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Message framing to encourage sustainable fashion consumption: The interaction of materialism and gender

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Abstract

In an era of fashion overconsumption, resources both human and natural are being exploited, and the question is raised on how to confront the abrupt growth of social and environmental problems. As fashion-related issues are geographically too far in distance for the daily consumer to properly register, social marketers need to address topics that are more easily perceivable to initiate change. This dissertation examines the impact of message framing on different consumer attitudes. For this purpose, gender and materialism are acting as moderators in a three-way interaction study. This current study aims to add value to the emerging field of behavioral economics and in particular to loss aversion theory. Furthermore, the author wishes to contribute useful learnings on the topics of gender and materialism studies and, most importantly, create an effective tool for social marketers to promote sustainable fashion consumption. The findings suggest that message framing has no main effects on consumer attitudes unless gender and materialism are being introduced as impactful moderators to the study design. Then, people high in materialism show significant gender differences. High materialistic female participants are more responsive to loss-framed messages, while high materialistic male participants are more sensitive to gain-framed messages. However, the findings also suggest that the two gender types are drawn by different motivations. These outcomes highlight the relevance of message framing combined with gender and materialism studies and show how these techniques can have a real impact when used precisely.

Resumo

Numa era de consumo excessivo na indústria da Moda, tanto recursos humanos como naturais estão a ser explorados, o que levanta a questão de como confrontar o abrupto crescimento dos problemas sociais e ambientais que daí advêm. Uma vez que as questões relacionadas com a Moda estão geograficamente inatingíveis para o consumidor as perceber, é necessário que os responsáveis pelo marketing social abordem tópicos que sejam mais facilmente propensos a iniciar mudança. Esta dissertação examina o impacto do enquadramento de mensagens em diferentes atitudes dos consumidores. Com este objetivo, o género e o materialismo são considerados moderadores num estudo de interação trilateral. Este estudo tem o intuito de acrescentar valor à área emergente da Economia Comportamental, e em particular à teoria de aversão da perda. Adicionalmente, o autor deseja contribuir com conhecimentos úteis para estudos de género e materialismo e sobretudo criar uma ferramenta eficaz para os responsáveis de marketing social promoverem consumo sustentável na Moda. Os resultados sugerem que o enquadramento da mensagem não tem efeitos na atitude do consumidor, a não ser que o género e o materialismo sejam introduzidos como moderadores impactantes na construção do estudo. Deste modo, pessoas com grau elevado de materialismo mostram diferenças significativas em função do género. Participantes do sexo feminino com um grau elevado de materialismo são mais recetivas a uma perda de enquadramento de mensagens, enquanto participantes do sexo masculino são mais sensíveis a um ganho de enquadramento de mensagens. No entanto, os resultados

também sugerem que os dois géneros são influenciados por diferentes motivações. Estas conclusões destacam a relevância do enquadramento da mensagem combinado com estudos de género e materialismo, e mostram o modo como estas técnicas podem ter impacto quando usadas de forma precisa.

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1. Introduction

1.1 Problem Definition and Relevance

The fashion industry is of global interest since it is among the leading drivers of the world economy (BOF & Mc Kinsey & Company, 2017). Next to luxury fashion, which started using drones for runway shows, fast fashion is causing sensation, such as introducing augmented reality for its display windows (Lutero, 2018; Ong, 2018). Its biggest representatives, Zara and H&M, have risen to being the largest clothes retailers in the world and with their promotion of fast fashion overall consumption of clothes is growing too (Greenpeace, 2017a). Market forecasts are predicting sales of clothing to reach \$2.1 trillion by 2025, after they have almost doubled from \$1 trillion worth in 2002 to \$1.8 trillion by 2015 (Mc Kinsey & Company, 2016).

In addition to be highly profitable, the apparel industry is also problematic to the world and in particular its fast fashion branch. During the past few decades it has grown fast and several social problems are rising due to this abrupt growth such as leading to very low wages (Parry S., 2017) and hazardous working environments. In order to fulfill the world's demands for low-priced goods but with the latest fashion flairs, workers involved in the manufacturing processes are encountering toxic chemicals and fibrous dust, that often lead to severe health problems (GFA & BCG, 2017). Apart from these ongoing risks, other immediate threats arise from the dangerous working conditions in the textile manufacturing industry as seen in Dhaka, Bangladesh, where the collapse of a textile factory building took its deadly toll of over a thousand lives (British Broadcasting Corporation, 2013). Global warming has been enhanced by both the material's endless demand for fossil fuels as a starting substance, as well as the need of a vast energy supply for the production process (Greenpeace International, 2017b). Same wise, environmental issues of different nature originate from low-priced and resulting low quality products. The use of synthetic materials is becoming more and more popular, especially polyester which reaches a share of 60% amongst clothing fibers. For instance, polyester issues three times more carbon dioxide than cotton (Kirchain, R., Olivetti, E., Miller, T., & Greene, 2015). Conventionally planted cotton, however, is criticized for the use of pesticides, fertilizers and genetically modified cotton seeds, which are constituting 80% of all cotton grown (Potts J, Lynch M, Wilkings A, Huppé G, Cunningham M, 2014). Additionally, the usage of pesticides and insecticides or GMOs is not only harming the environment in a direct

way, but it can also affect later generations (Ross M. & Morgan A., 2015). Fairtrade Labelling Organizations International, for example, is constantly working on expanding sustainable cotton production, while at the same time providing economic benefits via their guaranteed Fairtrade Minimum Price and an additional Fairtrade Premium. Still, there is only 55,000 cotton farmers under their umbrella, leaving behind 90 million small-scale cotton farmers without a better deal for their cotton (Fairtrade International, 2018). Moreover, cotton is known for its large need of water and can, consequently, cause not only water scarcity but also eutrophication. That is, a process by which any body of water is overly filled by minerals and nutrients through the discharge of nitrate or phosphate. This causes an excessive growth of plant life, which in turn leads to death of animal life from lack of oxygen (GFA & BCG, 2017). Additionally, once low-cost products are coming into usage, they are being disposed only after a short period of ownership (Joy, Sherry, Venkatesh, Wang, & Chan, 2012). The easy release of synthetic microfibers resulting from low-quality products into waterways through laundering is also contributing to the pollution of the oceans (Greenpeace International, 2017a), which leads to heavy pressure on the balance of our ecosystem. Whether consumers are aware of the damaging social and ecological factors named above and thus are affecting the corporate image of fast fashion textile suppliers and remains to be addressed, a business area which, apparently needs to catch up on transparency, in a complex and globally intertwined world (Niinimäki, 2010).

1.2 Objective and Research Questions

A great deal of academic research has been investigating the underlying reasons for people's unimpressed shopping behavior when it comes to sustainable products (Connell, 2010; Joshi, Y., 2015; Vermeir & Verbeke, 2006; Young, Hwang, McDonald, & Oates, 2009). Even ethically concerned consumers seem to quickly forget about their self-set moral obligations in purchasing situations (Ehrich & Irwin, 2005). Ethically concerned consumers in this regard are defined as people who have been proved to give value to the protection of the rain forest in a question used in previous research (Baron, J. & Spranca, 1997; Ehrich & Irwin, 2005; Irwin & Baron, 2001). Although some prior research has been focused on understanding why people behave in a way which is contrasting to what they actually believe in (Hume, 2010; Kollmuss & Agyeman, 2002; Mcneill & Moore, 2015; Nicholls & Lee, 2006; Tanner & Kast, 2003; Young et al., 2009), limited research has

looked into nudge-based interventions, such as message framing, that go beyond public healthcare or taxation systems (Thaler & Sunstein, 2008). That is, little research has examined how message framing techniques can function as drivers of sustainable fashion shopping behavior, that bridges behavioral economics together with the field of private fashion companies' conduct, while there has been conducted several studies to understand the effects of message framing in a variety of contexts of the healthcare field (Hull & Hong, 2016), such as condom use (Linville et al., 1993), sunscreen use (Detweiler et al., 1999; Alexander J. Rothman et al., 1993), physical exercise (Gray & Harrington, 2011) or safe driving (Millar & Millar, 2000). Considering the ever-present issues of the fashion industry, consumer claims for more longevity in clothing (Greenpeace International, 2017b) and the recent emergence of the scientific field of behavioral economics, it seems relevant to find ways to combine both. Therefore, this research aims at providing the reader with research insights on how to merge the concepts of both message framing coming from the field of behavioral economics and advertising that looks into the concept of sustainable fashion consumption or in other words, encouraging customers to consume fewer clothes but of higher quality. More specifically, with this project the author aims to test social marketing messages based on these behavioral and advertising insights through an experimental design study that is tested as a social marketing campaign. Additionally, this study aims at encouraging sustainable clothing brands through the acquired scientific knowledge to frame social advertising messages in their corporate marketing activities as well as public policy makers and independent institutions in developing social marketing campaigns. The first research question is therefore the following:

RQ1: Can framing techniques be efficiently used in promoting sustainable fashion consumption?

