intention of buying an item, but is dependent of the purchase conditions (offer and discounts for example). The main difference among them is that whereas the *pure* impulse buying happens due to an emotional stimulus and almost without any cognitive involvement, the other 3 are a combination of both characteristics (Stern, 1962).

Before 1973, investigation on impulse buying behaviour focused on goods or items being classified as impulsive or not, but with authors like Shapiro (1973), Belleneger (1978) or Rook and Hoch (1985) there was a shift on the way of thinking. These authors agreed that any good might be subject to impulsive behaviour and thus the research should rather focus on impulsive behaviour and purchases (Belleneger, Roberston, & Hirschman, 1978; Rook & Hoch, 1985).

A reconceptualization of the impulse buying concept was suggested in 1987, when Rook argued that the term was more specific and narrower than an unplanned purchase. In his article he defined impulse buying as “*a sudden, often powerful and persistent urge to buy something immediately*” that the consumer feels, disregarding the consequences. This lead him to conclude that it is not true that all unplanned purchases are impulsively decided and also that the impulsive behaviour was rather emotional instead of rational (Rook, 1987).

Before such reconceptualization, Weinberg and Gottwald (1982) had already shared a similar point of view. If impulsive purchase decisions are unplanned in the sense of thoughtless, not every unplanned purchase is impulsively decided, as some of these can be done rationally. Additionally, these authors state that impulsive decisions are based on three dimensions of consumer behaviour: affective, cognitive and reactive (Weinberg & Gottwald, 1982).

Following Rook’s work, several researchers have offered different definitions for the impulse buying concept. Worth mentioning is the view of Francis Piron (1991). The author argues that, contrary to the perspective of Rook (1987), the experience of an emotional and/or cognitive reaction (the feeling of acting sudden and spontaneously for example) is not by itself a determinant characteristic of an impulsive purchase. Instead, he proposed that impulse purchasing could be formally composed by three characteristics. A purchase that

was simultaneously (1) unplanned, (2) the result of an exposure to a stimulus and (3) decided on-the-spot (Piron, 1991). The stimulus may be triggered by the environmental manipulation of the shopping atmosphere, the positioning of the product on a certain shelf or aisle, or even through tie-ins, connecting different items by positioning them next to each other to make the other product stand out (Piron, 1991). In the case of fashion products, one can easily come across examples of this environmental manipulation of the shopping atmosphere. To increase the desirability of fashion products, brands and stores often resort to visual merchandising (Kim, 2003). It is simple to infer from these authors that after the 1980s the researchers centred their attention on the behavioural dimensions of impulse buying (Hausman, 1992).

Frequently associated with impulse buying is a disregard for the consequences of this behaviour (Rook, 1987). Wood (1998) suggests that emotional responses such as *regret*, or dissatisfaction are “*connected to retrospective judgements about the (marginal) utility of a purchase*”. When looking back to an acquisition made impulsively, the consumer may later find it as a waste or unnecessary (Wood, 1998). Furthermore, Wood (1998) emphasizes that consumer displeasure and regret can be related to time-inconsistent preferences from a cognitive and experiential side. To Hoch and Loewenstein (1991), a time-inconsistent choice “*is one that would not have been made if it had been contemplated from a removed, dispassionate perspective*” (p.493).

Impulse buying poses a problem to the rational choice model since these purchases are associated with time-inconsistent preferences and consequently with post-purchase regret (Dittmar, Beattie, & Friese, 1995; Dittmar & Drury, 2000). Many researchers have worked towards incorporating impulse buying and regret into economic theory, and one of these representations is the impatience model³ from Hoch and Loewenstein (1991).

Also on regret, Sugden (1985) defines it as a “*painful sensation of recognising that ‘what is’ compares unfavourably with ‘what might have been’*” (p.77). Moreover, this author acknowledges that regret is composed of two distinct components. The first one is to *wish* that the decision made would have been another, and the second is *self-recrimination* or *self-blame*. Self-recrimination is “*the state of mind you have when you come to believe that a previous decision involved an error of judgement, that it was wrong at the time you made it*” (p.79) and this also can be experienced even

³ The impatience model can be understood with more detail by reading: Coley & Burgess (2003), Dittmar & Drury (2000) and Rook (1987).

when it results in a positive outcome from the decision itself (Sugden, 1985). Sugden, alongside with Graham Loomes, were able to incorporate *regret* into a theory of rational choice (the idea is that decision-makers focus on minimizing the regret that arises if their choice leads to a low payoff)⁴ and explained some of the violations on expected utility theory (Loomes & Sugden, 1982; Sugden, 1985).

In addition to regret, other negative outcomes can be traced to impulse buying, such as: financial problems after purchase, feelings of guilt, social disapproval and ruined (nonfinancial) plans (Rook, 1987; Rook & Fisher, 1995).

Although there have been many researches concerned with impulse buying, most of these are focused on supermarket or department store purchases (Han, Morgan, & Kotsiopulos, 1991). On impulse buying of clothing specifically, though there has been a growing interest in the subject due to the fashion sector being one of the industries with the highest degree of impulse purchasing, there is still much to be discovered and understood (Fairhurst, Good, & Gentry, 1989; Liapati, Assiouras, & Decaudin, 2015).

In the last 20 years, there have been significant changes to the fashion clothing industry (Bhardwaj & Fairhurst, 2010). Namely: the decline of mass production, the growth of the number of fashion seasons, changes in the supply chain characteristics with a focus on lowering production costs while getting quickly to the market and adaptable design (Bhardwaj & Fairhurst, 2010). Additionally, during this time there has been an increase in the fashion consciousness of consumers, as it helps to express the way individuals define themselves (Bhardwaj & Fairhurst, 2010; Dhurup, 2014). Christopher, Lowson, and Peck (2004) have characterized the fashion markets with the following features: short life cycles, high volatility of market demand, low predictability of the demand and high impulse purchasing.

According to Dittmar and Drury (2000), items like clothes, jewellery, and ornaments were reported as items which are more frequently subject to being purchased impulsively compared to other types of consumer goods. Fashion-oriented impulse buying arises “*when consumers see a new fashion product and buy it because they are motivated by the suggestion to buy new products*” (Han et al., 1991) (as cited in Joo Park, Young Kim, & Forney, 2006).

Han et al. (1991) in their research on impulse buying behaviour of apparel purchasers were able to modify Stern’s (1962) classifications of impulse buying and adapted it to fashion-

⁴ More details on the Regret Theory developed by Loomes and Sugden (1982) can be found in: Quiggin, (2014).

oriented impulse buying. As reported by these authors, impulse buying can be classified into 4 categories: *planned*, *reminder*, *fashion-oriented* and *pure* impulse buying. The novelty in this classification is the replacement of Stern's (1962) *suggestion* impulse buying for *fashion-oriented* impulse buying. Han et al. (1991) explained that "*this type of buying occurs when the customer sees a product (in this study an apparel item) in a new style, design, or fabric and decides to buy it. Originally, Stern called this type of buying suggestion impulse buying.*" (p.16).

Among their findings, Han et al. (1991) found evidence that the textile and clothing students as compared to non-students had more chance to be fashion-oriented impulse buyers (Joo Park et al., 2006). The way Dittmar and Drury (2000) see it, fashion clothing is more subject to impulse buying compared to other items due to a higher discount rate associated with this type of consumer good. The researchers argue that "*having to wait for something a person wants, like a new dress, entails a psychological cost*" (p.113) and on items such as clothing the costs of waiting for these items is higher and so consumers demand a higher compensation (discount rate) to wait for those goods (Dittmar & Drury, 2000).

3.2 Involvement and fashion involvement

In many studies, especially in marketing literature, it is not difficult to come across the concept of involvement. Involvement is generally seen as "*a construct linked to the interaction between an individual and an object and refers to the relative strength of the consumers' cognitive structure related to a focal object (e.g., products)*" (O'Cass, 2000, p.548). Researchers seem to agree that this is an important variable that helps to explain consumer behaviour and therefore they have been focused not only in defining but also examining involvement in different contexts.

It is claimed that involvement originates from the notion of *ego-involvement* and social psychology, particularly from social judgement/involvement approach which is a theory of attitude change⁵ (Michaelidou & Dibb, 2008).

The construct of involvement is often claimed to be somewhat difficult to define, as scholars have contradicting views concerning the issue of the dimensionality of the concept. Nonetheless, there were many studies focused on coming up with a generalized definition of the involvement construct. As stated in Kapferer and Laurent (1985) there was an agreement in defining involvement as "*an unobservable state of motivation, arousal or interest. It is evoked*

⁵ To understand the Social Judgement Theory and the concept of ego-involvement read the following: Michaelidou & Dibb (2006), Sherif, Kelly, Rodgers, Sarup, & Tittler (1973) and Petty & Cacioppo (1992).

by a particular stimulus or situation and has driven properties. Its consequences are types of searching, information-processing and decision making." (Rothschild, 1984). Also, Mittal and Lee (1989) in their model of consumer involvement agree that involvement *"reflects the extent of personal relevance of the decision to the individual in terms of her basic values, goals and self-concept"* (Mittal & Lee, 1989, p.364).

There is a lack of agreement on whether the involvement construct should be conceptualized as unidimensional or multidimensional. Although earlier investigations have developed unidimensional measures (Fairhurst et al., 1989; Zaichkowsky, 1985) to this concept, in the literature the reader can look predominantly at examples of involvement as a multidimensional construct. As stated by Laurent & Kapferer (1985), researchers should *"stop thinking in terms of single indicators of the involvement level and instead use an "involvement" profile to specify more fully the nature of the relationship between a consumer and a product category"* (p.41). The involvement profile proposed by these authors includes dimensions of interest, pleasure, risk importance, risk probability, and sign-value. They suggest that by measuring an individual's position on each of these dimensions it is possible to get a complete picture of the origin of consumer involvement and therefore they should be taken into consideration (Kapferer & Laurent, 1985).

The struggle to find an appropriate measure to the involvement construct also seems to arise from the distinction between different types of involvement, *"which relates to the stimulus and its context"* (Michaelidou & Dibb, 2006, p.445). Addressing this issue, Houston and Rothschild (1977) presented a framework for the involvement construct, identifying three types of involvement: situational, enduring and response⁶.

With the understanding that involvement is associated with a variety of contexts in mind, in the literature it is easy to encounter this concept related to impulse buying. Previous researches propose that involvement can play a significant part in the impulse buying process (Jones et al., 2003). There are several reasons why involvement influences impulsive purchases. Between these, it can be pointed out the strong emotions developed by the proximity with a certain product (Jones et al., 2003; Rook, 1987).

All things considered and regardless of the variety of products which can be subject to involvement, the focus of the present thesis is to comprehend the involvement associated

⁶ To understand the three types of involvement read: Houston & Rothschild (1977), Bloch (1982), Richins & Bloch (1986), Arora (1982) and Michaelidou & Dibb (2006).

with fashion clothing. Fashion involvement refers to the extent of interest with a fashion product, thus fashion clothing involvement is linked to the importance that fashion clothing has in an individual's life.

Prior studies have explored the concept of fashion involvement and developed various ways to measure it. One of the most acknowledged works in fashion involvement is the one of Tigert, Ring & King (1976) in which was developed and validated an *index of fashion involvement*. They sought to demonstrate that when a consumer is highly involved with fashion there is a higher possibility that the consumer buys fashion items more frequently. In the study's 'index', five fashion behavioural dimensions were explored and tested, namely: fashion innovativeness, fashion interpersonal communication, fashion interest, fashion knowledgeability and fashion awareness and reaction to change in fashion trends (Tigert, Ring, & King, 1976).

Also, O'Cass (2000) developed a measurement of fashion involvement by considering four different forms of involvement. O'Cass (2000) proposes an alternative model to classify the different types of involvement in his attempt to understand consumer behaviour in fashion clothing. Rather than using the notion proposed by Houston and Rothschild (1976) or Arora (1982), he argues that an individual could be involved in different stimuli or objects, such as (1) products, (2) advertisements of products, (3) purchase decisions and (4) consumption involvement (O'Cass, 2000). The author explains that the purpose of establishing these four types is to "*represent basic types of involvement relevant to a consumer's environment and maintain involvement as an enduring relationship between a consumer and an object, not a temporary or situational one*" (O'Cass, 2000, p.553). In other words, involvement should be seen as a relationship variable, where involvement is linked to the interaction between the object and the consumer (O'Cass, 2004).

Regarding this thesis, the attention turns to two of the types of fashion involvement indicated by O'Cass (2000) which are: product involvement and purchase-decision involvement. Product involvement (PI), can be defined as "*an internal state variable that indicates the amount of arousal, interest or drive evoked by a product class*" (Dholakia, 2001, p.1341). Mittal & Lee (1989) consider product involvement as "*the interest a consumer finds in a product class*", when a determined product class can fulfil important values and goals, and this is noticed by the consumer.

Following a lack of investigation for purchase-decision involvement in prior literature, Mittal (1989b) conceptualized purchase decision involvement as "*the extent of interest and*

concern that a consumer brings to bear upon a purchase decision task” (p.150). To understand the importance of making the distinction between product involvement and purchase decision involvement purchase-decision involvement, Mittal (1989b) gives the following example: “*most consumers would have no enduring involvement in a washing machine, but they would have a high purchase-decision involvement*” (p.148). Putting it differently, a consumer can have a high involvement with a certain product class (high product involvement), but when it comes to the choice of a brand (if it is indifferent for example) the purchase decision involvement can be low (Mittal, 1989).

Subsequently to Mittal’s (1989b) generalized measure to the purchase involvement decision construct, O’Cass (2000) followed similar procedures adopted by Mittal and Lee (1989) and came up with a scale to measure purchase involvement decision specific for fashion clothing (O’Cass & Choy, 2008).

3.3 Hedonic consumption tendency

It is common to find the concept of *hedonism* in economic books. The word is derived from the ancient Greek (*hedone*) which means pleasure. Simultaneous to the discussion that revolves around rational choice and the rational men in economics more recently, the difficulty regarding the coexistence of psychological and non-psychological ideas within economics can be traced to other debates, namely on the controversy around *hedonism* (Lewin, 1996).