Previous research found that the consumer's knowledge base has arrived to a point, where there exists enough awareness so that people are starting to create attitudes towards sustainable clothing either through personal consumption or advertising exposure amongst other information outlets (Mcneill & Moore, 2015; Paulins & Hillery, 2009; Rokicka & Słomczyńska, 2002). Day by day, consumers are growing in consciousness about the impact of their actions on the planet (Krause, 1993). They are increasingly becoming interested in manufacturing processes, supply chains and working conditions related to the products they buy (Dupré, 2005). Still, there is claim that knowledge on how an environmental system works, the impacts of external sources on it and the related

consequences, does not enhance sustainable behavior (i.e. Diekmann, A., Preisendörfer, 1992; Grob, 1995; Schahn & Holzer, 1990). This supports the suggestion that marketers need to emphasize meaning and relevance because attitude alone does not transform into real behavior; an attitude-behavior gap whose concept was described in several research papers before (Hume, 2010; Kollmuss & Agyeman, 2002; Mcneill & Moore, 2015; Nicholls & Lee, 2006; Rokicka & Słomczyńska, 2002; Tanner & Kast, 2003; Young et al., 2009) and will be explained next, in the literature review. With the help of a combined approach including the principles of loss aversion, personal benefit dominance and message framing techniques this research aims at reducing the spread of the attitude behavior gap.

Moreover, to give a more clarified guidance on how to enhance people's choice in their best interest and provide them with directions towards sustainable fashion consumption it is necessary to have a detailed look at the underlying factors which make people act more versus less sustainably. These include, consumer knowledge, attitudes and situational aspects, which, with the aid of behavioral economics and the social marketing literature, the author will be able to evaluate the decision-making process. Consequently, the following research question is as follows:

RQ2: Can the principle of loss aversion be efficiently used for message framing in the context of social marketing aimed at encouraging sufficiency in fashion consumption?

The research questions mentioned above will serve as the baseline of research for the present dissertation. They define a starting point to further enlarge the study with linked concepts and ideas, important for the creation of a well-thought-out and efficient experiment.

1.3 Thesis Structure

The present dissertation is structured as follows: the first chapter covers the research problem and its relevance. The research objective and questions are defined thereafter. The second chapter reviews previous literature which serves as the baseline of this document. The conceptual model and its hypotheses are explained in the third chapter. The fourth chapter provides a description of the methodology used in this study. The fifth chapter addresses the data analysis and the corresponding results are presented. Towards the end of

the dissertation, in the last chapter, the conclusions are outlined along with managerial implications as well as with suggestions for public policy makers. Lastly, the dissertation is finalized with the limitations involved in the study and recommendations for future research.

2. Academic Literature Review

2.1 Sustainability and the fashion industry

The idea of sustainability was first defined in the Brundtland Report as “Sustainable Development” (Wang, Lo, & Fang, 2008), which represents the idea that the generation of today should treat the world in a way so that future generations will have a promising outlook to live a life which is as good, if not better than the one we live today, and this applies to all living beings (World Commission on Environment and Development, 1987). It also created the basis for the concept of the so-called “triple bottom line”, which includes the three spheres of the environmental, social and economic perspective (Elkington, 1998). It sheds light on the economical principle of constant and sufficient supply of resources for the upkeep of a good quality of life, the fair and balanced treatment from a social point of view and the protection of the ecosystem in order to fulfil the environmental aspect (Bansal, 2002).

The topic of environmental concern has been discussed before by national and local governments, the corporate world as well as academics. Yet, modern industrial societies tend to ignore its importance (Curzons, Mortimer, Constable, & Cunningham, 2001). On August 2nd, 2017 the world’s population reached the date when humanity has depleted all the world’s resources for that year. After the Earth Overshoot Day, which gets marked each year on a different day, reports issued by the Global Footprint Network (2018) suggest that mankind is not operating sustainably anymore, but is operating in an overshoot mode. Also, an increasing number of academics have been looking into the different subjects of sustainability ranging from energy saving behaviors, consumer’s disposition to pay more for more sustainable products to ecological modernization (e.g. Gadenne, Sharma, Kerr, & Smith, 2011; Laroche, Bergeron, & Barbaro-Forleo, 2001; Spaargaren & Vliet, 2000; Vermeir, I., & Verbeke, 2008; Young et al., 2009) Within the fashion scope, some companies are starting to adopt similar conscious attitudes towards both the environment and society. For instance, Italian jeans manufacturing company – Italdenim,

the firm based near Milan introduced a natural fixing agent derived from crushed shellfish to reduce the amount of chemicals used in the dyeing of their jeans. Furthermore, Italdenim is producing their own energy at their plant (italdenim, 2018). The topic enjoyed an increase in consumer awareness through a growing amount of talks on the issue in the media, which consequently led to a boost in the global market of environmentally friendly apparel (Laroche et al., 2001; Lipson, 2008; Yan, Hyllegard, & Blaesi, 2012). Yet, the aforementioned case is still not the norm and many sustainability advocates and initiatives are increasingly appealing towards more transparency, fairer labor conditions and away from human exploitation. The “Fashion Revolution Week” campaign with its claim #whomademyclothes is grabbing for attention on a global basis, asking for more transparency in garment supply chains (Fashion Revolution movement, 2018). Brands such as Levi’s or Nike give answers to the public claim on more transparency in publishing lists of companies which supply them and by providing ethical codes of conduct that protect their workers. Arket, a H&M label, is even indicating factories’ names on a map on their newly launched webpage (Quartz — News, videos, ideas, 2018b). Moreover, the US-American fashion retailer Gap Inc. engages in water stewardship with a strong focus on women (Gap Inc., 2018).

On one side, next to independent organizations, like the Fashion Revolution Week mentioned above, apparel companies are showing their willingness to rise the consumer’s consciousness and awareness on the topic, introducing different mechanisms in communicating more transparent processes. Many, constantly advertise their positive impact on societies and environment on their websites through special collections (Arket, 2018; Levistrauss, 2018). However, consumer’s trust in the goodwill of fashion brands is being shattered due to the repetitive cases of industry scandals that employ for instance, sweatshop labor (Shen, Wang, Lo, & Shum, 2012) or prisoners working in slave-like conditions in Qingpu prison, in the Shanghai area (Handelsblatt - Nachrichten aus Wirtschaft, 2018; Quartz — News, videos, ideas, 2018a).

On the other side, people struggle in developing a positive attitude towards ‘eco-conscious apparel acquisition’ and to consume more sustainably (Mcneill & Moore, 2015). While some conscious consumers engage in clothing donations and in the re-usage of older clothes (Hiller Connell, 2011), most of the market demand is placed on new clothing. Frequent purchases are made without apparent need, a type of consumption behavior that

contributes to the short life cycle of garments, which are quickly disposed only after a few uses. On the supply side, clothes made of recycled materials or ecological fibers are emerging mostly through eco-conscious businesses or second-hand stores and through some fast fashion brands, though it is still, a slow-motion trend.

2.2 Encouraging Sufficiency

Sustainable fashion or also “fashion with conscience” is meant to maximize benefits for the society and its people, but at the same time keeping negative environmental impacts on the lowest level possible (Claudio, 2007; Joergens, 2006). The typology of business model archetypes describes approaches which are possible innovative solutions for sustainable matters, searching for new methods of creating sustainable value and tackling conflicting stakeholder demands (Short, Bocken, Rana, & Evans, 2012).

One of the nine described sustainable business model archetypes is defined as *Encourage Sufficiency – Solutions that actively seek to reduce consumption and production* (Short et al., 2012). This approach, opposing planned obsolescence and throwaway paradigm, wants to introduce a fundamental change in the western economic business model (Bocken & Short, 2016; Jackson, 2009; Mont, 2008). By making long-lasting products, educating and engaging the consumer, as well as introducing conscious sales and marketing methods and innovation through technology, this path wants to focus on “needs” instead of creating “wants” (Bocken & Short, 2016). Consumers developing strong emotional attachments with a product can foster longer usage and reduce disposal rates and consequently material wastage (Pal, 2017), additional to have a higher perceived product quality due to a premium price. Still, before such emotive connections with longevity clothing can install, consumers need to either be convinced about products of higher quality or bothered by garments of low quality.

The path towards increasing more sustainable consciousness from both the corporate world and consumers is not linear however and does not directly translate into action as will be investigated further in the next chapter.