Around the nineteenth century, Jeremy Bentham proposed the use of *hedonic calculus* as the foundation of his theory (Lewin, 1996). According to him, “*Nature has placed mankind under the governance of two sovereign masters, pain and pleasure*” (Bentham, 1907, p.1). And so, his measure of utility was connected to an individual’s inner happiness, in other words, utility was a psychological magnitude (Lewin, 1996). Bentham’s Utilitarianism was therefore based on the concept of *hedonism* and the “greatest happiness principle”. Jevons was also profoundly influenced by Bentham’s ideas as he “*attempted to treat Economy as a Calculus of Pleasure and Pain*” (Jevons, 1888)(as cited in Read, 2007).

Mainstream economics has long abandoned the Benthamite approach to utility. Nevertheless, Daniel Kahneman and other researchers have more recently attempted to bring

back *hedonism* into utility and more specifically a new empirical approach named *theory of experienced utility* (Kahneman, Wakker, & Sarin, 1997; Read, 2007) ⁷.

Additionally, the importance of considering other aspects, such as the experiential aspect of consumption, in contrast to the existing rational models of decision making, has been highlighted by researchers like Olshavsky and Granbois (1979), Sheth (1979) and Khan, Dhar, & Wertenbroch (2005). This research focuses on the distinction between the actual *hedonic* and *utilitarian* consumption, understanding its motivations and differences, to better comprehend the fashion-oriented impulse buying behaviour.

It is relevant to keep in mind that the use of the term *utilitarian* when it comes to consumer behaviour is different from the notion of utilitarianism given by Bentham (Babin, Darden, & Griffin, 1994). To his sense the utilitarianism “*reflects much of both hedonic and utilitarian dimensions of consumer behaviour*” (Babin et al., 1994, p.645), which is quite distinct from the utilitarian value that it is focused on this thesis.

There are several reasons for consumers to acquire products or services and two possible explanations for this are the utilitarian and hedonic motivations (Babin et al., 1994; Hirschman & Holbrook, 1982; Holbrook & Hirschman, 1982; Voss, Spangenberg, & Grohmann, 2003).

Concerning the utilitarian motivation, this can be associated with rational behaviour and the utility related to a certain good (Batra & Ahtola, 1991). Batra and Ahtola (1991) argue that this feature is presumed to be based on the instrumentality or function (“means-ends”) of a product attributed by the consumer. And, according to Strahilevitz and Myers (1998), the utilitarian or “*goal-oriented consumption is motivated mainly by the desire to fill a basic need or accomplish a functional task (e.g., the consumption of a bottle of dishwashing liquid or a box of trash bags)*” (Strahilevitz & Myers, 1998, p.436).

When compared to utilitarian motivation, hedonic motivation has not been studied and understood in so much detail but has over the past few years been attracting more attention (Babin et al., 1994). This might be due to difficulties understanding what is behind the concept itself as it is more subjective and personal than its counterpart. (Holbrook & Hirschman, 1982)(as cited in Babin et al., 1994). In other words, a part of the customer’s shopping experience was not being properly considered, namely the weight of emotions related to consumption activities (Bloch & Richins, 1983; Hirschman, 1984; Holbrook,

⁷ See Read (2007) and Kahneman, Wakker, & Sarin (1997) for more details on the *theory of experienced utility*.

1986)(as cited in Lim, Cyr, & Tan, 2012).

The definition given by Hirschman and Holbrook (1982) of hedonic consumption, also referred to as experiential consumption, can be found in most of the academic literature on this subject. The authors relate this concept to a specific behaviour of the consumer, who seeks an experience characterized by fun, emotion, fantasy and sensory stimuli (Childers, Carr, Peck, & Carson, 2001).

While many researchers consider the hedonic consumption as unidimensional, Arnold and Reynolds (2003) are able to identify within the aspects of shopping six hedonic motivations that lead consumers to buy. The categories are the following: adventure, social, gratification, idea, role and value shopping (Arnold & Reynolds, 2003).

Additionally, the hedonic shopping value reflects that the experience a consumer goes through is in itself the reward of interacting with an environment. This means that when the consumer goes through positive emotional experiences such as pleasure and excitement or, that is to say, the consumer has a pleasant interaction with an environment both hedonic shopping value and unplanned purchases can be increased (Babin & Babin, 2001).

Intuitively, the characterization from both hedonic and utilitarian consumption makes it easier to conclude that the affective content and the motives that lead to these types of consumption are reasonably different (Strahilevitz & Myers, 1998).

In addition to being defined as a type of consumer experience, hedonic and utilitarian characteristics can also be applied in an *attribute* level, in other words, as a classification of a product instead of a type of consumption (Chernev, 2004; Dhar & Wertenbroch, 2000). Taking as an example the one given by Chernev (2004), an ice cream can be regarded as a hedonic product but containing both hedonic and utilitarian attributes. Utilitarian attribute in the sense that the ice cream possesses a certain number of calories necessities for the human body to attain and hedonic attribute the flavour and taste of that ice cream (Chernev, 2004). Overall, a combination of utilitarian and hedonic motives can drive a consumer to make purchases and identifying which has more weight in the consumer choice can be a difficult task (Alba & Williams, 2013).

Many studies indicate conceptual support for a connection between impulse buying and hedonic consumption motives (Hausman, 2000). Considerable research contends that to satisfy hedonic needs, the consumers often engage in impulse buying behaviour (Hausman, 2000).

When Rook (1987) made a reconceptualization of impulse buying, in his definition

he suggested a relation between this concept and hedonism: *“The impulse to buy is hedonically complex and may stimulate emotional conflict”* (Rook, 1987, p. 191). It appears to be of general agreement that impulse buying involves a hedonic component (Cobb & Hoyer, 1986; Dhar & Wertenbroch, 2000; Wertenbroch, 1998). This relationship also applies to the consumption of fashion clothing. On a study conducted with college students, Joo Park et al. (2006) were able to identify that to fulfil hedonic needs the students engaged in fashion-oriented impulse buying (Liapati et al., 2015).

4. Consumption of fashion clothing in Portugal

Before proceeding to the analysis of the sample collected to this thesis, it is relevant to get an insight into a few sociodemographic characteristics of the Portuguese population and also the framework of Portuguese consumption, specifically the consumption of fashion clothing. Additionally, it is shown the considerable relevance that the textile and clothing sector have not only within the Portuguese economy but correspondingly across the globe.

According to data from 2018 (INE), Portugal has around 10.3 million inhabitants, of which 52.8% are females. Considering the population by age groups, the most representative are the people above 65 years old (22%) followed by the 19 years old or less (19%). On the level of education, about 60% of the population (over 15 years old) has a level of education lower than high school or equivalent, and about 18.7% have a superior education diploma. Regarding the labour market, around 60% of the population (over 15 years old) was active, and of the active population, 7% were unemployed.

Focusing on the Portuguese consumption for the category of “Clothing and Footwear”, in comparison with other European countries between 2007 and 2017, it is possible to verify in Table 1 that Portugal has one of the highest percentages (around 6%) in the category “Clothing and Footwear” in terms of total consumption. Of the countries represented in the table, only Italy surpasses Portugal between the years of 2007-2014, and Portuguese consumption is above both the average for the European Union and the Euro Area. It should be highlighted that not only has Portugal grown more fashion-conscious over the last 20 years with the increasing access to the internet and social media, the help of sales and advertisements but also because the “Clothing and Footwear” industry has been transforming over these years. Stepping from a more traditional and labour-intensive production to a modern and highly competitive one (Batista, Matos, & Matos, 2017)(aicep Portugal Global, 2018).

Table 1 - Clothing and footwear (%) in terms of total consumption in Europe

	Years		
European Countries	2007	2012	2017
European Union (28 countries)	5.3	4.9	4.9
Euro Area (19 countries)	5.4	4.9	4.8
Belgium	4.9	4.7	4.2
Denmark	4.6	4.5	4.1
France	4.6	4	3.8
Germany	5.3	4.9	4.8
Greece	5.4	3.4	3.7
Hungary	3.3	2.6	3.8
Ireland	4.6	4	3.9
Italy	6.7	6.3	6.1
Luxembourg	5	5.4	5.2
Netherlands	5.4	5.4	5.4
Portugal	6.3	5.6	6.2
Spain	5.4	4.3	4.4
United Kingdom	5	5.3	5.5

Source: Data retrieved from INE

The Portuguese textile and clothing industry (“Indústria Têxtil e Vestuário”-ITV), is one of the most important industries of the Portuguese economy. In 2017, this industry produced 7.4 billion euros and generated a turnover of 7.6 billion euros, of which 5.2 billion euros are the result of export activity (ATP, 2019) as is shown in Table 2. Table 2 also shows that between 2007-2017, the production, turnover, exports and imports have increased overall, despite a decrease around 2008 explained by the impact of the global economic and financial crisis. The industry started to recover around 2010 and since then has grown steadily until 2017, under a set of critical factors, namely the industrial know-how, the high quality of goods, combined with strong innovation skills (ATP, 2019).

Based on information from the “Associação Têxtil e Vestuário de Portugal” (ATP) – a Portuguese association regarding the textile and clothing sector, this industry accounts for

19% of the manufacturing industry employment, 10% of the national exports and is considered one of the few activities with a positive balance of trade of goods (aicep Portugal Global, 2018; ATP, 2019). It should be stressed that this industry is mainly located in the North region of Portugal, representing 87% of the sector turnover (aicep Portugal Global, 2018; ATP, 2019).

Table 2 - Portuguese textile and clothing industry indicators

	Years		
Indicators (million €)	2007	2012	2017
Production	n.a	5 647	7 425
Turnover	n.a	5 838	7 597
Exports	4 352	4 127	5 224
Imports	3 415	3 116	4 148
Trade Balance	938	1 011	1 077

Source: Data retrieved from INE

Bearing in mind Portugal and considering the case of online purchases, a report on e-commerce from “CTT - Correios de Portugal”⁸, informed that e-commerce grew 12.5 p.p.⁹ in 2017, reaching a total of 4.1 billion euros and about 36% of the population made online purchases. It should be highlighted that most purchases (around 50% of the total) were made in the category of “Clothing and Footwear”.

The outlook for the future is positive when talking about e-commerce in Portugal. According to the CTT report, 5 out of 10 e-buyers expects to increase the number of products bought online, and 4 out of 10 e-buyers anticipate an increase of the amount spent on online shopping as well as the number of categories of purchase (CTT - Correios de Portugal, 2018).

Altogether, the economic relevance of the sector of textiles and clothing in Portugal

⁸ “CTT - Correios de Portugal” is a Portuguese post office company.

⁹ Percentage points.

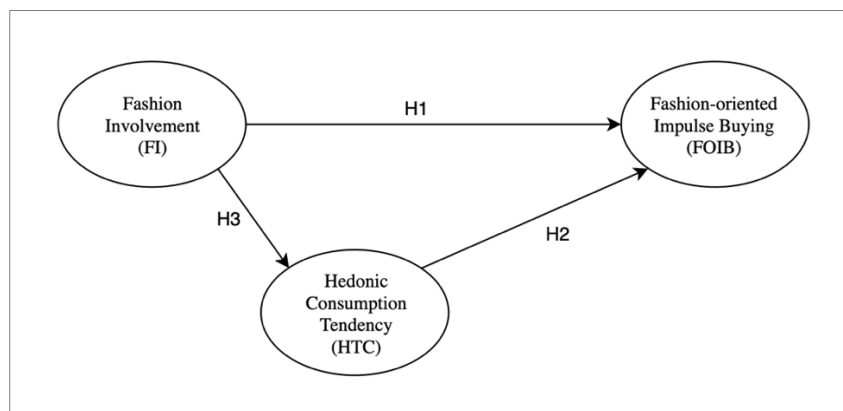
is clear. However, there is still a lack of understanding of many aspects of the Portuguese consumption, in particular the impulsive consumption of fashion goods, which is the issue the present thesis aims to address.

Part II – Methodology

1. Investigation model and hypotheses

Based on prior impulse buying studies, this thesis introduces three variables to the model of fashion-oriented impulse buying and which is the one proposed below in *Figure 1*. The model shown is similar to the one presented in the work of Joo Park et al (2006), but the main objective here is to illuminate the relationships among three variables: fashion involvement (FI), hedonic consumption tendency (HCT) and fashion-oriented impulse buying (FOIB).

Figure 1 - Conceptual model of Fashion-oriented impulse buying



Source: Author

As seen, fashion involvement is characterized by an interest, arousal or drive that a consumer finds for a fashion good, which is in this case clothing products (Dholakia, 2001; Fairhurst et al., 1989; Han et al., 1991). This drive is often responsible for stimulating consumers to make purchases of apparel that were not among the previous intentions of these consumers. In other words, when consumers have a higher fashion involvement the more likely they are to engage in the impulse buying of fashion clothing as previous studies have shown (Cardoso et al., 2010; Joo Park et al., 2006). Therefore, it is hypothesized that:

H1: An individual with higher fashion involvement is more likely to engage in fashion-oriented impulse buying behaviour.

As proposed by Hirschman and Holbrook (1982), consumers search for products for several reasons, being one of them for hedonic or experience purposes. Hedonic shopping is characterized by emotion, fantasy and sensory stimuli, rather than simply focusing on filling a basic need a consumer has (Childers et al., 2001). This motivation has historically been demonstrated to have a positive influence on the general impulse buying behaviour from the

consumers and also to the impulse buying related to fashion clothing (Joo Park et al., 2006). So, in a similar manner of H1, it is proposed that:

H2: An individual with a higher hedonic consumption tendency is more likely to engage in fashion-oriented impulse buying behaviour.

Moreover, Joo Park et al. (2006) showed that a higher involvement with fashion or consumers that were more concerned with fashion clothing indicated a greater hedonic tendency (e.g. sense of adventure, new experiences, bonding experience) while shopping (Arnold & Reynolds, 2003; Joo Park et al., 2006). Based on this, it is suggested that:

H3: An individual with a higher degree of fashion involvement has a higher hedonic consumption tendency.

To analyse the relationships between the three dimensions presented in *Figure 1* and test the hypotheses, a structural equation model (SEM) was used. This was also similar to the model used in the work of Joo Park et al. (2006). The SEM is a model which allows to represent “*a series of hypothesized cause-effect relationships between variables into a composite hypothesis concerning patterns of statistical dependencies*” (Hershberger, Marcoulides, & Parramore, 2009, p.4). Specifically, those relations “*are described by parameters that indicate the magnitude of the effect (direct or indirect) that independent variables (either observed or latent) have on dependent variables (either observed or latent)*” (Hershberger et al., 2009, p.4).