2.3 Attitude Behavior Gap

Whether the average citizen of today is decently informed about the fashion controversy affecting both society and environment, is likely to be affecting how consumers are making sustainable decisions. Although consumer awareness about sustainable fashion and production might have progressively entered societies in the past few years, there is claim that ten years ago there was still no real knowledge about the meaning and impact of sustainable fashion (Beard, 2008). Thus, it is crucial to provide individuals with enough education in order for them to have a clearer conscience about their responsibilities (Paulins & Hillery, 2009). Consequently, consumers are likely to purchase in a more sustainable manner (Dickson, 2001). Moreover, the triggering moment a product's impact on society and environment is made aware to consumers by marketers and sustainable marketing campaigns, brands can start advocating for more sustainable consumption and set sustainable policies. Working on new knowledge the customer has gained through information on sustainability is thus, imperative (Shim, 1995).

However, the discussion on consumer knowledge's effect on sustainable consumption remains a highly contentious topic (Kim, Yun, Lee, & Ko, 2015). There is research that speaks in favor (Mcneill & Moore, 2015; Paulins & Hillery, 2009; Rokicka & Słomczyńska, 2002), but also some research that represent aspects in disfavor of the premise that consumer knowledge, pro-environmental attitudes and concern for environmental and social issues are able to directly translate into sustainable behavior (Ellen et al., 1991; Kollmuss & Agyeman, 2002; Vermeir, I., & Verbeke, 2006, 2008).

On the one hand, amongst consumers longing for more sustainable behavior in consumption the recurrent question comes up of whether buying sustainably is really worth the additional effort (Kim et al., 2015). Social pressures or a variety of choices to select from can impede goodwill towards socially and environmental-friendly causes to become reality (Hines, Hungerford, & Tomera, 1987).

On the other hand, some don't even have a different choice than consuming products from unsustainable sources. The influence of situational factors like scarce economic resources of a country (Kollmuss & Agyeman, 2002) is representing another reason of the attitude behavior gap that is often experienced in matters of sustainable (fashion) consumption.

These opposing findings show that the interaction between knowledge and behavior is more complex than previously assumed (Chan, 2001). Now, two factors are being highlighted and explained how they potentially impede attitude to translate into behavior.

2.4 Materialism and Gender

The textile, clothing and fashion industries are not only amongst the most environmental polluting ones (Greenpeace International, 2017a), they are also one of the worst when it comes to masquerading materialism as a good virtue. Being driven by the school of thought of classic market economy, it is serving itself with short product life cycles to fuel the expanding demand for new products and services (Mont, 2008). Materialism, defined as a set of centrally held beliefs on the high importance of possessions in the life of an individual (Richins & Dawson, 1992) is shifting consumption patterns. The process of consumption itself grows in importance, while the utilitarian value of the product becomes secondary (Kilbourne & Pickett, 2008). The multi-facet value structure, which is meant to enhance subjective well-being, has individual and social consequences (Ahuvia & Wong, 2002; Belk, 1985; Richins & Dawson, 1992), such as restlessness and dissatisfaction and the loss of meaning given to interpersonal relationships (Greenpeace International, 2017a). It is suggested to outrank religion, friends and achievements, becoming the central factor of the life of an individual (Richins & Dawson, 1992). Thus, the promise that well-being comes with possessions appears to be delusive (Burroughs & Rindfleisch, 2002).

Gender tends to deviate in materialism-related topics in combination with fashion (Handa & Khare, 2013). Not only is fashion more important to women than to men, also society is allocating a relevantly higher value on women's physical appearance compared with that of men (Bakewell, Mitchell, & Rothwell, 2006). Most women, thus, consider fashion-related topics to be personally relevant not only due to the social pressure that is exerted on them but also due to the stereotypes that this pressure has been created along generations, resulting in the higher fashion clothing involvement by women than men (Bloch, 1981).

While research suggests that materialism is negatively correlating with environmentally responsible behaviors (Kilbourne & Pickett, 2008), it positively impacts both, status consumption (Lertwannawit & Mandhachitara, 2012) and fashion clothing involvement (Cass, 2001). Addressing the perspective of materialistic values behind consumption

behaviors in combination with gender studies is hoped to bring answers to the question on how to tackle the challenging “producers continue producing and consumers continue buying”-paradigm (Fuad-Luke, 2009). Next, the author sheds light onto a possible solution in overcoming the issue of materialism and gender in terms of fashion overconsumption.

2.5 Social Marketing and Fashion

Previous research addressing the concepts of Ecological Marketing (K. E. Henion & Kinnear, 1976) and Ecologically Concerned Consumer (Kardash, 1976), the question arose whether conventional marketing techniques could be applied in order to endorse objectives related to society’s well-being like safe driving or family planning (Kotler & Zaltman, 1971). And in fact, companies exist in the market place that are running activities to moderate sales and make people think about the effect of consumerism on the environment, such as Patagonia’s manipulative marketing campaigns (Patagonia, 2011), no sales incentives or choice editing techniques (Ekvall et al., 2014). However, it is not only companies who are engaged in such kinds of promotional activities. Furthermore, public policy entities including health care institutions (Grier & Bryant, 2005) and transportation system providers (Peattie & Peattie, 2009), as well as all other kinds of non-business institutions, such as churches, charities and museums (Kotler & Zaltman, 1971) are making usage of marketing techniques by transmitting them into constructive measures to stimulate socially beneficial behavior change. With regard to fashion, social marketing has the goal to move people away from overconsumption and lead them to a far lower level of usage in both senses, materially and economically, while reaching the same levels of satisfaction (Peattie & Peattie, 2009).

Considering what the original definition of marketing stands for, namely, a process through which demand for a certain product or service is being developed among consumers (BusinessDictionary, 2018), it might be confusing to see marketing techniques used for a goal which is actually trying to reach the opposite (Peattie & Peattie, 2009). This research paper wants to attribute additional know-how to the matter in the area of social marketing, which is investigated in the next chapter.

2.6 Prospect Theory and Message Framing

First described by Tversky & Kahneman (1981) and further developed in 1992 (Tversky & Kahneman, 1992), the behavior economic theory of prospect theory accounts for a big deal of scientific discussion in the field of decision-making processes (Eckles & Schaffner, 2010; Ghuge, Sar, Rodriguez, & Wirtz, 2011; Hull & Hong, 2016; Millar & Millar, 2000; Rothman, Martino, Bedell, Detweiler, & Salovey, 1999; Trope & Liberman, 2010). One of its most important features and fundamental ideas is that losses loom larger than corresponding gains; the loss aversion theory. Connected with this model is the theory of message framing, which is explaining a cognitive bias that changes the way people react or feel about a certain message depending on the way it is presented (Kahneman, 2011).

Is a decision framed in terms of gains, people tend to be rather risk averse, while people are more likely to accept risk when a decision is framed in terms of losses (Tversky & Kahneman, 1981). Loss-framed messages are further more influential if the outcome is supposed to be unpleasant and thus representing a risk (Detweiler et al., 1999; Rothman et al., 1999). Furthermore, prevention behaviors, as possessing low levels of perceived risk, are suggested to be more responsive to gain-framed messages (A.J. Rothman & Salovey, 1997). Significant study results suggest that gender differences can depend on message framing, so that women tend to be more sensitive to message framing related to their health and, if they feel low future risk, gain-framed messages have more impact on them (Toll et al., 2008). Moreover, women are more easily persuaded by gain-framed messages when being high in involvement (Alexander J. Rothman et al., 1993), which evokes the topic of fashion involvement. Framing effectiveness is based on whether a recipient is involved in the topic and whether the recipient is perceiving a high or a low level of risk associated with the message (Loroz, 2007).

This reasoning and the overall big importance for marketers and social marketers of this topic lead the author to pose questions regarding how this can affect both personal and environmental and social benefits, hence leading over to the conceptual framework and the hypotheses.

3. Conceptual Framework and Hypotheses:

After having explored the theoretical foundation of the sustainable business model archetype *Encourage Sufficiency*, the attitude behavior gap, the role of social marketing in

fashion, as well as message framing techniques and gender and materialism linked to consumption, this paper will continue with the explanation of the conceptual model and its connected hypothesis tested in this research.

The aim of this empirical study is to investigate the effects of differently framed promotion messages to encourage a sustainable fashion consumption, or in other words, sufficiency in fashion consumption, while never forgetting about the impact of materialism as well as gender. Accordingly, independent variables are represented by gender, message frame and level of materialism. The author explores how they influence the dependent variables, namely *perceived personal relevance (PPR)*, *compliance intention (CI)* and *importance given to corporate social responsibility (CSR)*. Outcome variables are described as the concern people develop for themselves and for corporate matters when reading the promotional text. They create attitudes towards a certain behavior and rate the effectiveness level of the different promotion messages. In other words, the effect of a certain kind of message framing is tested on the conviction of fashion consumers to (theoretically) comply with sustainable behavior.

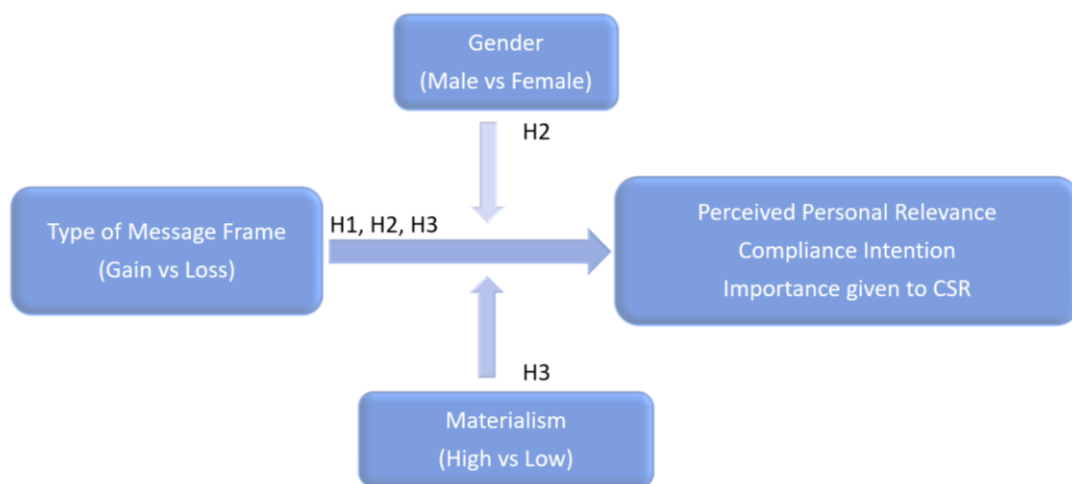


Figure 1: Conceptual Framework

The promotional text of this study focuses on personal health benefits, while ignoring the social or environmental aspects that come with sustainable clothing consumption, such as the reduction of child labor or water waste. This is being done for two reasons; first, to avoid the artifact of the social desirability bias (Carrington, Neville, & Whitwell, 2010;

Edwards, 1953). It is assumed that participants would respond in favor of social and environmental benefits due to the reason that they want to be perceived as socially and environmentally responsible. An individual's reaction can therefore differ depending on whether he/she believes that a certain answer is desired by others. A second reason for only mentioning personal benefits is the suggestion by the theory of self-interest that individuals always try to maximize personal benefits (Holmes, 1990), and also popular under the phrase of *What's in it for me?* (Ye, Teng, Yu, & Wang, 2015). Consequently, it is more interesting to see how the aspect of personal benefits can be further emphasized in the area of sustainable fashion consumption. The personal benefit options include health, wealth and happiness and are thus the same factors Cass Sunstein and Richard Thaler are addressing in their book *Nudge: Improving Decisions About Health, Wealth, and Happiness*, which is the starting point of this whole research paper in the first place. Nevertheless, social and environmental aspects are inevitably linked to sustainable clothing and will thus be integrated, next to personal benefits, in the evaluation of the messages.

Hypothesis

As aforementioned the present research focus lays in finding out whether gain or loss messages work better in encouraging sufficiency amongst fashion consumers and the author is thus promoting a desired behavior, which is consumption prevention. Gain-framed messages have been suggested more successful on prevention behavior, while loss-framed messages are supposed to be more effective on detection behavior (Hull & Hong, 2016). This line of thought is taken further in assuming that under conditions of low risk the human mind is more sensitive to gains than to losses (A.J. Rothman & Salovey, 1997; Rothman et al., 1999). With regard to the aforementioned findings and to the first research question, whether message framing techniques can be efficiently used in promoting sustainable fashion consumption, the study proposes the following first hypothesis:

H1: A gain-framed promotional text will be more effective than a loss-framed promotional text when promoting sustainable consumption in fashion, in:

H1a: arousing perceived personal relevance,

H1b: increasing compliance intention, and

H1c: raising importance given to corporate social responsibility.

Furthermore, several studies have looked into the topic of materialism related with fashion consumption (Cass, 2001; Lertwannawit & Mandhachitara, 2012) and more specifically on materialism related with fashion and gender (Handa & Khare, 2013; Workman & Lee, 2011), which the author wants to contribute to.

Significant study results suggest that gender differences to message frames are evident (Toll et al., 2008) and materialism was shown to have a negative impact on environmentally responsible behaviors (Kilbourne & Pickett, 2008), which could pose a serious risk to professionals involved in sustainable fashion marketing and social marketing. Research suggests further, that materialism positively impacts fashion clothing involvement and fashion clothing is more pronounced among women than on men (Handa & Khare, 2013). Consequently, a lower importance given to corporate social responsibility is expected when materialism and fashion clothing involvement levels increase. This development might then lead to weaker effects of gain-framed promotional text regarding social and environmental concern. Levels of materialism as well as gender are leading to crucial differences in the decision-making process of fashion consumers and need to be included in this research paper. Their influential strength to affect the results are hard to predict and several researchers have had difficulties in encountering statistical findings more significant than marginal or among sub-samples of respondents in framing studies (A. J. Rothman & Updegraff, 2010). Hence, the author hypothesizes the moderating effect of both materialism and gender on the relationship between message-framing and personal versus social-benefits, so that:

H2: The impact of message-framing on consumers' attitudes will be moderated both by gender and materialism differences:

H2a: The higher the level of materialism orientation, the higher the impact of message-framing on gender differences.

H2b: The lower the level of materialism the lower the impact of message-framing on gender differences.

Finally, the author wants to explore the direction of the interaction effects and in particular on the variable *importance given to CSR*. Women tend to be more sensitive to message framing when it comes to health messages and, if they feel low future risk, gain-framed messages have more impact on them (Toll et al., 2008). In fact, prevention behavior is not supposed to induce high perceived risk to anyone (A.J. Rothman & Salovey, 1997), and that will not differ with the potential effect of decreasing consumption leading to a reduced possibility of suffering psychological problems. People in general might not acknowledge psychological problems related to fashion consumption as any kind of risk. This, combined with higher female sensitivity than male to social and environmental issues according to literature (Mainieri, Barnett, Valdero, Unipan, & Oskamp, 1997), as well as being more easily persuaded by gain-framed messages when being high in involvement (Alexander J. Rothman et al., 1993), lets it appear obvious to assume that women are more sensitive than men to gain-framed messages related to corporate social responsibility. Still, as materialism, and thus fashion involvement, negatively correlates with environmental and social behavior, the assumption gets reversed. The third hypothesis is stated as the following:

H3: Increases in materialism-orientation will lead to gender differences in social and environmental concern depending on whether the message is framed with a gain (loss) appeal.

4. Methodology and Data Collection

In this section, the author presents both the research method applied for answering the research questions and the corresponding variables.

4.1 Research Method

In this research, two research instruments were used, one pre-test and one main study. They were conducted in order to analyze the research questions. The online survey was created on the Qualtrics web platform, which allows to gather data quickly and without any additional costs. People can respond either on their computer or mobile phone if on the way, closing and opening the link with their answers saved as many times as they want, which offers the possibility to complete the questionnaire in more than only one session.

4.2 Sampling

A nonprobability sampling technique was chosen for this study, meaning that there was no particular probability for any of the participants to take part. This implies that the sample is very unlikely to be perfectly representative for a specific population, which is shown in the distribution of nationalities (according to the question *Where did you live in the past 5 years?*) in this study. Participation was linked to convenience, say collecting data from population members that are conveniently available, which has the advantage of being less cost- and time-intensive (Kothari, 2004). This makes it a non-probabilistic convenience sampling technique. At the same time, there is no control on where the respondents will come from, which age group they belong to or what occupation they have. Still, this sampling method was considered an adequate way of addressing theoretical research questions on a topic which was only investigated little so far and thus comes with little steps. The majority of the respondents are women amongst their twenties and thirties and represent a gender- and age-group which is very well suited for this topic, being the most vulnerable to compulsive shopping (Greenpeace International, 2017a).

Participants were gathered amongst different social media channels (Facebook, WhatsApp, Twitter) and referred by some participants in their network, which made it possible to reach a high number of participants in a short period of time. In the next section, a detailed description of the research instruments, the study design and its procedures will follow alongside with the variables used in the research model before leading over to the data analysis.

4.3 Research Instruments

As already stated above, one pre-test and an empirical main study were conducted, managed with *Qualtrics Experience Management Platform*. All the participants accessed the questionnaire through an anonymous link distributed on social media via postings, group chats and private messages. The next paragraph will introduce the pre-test and the main study succeeded by the design description.

4.3.1 Pre-test

Participants were invited to join a pre-test on their materialism level by using a short form of the material values scale (MVS), which has originally been developed by Richins and

Dawson (1992) to study materialism as a feature of consumer behavior (Richins, 2004). In this nine-item scale a general level of materialism was being assessed before being exposed to the intervention stimulus of to the main study. Questions on demographics were also part of the pre-test, including topics such as age, annual household income and occupation.