In this case, the variables being studied are the ones previously shown in *Figure 1*: fashion involvement (independent variable), hedonic consumption tendency (both independent and dependent variable) and fashion-oriented impulse buying (dependent variable).

2. Research method

Using as a basis the SEM model proposed in *Figure 1*, quantitative research was carried by gathering information to validate or reject the investigation hypotheses. Since the focus here is to use data to test the hypotheses, quantitative research follows a deductive approach (Saunders, Lewis, & Thornhill, 2016).

For this investigation's purpose it was chosen an indirect method of data collection, namely the collection of data through questionnaires, which is according to Kothari (2004) one of the most popular and frequently adopted by researchers in various economic and business surveys. Many advantages arise from the adoption of questionnaires to gather the respondents' information as in comparison to interviews (for example), considering that not only enables the attainment of a significative number of answers with low cost, quickly and

effectively, but also is independent from the potential bias of the interviewer (Kothari, 2004; Saunders et al., 2016).

2.1 Questionnaire

With the intention of testing the proposed model of investigation, which was mostly based on the literature review, a questionnaire was developed (see Annex A in English and Annex B in Portuguese).

The questions, developed according to the variables of the model, are indicative and serve as a base of measure of those same variables. Most of the questions used in this research were extracted or adapted from past researches. Some of them were, however, created by the author. Also, most of the questions chosen for this questionnaire were closed-ended questions, which are easier to answer and which the respondents are instructed to answer by choosing from a set of alternative given answers (Saunders et al., 2016).

The questionnaire consists of 32 questions, divided into 4 sections.

In the first section of questions, the respondents were requested to answer multiple-choice questions which provide their sociodemographic profile for sample characterization purposes.

In all the other three sections, a Likert-type scale (Likert, 1932) was used to measure the statements, with levels of measurement between 1 and 5, in which the answer 1 indicates that the respondent “Strongly disagree” with the affirmation and 5 represents that the participant “Strongly agree” with the affirmation. Likert is adopted here not only because it is the scale used in the measurement of the affirmations retrieved from previous studies but also because it is one of the most recommended in the study of an individual’s attitudes and opinions (DeVellis, 2017). Additionally, it was chosen an odd number of responses to the statements since *“an odd rather than an even number of response alternatives is preferable under circumstances in which the respondent can legitimately adopt a neutral position”* (Cox III, 1980, p.420).

The second section intends to measure the dimension of *fashion involvement* and is composed of 8 questions, of which 5 were selected from O’Cass (2000), 2 were selected from Tigert, Ring and King (1976) and one was created by the author of this dissertation.

To the purposes of this study, despite O’Cass (2000) having developed a measurement of fashion involvement by considering four different forms of involvement, it will only be taken into account two forms of involvement: product involvement and purchase decision involvement. These represent a more enduring relationship between the consumer and the

product or object of consumption (O’Cass, 2000; O’Cass & Choy, 2008). The third section, also comprised of 8 questions, 6 of which retrieved from Sarkar (2011) and 2 from Arnold and Reynolds (2003), is intended to measure the dimension *hedonic consumption tendency*. The fourth section is composed of 4 questions, and it has the purpose to measure the dimension of the degree of *fashion-oriented impulse buying*. Of these 4 questions, 2 were chosen from Hausman (2000) and the other 2 were selected from Rook and Fisher (1995) and subsequently adapted by the author of this thesis to match *fashion-oriented impulse buying* (Annex C).

Before becoming available for respondents’ completion, a small pre-test of the questionnaire was applied to 15 individuals (sampled by convenience) to validate the questions, to adjust the vocabulary since the target population was Portuguese and to identify potential statements that could generate doubt among the respondents to make the necessary adjustments. Of this pre-test, few changes were suggested and were mainly related to the words chosen to describe the feelings associated with the three dimensions being studied: fashion involvement, hedonic consumption tendency and fashion-oriented impulse buying.

2.2 Data collection

To collect the data for this research, the sampling technique used was the non-probability sampling, namely the convenience and the snowball samplings. In a convenience sampling, the elements are selected by their convenience (people that are closer to the researcher, like classmates or work colleagues) while in the snowball sampling the researcher starts by selecting an individual of interest that after will recommend other individuals, increasing the size of the sample (Marôco, 2014). The snowball sampling makes it easier to reach people that with alternative techniques would be harder to reach but it has the disadvantage that it might not be able to collect a representative sample.

The questionnaire was published in the platform Google Forms and subsequently shared and disseminated online, through Facebook and Instagram networks, and also sent by email both for private and professional contacts, which later were re-shared. The questionnaire was published on December 1st of 2018 and it was available to answer until January 15th of 2019. During this time, it was possible to gather a sample totalling 276 valid answers of online respondents. It should be stressed the importance of assuring that the sample has an adequate size to be representative of the target population. To define the size of the sample for validation studies, Hair, Black, Babin, & Anderson (2014) suggest it should be preferably of 100 or larger, which in this case is larger.

Part III – Results

This chapter has the purpose of presenting the results obtained from the collected data.

After gathering the answers to the questionnaire, it was proceeded to its analysis utilizing the methodology described in the previous chapter. Additionally, the data obtained from the respondents was aggregated in an Excel database and after processed with the help of the IBM SPSS Statistics v26 software, that is according to Marôco (2014) one of the most used software to manipulation, analysis and results presentation in social sciences and IBM SPSS Amos which enables the modelling of structural equations.

In the first place, it is made a validation of the questionnaire and an analysis of the internal consistency of the constructs.

After, it is presented both a sample characterization of the population involved in the study and a descriptive analysis of the model. The estimation of the model aims the evaluation of the statistical significance of the relations among the variables being studied, to understand the impact of *fashion involvement* and *hedonic consumption tendency* in *fashion-oriented impulse buying*.

1. Validation

The validation of the questionnaire for the Portuguese population is based on an analysis of content validity. Before proceeding with this analysis and to assure it produces a reliable result, the sampling adequacy was tested. Here, two methods are used to evaluate the quality of the data: the Kaiser-Meyer-Olkin (KMO) and the Bartlett's test of sphericity.

The Kaiser-Meyer-Olkin (KMO) consists of a measure that compares the simple correlations with the observed partial correlations between the variables. KMO returns values between 0 and 1. To interpret this statistic, a KMO value between 0.8 and 1 indicates that the sampling is adequate and good (Kaiser, 1974; Marôco, 2014). The index of sampling adequacy of KMO was calculated for this research and is 0.938, which means the sampling is adequate.

The Bartlett's test is used to test that variances are equal for all samples, it compares a matrix of Pearson correlations to the identity matrix (Hair et al., 2014). The test was performed ($p < 0.001$), indicating that all the items used to measure the three dimensions (*fashion involvement*, *hedonic consumption tendency* and *fashion-oriented impulse buying*) are correlated.

After attaining good results from both tests, it was proceeded to the analysis of

content validity. This was performed using Principal Components Analysis (PCA), with the application of a Varimax rotation. PCA is a technique of multivariate exploratory analysis used for data reduction purposes (Marôco, 2014). Despite being designed for interval data it is possible to be used for ordinal data as well (Likert scales) (Cornish, 2007).

This analysis was conducted since the items chosen to compose the three dimensions (*fashion involvement, hedonic consumption tendency and fashion-oriented impulse buying*) were different than the ones from the model used as a basis (Joo Park et al., 2006). Using the extraction method of PCA with the help of SPSS software, *Table 3* was obtained.

To determine the number of components (dimensions), the eigenvalues (or initial values - represent the amount of variance accounted for by a factor, which in turn represent the underlying dimensions being studied) were calculated and can be observed in *Table 3*. The larger the eigenvalue, the more important is the component. The Kaiser criterion suggests that only the eigenvalues greater than 1 should be considered, indicating that these values would be statistically significant (Marôco, 2014). Using this criterion, it can be observed in *Table 3* that 3 components are greater than 1, and together these components explain around 61% of the variance of the model. Regarding the communalities, all the items show values above 0.4. Only items with a factor loading greater than 0.4 were considered.

The solution of PCA is represented in *Table 4*. The sample validated the questionnaire as containing three dimensions and it placed the items in accordance with the dimensions initially designed.

Table 3 - Percentage of total variance explained by the three primary factors

Components	Initial Values			Extraction of loads			Rotation of loads		
	% Variance		% Cumulative	% Variance		% Cumulative	% Variance		% Cumulative
	Total	Variance	Cumulative	Total	Variance	Cumulative	Total	Variance	Cumulative
1	8.990	44.952	44.952	8.990	44.952	44.952	5.219	26.095	26.095
2	2.073	10.364	55.316	2.073	10.364	55.316	4.778	23.892	49.988
3	1.184	5.922	61.239	1.184	5.922	61.239	2.250	11.251	61.239
4	0.859	4.294	65.533						
5	0.771	3.853	69.386						
6	0.684	3.420	72.806						
7	0.621	3.107	75.913						
8	0.571	2.854	78.767						
9	0.515	2.574	81.341						
10	0.479	2.396	83.737						
11	0.460	2.298	86.036						
12	0.415	2.074	88.110						
13	0.390	1.950	90.059						
14	0.364	1.821	91.881						
15	0.307	1.535	93.416						
16	0.296	1.480	94.896						
17	0.292	1.459	96.355						
18	0.265	1.327	97.682						
19	0.255	1.273	98.955						
20	0.209	1.045	100.000						

Note: Extraction Method - Analysis of Principal Components

Source: Author

Table 4 - Communalities and principal components of the scale

Variables	Communality	Components		
		1	2	3
FINV1	0.626	0.735		
FINV2	0.698	0.788		
FINV3	0.661	0.783		
FINV4	0.642	0.778		
FINV5	0.641	0.622	0.499	
FINV6	0.621	0.718		
FINV7	0.652	0.761		
FINV8	0.506	0.600		
HCT1	0.697		0.738	
HCT2	0.595		0.694	
HCT3	0.687		0.741	
HCT4	0.497		0.59	
HCT5	0.636		0.698	
HCT6	0.554		0.649	
HCT7	0.56		0.682	
HCT8	0.475		0.622	
FOIB1	0.684			0.745
FOIB2	0.645			0.659
FOIB3_rec	0.515			0.671
FOIB4	0.656			0.694

Note: Orthogonal rotation by the Varimax method, with Kaiser normalization type; Items with factor loading>0.4; Rotation converged in five iterations

Source: Author

2. Internal consistency

In this section, the results of testing for internal consistency are presented in *Table 5*. This testing sought to assure that the questionnaire is measuring the dimensions it is supposed to be measuring (Sekaran & Bougie, 2016).

To calculate the internal consistency, one of the most used methods is Cronbach's alpha (Cronbach, 1951). This coefficient helps to verify whether or not the responses to a set of items is measuring a particular dimension (Saunders et al., 2016; Sekaran & Bougie, 2016). When Cronbach's alpha is closer to 1, the internal consistency reliability is higher (Sekaran

& Bougie, 2016; Tavakol & Dennick, 2011).

Additionally, to test the internal consistency here it was used the inter-item correlation and the corrected item-total correlation. The inter-item correlation should have values higher than 0.4 to assure there is good internal consistency.

Cronbach's alpha value obtained for the *fashion involvement* dimension is 0.908, which represents good internal consistency. Concerning the corrected item-total correlation of the items in this dimension, as all the values are above 0.4 indicating good internal consistency.

For the dimension of *hedonic consumption tendency*, the Cronbach's alpha value obtained was 0.892, suggesting a good internal consistency. The corrected item-total correlation of the items in the dimension was all above 0.4, again indicating good internal consistency.

Finally, to measure the internal consistency of the dimension of *fashion-oriented impulse buying* it was necessary to primarily proceed to an inversion of the classification of the item FOIB3 (FOIB3_rec), since it was measuring this dimension backward as compared to the other items. The Cronbach's alpha obtained after this inversion for the *fashion-oriented impulse buying* dimension was 0.729, which means that this dimension has an acceptable internal consistency.

Regardless of being acceptable, observing *Table 5* and looking at the Cronbach's alpha if the item FOIB3_rec is excluded, it is possible to obtain a Cronbach's alpha of 0.805 for the dimension, turning it from acceptable to good internal consistency.

Also, observing the corrected item-total correlation for the same item, the value of 0.259 is below 0.4 and suggests a sufficient value. So, since this item did not meet 2 (Cronbach's alpha can improve if the item is removed and low value for the corrected item-total correlation) of the 3 (inter-item correlation is above 0.4, so it assures good internal consistency) criteria mentioned it was decided to remove this item from the dimension. When the item FOIB3_rec is removed, the inter-item correlation of this dimension increases to 0.582.

Table 5 - Internal Consistency

Dimension	Item	Corrected Item-Total Correlation	Cronbach's Alpha if the item is excluded	Inter-items Correlation	Cronbach's Alpha
Fashion Involvement	FINV1	0.709	0.898	0.564	0.908
	FINV2	0.763	0.892		
	FINV3	0.726	0.895		
	FINV4	0.700	0.897		
	FINV5	0.712	0.896		
	FINV6	0.707	0.896		
	FINV7	0.741	0.893		
	FINV8	0.637	0.904		
Hedonic Consumption Tendency	HCT1	0.731	0.872	0.505	0.892
	HCT2	0.687	0.876		
	HCT3	0.760	0.868		
	HCT4	0.616	0.883		
	HCT5	0.728	0.872		
	HCT6	0.660	0.879		
	HCT7	0.659	0.879		
	HCT8	0.498	0.893		
Fashion-oriented Impulse Buying	FOIB1	0.652	0.593	0.401	0.729
	FOIB2	0.598	0.619		
	FOIB3_rec	0.259	0.805		
	FOIB4	0.606	0.617		

Source: Author

3. Sample characterization

With the online survey, which was available from December 1st of 2018 until January 15th of 2019, it was managed to collect a total of 276 accepted answers of internet users.

In Annex D it is outlined the sociodemographic profile of the survey respondents, which consists of a characterization of the sample in terms of sex, age, level of education, current employment status, personal monthly net income and place of residence.