The corresponding main findings include interesting information on materialism levels related to happiness, centrality and success. While most people say that they don't like to own thing to impress people ($M_{\text{success, item3}} = 2.96$), they admire people who own expensive homes, cars and clothes ($M_{\text{success, item1}} = 3.67$). The majority of people enjoys shopping and says that buying things gives them a lot of pleasure ($M_{\text{centrality, item2}} = 4.5$), but denying to like a lot of luxury in their life ($M_{\text{centrality, item3}} = 3.13$). In terms of happiness, most people don't think that owning certain things which they don't have as well as affording to buy more things will contribute to their happiness ($M_{\text{happiness, item1}} = 3.1$; $M_{\text{happiness, item2}} = 3.29$).

4.3.2 Main Study

The primary data used for this research paper was collected in a quantitative online-survey during a period of nine days from April, 28th until May, 7th 2018. Two hundred and seventy individuals took part in the empirical study, but only two hundred and three were fully completed. This depicts a drop-out rate of approximately 25%. Dropout rates like this are common in internet-based experimenting (Reips, 2002). People get easily distracted and might also not feel committed to answering all the questions, especially on long questionnaires, which the study is. High dropout rates can therefore set in. Still, with ninety-three male and one hundred and ten females, the sample size is considered being sufficiently large with more than 100 subjects in each cell of the two message conditions (gain vs loss). Its design is being presented in the following chapter.

4.4 Design and Procedure

The study followed a 2 (Type of message frame: gain, loss) x 2 (Type of gender: male, female) x 2 (Level of materialism: high, low) between-subjects design. Type of message frame was experimentally manipulated using four different scenarios in text format, which are pictured in the graphic below:

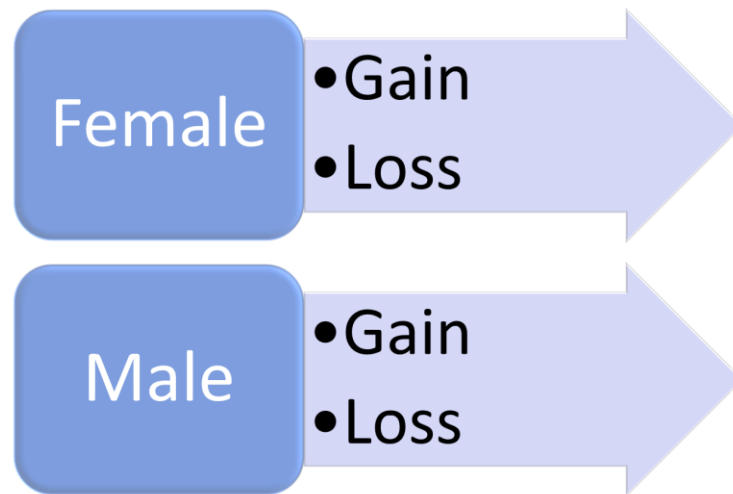


Figure 2: Survey Flow Detail on Condition Split

The members of the two gender groups were randomly but evenly allocated to either a gain-framed or a loss-framed condition. That is, after having responded to the demographic questions and the material values scale, the condition was shown from a male or female perspective depending on who was reading it, meaning that all women read the text about the fictitious character *Daniela* and all men read the text about the fictitious character *Peter*. Due to gender adaptation the messages slightly differ in wording while the most important base-line-structure as well as the story-line and its contents remain the same. Moreover, only text was used, with no supplementary visual cues. This ought to maximize internal validity with regard to framing effects and to make sure that the experiment would not be affected by additional parameters (See appendix 2 for full stimuli information).

After having been exposed to the manipulation scenario, participants were asked to answer to a set of questions that were checking the readers' understanding of the text. These were used as manipulation check measures and investigated whether the text was clear, credible and trustworthy. A set of questions followed and were related to *perceived personal relevance*, *compliance intention* and *importance given to corporate social responsibility* as well as influential factors on purchase-decisions and knowledge on different issues related with the fashion industry. At the end, the author thanked the people who took part in the survey.

4.5 Stimuli Development

A message framing stimulus with two levels (gain vs. loss) was developed for this research paper, each having a male and a female version. The messages have a length of 425 to 449 words, depending on whether being gain- or loss-framed and whether being from the perspective of a woman or a man. The text was adapted from a study design intervention by Hull and Hong (2016) and other previous research (Craig R. Hullett, 2006; De Wit, Das, & Vet, 2008; Kalichman & Coley, 1995; Meyerowitz & Chaiken, 1987). The stimulus at hand (see appendix 2) is based on real-world data (Greenpeace International, 2017a), addressing a real issue.

The message pictures the psychological problems of the protagonist which had been caused by excessive shopping behavior, the origins of the addiction and the acknowledgement of the issue by the protagonist. Furthermore, it describes the self-disciplinary treatment the protagonist is following in order to escape the vicious circle of overconsumption. The text is ought to arouse people emotionally with the purpose to elicit emotive responses depending from whether the message is gain- (positive) or loss-framed (negative). The text starts with a warning on the negative psychological effects overconsumption of fashion can have. Next, a fictional character is introduced – *Daniela* or *Peter*, depending on the gender of the reader – who tells her/his story of getting addicted to fashion shopping. The adapted gender version was used so that respondents could identify easier with the protagonist and make the reading experience catchier and bring the matter closer to the reader's reality.

The reader reads the person talking in first person on her regrets on becoming an addict, the health problems involved, such as guilt and shame or restlessness and dissatisfaction, as well as on a way to escape from the mental illness.

After the story of the individual the text is directed straight at the reader again, asking whether he/she is feeling to be addicted and giving advice on how to get out of it in case the person really finds herself in this situation.

4.6 Variable Descriptions

All the variables were measured and assessed on 7-point Likert-scales, (1- strongly disagree, 7 – strongly agree; see appendix 1 for detailed information on the questionnaire).

4.6.1 Manipulation Check

Perceived Text Effectiveness, was assessed by asking participants to complete three items concerning participants' understanding of the promotional text on sustainable clothing consumption right after they have read it. It was investigated whether the text was written in a clear, credible and trustworthy way.

4.6.2 Independent Variables

Message-framing was used as the main independent or causal variable in the experimental study and manipulations involved either loss- or gain-framed messages, which were equally distributed among the participants with the help of a randomizer function.

Materialism (happiness) adapted from (Richins, 2004) was used as a moderator and was measured using three items that assessed happiness seeking through materialism. It was checked as the first thing after demographics so that participants would not be biased by the stimuli text which followed thereafter.

In the process of hypothesis testing, a median split was used on the continuous measure of materialism (the variable was split for values below and above 3.16, which was the reported median value) the sample was divided into two groups of respondents; high and low level of materialism (0 = low; 1 = high). This led to a well-balanced frequency distribution of 102 participants low on materialism and 101 participants high on materialism.

Gender, the second moderator was used to assess whether participants' responses to the stimuli (gains versus loss-framed messages) varied according to gender differences. The interaction with materialism is a second reason for its inclusion.

4.6.3 Dependent Variables

Perceived personal relevance, was assessed by asking participants to answer four items concerning how personally relevant the message was perceived to be, as well as well as its perceived importance, benefits and concerns.

Compliance intention was assessed by asking participants to answer four items related to whether the text was convincing and whether the participant was going to comply with the proposed idea of consuming in a more sustainable way.

Importance given to corporate social responsibility was assessed by asking participants to indicate their level of agreement with three items about how people evaluate corporate social responsibility practices whether ethical standards or environmental concern by corporations is important to them.

Other remaining explanatory variables, such as shopping frequency, influence on purchase-decisions or knowledge on issues related to fashion, were assessed on a 7-point Likert scale like the others.

5. Analysis and Results

The purpose of this chapter is to present the analysis conducted on the collected data, together with the intervention of the stimuli, reliability tests and factor analysis on the assessment items.

5.1 Sample Characterization

The statistical analysis started with descriptive statistics, in order to understand the sample distribution in terms of gender, age, origin and other demographic characteristics. As aforementioned, gender was rather equally distributed among the two hundred and three considered responses, with approximately 46% males and 54% females. Residents of 25 different nations answered the questionnaire. A clear majority of Italian residents (38,9%), followed by Austrian (15,3%), German (12,8%) and Portuguese residents (11,8%) took part in the study. Even though the sample includes people from all over the world, including South American, Asians and North American, more than 85% of participants are from Europe (178 responses). Sample homogeneity is given in regard to residency amongst the two message possibilities; gain and loss.

The sample consisted of rather young people, given the percentages of approximately 29% for eighteen to twenty-four aged and 52% for twenty-five to thirty-four aged people, together making 81% of all participants. Age levels range from under 18-year-olds to the highest age spectrum of fifty-five to sixty-four years, whereas the median does not differ

much from the mean. Moreover, sample members show high educational levels, with many Bachelor- (40%) and Master-degrees (29%). This is also evident when looking at occupation data, as 86 people are still studying and 85 people are committed to a full-time employment contract, which amount up to more than three quarters of the sample size.

The high amount of young people in this sample, who are still in their education, is very apparent when looking at cross tabulations. More than one fourth (56 participants) have a yearly income of less than €10.000,00.

5.2 Data Screening Univariate Outliers and Multivariate Outliers

Following the sample characterization, both univariate as well as multivariate outlier analyses were performed to test for any inconsistencies in the data. This included first, the creation of Z-scores of the dependent variables in order to find univariate outliers and second, a Mahalanobis distance (MD) calculation, which led to a data sheet with 182 remaining responses. After having compared pre-tests running multivariate analysis of variances tests with and without the outliers it showed that taking them off from the sample did not lead to any improvements in results and therefore, the original sample was kept.

5.3 Scale Reliability

Even though scales were adapted from the literature, it is necessary to assure reliability and consistency of the items used. This procedure was done by assessing the Cronbach's α (alpha) for each item. It is a widely used statistical measure for Likert-type scales and explores internal consistency of multi-item scales that intend to measure the same construct. The Cronbach's alpha is expressed on a range from 0.1 to 1, but only values higher than the minimum acceptable value of 0.6 are commonly considered being good values for research purposes. Anyhow, values above 0.9 are suggesting redundancy among scale items and should therefore be avoided (Streiner & Streiner, 2003). This induces that the higher the value, but only between 0.6 to 0.9, the more internally consistent and reliable is a certain cluster of items and can thus be used as such.

Regarding materialism, it was needed to recode one item (item 4), because of its reversed coding in the questionnaire. The result for internal consistency of the different scales showed good numbers, presented in the table below:

Scale	Initial number of items	Cronbach's Alpha	Cronbach's alpha if items deleted	Items deleted	Final number of items
Materialism (Success)	3	.743	-	-	3
Materialism (Centrality)	3	.618	.629	1	2
Materialism (Happiness)	3	.853	-	-	3
Perceived Advertisement Effectiveness (Manipulation Check)	3	.743	.797	-	3
Perceived Personal Relevance	4	.736	-	-	4
Compliance Intention	4	.803	-	-	4
Importance given to CSR	3	.864	-	-	3

Table 1: Reliability Test for Multi-Item Scales

Despite the fact that there could have been an improvement done on the *perceived advertisement effectiveness*' alpha (+ .054), the item "The text is clear" was not taken from the scale due to its high importance for the manipulation check. Besides that, the Cronbach's alpha was showing a sufficient value of .743 and thus an exclusion was not forcedly needed.

5.4 Manipulation Check Results

No significant results were expected in the manipulation check as for both intervention possibilities it was aimed for positive values that range from *somewhat agree* to *strongly agree*. Independent *t-tests* at a 95% confidence indicate that the manipulation check was successful for both loss versus gain-framed message conditions showing that both versions of the text were clear, credible and trustworthy ($M_{\text{gains}} = 5.45$ and $M_{\text{losses}} = 5.51$; $t(201) = -.579$, $p = .563$).

5.5 Factor Analysis

A factor analysis was performed for the dependent variable *perceived personal relevance* and it showed that this variable had two different dimensions, which one was opted out

since it was investigating participant's opinion on other people, but not on themselves. Therefore, a new dependent variable was created considering the personal benefits' dimension only (*the text talks about something which concerns me; the text talks about something which is important for me*).

The materialism moderator underwent also a segmentation and was split into success, centrality and happiness. This created three new moderators by averaging the respective items on these variables and called Success (3 items), Centrality (2 items) and Happiness (3 items). The continuous cycle of happiness-seeking through materialism is a controversial act which, instead of bringing the desired fulfillment, is negatively affecting self-esteem, well-being and quality of life fulfillment (Kasser, 2002; Richins & Dawson, 1992; Sirgy, 1998). This particular part of materialism is of great interest for this present study as it can be seen as the root cause of the overconsumption issue in fashion. The author is thus interested in using the dimension of happiness seeking through materialism as a moderator variable. Interestingly, it showed also to be more robust in the reliability analysis than the other two dimensions with a Cronbach's alpha of .853 in comparison to .743 (Success) and .629 (Centrality). It is therefore not only justified from a fundamental but also from a numeric point of view.

5.6 Main Results

Since all item scales have been checked on reliability, the variables been validated and new factors been created, the hypotheses were tested next.

5.6.1 The effect of gain- and loss-framed promotional text

H1: A gain-framed promotional text will be more effective than a loss-framed promotional text when promoting sustainable consumption in fashion, in:

H1a: arousing perceived personal relevance,

H1b: increasing compliance intention, and

H1c: raising importance given to corporate social responsibility.

The first hypothesis, which suggests that gain (versus loss) framing will have a positive effect on (a) perceived personal relevance, (b) compliance intention and (c) importance given to corporate social responsibility, was tested in a first analysis.

A multivariate analysis of variance (MANOVA) was tested on the three dependent variables but no significant main effects were obtained for perceived personal relevance (PPR) ($F(1,201) = .99, p = .320$); compliance intention (CI) ($F(1,201) = 1.13, p = .289$) and importance given to CSR (CSR) ($F(1,201) = .96, p = .327$). Respondents showed no significant mean differences between gains or losses message-frames, meaning that the message condition did not have an effect (see Table 2).

Dependent Variable	Message Frame		Degrees of freedom	<i>t</i> -test value
	Gain Mean	Loss Mean		
PPR	3.80	3.57	201	1.03++
CI	4.38	4.53	201	-.96++
CSR	5.84	5.66	201	1.38++

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$, ++ $p > .1$

Table 2: Results Main Effect Type of Message Estimated Marginal Means

Although the means related to gain-framed messages are slightly higher for perceived personal relevance and importance given to CSR, these are not statistically significant, hence, the H1 is rejected. Further tests were conducted to evaluate the moderating effects of both gender and materialism on the relationship between message-framing and the dependent variables.

5.6.2 The moderating effects of gender and materialism

H2: The impact of message-framing on consumers' attitudes will be moderated both by gender and materialism differences:

H2a: The higher the level of materialism orientation, the higher the impact of message-framing on gender differences.

H2b: The lower the level of materialism the lower the impact of message-framing on gender differences.

In order to test the second hypothesis, which suggests that the impact of message-framing is moderated by both gender and materialism differences, so that, (H2a) the higher the level of materialism orientation, the higher the impact of message-framing on gender differences; (H2b) the lower the level of materialism the lower the impact of message-framing on gender differences, a MANOVA was again performed.

Results indicate a statistically significant three-way interaction effect on type of message appeal on CSR ($F(1,201) = 8.06, p < .05$), suggesting the potential moderating effect of both gender and materialism. Follow-up tests were conducted considering both the high and the low materialism-orientation of the sample, separately (see Table 3).

	Gain Frame		Loss Frame		Main Effect Gender	Main Effect Message	Interaction Effect Gender*Message
	Male	Female	Male	Female	<i>F test</i>	<i>F test</i>	<i>F test</i>
N = 101	N = 24	N = 23	N = 31	N = 23			
High Materialism	6.02 (.760)	5.39 (1.061)	5.25 (1.219)	5.69 (.771)	.25++	1.36++	7.25**
N = 102	N = 22	N = 32	N = 16	N = 32			
Low Materialism	5.60 (.963)	6.19 (.742)	5.79 (.749)	5.95 (.866)	4.84*	.02++	1.52++

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$, ++ $p > .1$

Table 3: Results Three-Way-Interaction Effects Materialism*Type of Message*Gender on CSR

For the high materialism-orientation condition, results of a 2 (message-framing) x 2 (gender) MANOVA reveals to be significant not only on importance given to CSR ($F(1,99) = 7.26, p < .05$), but also on perceived personal relevance ($F(1,99) = 4.24, p < .05$), and marginally significant on compliance ($F(1,99) = 3.26, p < .05$). Results indicate that

message-framing impacts high materialism-oriented male and female participants differently. Whereas female participants seem to be more impacted by loss-framed messages (Perceived Personal Relevance (($M_{\text{female, losses}} = 4.41$ vs. $M_{\text{female, gains}} = 3.52$; $t(44) = -1.84, p = .072$); (Compliance Intention ($M_{\text{female, losses}} = 4.76$ vs. $M_{\text{female, gains}} = 4.10$; $t(44) = -2.17, p < .05$)), male participants seem to be impacted more by gain-framed messages (Importance given to CSR ($M_{\text{male, gains}} = 6.02$ vs. ($M_{\text{male, losses}} = 5.25$; $t(53) = 2.708, p < .05$)), fully supporting H2a.