The sample is composed of a majority of female respondents - 185 (67.0%) against 91 male respondents (33.0%). Concerning age, the participants are mainly in the age group of 25-34 years old (33.3%), followed by the age group 18-24 (31.9%). Then less than 18 years old (10.9%) and the other group ages all correspond to less than 10% of the sample.

Regarding the education level, it is possible to acknowledge that a great deal of the participants possesses an elevated level of education, where most has completed a bachelor's

degree or equivalent (38.0%) and also a significant number of respondents has completed a master's degree, PhD or equivalent (35.5%).

In this sample, concerning the current employment status, more than half of the sample can be described as a dependent employee (56.9%), followed by students (22.5%). The other groups of employment status (working student, employer, self-employed worker, unemployed and retired) each correspond to less than 10% of this sample.

To analyse the area of residence, it was resorted to the Nomenclature of Territorial Units for Statistics (NUTS II) and then subgroups – municipalities. In this sample, the respondents are mainly from the North region (84.4%), followed by the Lisbon region (14.4%) and Centre region (1.1%)¹⁰.

In terms of municipalities the surveyed reside predominantly in Porto (40.7%) and Vila Nova de Gaia (24.8%), which belong to the North region, followed by Lisbon (8.9%), from Lisbon region.

About the personal monthly net income, there is a preponderance of an income of less than 250€ a month (20.3%). Crossing this information with the employment status, the individuals who answered that they earn less than 250€ a month were mainly students (around 76%). Whereas it can be perceived as larger distribution on higher scales of income among people who are currently employed. Following there is the 751-1000€ level of income (18.8%), then income above 1500€ (16.3%) and 1001-1250€ (14.5%). Considering both the gender and the income level 35% of women in this sample have an income above 1000€ whereas 56% of men have an income above 1000€.

To group and classify the areas of occupation, the study is based on the “Portuguese Classification of Professions” (“Classificação Portuguesa das Profissões”) and for this purpose only the active population of the sample was taken into account (n=176). Of these, the majority is classified as “Specialists in intellectual and scientific activities” (63.1%), followed by “Middle-level technicians and professions” (26.1%).

When questioned about the frequency of purchase of new clothing, more than half of the sample buys a “few times a year” (52.2%), additionally, 64% of men chose this answer against 46% of women. Many respondents answered that they buy a “few times a month” (40.0%), 46% of women and only 26% of men chose this answer. These results indicate that

¹⁰ Note that Portugal has other two regions beyond the three mentioned in this dissertation, but there were no respondents from those regions and therefore they were not referred.

women in this sample buy new clothing more frequently than men.

Also, about the season of the year in which they spend the most on clothing, the most chosen answer was “same in all seasons of the year” (34.1%), almost one quarter of the sample does not know in which season they spend most on clothing (24.6%), after that Winter is the season that respondents say they spend the most money (20.3%).

According to Annex D, it is possible to validate that the respondents spend mainly, on average, 31-60€ each time they go on a shopping trip (37.0%), 25% of men and 43% of women chose this answer. About one-quarter of the respondents on this sample spend 61-90€ (24.6%) and about 12% spend 91-120€ on each clothing shopping trip.

Most of the participants in the survey prefer to buy on a physical store or shopping centre (89.9%), whereas only a few prefer to shop online for clothing (10.1%).

It is possible to acknowledge the characteristics of this sample are not totally representative of the Portuguese population. This is recognized as a limitation, which will be discussed in the limitations section of this research.

4. Descriptive analysis

To get a better understanding of the dimensions underlying this study, a descriptive analysis of the data of the respondents was conducted. The main objective of the questionnaire was to gather information on the constructs of *fashion involvement*, *hedonic consumption tendency* and *fashion-oriented impulse buying* and later study the relations and hypotheses between them.

The tables below contain these dimensions, the items used to measure them, the classification of these items which follow the 5-points Likert scale (with the absolute frequency of answer and the respective relative frequency), the median and the mode.

The first dimension, *fashion involvement*, is comprised of 8 items that intend to describe attitudes and beliefs that depict this construct. Table 6 shows that for the item FINV1, “Fashion Clothing is important to me”, 134 respondents, which represent almost half of our sample (48.6%), answered that they “agree” with the affirmation. Considering this answer by gender, both genders answered highly in this item (54% of men and 46% of women agreed with the affirmation). For the items FINV3, FINV4 and FINV5, namely “Making purchase decisions for Fashion Clothing is significant to me”, “I think a lot about my choices when it comes to Fashion Clothing” and “The purchase of Fashion Clothing is important to me”, the mode answer was 4. The item FINV8, “You spend a lot of time searching the internet

for new clothing items” had the lowest classification in item frequency, since 106 respondents (38.4%) strongly disagree with this affirmation. This item has also the lowest mode (1) compared to the other items of the fashion involvement construct.

Notice that the mode for this dimension is 27 (the score takes values between 8 and 40).

Table 6 - Results obtained for the dimension of fashion involvement

Dimension/ Item	Item classification, n(%)					Median	Mode
	1	2	3	4	5		
Fashion Clothing is important to me. (FINV1)	3 (1.1)	6 (2.2)	54 (19.6)	134 (48.6)	79 (28.6)	4	4
I pay a lot of attention to Fashion Clothing. (FINV2)	9 (3.3)	33 (12.0)	95 (34.4)	92 (33.3)	47 (17.0)	4	3
Making purchase decisions for Fashion Clothing is significant to me. (FINV3)	9 (3.3)	34 (12.3)	89 (32.2)	98 (35.5)	46 (16.7)	4	4
I think a lot about my choices when it comes to Fashion Clothing. (FINV4)	9 (3.3)	37 (13.4)	80 (29.0)	93 (33.7)	57 (20.7)	4	4
The purchase of Fashion Clothing is important to me. (FINV5)	21 (7.6)	48 (17.4)	80 (29.0)	87 (31.5)	40 (14.5)	3	4
You are more interested in Fashion clothing that most other people. (FINV6)	78 (28.3)	72 (26.1)	83 (30.1)	33 (12.0)	10 (3.6)	2	3
You pay attention to fashion trends and latest styles. (FINV7)	32 (11.6)	60 (21.7)	85 (30.8)	67 (24.3)	32 (11.6)	3	3
You spend a lot of time searching the internet for new clothing items. (FINV8)	106 (38.4)	70 (25.4)	48 (17.4)	33 (12.0)	19 (6.9)	2	1
Fashion Involvement						25	27

* 1- "Strongly disagree"; 2- "Disagree"; 3- "Neither Agree nor Disagree"; 4- "Agree"; 5- "Strongly agree"

Source: Author

Table 7 illustrates the items that are part of the *hedonic consumption tendency* dimension. This table shows lower classifications for these items than the items of the previous dimension. The items HTC3, HTC6, HTC7, and HTC8 have as the most frequent classification 1, which means there is a low level of agreement with the affirmations. In the item HTC7, “When I’m in a down mood, I go shopping to make me feel better” almost half of the participants (47.8%) don’t agree at all with this. Also, most of these items show a low score for the median (2) in this dimension. However, items like HTC1, “Shopping to me is truly a joy”, and HTC4, “I enjoy being immersed in exciting new products while shopping”, show higher item classifications which means that the respondents agree with these assertions, the median answer for both of these items was 4. Notice that the mode for this dimension is 27 (the score takes values between 8 and 40).

Table 7 - Results obtained for the dimension of *hedonic consumption tendency*

Dimension/ Item	Item classification, n(%)					Median	Mode
	1	2	3	4	5		
Shopping to me is truly a joy. (HCT1)	22 (8.0)	46 (16.7)	59 (21.4)	80 (29.0)	69 (25.0)	4	4
I shop not because I have to, but because I want to. (HCT2)	36 (13.0)	54 (19.6)	79 (28.6)	66 (23.9)	41 (14.9)	3	3
Shopping is like an escape from my daily routine life. (HCT3)	83 (30.1)	61 (22.1)	54 (19.6)	51 (18.5)	27 (9.8)	2	1
I enjoy being immersed in exciting new products while shopping. (HCT4)	23 (8.3)	41 (14.9)	64 (23.2)	89 (32.2)	59 (21.4)	4	4
I enjoy shopping for its own sake and not because of that I need to purchase something. (HCT5)	62 (22.5)	65 (23.6)	68 (24.6)	50 (18.1)	31 (11.2)	3	3
While shopping I feel a sense of adventure. (HCT6)	94 (34.1)	77 (27.9)	58 (21.0)	32 (11.6)	15 (5.4)	2	1
When I'm in a down mood, I go shopping to make me feel better. (HCT7)	132 (47.8)	57 (20.7)	40 (14.5)	36 (13.0)	11 (4.0)	2	1
Shopping with others is a bonding experience. (HCT8)	83 (30.1)	59 (21.4)	80 (29.0)	39 (14.1)	15 (5.4)	2	1
Hedonic Consumption Tendency						22	21

* 1- "Strongly disagree"; 2- "Disagree"; 3- "Neither Agree nor Disagree"; 4- "Agree"; 5- "Strongly agree"

Source: Author

Lastly, in *Table 8* are represented the items that compose the dimension of *fashion-oriented impulse buying*. The first item of this dimension, FOIB1 – “I often buy clothes without thinking” shows a low level of agreement by the respondents, 107 of them disagree with the affirmation, and the mode is therefore 1, being the lowest of the four items. The item FOIB3, “I carefully plan most of my clothing purchases”, contrary to the other items shows a higher level of accordance with the affirmation with both median and mode score of 3. Different from the other items, FOIB3 reflects a careful buying rather than an impulsive one. Notice that the mode for this dimension is 8 (the score takes values between 4 and 20).

Table 8 - Results obtained for the dimension of fashion-oriented impulse buying

Dimension/ Item	Item classification, n(%)					Median	Mode
	1	2	3	4	5		
I often buy clothes without thinking. (FOIB1)	107 (38.8)	72 (26.1)	62 (22.5)	27 (9.8)	8 (2.9)	2	1
Sometimes I feel like buying things in the spur-of-the-moment. (FOIB2)	58 (21.0)	71 (25.7)	65 (23.6)	55 (19.9)	27 (9.8)	3	2
I carefully plan most of my clothing purchases. (FOIB3)	22 (8.0)	52 (18.8)	83 (30.1)	81 (29.3)	38 (13.8)	3	3
Sometimes I am a bit reckless about what I buy. (FOIB4)	52 (18.8)	88 (31.9)	66 (23.9)	54 (19.6)	16 (5.8)	2	2
Fashion-oriented Impulse Buying						10	8

* 1- "Strongly disagree"; 2- "Disagree"; 3- "Neither Agree nor Disagree"; 4- "Agree"; 5- "Strongly agree"

Source: Author

5. Investigation model and hypotheses

To conduct the inferential and statistical analysis in this investigation non-parametric methods were used (Siegel, 1956) as well as a structural equation model was developed.

Non-parametric tests work even if variables are ordinal or nominal and the data does not follow a normal distribution (Hollander, Wolfe, & Chicken, 2013; Kothari, 2004; Siegel, 1956). Despite being slightly less efficient than parametric tests, non-parametric tests have also many advantages such as the easiness to understand the procedures and the applicability in situations where parametric procedures do not seem to be appropriate (Hollander et al., 2013). Among the several non-parametric tests existent this investigation used two: the Mann-Whitney and the Kruskal-Wallis test.

The Mann-Whitney test is a statistical test that corresponds to the parametric two-independent samples *t-test*. This test compares differences amid two independent groups for ordinal variables and is one of the most powerful non-parametric tests (Kothari, 2004; Marôco, 2014; Siegel, 1956).

The second test, the Kruskal-Wallis test can be considered as a non-parametric alternative to the *one-way* ANOVA (Marôco, 2014). This test is conducted to verify if two or more groups come from the same populations or not, or if the samples come from populations with the same distribution (Kothari, 2004; Siegel, 1956)¹¹.

¹¹ Note that this test is not able to tell which specific groups of the independent variable are statistically significantly different from each other, but only shows that at least two groups were different.

To examine the relationship between each of the sample characterization variables and the three dimensions of the research the Kruskal-Wallis test was conducted, except for the variable gender where the Mann-Whitney test was used, and the results can be found in Table 9, Table 10 and Table 11. A level of significance of 5% was considered to analyse the test results.

With respect to the variable “age”, the dimensions of *fashion involvement* ($p\text{-value} = 0.001$) and *hedonic consumption tendency* ($p\text{-value} = 0.003$) are statistically significant which means there is an association between these dimensions and the age groups. In other words, the answers to these dimensions varied between group ages. The age group of “Less than 18” showed the highest medians scores for these dimensions, which means they identify themselves more with these dimensions than the other age groups. The dimension of *fashion-oriented impulse buying* does not show any statistically significant difference between age groups at a 5% level of significance. However, it shows when a level of significance of 10% is considered ($p\text{-value} = 0.079$). In that case, the individuals within the age group “Less than 18” also tended to identify themselves more with *fashion-oriented impulse buying*.

The Mann-Whitney test showed that there is a statistically significant difference in both *fashion involvement* ($p\text{-value} = 0.006$) and *hedonic consumption tendency* ($p\text{-value} = <0.001$) for the different “genders (female and male)”. Taking into consideration the medians, the results show that females tended to answer more highly than males in both of these dimensions. The test did not show, however, any significant difference between gender answers to *fashion-oriented impulse buying* ($p\text{-value} = 0.08$).

Still in Table 9 and considering the results from the Kruskal-Wallis test, in the variable “level of education” it is possible to see that all dimensions are statistically significant: *fashion involvement* ($p\text{-value} = 0.026$), *hedonic consumption tendency* ($p\text{-value} = 0.005$) and *fashion-oriented impulse buying* ($p\text{-value} = 0.013$). The class of “Less than high school” scored the highest medians for all the dimensions, which means they tend to answer more highly on all of these dimensions, while the class of “Master’s degree, PhD or equivalent” scored the lowest medians for two of the dimensions, meaning they tend to be less fashion involved and less prone to hedonic consumption tendency in comparison to other levels of education.

Regarding the variable “employment status” in Table 10, only the dimension of *fashion involvement* ($p\text{-value} = 0.017$) is statistically significant, which means there is a difference among the diverse employment status and the scores in *fashion involvement*. Also, the class of “Students” hit the highest median scores for both *fashion involvement* and *hedonic consumption tendency*

meaning they answered more highly on these dimensions, while the class of “Employer” had the highest median for *fashion-oriented impulse buying*.