However, when considering the low materialism-orientation sample, results of the 2 (message-framing) x 2 (gender) MANOVA indicate no significant interaction effects (all $F_s < .14, p > .05$), fully supporting H2b (see table 4).

	Gain Frame		Loss Frame		Main Effect Gender	Main Effect Message	Interaction Effect Gender*Message
	Male	Female	Male	Female	<i>F test</i>	<i>F test</i>	<i>F test</i>
	N = 22	N = 32	N = 16	N = 32			
Perceived Personal Relevance	3.88 (1.39)	3.81 (1.70)	3.12 (1.84)	3.18 (1.31)	<.001++	4.68*	.04++
Compliance Intention	4.48 (1.21)	4.41 (1.17)	4.56 (1.35)	4.55 (1.05)	.02++	.19++	.01++
Importance given to CSR	5.60 (.963)	6.19 (.742)	5.79 (.749)	5.95 (.866)	4.84*	.02++	1.52++

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$, ++ $p > .1$

Table 4: Results Interaction Effects Type of Message*Gender among low levels of Materialism

These results clearly indicate that gender differences indeed moderate the relationship between message-frame types on the outcome variables, when there is high versus low materialism-orientations. Further, it suggests that female and males are also drawn by different motivations and that, message-framing plays an important role in eliciting these type of motivations, as can be seen next.

5.6.3 Gender differences in social and environmental concern depending on the message appeal

H3: Increases in materialism-orientation will lead to gender differences in social and environmental concern depending on whether the message is framed with a gain (loss) appeal.

To test hypothesis three, where the author predicts that increases in materialism-orientation will lead to gender differences in social and environmental matters depending on whether the message is framed with a gain (loss) appeal, further tests were performed.

To test H3, a *t-test* analysis reveals that male participants high in materialism seem to be impacted by gain-framed messages more on social- and environmental-related issues (Importance given to CSR ($M_{\text{male, gains}} = 6.02$ vs. $M_{\text{male, losses}} = 5.25$; $t(53) = 2.70$, $p < .05$)).

In fact, the moment materialism-orientation raises, male participants rank gain-framed messages significantly higher than their female counterpart on that concern (Importance given to CSR ($M_{\text{male, gains}} = 6.02$ vs $M_{\text{female, gains}} = 5.39$; $t(45) = 2.37$, $p\text{-value} < .05$)). Yet,

female participants show to be impacted by loss-framed messages on more personally relevant issues (Perceived Personal Relevance ($M_{\text{female, losses}} = 4.41$ vs. $M_{\text{male, losses}} = 3.58$; $t(52) = -1.97$, $p = .054$)). Yet, no significant differences are observed between males and

females when it comes to compliance on responses to either gains or loss-framed messages (Compliance Intentions ($M_{\text{male, gains}} = 4.50$ vs. $M_{\text{female, gains}} = 4.10$; $t(45) = 1.25$, $p > .05$) ($M_{\text{male, losses}} = 4.33$ vs. $M_{\text{female, losses}} = 4.76$; $t(52) = -1.31$, $p > .05$)), partially supporting H3.

5.7 Further Analysis or other findings

In the low materialism range, significant differences were found among gender differences on importance given to CSR ($F(1,100) = 4.84, p < .05$). Further tests followed and revealed, that male respondents give significantly less importance to CSR than females when having been exposed to the gain-framed message (Importance given to CSR ($M_{\text{male, gains}} = 5.60, M_{\text{female, gains}} = 6.19; t(52) = -2.55, p\text{-value} < .05$)).

6. Conclusion and Future Research, Implications and Limitations

6.1 Conclusion and future research

The study's purpose is to understand how message framing could be used efficiently in promoting a more sustainable consumption lifestyle (RQ1), which is healthier for both, the human and environment, and encouraging sufficiency among fashion consumers with the help of social marketing (RQ2). In order to contribute useful and essential knowledge to the topic the author was investigating three variables possibly involved in the decision-making process; message framing, gender and materialism. In particular, because of the well-distributed sample in terms of gender and age, the study is able to shed light on a generation which is highly relevant to the topic. In trying to find a way of convincing people from consuming less in order to be healthier, the study was contributing to previous research which was lacking such a combination, even though several studies were conducted around similar topics (i.e. Amatulli, de Angelis, Peluso, Soscia, & Guido, 2017; Detweiler et al., 1999; Dillard & Shen, 2007; Ghuge et al., 2011; Handa & Khare, 2013; Hull & Hong, 2016; Kilbourne & Pickett, 2008; Kolandai-Matchett, 2009; Pal, 2017; Rothman et al., 1999; Workman & Lee, 2011, etc.).

The findings of this study suggest that message framing used in the context of social marketing can have an impact on consumers' attitudes, when moderated by gender and level of materialism, and is therefore a fair tool for encouraging sufficiency among fashion consumption when used in combination with the other influential factors. The promotional text contains the story of someone who suffers psychological problems due to excessive clothing consumption. A possible reason for the low sensitiveness to the message frames and thus difficulties in finding relevant results can be found in the low risk associated with the matter. Psychological problems related with fashion consumption, such as shopping

addiction, might appear as something very improbable. Moreover, people might be unwilling to admit to themselves such a tendency. However, when looking at the numbers of the fashion industry over the last years and the galactic success of fast fashion, one might assume that shopping has become some kind of national sport; the production of clothes doubled from 2000 to 2014 with an average consumer who keeps his clothing items about half as long as 16 years ago, and consequently purchases 60 percent more of them (Greenpeace International, 2017b). Highly materialistic consumers, who are – next to fast fashion companies – responsible for such developments, need to be addressed with different messages depending on their gender, which again is persuaded by different motivational factors. Hence when addressing materialistic women, a loss-framed message should be used, having a higher impact on their perceived personal relevance, as well as consequently leading to significantly higher commitment to comply with the promotional message to consume less clothing.

Unlike theory's suggestion that the higher the involvement on women the more sensitive they will become to gain-framed messages, the results show a reversed picture. The author suspects the generally high involvement of women in fashion to have an opposite effect on the outcome variables in this case because the higher the level of materialism the higher the involvement in fashion becomes. Taking this thought further, materialism correlates negatively with environmentally responsible behaviors, implying that involvement in fashion has a negative impact on environmentally responsible behaviors too. This intertwined relationship of different variables might lead to the eventuality of women becoming insensitive to gain-framed messages. To sum things up, the author reasons with the promotional content of the messages which is encouraging a behavior which is opposing the high involvement of women in fashion consumption, suggesting to buy less.

The result is different, when looking at women low in materialism, as they feel moved the most by gain-framed message in terms of environmental and social responsibility, demonstrating the anticipated effect found in literature, that they are generally more sensitive to social and environmental topics than male. Still, when the factor materialism comes into play men are more responsive to gain-framed messages, enlisting in an overall high rating towards social and environmental concern, which is more pronounced than perceived personal relevance or compliance intentions. Finally, precise and adequate targeting will be needed in order to convince the reader of a message.

6.2 Implications

This research paper contributes to literature in the topics of message-framing (A.J. Rothman & Updegraff, 2010; Kiene, Barta, Zelenski, & Cothran, 2005; Toll et al., 2008), materialism (Burroughs & Rindfleisch, 2002; Kilbourne & Pickett, 2008; Richins & Dawson, 1992) and gender studies (Handa & Khare, 2013; Shim, 1995; Workman & Lee, 2011) related to social marketing for sustainable fashion and encouraging sufficiency (Pal, 2017) by giving insights on main and interaction effects on different consumer attitudes. To sum up the key takeaways, first, materialism and gender are moderating the effects of message-framing and second, materialistic women are likely to reverse their responsiveness to message-framing when confronted with a message that opposes their lifestyle or credo. Low future risk perception of a prevention behavior does not change the fact that one enjoys clothing purchases and until consumers are not getting aware of the underlying potential dangers – not only for the people working in the supply chain and the environment – high involvement for consumption reduction can be developed. Once consumers reach this point however and change their attitudes, the author assumes that message-framing needs to be reversed again and thus is subject to constant change, following consumer attitudes and changes. This calls for perpetual research on the topic, in order to steadily refresh the gained knowledge, also pinning it down to different regions of the world, with people inheriting different consumer attitudes and lifestyles.

The same is valid for people working with message framing in private companies, NGOs or public policy. The insights need constant refreshment before being applied practically, which hopefully happens in many occasions. Prior randomized controlled trials (RCTs) to guarantee efficiency and to uncover unplanned consequences should be a constant tool not only for companies, but for public policy entities in particular. There are improvements on the field with emerging governmental institutions like the nudge unit in the UK (The Behavioral Insights Team, 2018), but it should become the norm. The behavioral insights teams' experiments and findings account for major improvements in tax collection, saving energy and limiting antibiotic prescriptions (Halpern, 2015). A study conducted by highly renowned researchers published in *Psychological Science* is proving the cost-effective implementation of behavioral nudges (Shlomo et al., 2017). So, why should behavioral economics used in the healthcare or energy industry not be translated to the fashion sector and in particular improve the way we consume our clothes? There are enough costs to be tackled, they are just hidden from our sight and low in perceived risk.