Concerning the “area of residence (NUTS II)”, the table shows that only the dimension of *hedonic consumption tendency* appears to be statistically significant ($p\text{-value} = 0.005$) with the Centre region answering more highly to this dimension.

The variable “monthly net income”, similarly, to the variable gender, indicates that the dimensions of *fashion involvement* ($p\text{-value} = 0.014$) and *hedonic consumption tendency* ($p\text{-value} = 0.011$) are statistically significant. This means that there are significant differences between income groups for both of these dimensions. Both classes of income “Less than 250€” and “1001€-1250€” have higher scores in the dimension of *fashion involvement* when compared to the other income groups, meaning individuals within these categories identified themselves more with *fashion involvement*. In the case of *hedonic consumption tendency*, the highest score was for the category of “751€-1000€”.

Moving on to *Table 11*, with reference to the “frequency of new clothing purchase”, the table indicates that all the dimensions are statistically significant: *fashion involvement* ($p\text{-value} < 0.001$), *hedonic consumption tendency* ($p\text{-value} < 0.001$) and *fashion-oriented impulse buying* ($p\text{-value} < 0.001$), which shows a significant difference between the frequencies of purchases for these dimensions. Additionally, the frequency of “Several times per week” had the highest median scores for all of the dimensions pointing to a higher *fashion involvement*, a higher level of *hedonic consumption tendency* and *fashion-oriented impulse buying* from the people who shop “several times per week” as in comparison to the class of “Less often than the options above” which had the lowest median scores.

In the case of the variable “season of the year” the respondents spend the most on clothing, the table reveals that the dimensions of *fashion involvement* ($p\text{-value} < 0.001$) and *hedonic consumption tendency* ($p\text{-value} < 0.001$) are statistically significant at 5%. This indicates that there are significant differences in the groups according to seasons of the year in both of these dimensions. Also, concerning these two dimensions, the class of “Autumn” had the highest median scores, showing that people who spend the most in Autumn have a higher degree of *fashion involvement* and are more prone to *hedonic consumption tendency* than the other categories.

Finally, on the variable of “average expenditure on clothing” none of the dimensions are statistically significant ($p\text{-value} > 0.05$) which means that there are no significant differences between any of the three dimensions and the categories of average expenditure on clothing.

Table 9 - Non-parametric tests regarding age, gender and level of education

Variables	Fashion Involvement		Hedonic Consumption Tendency		Fashion-oriented Impulse Buying	
	Median [Q1,Q3]	P-value	Median [Q1,Q3]	P-value	Median [Q1,Q3]	P-value
Age (years)		0.001 a,*		0.003 a,*		0.079 a
Less than 18	29.5 [25.5, 34]		27.5 [21.75, 33.25]		13 [8, 15.25]	
18-24	25.5 [22, 31]		22 [16.25, 29]		9.5 [8, 12]	
25-34	24.5 [19, 29]		20 [14.25, 27]		10 [8, 13]	
35-44	24 [20.5, 28.5]		20 [15, 23.5]		10 [6.5, 13]	
45-54	27 [19, 33]		21 [16, 30]		9 [8, 11]	
55-64	21.5 [18, 25.75]		21.5 [17, 25.75]		9 [8, 11]	
Over 65	23 [19, 26.5]		18 [15.25, 20.5]		10 [6.5, 11.25]	
Gender		0.006 b,*		<0.001 b,*		0.080 b
Female	26 [21, 31.5]		24 [19, 29]		10 [8, 13]	
Male	24 [19, 28]		16 [13, 21]		10 [7, 12]	
Level of Education		0.026 a,*		0.005 a,*		0.013 a,*
Less than high school	28 [23, 33]		29 [21, 33]		14 [8, 16]	
High school graduate or equivalent	26.5 [21, 33]		21.5 [17, 28.25]		10 [8, 12.25]	
Bachelor's degree or equivalent	26 [21, 30]		22 [16, 28]		10 [8, 13]	
Master's degree, PhD or equivalent	24 [19, 28]		21 [14, 25]		10 [6, 13]	

a: Kruskal-Wallis test. b: Mann-Whitney test. *: significant at 5%. NA: not applicable.

Source: Author

Table 10 - Non-parametric tests regarding employment status, NUTS II and monthly net income

Variables	Fashion Involvement		Hedonic Consumption Tendency		Fashion-oriented Impulse Buying	
	Median [Q1,Q3]	P-value	Median [Q1,Q3]	P-value	Median [Q1,Q3]	P-value
Employment Status		0.017 a,*		0.077 a		0.341 a
Student	28 [23, 33.25]		24 [17, 31]		11 [8, 14]	
Working student	26 [22, 31]		23 [18, 31]		10 [9, 12.5]	
Dependent employee	24 [20, 29]		21 [16, 27]		10 [7, 13]	
Self-employed worker	23 [18, 32.25]		19.5 [18, 24.75]		10 [7.5, 11]	
Employer	21 [21, NA]		17 [16, NA]		12 [12, NA]	
Unemployed	22 [19.25, 29.25]		16 [12.25, 24]		9 [8, 11.5]	
Retired	24 [16.5, 30.5]		20 [14.5, 30]		9 [6, 13.5]	
NUTSII		0.244 a		0.010 a,*		0.670 a
North region	26 [21, 31]		22 [16, 29]		10 [8, 13]	
Center region	34 [20, NA]		25 [22, NA]		11 [7, NA]	
Lisbon region	24 [20, 27]		20 [12, 23]		10 [7, 13]	
Monthly Net Income		0.014 a,*		0.011 a,*		0.117 a
Less than 250€	27 [22.25, 31]		22.5 [15.25, 28]		10 [8, 13]	
251-500€	25.5 [19.25, 29.5]		22.5 [16.5, 28.5]		10 [8, 13.5]	
501-750€	25 [20.5, 31]		22 [16.5, 29]		9 [7, 13.5]	
751-1000€	26 [21.25, 31.75]		23.5 [17, 29]		10 [8.25, 13]	
1001-1250€	26.5 [22, 32.75]		22 [19.25, 29]		11 [8, 13]	
1251-1500€	22 [18, 27]		17.5 [12, 25]		8 [6.75, 10]	
Over 1500€	23 [19, 28]		18 [13.5, 24.5]		10 [7, 12]	

a: Kruskal-Wallis test. b: Mann-Whitney test. *: significant at 5%. NA: not applicable.

Source: Author

Table 11 - Non-parametric tests regarding frequency of purchase, season of the year and average expenditure per shopping trip on new clothing

Variables	Fashion Involvement		Hedonic Consumption Tendency		Fashion-oriented Impulse Buying	
	Median [Q1,Q3]	P-value	Median [Q1,Q3]	P-value	Median [Q1,Q3]	P-value
Frequency of new clothing purchase		<0.001 a,*		<0.001 a,*		<0.001 a,*
Several times per week	33.5 [20.25, 34]		33.5 [20.75, 36.5]		15.5 [7.25, 17]	
Several times per month	30 [25, 34]		27 [22, 31]		12 [9, 14]	
Several times per year	23 [19, 27]		18 [14, 23.75]		9 [7, 11.75]	
Less often than the options above	21 [17.5, 27.25]		16 [12, 21.25]		7 [5.75, 9]	
Season of the year spend the most on clothing		<0.001 a,*		<0.001 a,*		0.218 a
Spring	24 [17.75, 26]		22 [15.75, 26.25]		8 [6.5, 11]	
Summer	28 [22, 33]		24 [19.5, 28]		10 [8.5, 13]	
Autumn	29 [28, 35]		30 [18, 33]		10 [8, 14]	
Winter	27 [20.25, 32]		22.5 [16.25, 31]		9.5 [8, 14]	
No difference between these seasons	25.5 [21.75, 30]		22 [17.75, 29]		11 [8, 13]	
I don't know	21.5 [19, 27]		17 [13, 23.75]		9 [7, 12]	
Average expenditure on clothing for each shopping trip		0.410 a		0.705 a		0.173 a
Less than 30€	24 [20.75, 31]		22.5 [15.75, 28.5]		8.5 [8, 11.25]	
31-60€	25 [20, 31]		22 [17, 28]		10 [8, 12]	
61-90€	25.5 [21, 30]		21 [17, 28.75]		10 [8, 13]	
91-120€	26 [19, 30.5]		22 [15, 29.5]		12 [9.5, 13.5]	
121-150€	23 [17.25, 29.75]		18 [14, 24]		10 [6.5, 12.75]	
Over 150€	28 [23, 33]		19 [15, 31]		11 [7, 15]	

a: Kruskal-Wallis test. b: Mann-Whitney test. *: significant at 5%. NA: not applicable.

Source: Author

The proposed structural equation model (SEM) presented in *Figure 2* was estimated to study the relationships between the latent variables (to test the hypotheses and the theoretical model formulated in the methodology section).

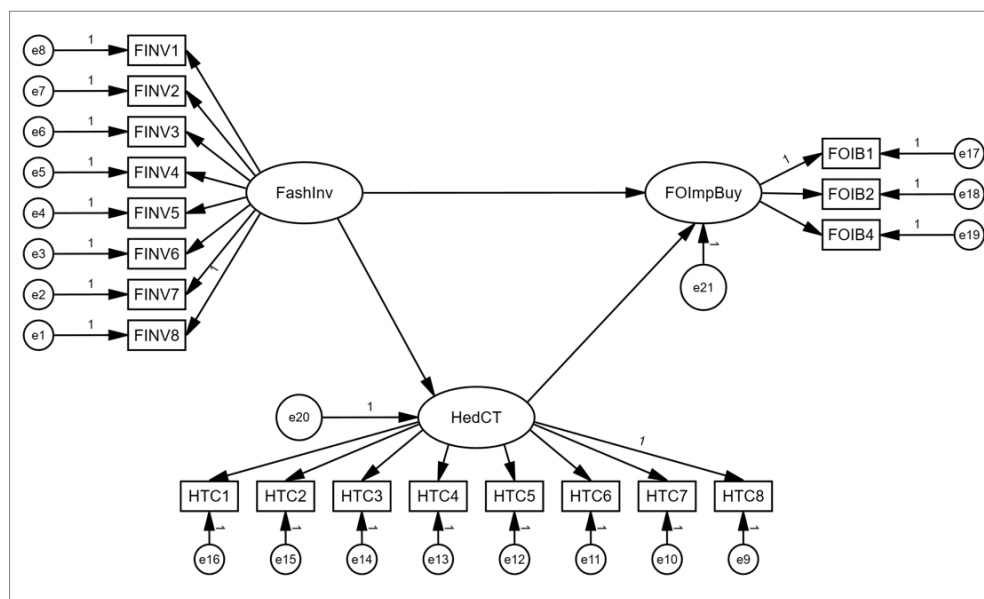
The responses to a number of items or questions of indicators, in areas that study consumer behaviour, economics and marketing, are frequently collected in order to develop composite scores that represent some underlying latent dimension (Hershberger et al., 2009; O'Cass, 2000). Those composite variables that represent the dimension are then treated as if they were continuous variables in general linear modelling techniques such as multiple regression (O'Cass, 2000). Also, the SEM is a second-generation method of multivariate data analysis and was developed to overcome the limitations in Ordinary Least Square particularly when dealing with latent constructs or complex models (Awang, 2012). This method of analysis is statistically able to integrate both the econometric perspective focusing on prediction

and a psychometric perspective modelling latent variables occasioning in better flexibility of modelling theory compared to first-generation techniques (Chin, 2000).

Path diagrams (*Figure 2*) are used in SEM to represent the relationships between the variables. To represent latent variables, ovals are used, while rectangles or squares represent the measured variables. Since residuals are always unobserved, they are represented by circles. The causal effects are represented by single-headed arrows in the path diagram.

In this model, there are three latent variables (fashion involvement, hedonic consumption tendency and fashion-oriented impulse buying), there are nineteen measured variables (the items composing the three dimensions), and one residual per item plus the residuals from the dependent variables being studied (hedonic consumption tendency and fashion-oriented impulse buying).

Figure 2 - Representation of the estimated SEM



Source: Author using AMOS software

The structural equation model generated the χ^2 value of 365.157 with 149 degrees of freedom ($p\text{-value} < 0.001$) (see *Table 12*). The null hypothesis is that the data fit the model well, but here, since the $p\text{-value} < 0.05$, the null hypothesis is rejected and therefore the data does not fit the model well. Nevertheless, a large sample ($n > 200$) can produce a significantly poor fit even if the model is explaining the data well, this is due the χ^2 value being sensitive to sample size (Joo Park et al., 2006; Schermelleh-engel, Moosbrugger, & Müller, 2003). For that reason, other fit indexes were used to judge the model fit (RMSEA = 0.73, CFI = 0.927,

GFI = 0.874) and indicated a good fit (Awang, 2012; Hair et al., 2014).

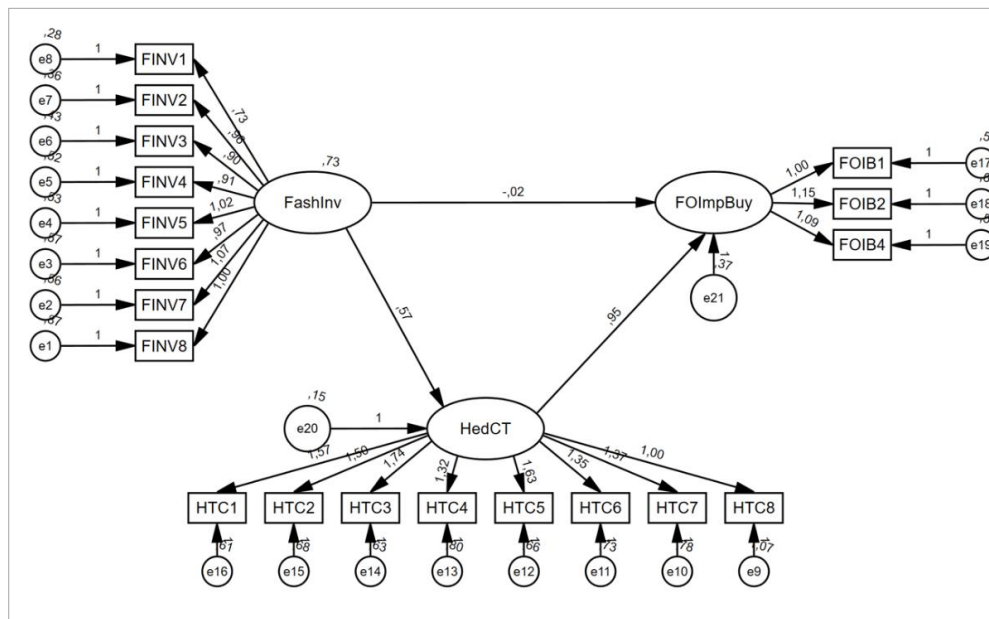
Table 12 - Goodness of fit indexes of the estimated model

Index of Fit	Result	Classification
χ^2/df	365.157/149 P-value<0.001	Poor fit
RMSEA	0.73	Good fit
CFI	0.927	Very good fit
GFI	0.874	Good fit

Source: Author

Following the validation of the structural equation model, the unstandardized coefficients were also calculated and are presented in *Figure 3* bellow.

Figure 3 - Results of the estimation of the SEM



Source: Author using AMOS software

The hypothesis H1 was rejected. There was no significant direct effect found of fashion involvement on fashion-oriented impulse buying ($\beta = -0.017$, $p\text{-value} > 0.05$). Unlike the study of Joo Park et al. (2006) that was used as a basis for this thesis, that presented a positive effect of fashion involvement on fashion-oriented impulse buying, here it was not significant.

Several reasons can justify the difference. The first and most probable cause is though Joo Park et al (2006) study was used as a basis for this thesis it does not consist of an exact replicate. The items used to measure the dimensions in the present work were adapted from other studies but concerning the same dimensions of the original study. Additionally, according to Liapati et al (2015), these authors were also able to find a positive relationship between these two dimensions. However, this does not mean that fashion involvement cannot have an indirect effect on fashion-oriented impulse buying. When looking at the indirect effects of fashion involvement on fashion-oriented impulse buying through hedonic consumption tendency the results showed a positive indirect effect between these two variables.

On hypothesis H2, this hypothesis was supported. Hedonic consumption tendency possibly has a significant positive effect on fashion-oriented impulse buying ($\beta=0.946$, $p\text{-value}<0.001$). The study conducted by Joo Park et al. (2006) apparently shows that there was no effect of hedonic consumption tendency on fashion-oriented impulse buying, but here the result was supported. In the work carried out by Hausman (2000), she concluded for her sample that consumers who are more impulsive are more likely to shop for hedonic reasons and so here it is suggested that hedonic consumption tendency encourages fashion-oriented impulse buying behaviour. The study by Liapati et al. (2015) presented a potential small positive impact of hedonic consumption tendency in fashion-oriented impulse buying showing consistency of these results.

Lastly, also H3 was supported. Fashion involvement produced a significant positive effect on hedonic consumption ($\beta=0.569$, $p\text{-value}<0.001$). This goes in line with Joo Park et al. (2006), a possible higher hedonic tendency was shown by consumers when these had a higher involvement with fashion clothing or while shopping for fashion clothing needs (Joo Park et al., 2006).

In Table 13 are presented the hypothesis' conclusions in summary.

Table 13 - Hypotheses results

Hypotheses		Validation
H1	An individual with higher fashion involvement is more likely to engage in fashion-oriented impulse buying behaviour.	Not Supported
H2	An individual with a higher hedonic consumption tendency is more likely to engage in fashion-oriented impulse buying behaviour.	Supported
H3	An individual with a higher degree of fashion involvement has a higher hedonic consumption tendency.	Supported

Source: Author

Conclusions

The main goal of this dissertation was to apply a conceptual model of impulse buying to a Portuguese sample, to understand how fashion involvement and hedonic consumption tendency have an influence or motivate fashion-oriented impulse buying.

The hypotheses, based on the existent literature, were that a higher fashion-involvement and a higher hedonic consumption tendency would have a positive influence in fashion-oriented impulse buying, and also that fashion-involvement has a positive influence in hedonic consumption tendency. It was also intended to understand the answers to these dimensions associated with sample characteristics such as age, monthly income, and education level.

The experiment was carried out with 276 Portuguese participants, resident in Portugal and with access to the online questionnaire and therefore this was the context.

The results of the questionnaire allowed to get some interesting conclusions especially in the Portuguese context since there has never been any previous study with these variables been made in this country. The first hypothesis, “an individual with higher fashion involvement is more likely to engage in fashion-oriented impulse buying behaviour” was found not to be supported. Despite this, regarding the other two hypotheses “an individual with a higher hedonic consumption tendency is more likely to engage in fashion-oriented impulse buying behaviour” and “an individual with a higher degree of fashion involvement has a higher hedonic consumption tendency” were both supported in this study.

Crossing the scores from the dimensions studied with the sociodemographic characteristics, results suggest that women tended to answer more highly compared to men in the dimensions of fashion involvement and hedonic consumption tendency but not when it comes to fashion-oriented impulse buying. Also, concerning the frequency of new clothing purchase, the individuals who went shopping more frequently tended to answer more highly to all the three dimensions when compared to individuals who shop less frequently.

This study is an important contribution to literature in the empirical ground of impulse buying, by providing an investigation that can drive further researchers into work towards the development of behavioural economics concepts and to achieve further conclusions on a line that goes beyond the mainstream economics we are used to learning at the university.

The limitations of this thesis can be useful for future investigations being conducted within the impulse buying study, and in particular the ones related to the Portuguese context,

in order either to reinforce these results or coming up with more developed models than the one presented here. Though the sample obtained for the analysis of the data was considered appropriate, it still might not be representative of all consumers in Portugal, in particular the ones who don't have access to the internet. Therefore, the conclusions attained should be relativized to the universe of study.

Also, there might be some disadvantages related to the scaled questions used in the questionnaire since respondents often do not use the entire scale and there is no information on why a particular answer was chosen (Gillham, 2008). The solution to this could have been through the conduction of semi-structured interviews which would lead to a deeper understanding of what individuals feel and think about the dimensions of fashion involvement, hedonic consumption tendency and fashion-oriented impulse buying (Gillham, 2008).

In the future, further research can be done not only to try to rectify some of the issues in the present work but also to implement this questionnaire in other samples. It would also be interesting to find additional motives that might lead to fashion-oriented impulse buying and to study them in particular in the Portuguese context in order to provide a broader perspective on this matter in Portugal.

Bibliographic references

- Abdellaoui, M., Barrios, C., & Wakker, P. P. (2007). Reconciling introspective utility with revealed preference: Experimental arguments based on prospect theory. *Journal of Econometrics*, 138(1), 356–378.
- aicep Portugal Global. (2018). ITV - Indústria Têxtil e de Vestuário. *Portugal Global*, 113(Outubro).
- Ainslie, G. (1975). Specious reward: A Behavioral Theory of Impulsiveness and Impulse Control. *Psychological Bulletin*, 82(4), 463–496.
- Alba, J. W., & Williams, E. F. (2013). Pleasure principles: A review of research on hedonic consumption. *Journal of Consumer Psychology*, 23(1), 2–18.
- Arnold, M. J., & Reynolds, K. E. (2003). Hedonic shopping motivations. *Journal of Retailing*, 79(2), 77–95.
- Arora, R. (1982). Validation of an S-O-R Model for Situation, Enduring, and Response Components of Involvement. *Journal of Marketing Research*, 19(4), 505–516.
- Ashraf, N., Camerer, C. F., & Loewenstein, G. (2005). Adam Smith, Behavioral Economist. *Journal of Economic Perspectives*, 19(3), 131–145.
- ATP. (2019). Fashion From Portugal 4.0. *Associação Têxtil e Vestuário de Portugal*.
- Awang, Z. (2012). *Structural equation modeling using AMOS graphic*.
- Babin, B. J., & Babin, L. (2001). Seeking something different? A model of schema typicality, consumer affect, purchase intentions and perceived shopping value. *Journal of Business Research*, 54(2), 89–96.
- Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value. *Journal of Consumer Research*, 20(4), 644–656.
- Barros, G. (2010). Herbert A. Simon and the concept of rationality: boundaries and procedures. *Revista de Economia Política*, 30(3), 455–472.
- Batista, F., Matos, J. E., & Matos, M. C. (2017). *Assessing the Competitiveness of the Portuguese Footwear Sector* (No. 66).
- Batra, R., & Ahtola, O. T. (1991). Measuring the Hedonic and Utilitarian Sources of Consumer Attitudes. *Marketing Letters*, 2(2), 159–170.
- Baumeister, R. F. (2003). Ego depletion and self-regulation failure: A resource model of self-control. *Alcoholism: Clinical and Experimental Research*, 27(2), 281–284.
- Baumeister, R. F., Sparks, E. A., Stillman, T. F., & Vohs, K. D. (2008). Free will in consumer behavior: Self-control, ego depletion, and choice. *Journal of Consumer Psychology*, 18(1),

4–13.

- Bayley, G., & Nancarrow, C. (1998). Impulse purchasing: a qualitative exploration of the phenomenon. *Qualitative Market Research: An International Journal*, 1(2), 99–114.
- Belleneger, D. N., Roberston, D. H., & Hirschman, E. C. (1978). Impulse buying varies by product. *Journal of Advertising Research*, 18(6), 15.
- Bentham, J. (1907). *An Introduction to the Principles of Morals and Legislation*. Oxford: Clarendon Press.
- Berg, L. (2014). Who benefits from behavioural economics? *Economic Analysis and Policy*, 44(2), 221–232.
- Bhardwaj, V., & Fairhurst, A. (2010). Fast fashion: Response to changes in the fashion industry. *International Review of Retail, Distribution and Consumer Research*, 20(1), 165–173.
- Bloch, P. H., & Richins, M. H. (1983). Shopping Without Purchase: an Investigation of Consumer Browsing Behavior. *Advances in Consumer Research*, 10, 389–393.
- Bruni, L., & Sugden, R. (2007). The Road Not Taken: How Psychology was Removed from Economy, and How It Might Be Brought Back. *The Economic Journal*, 117, 146–173.
- Camerer, C. F., Loewenstein, G., & Rabin, M. (Eds.). (2004). *Advances in Behavioral Economics*. Princeton University Press.
- Cardoso, P. R., Costa, H. S., & Novais, L. A. (2010). Fashion consumer profiles in the Portuguese market: Involvement, innovativeness, self-expression and impulsiveness as segmentation criteria. *International Journal of Consumer Studies*, 34(6), 638–647.
- Carter, E. C., Kofler, L. M., Forster, D. E., & McCullough, M. E. (2015). A Series of Meta-Analytic Tests of the Depletion Effect: Self-Control does not Seem to Rely on a Limited Resource. *Journal of Experimental Psychology: General*, 144(4), 796.
- Cartwright, E. (2014). *Behavioral Economics* (2nd ed.).
- Chernev, A. (2004). Goal-Attribute Compatibility in Consumer Choice. *Journal of Consumer Psychology*, 14(1–2), 141–150.
- Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping behavior. *Journal of Retailing*, 77(4), 511–535.
- Chin, W. W. (2000). *Partial Least Squares For Researchers : An overview and presentation of recent advances using the PLS approach*.
- Christopher, M., Lowson, R., & Peck, H. (2004). Creating agile supply chains in the fashion industry. *International Journal of Retail & Distribution Management*, 32(8), 367–376.
- Cobb, C. J., & Hoyer, W. D. (1986). Planned versus impulse purchase behavior. *Journal of*

- Retailing*, 62(4), 384–409.
- Colander, D. (2002). The death of neoclassical economics. *Journal of the History of Economic Thought*, 22(02), 127–143.
- Coley, A., & Burgess, B. (2003). Gender differences in cognitive and affective impulse buying. *Journal of Fashion Marketing and Management: An International Journal*, 7(3), 282–295.
- Cornish, R. (2007). *Factor Analysis*. Mathematics Learning Support Centre.
- Cox III, E. P. (1980). The optimal number of response alternatives for a scale: A review. *Journal of Marketing Research*, 17(4), 407–422.
- Cronback, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334.
- CTT - Correios de Portugal, . (2018). *E_Commerce Report CTT 2018*. Retrieved from http://www.ctt.pt/contentAsset/raw-data/4e000596-540b-4b6e-a873-ed0825862e85/ficheiro/0359b6d5-d59c-4787-95f1-84e4006ea20c/export/CTT_ECOMMERCE_2018.pdf
- DellaVigna, S. (2009). Psychology and Economics: Evidence from the Field. *Journal of Economic Literature*, 47(2), 315–372.
- DeVellis, R. F. (2017). *Scale development: theory and applications* (4th ed.). SAGE Publications, Inc.
- Dhar, R., & Wertenbroch, K. (2000). Consumer Choice between Hedonic and Utilitarian Goods. *Journal of Marketing Research*, 37(1), 60–71.
- Dholakia, U. M. (2001). A motivational process model of product involvement and consumer risk perception. *European Journal of Marketing*, 35(11/12), 1340–1362.
- Dhurup, M. (2014). Impulsive Fashion Apparel Consumption: The Role of Hedonism, Fashion Involvement and Emotional Gratification in Fashion Apparel Impulsive Buying Behaviour in a Developing Country. *Mediterranean Journal of Social Sciences*, 5(8), 168–177.
- Dittmar, H., Beattie, J., & Friese, S. (1995). Gender identity and material symbols: Objects and decision considerations in impulse purchases. *Journal of Economic Psychology*, 16, 491–511.
- Dittmar, H., & Drury, J. (2000). Self-image – is it in the bag? A qualitative comparison between “ordinary” and “excessive” consumers. *Journal of Economic Psychology*, 21, 109–142.

- Evenden, J. L. (1999). Varieties of impulsivity. *Psychopharmacology*, 146(4), 348–361.
- Fairhurst, A. E., Good, L. K., & Gentry, J. W. (1989). Fashion Involvement: An Instrument Validation Procedure. *Clothing and Textiles Research Journal*, 7(3), 10–14.
- Friese, M., Loschelder, D. D., Gieseler, K., Frankenbach, J., & Inzlicht, M. (2018). Is Ego Depletion Real? An Analysis of Arguments. *Personality and Social Psychology Review*, 23(2), 107–131.
- Gillham, B. (2008). *Developing a questionnaire* (2nd ed.). Continuum International Publishing Group.
- Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis: Pearson new international edition* (7th ed.). Essex: Pearson Education Limited.
- Hall, R. E., & Lieberman, M. (2012). *Microeconomics: Principles and applications*. Cengage Learning.
- Han, Y. K., Morgan, G. A., & Kotsiopulos, A. (1991). Impulse Buying Behavior of Apparel Purchasers. *Clothing and Textiles Research Journal*, 9(3), 15–21.
- Hausman, A. (2000). A multi-method investigation of consumer motivations in impulse buying behavior. *Journal of Consumer Marketing International Journal of Bank Marketing Iss Young Consumers Iss*, 17(05), 403–426.
- Hershberger, S. L., Marcoulides, G. A., & Parramore, M. M. (2009). *Structural equation modeling: an introduction. Structural Equation Modeling*.
- Heufer, J. (2009). *Essays on revealed preference: contributions to the theory of consumer's behavior*. Technischen Universität Dortmund.
- Himmelweit, S., Simonetti, R., & Trigg, A. (2001). *Microeconomics: Neoclassical and institutional perspectives on economic behaviour*. Cengage Learning EMEA.
- Hirschman, E. C. (1984). Experience seeking: A subjectivist perspective of consumption. *Journal of Business Research*, 12(1), 115–136.
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: emerging concepts, methods and propositions. *Journal of Marketing*, 46(3), 92–101.
- Hoch, S. J., & Loewenstein, G. F. (1991). Time-Inconsistent Preferences and Consumer Self-Control. *Journal of Consumer Research*, 17(4), 492–507.
- Holbrook, M. B. (1986). Emotion in the consumption experience: toward a new model of the human consumer. In *The role of affect in consumer behavior: Emerging theories and applications* (pp. 17–52).
- Holbrook, M. B., & Hirschman, E. C. (1982). The Experiential Aspects of Consumption:

- Consumer Fantasies, Feelings, and Fun. *Journal of Consumer Research*, 9(2), 132–140.
Retrieved from <https://academic.oup.com/jcr/article-lookup/doi/10.1086/208906>
- Hollander, M., Wolfe, D. A., & Chicken, E. (2013). *Nonparametric statistical methods*. John Wiley & Sons.
- Houthakker, H. S. (2016). Revealed Preference and the Utility Function. *Economica*, 17(66), 159–174.
- Jones, M. A., Reynolds, K. E., Weun, S., & Beatty, S. E. (2003). The product-specific nature of impulse buying tendency. *Journal of Business Research*, 56(7), 505–511.
- Joo Park, E., Young Kim, E., & Forney, J. (2006). A structural model of fashion-oriented impulse buying behavior. *Journal of Fashion Marketing and Management*, 10(4), 433–446.
- Kahneman, D. (2012). *Thinking, Fast and Slow*. London: Penguin Books.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–292.
- Kahneman, D., Wakker, P. P., & Sarin, R. (1997). Back to Bentham ? Explorations of Experienced Utility. *Quarterly Journal Of Economics*, 112(2), 375–405.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31–36.
- Kalantari, B. (2010). Herbert A. Simon on making decisions: enduring insights and bounded rationality. *Journal of Management History*, 16(4), 509–520.
- Kapferer, J.-N., & Laurent, G. (1985). Consumer involvement profiles: A new practical approach to consumer involvement. *Journal of Advertising Research*, 25(6), 48–56.
- Keita, L. (2012). Revealed preference theory, rationality, and neoclassical economics: Science or ideology. *Africa Development*, 37(4), 73–116.
- Khan, U., Dhar, R., & Wertenbroch, K. (2005). A Behavioral Decision Theory Perspective on Hedonic and Utilitarian Choice. In S. Ratneshwar & D. G. Mick (Eds.), *Inside consumption: Frontiers of research on consumer motives, goals, and desires* (1st ed., pp. 144–165). Taylor & Francis Group.
- Kim, J. (2003). *College students' apparel impulse buying behaviors in relation to visual merchandising*. University of Georgia.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Age International Publishers.
- Laibson, D. (1997). Golden Eggs and Hyperbolic Discounting. *Quarterly Journal Of Economics*, 112(2), 443–447.
- Laibson, D. (1998). Life-cycle consumption and hyperbolic discount functions. *European*

- Economic Review*, 42(3–5), 861–871.
- Laurent, G., & Kapferer, J.-N. (1985). Measuring Consumer Involvement Profiles. *Journal of Marketing Research*, 22(1), 41–53.
- Lawson, T. (2013). What is this “school” called neoclassical economics? *Cambridge Journal of Economics*, 37(5), 947–983.
- Lewin, S. B. (1996). Economics and Psychology: Lessons For Our Own Day From the Early Twentieth Century. *Journal of Economic Literature*, Vol. XXXIV(September), 1293–1323.
- Liapati, G., Assiouras, I., & Decaudin, J. M. (2015). The role of fashion involvement, brand love and hedonic consumption tendency in fashion impulse purchasing. *Journal of Global Fashion Marketing*, 6(4), 251–264.
- Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*.
- Lim, E. T. K., Cyr, D., & Tan, C. W. (2012). Untangling Utilitarian and Hedonic Consumption Behaviors in Online Shopping. *Pacific Asia Conference on Information Systems*, 94.
- Lishman, J., Yuill, C., Brannan, J., & Gibson, A. (2014). *Social work: An introduction*. (J. Lishman, C. Yuill, J. Brannan, & A. Gibson, Eds.). SAGE Publications Ltd.
- Loomes, G., & Sugden, R. (1982). Regret Theory: An Alternative Theory of Rational Choice Under Uncertainty. *The Economic Journal*, 92(368), 805–824.
- Mankin, N. G. (2014). *Principles of Microeconomics* (7th ed.). Cengage Learning.
- Marôco, J. (2014). *Análise Estatística - Com utilização do SPSS*. Edições Sílabo.
- Mas-Colell, A., Whinston, M. D., & Green, J. R. (1995). *Microeconomic theory* (Vol. 1). Oxford University Press New York.
- Michaelidou, N., & Dibb, S. (2006). Product involvement: an application in clothing. *Journal of Consumer Behaviour: An International Research Review*, 5(5), 442–453.
- Michaelidou, N., & Dibb, S. (2008). Consumer involvement: a new perspective. *The Marketing Review*, 8(1), 83–99(17).
- Mittal, B. (1989). Measuring Purchase-decision involvement. *Psychology and Marketing*, 6(2), 147–162.
- Mittal, B., & Lee, M.-S. (1989). A causal model of consumer involvement. *Journal of Economic Psychology*, 10(3), 363–389.
- Mohan, G., Sivakumaran, B., & Sharma, P. (2013). Impact of store environment on impulse buying behavior. *European Journal of Marketing*, 47(10), 1711–1732.

- Morgan, J. (Ed.). (2016). *What is neoclassical economics?: Debating the origins, meaning and significance*. Routledge.
- Muramatsu, R. (2009). The death and resurrection of “economics with psychology”: remarks from a methodological standpoint. *Brazilian Journal of Political Economy / Revista de Economia Política*, 29(1), 62–81.
- O’Cass, A. (2000). An assessment of consumers product, purchase decision, advertising and consumption involvement in fashion clothing. *Journal of Economic Psychology*, 21(5), 545–576.
- O’Cass, A. (2004). Fashion clothing consumption: antecedents and consequences of fashion clothing involvement. *European Journal of Marketing*, 38(7), 869–882.
- O’Cass, A., & Choy, E. (2008). Studying Chinese generation Y consumers’ involvement in fashion clothing and perceived brand status. *Journal of Product and Brand Management*, 17(5), 341–352.
- O’Donoghue, T., & Rabin, M. (1992). Doing It Now or Later By. *The American Economic Review*, 82(1), 103–124.
- O’Donoghue, T., & Sprenger, C. (2018). Reference-Dependent Preferences. In *Handbook of Behavioral Economics-Foundations and Applications 1* (Vol. 1). Elsevier B.V.
- Olshavsky, R. W., & Granbois, D. H. (1979). Consumer Decision Making-Fact or Fiction? *Journal of Consumer Research*, 6(2), 93–100.
- Peck, J., & Childers, T. L. (2006). If I touch it I have to have it: Individual and environmental influences on impulse purchasing. *Journal of Business Research*, 59(6), 765–769.
- Petty, R. E., & Cacioppo, J. T. (1992). Ego-involvement and persuasion: An appreciative look at the Sherif’s contribution to the study of self-relevance and attitude change. In D. Granberg & G. Sarup (Eds.), *Social Judgment and Intergroup Relations* (pp. 147–174). Springer, New York, NY.
- Piron, F. (1991). Defining impulse purchasing. *Advances in Consumer Research*, 18(1951), 509–514.
- Quiggin, J. (2014). Non-Expected Utility Models Under Objective Uncertainty. In M. Machina & K. Viscusi (Eds.), *Handbook of the Economics of Risk and Uncertainty* (pp. 701–728).
- Rabin, M. (1998). Psychology and Economics. *Journal of Economic Literature*, 36(1), 11–46.
- Read, D. (2007). Experienced utility: Utility theory from Jeremy Bentham to Daniel

- Kahneman. *Thinking and Reasoning*, 13(1), 45–61.
- Rook, D. W. (1987). The Buying Impulse. *Journal of Consumer Research*, 14(2), 189–199.
- Rook, D. W., & Fisher, R. J. (1995). Normative Influences on Impulsive Buying Behavior. *Journal of Consumer Research*, 22(3), 305–313.
- Rook, D. W., & Hoch, S. J. (1985). Consuming Impulses. Retrieved November 12, 2018, from <http://www.acrwebsite.org/volumes/6351/volumes/v12/NA-12>
- Rothschild, M. L. (1984). Perspectives on Involvement: Current Problems and Future Directions. *Advances in Consumer Research*, 11(1), 216–217.
- Salvatore, D. (2005). *Microeconomics: Theory and Applications* (5th ed.). Oxford Univ. Press.
- Samson (ed.), A. (2014). The Behavioral Economics Guide 2014 (with a foreword by George Loewenstein and Rory Sutherland).
- Samuelson, P. (1938). A Note on the Pure Theory of Consumer's Behaviour. *Economica*, 5(17), 61–71.
- Samuelson, P. (1950). The Problem of Integrability in Utility Theory. *Economica*, 17(68), 355–385.
- Saunders, M., Lewis, P., & Thornhill, A. (2016). *Research Methods for Business Students* (7th ed.). Pearson Education Limited.
- Schermelleh-engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the Fit of Structural Equation Models Tests of Significance and Descriptive. *Methods of Psychological Research Online*, 8(2), 23–74.
- Schiliro, D. (2011). *Economics and psychology. Perfect rationality versus bounded rationality*.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach* (7th ed.). John Wiley & Sons Ltd.
- Sent, E.-M. (2004). Behavioral Economics: How Psychology Made Its (Limited) Way Back Into Economics. *History of Political Economy*, 36(4), 735–760.
- Sherif, C. W., Kelly, M., Rodgers, H. L., Sarup, G., & Tittler, B. I. (1973). Personal involvement, social judgment, and action. *Journal of Personality and Social Psychology*, 27(3), 311–328.
- Sheth, J. N. (1979). The surpluses and shortages in consumer behavior theory and research. *Journal of the Academy of Marketing Science*, 7(4), 414–427.
- Shleifer, A. (2012). Psychologists at the Gate: A Review of Daniel Kahneman's Thinking, Fast and Slow. *Journal of Economic Literature*, 50(4), 1080–1091.
- Siegel, S. (1956). *Nonparametric statistics for the behavioral sciences*.

- Simon, H. A. (1959). Theories of decision-making in economics and behavioral science. *The American Economic Review*, 49(3), 253–283.
- Soukup, A., Maitah, M., & Svoboda, R. (2015). The concept of rationality in neoclassical and behavioural economic theory. *Modern Applied Science*, 9(3), 1–9.
- Stern, H. (1962). The Significance of Impulse Buying Today. *Journal of Marketing*, 26(2), 59.
- Stojanovic, B. (2013). The Riddle of Thinking - Thinking, Fast and Slow. *Panoeconomicus*, 60(4), 569–576.
- Strahilevitz, M., & Myers, J. G. (1998). Donations to Charity as Purchase Incentives: How Well They Work May Depend on What You Are Trying to Sell. *Journal of Consumer Research*, 24(4), 434–446.
- Strotz, R. H. (1956). Myopia and Inconsistency in Dynamic Utility Maximization. *The Review of Economic Studies*, 23(3), 165–180.
- Sugden, R. (1985). Regret, Recrimination and Rationality. *Theory and Decision*, 19(1), 77–99.
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53–55.
- Thaler, R. (2016). Behavioral Economics : Past , Present , Future. *American Economic Review*, 106(7), 1–61.
- The Committee for the Prize in Economic Sciences in Memory of Alfred Nobel. (n.d.). The Prize in Economic Sciences 2017 - Scientific Background: Richard H. Thaler: Integrating Economics with Psychology. Retrieved from http://www.nobelprize.org/nobel_prizes/economicssciences/laureates/2017/advanced.html
- Thorgeirsson, T., & Kawachi, I. (2013). Behavioral Economics - Merging Psychology and Economics for Lifestyle Interventions. *American Journal of Preventive Medicine*, 44(2), 185–189. Retrieved from <http://dx.doi.org/10.1016/j.amepre.2012.10.008>
- Tigert, D. J., Ring, L. J., & King, C. W. (1976). Fashion Involvement and Buying Behavior: A Methodological Study. *Advances in Consumer Research*, 3, 46–52.
- Tversky, A., & Kahneman, D. (1974). Judgment Under Uncertainty: Heuristics and Biases. *Science*, 185(4157), 1124–1131.
- Urbina, D. A., & Ruiz-Villaverde, A. (2019). A Critical Review of Homo Economicus from Five Approaches. *American Journal of Economics and Sociology*, 78(1), 63–93. <https://doi.org/10.1111/ajes.12258>
- Varian, H. R. (2005). Revealed Preference, (January), 1–23.

- Verplanken, B., & Sato, A. (2011). The Psychology of Impulse Buying: An Integrative Self-Regulation Approach. *Journal of Consumer Policy*, 34(2), 197–210.
- Vohs, K. D., & Faber, R. J. (2007). Spent Resources: Self-Regulatory Resource Availability Affects Impulse Buying. *Journal of Consumer Research*, 33(4), 537–547.
- Voss, K. E., Spangenberg, E. R., & Grohmann, B. (2003). Measuring the Hedonic and Utilitarian Dimensions of Consumer Attitude. *Journal of Marketing Research*, 40(3), 310–320.
- Weinberg, P., & Gottwald, W. (1982). Impulsive consumer buying as a result of emotions. *Journal of Business Research*, 10(1), 43–57.
- Weintraub, E. R. (2002). Neoclassical economics. In *The concise encyclopedia of economics*.
- Wertenbroch, K. (1998). Consumption Self-Control by Rationing Purchase Quantities of Virtue and Vice. *Marketing Science*, 17(4), 317–337.
- Wong, S. (2006). *The Foundations of Paul Samuelson's Revealed Preference Theory: A study by the method of rational reconstruction*. Routledge.
- Wood, M. (1998). Socio-economic status, delay of gratification, and impulse buying. *Journal of Economic Psychology*, 19(3), 295–320.
- Youn, S., & Faber, R. J. (2000). Impulse buying: Its relation to personality traits and cues. *Advances in Consumer Research*, 27(1), 179–185.
- Zaichkowsky, J. L. (1985). Measuring the Involvement Construct. *Journal of Consumer Research*, 12(3), 341–352.

Annexes

1. Annex A – Research questionnaire (English)

1. Age:

18-24

25-34

35-44

45-54

55-64

Over 64

2. Gender:

Female

Male

3. Highest level of education completed:

Less than high school (12th grade)

High school graduate (12th grade) or equivalent

Bachelor or equivalent

Master, PhD or equivalent

4. What is your current employment status?

Student

Working student

Employee

Self-employed worker

Employer

Unemployed

Retired

5. What is your profession/course/field of study?

6. Nationality:

Portuguese

Other

7. Place of residence:

8. What is your personal monthly net income?

Less than 250€

251€ to 500€

501€ to 750€

751€ to 1000€

1001€ to 1250€

1251€ to 1500€

Over 1500€

9. How often do you purchase new clothes?

Several times per week

Several times per month

Several times per year

Less often than the options above

10. In which season of the year you spend the most on clothing?

Spring

Summer

Autumn

Winter

I don't know

No difference between these periods

11. How much do you usually spend (in average) each time you go in each shopping clothing trip?

Less than 30€

31-60€

61-90€

91-120€

121-150€

Over 150€

12. Do you prefer to buy clothing in a store/shopping or online?

Store/shopping

Online

A. On a scale of 1 to 5, where 1 corresponds to “Strongly disagree” and 5 corresponds to “Strongly agree”, define to which grade you agree with the following sentences:

13. Fashion Clothing is important to me.

14. I pay a lot of attention to Fashion Clothing.

15. Making purchase decisions for Fashion Clothing is significant to me.

16. I think a lot about my choices when it comes to Fashion Clothing.

17. The purchase of Fashion Clothing is important to me.

18. You are more interested in Fashion clothing than most other people.

19. You pay attention to fashion trends and latest styles.

20. You spend a lot of time searching the internet for new clothing items.

B. On a scale of 1 to 5, where 1 corresponds to “Strongly disagree” and 5 corresponds to “Strongly agree”, define to which grade you agree with the following sentences:

21. Shopping to me is truly a joy.

22. I shop not because I have to, but because I want to.

23. Shopping is like an escape from my daily routine life.

24. I enjoy being immersed in exciting new products while shopping.

25. I enjoy shopping for its own sake and not because of that I need to purchase something.

26. While shopping I feel a sense of adventure.

27. When I'm in a down mood, I go shopping to make me feel better.

28. Shopping with others is a bonding experience.

C. On a scale of 1 to 5, where 1 corresponds to “Strongly disagree” and 5 corresponds to “Strongly agree”, define to which grade you agree with the following sentences:

- 29. I often buy clothes without thinking.
- 30. Sometimes I feel like buying things in the spur-of-the-moment.
- 31. I carefully plan most of my clothing purchases.
- 32. Sometimes I am a bit reckless about what I buy.

2. Annex B – Research questionnaire delivered (Portuguese)

Estudo sobre o comportamento dos consumidores de roupa em Portugal

O presente questionário foi realizado no âmbito da realização da tese do Mestrado em Economia da Faculdade de Economia da Universidade do Porto. O que se pretende com este estudo é perceber o comportamento dos consumidores de roupa em Portugal.

Gostaria de pedir a sua honesta participação. Não existem respostas certas ou erradas.

Todas as respostas são confidenciais e anónimas. A recolha e tratamento de dados destina-se exclusivamente para fins de investigação académica.

Para esclarecer qualquer questão relacionada com o questionário/estudo poderá contactar a estudante responsável através do endereço eletrónico: up201106384@fep.up.pt

*Obrigatório

1. Idade: *

Menos de 18

18-24

25-34

35-44

45-54

55-64

Mais de 64 anos

2. Sexo: *

Feminino

Masculino

Outro

3. Nível de escolaridade completo mais elevado obtido: *

Inferior ao ensino secundário (12ºano)

Ensino secundário (12º ano) ou equivalente

Licenciatura ou equivalente

Mestrado, Doutoramento ou equivalente

4. Em que situação profissional se encontra atualmente? *

Estudante

Trabalhador-estudante

Empregado por conta de outrem

Empregado por conta própria

Empregador

Desempregado

Reformado

5. Qual a sua profissão/cursos/área de estudo? *

6. Nacionalidade: *

Portuguesa

Outra

7. Local de Residência: *

8. Qual o seu rendimento líquido mensal? *

Menos de 250€

251€ a 500€

501€ a 750€

751€ a 1000€

1001€ a 1250€

1251€ a 1500€

Acima de 1500€

9. Com que frequência compra peças de roupa novas? *

Algumas vezes por semana

Algumas vezes por mês

Algumas vezes por ano

Com menos frequência do que as opções anteriores

10. Em que época do ano gasta mais dinheiro em roupa? *

Primavera

Verão

Outono

Inverno

Igual em todas as épocas

Não sei

11. Quanto costuma gastar (em média) de cada vez que vai às compras de roupa? *

Menos de 30€

31€ a 60€

61€ a 90€

91€ a 120€

120€ a 150€

Mais de 150€

12. Prefere comprar roupa em loja/shopping ou online? *

Loja física/ shopping

Online

Numa escala de 1 a 5, sendo que 1 corresponde a "Discordo totalmente" e 5 corresponde a "Concordo totalmente", defina qual o seu grau de concordância com as afirmações seguintes:

13. A roupa é importante para mim. *

14. Presto muita atenção à roupa (moda). *

15. Tomar decisões de compra de roupa é significativo para mim. *

16. Penso muito sobre as minhas escolhas no que toca a roupa. *

17. A experiência de compra de roupa é importante para mim. *

18. Sou mais interessado/a em roupa que as outras pessoas. *

19. Presto atenção às tendências de roupa. *

20. Passo muito tempo a pesquisar na internet por novas peças de roupa. *

Numa escala de 1 a 5, sendo que 1 corresponde a "Discordo totalmente" e 5 corresponde a "Concordo totalmente", defina qual o seu grau de concordância com as afirmações seguintes:

21. Para mim, ir às compras de roupa é algo que me dá prazer. *

22. Eu faço compras não porque é algo que tenho de fazer, mas porque quero fazer.

23. Fazer compras de roupa é como uma fuga à minha rotina diária. *

24. Gosto de procurar/ver/encontrar produtos novos e surpreendentes quando vou às compras. *

25. Eu gosto de fazer compras de roupa por si só e não porque precise de comprar algo.*

26. Ao fazer compras, sinto uma sensação de aventura. *

27. Quando estou de mau humor, vou comprar roupas novas para me sentir melhor. *

28. Ir às compras com alguém ajuda-me a ficar mais próximo dessa(s) pessoa(s).

Numa escala de 1 a 5, sendo que 1 corresponde a "Discordo totalmente" e 5 corresponde a "Concordo totalmente", defina qual o seu grau de concordância com as afirmações seguintes:

29. Costumo comprar roupa nova sem pensar. *

30. Às vezes sinto vontade de comprar roupa no “calor do momento”. *

31. Planeio cuidadosamente a maioria das minhas compras de roupa. *

32. Às vezes sou um pouco imprudente nas minhas compras de roupa

3. Annex C – Bibliography of the items composing the questionnaire

Dimension	Question	Bibliographic Reference
Fashion Involvement	Fashion Clothing is important to me. I pay a lot of attention to Fashion Clothing. Making purchase decisions for Fashion Clothing is significant to me. I think a lot about my choices when it comes to Fashion Clothing. The purchase of Fashion Clothing is important to me.	O'Cass (2000)
	You are more interested in Fashion clothing than most other people. You pay attention to fashion trends and latest styles.	Tigert, Ring and King (1976)
	You spend a lot of time searching the internet for new clothing items.	Developed by the author
	Shopping to me is truly a joy. I shop not because I have to, but because I want to. Shopping is like an escape from my daily routine life. I enjoy being immersed in exciting new products while shopping. I enjoy shopping for its own sake and not because of that I need to purchase something. While shopping I feel a sense of adventure.	Sarkar (2011)
	When I'm in a down mood, I go shopping to make me feel better. Shopping with others is a bonding experience.	Arnold and Reynolds (2003)
	I often buy clothes without thinking. I carefully plan most of my clothing purchases.	Rook and Fisher (1995) - modified by the author
Fashion-oriented Impulse Buying	Sometimes I feel like buying things in the spur-of-the-moment. Sometimes I am a bit reckless about what I buy.	Hausman (2000)

4. Annex D – Sample characterization

Variables, n= 276	
Age (years), n(%)	
<i>Less than 18</i>	30 (10.9)
<i>18-24</i>	88 (31.9)
<i>25-34</i>	92 (33.3)
<i>35-44</i>	21 (7.6)
<i>45-54</i>	19 (6.9)
<i>55-64</i>	20 (7.2)
<i>Over than 64 years</i>	6 (2.2)
Gender, n(%)	
<i>Female</i>	185 (67.0)

	<i>Male</i>	91 (33.0)
--	-------------	-----------

Level of Education, n(%)		
	<i>Less than high school</i>	23 (8.3)
	<i>High school graduate or equivalent</i>	50 (18.1)
	<i>Bachelor's degree or equivalent</i>	105 (38.0)
	<i>Master's degree, PhD or equivalent</i>	98 (35.5)

Employment Status, n(%)		
	<i>Student</i>	62 (22.5)
	<i>Working student</i>	21 (7.6)
	<i>Dependent employee</i>	157 (56.9)
	<i>Self-employed worker</i>	16 (5.8)
	<i>Employer</i>	3 (1.1)
	<i>Unemployed</i>	12 (4.3)
	<i>Retired</i>	5 (1.8)

Nationality, n(%)		
	<i>Portuguese</i>	268 (97.1)
	<i>Other</i>	8 (2.9)

NUTS II of Residence and Municipalities,		
n(%) (n=270)		
	<i>North Region</i>	228 (84.4)
	<i>Aveiro</i>	2 (0.7)
	<i>Braga</i>	6 (2.2)
	<i>Bragança</i>	2 (0.7)
	<i>Castelo de Paiva</i>	1 (0.4)
	<i>Valongo</i>	3 (1.1)
	<i>Espinho</i>	1 (0.4)
	<i>Gondomar</i>	3 (1.1)
	<i>Lamego</i>	1 (0.4)
	<i>Matosinhos</i>	11 (4.1)
	<i>Maia</i>	4 (1.5)
	<i>Marco</i>	1 (0.4)
	<i>Santa Maria da Feira</i>	4 (1.5)

	<i>Porto</i>	110 (40.7)
	<i>Paredes</i>	1 (0.4)
	<i>Vila Nova de Gaia</i>	67 (24.8)
	<i>Póvoa de Varzim</i>	5 (1.9)
	<i>Vale de Cambra</i>	2 (0.7)
	<i>Viana do Castelo</i>	2 (0.7)
	<i>Vila do Conde</i>	1 (0.4)
	<i>Vizela</i>	1 (0.4)
Center Region		3 (1.1)
	<i>Ovar</i>	2 (0.7)
	<i>Santarém</i>	1 (0.4)
Lisbon Region		39 (14.4)
	<i>Setúbal</i>	1 (0.4)
	<i>Amadora</i>	3 (1.1)
	<i>Almada</i>	5 (1.9)
	<i>Seixal</i>	2 (0.7)
	<i>Lisboa</i>	24 (8.9)
	<i>Sintra</i>	2 (0.7)
	<i>Odivelas</i>	1 (0.4)
	<i>Cascais</i>	1 (0.4)
Monthly Net Income, n(%)		
	<i>Menos de 250€</i>	56 (20.3)
	<i>251-500€</i>	20 (7.2)
	<i>501-750€</i>	33 (12.0)
	<i>751-1000€</i>	52 (18.8)
	<i>1001-1250€</i>	40 (14.5)
	<i>1251-1500€</i>	30 (10.9)
	<i>Acima de 1500€</i>	45 (16.3)
Frequency of new clothing purchase, n(%)		
	<i>Several times per week</i>	4 (1.4)
	<i>Several times per month</i>	110 (39.9)
	<i>Several times per year</i>	144 (52.2)
	<i>Less often than the options above</i>	18 (6.5)

Season of the year spend the most on cloth-**ing, n(%)**

<i>Spring</i>	10 (3.6)
<i>Summer</i>	41 (14.9)
<i>Autumn</i>	7 (2.5)
<i>Winter</i>	56 (20.3)
<i>No difference between these seasons</i>	94 (34.1)
<i>I don't know</i>	68 (24.6)

Average expenditure on clothing for each**shopping trip, n(%)**

<i>Less than 30€</i>	30 (10.9)
<i>31-60€</i>	102 (37.0)
<i>61-90€</i>	68 (24.6)
<i>91-120€</i>	33 (12.0)
<i>121-150€</i>	20 (7.2)
<i>Over than 150€</i>	23 (8.3)

Shopping preference type, n(%)

<i>Physical store/shopping center</i>	248 (89.9)
<i>Online</i>	28 (10.1)