6.3 Limitations

Although the findings of this dissertation are contributing interesting knowledge to the field of message framing in combination with gender and materialism studies and are thus leading to a more profound understanding of the topic, a set of limitations including monetary and time-related ones need to be recognized.

First, the non-probabilistic convenience sampling technique chosen for this study and thus the questionnaire's distribution via the author's online social media network made it possible for all kinds of people represented in this social network to take part. The outcome of this tool was a diverse and multicultural sample, representing people from 25 different countries (see graph 1).

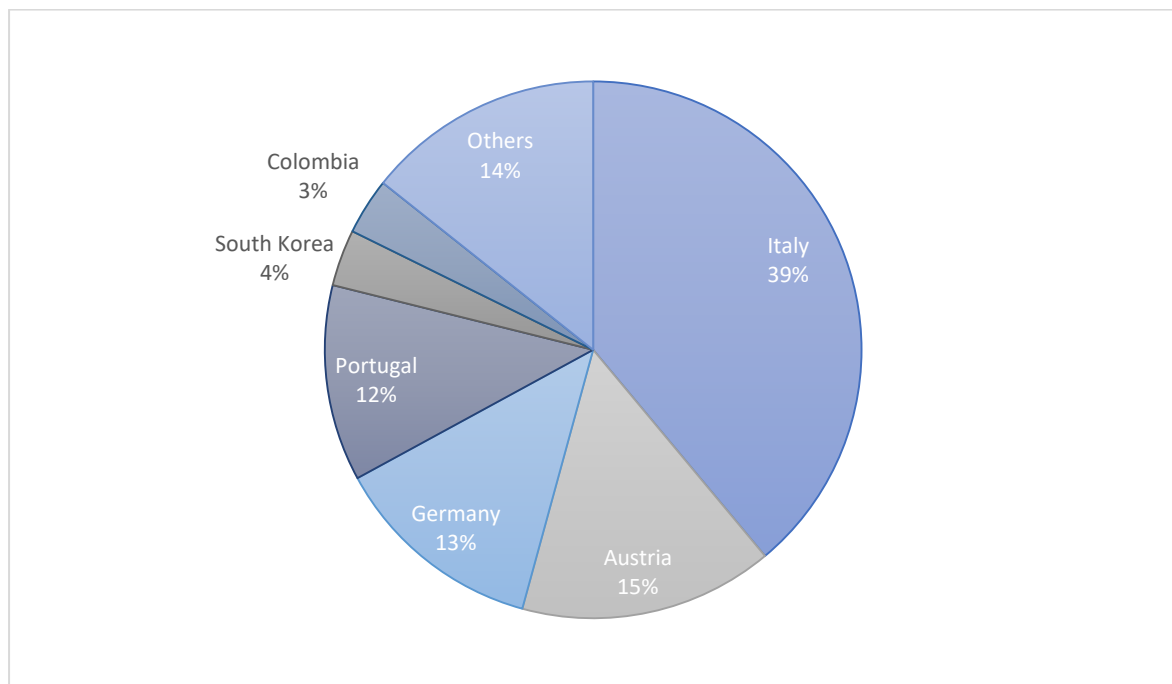


Figure 3: Country Distribution Participants (Others including responses from Europe, Asia, Africa and South America)

Consequently, the sample of the research study represents predominantly a Central and Southern European point of view with an international touch. This makes the results hard to grasp and pin them down to a certain region of the world. One possibility of interpretation would be to refer to the global consumer, but again, then Europe is represented too strongly. Having more participants in the sample could help in overcoming this issue as the influence becomes smaller in terms of percentages. Moreover, the overall

significance of the study would improve. Unless this is an option, future researcher should simply stick to a certain region of interest.

Secondly and still concerning the survey, due to its online distribution it is difficult for the author to assess the overall conditions under which the questionnaire was filled out. Was the respondent in a quiet space and could concentrate or was it loud and the participant would get distracted easily? Was the respondent tired or wide awake? Was the respondent bored or excited? All this is affecting the quality of answers and is thus a limitation because the author cannot guarantee good overall circumstances under which the survey was filled out. Furthermore, the length of the study required a higher motivation than usual in answering a survey. The fact that this study recorded a dropout rate of approximately 25% speaks in favor of establishing controlled circumstances. High dropout rates in online surveys are common, suggests literature (Reips, 2002), still they should be avoided. The author suggests to either shorten the length of the survey or to guarantee good and controlled circumstances by inviting participants to a certain location if it is possible in the sense of time and money.

In addition, the study was assessing attitudes, intentions and perceived relevance, while this doesn't show how people would behave in reality, like the author mentioned in the section of the attitude behaviour gap of the literature review. The importance of gathering real-life data and numbers is undisputable, as the condition wants to test exactly that; whether a social marketing campaign can change behaviour and consumption patterns. Unfortunately, this is only possible to check in long-term studies on limited samples in terms of demographic data, such as location and age. Due to time and money restraints such a collection of data was not feasible in the frame of a master dissertation. The author strongly encourages other researchers to engage in the topic, develop long-term study designs and conduct field experiments.

Finally, a modified research design with a different stimulus and refined hypothesis could lead to different and maybe clearer results, supported by higher significance levels under the logic of null-hypothesis testing. The findings need further research for being able to be generalized, and again, preferably with a larger and regionally limited sample size.

7. Appendices

7.1 Appendix 1: Questionnaire

Hi,

This survey is part of my master dissertation that aims to set up a real-world project. So, you see, your diligent participation is pretty important.

The survey should take approximately 7 minutes to complete and all data obtained will be kept anonymous and confidential, my name is Chris and not Zuckerberg. If you have either questions or feedback regarding the survey please contact me via: 152116256@alunos.lisboa.ucp.pt

Cheers and enjoy!

Chris

What is your gender?

<input type="radio"/> Male	<input type="radio"/> Female
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What is your age?

▼ Under 18 ... 85 or older

What is your occupation?

- Employed full time
- Employed part time
- Unemployed looking for work
- Unemployed not looking for work
- Student

Retired

Disabled

What is the highest level of education you have completed?

Less than High School

High School

Bachelor Degree

Master Degree

Professional Degree

Doctoral Degree

Where did you live in the past 5 years? If you haven't been living for 5 years in one country, which is the country you spent the most time in over the last 5 years?

▼ Please select below... .. Other

What is your current annual household (net) income in Euros?

Under €10,000

€10,000 - €19,999

€20,000 - €29,999

€30,000 - €39,999

€40,000 - €49,999

€50,000 - €74,999

€75,000 - €99,999

€100,000 - €150,000

Over €150,000

Do not wish to share this information

How do you feel about success? On a scale from 1 (strongly disagree) to 7 (strongly agree), please indicate your level of agreement on each of the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I admire people who own expensive homes, cars, and clothes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The things I own say a lot about how well I'm doing in life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to own things that impress people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How do you feel about centrality? On a scale from 1 (strongly disagree) to 7 (strongly agree), please indicate your level of agreement on each of the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I try to keep my life simple, as far as possessions are concerned.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Buying things gives me a lot of pleasure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like a lot of luxury in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How do you feel about happiness? On a scale from 1 (strongly disagree) to 7 (strongly agree), please indicate your level of agreement on each of the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
My life would be better if I owned certain things I don't have.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'd be happier if I could afford to buy more things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

On the next page you will be provided with a short text. Please read it carefully. The text is based on real-world data taken from the Greenpeace Report *After the Binge, the Hangover (2017)*. I am looking for your perception concerning this text. Afterwards I will be asking you a set of questions related to this. There are no right or wrong answers.

Gain-framed text (male)

Overconsumption of fashion can put you at risk of negative psychological effects. The more clothes you buy, the larger the risk of suffering from addiction to buy more and more. Make sure you are not obsessed with shopping!

Peter is a 24-year-old man. He is an excessive shopper. He became one when he broke up with his girlfriend two years ago. We asked Peter about the beginnings of his obsession. He said, "I never thought I would turn into such a shopping maniac. I enjoyed purchasing clothes before, but I usually went to a store only when I really needed a new piece of clothing. Okay, sometimes I went to a shopping tour with my girlfriend for no good reason. Then, I usually limited myself to try-ons without buying or basically advising her. I rarely bought something without proper need for it. How could this have happened to me? I know what excessive shopping is, but I thought that it could only happen to people who are mindless about their shopping habits and spend money at will. When my girlfriend and me broke up some years ago I was looking for happiness and self-worth in buying clothes. For

some people it is sweets, for some it is partying, for me it was fashion.” He went on to explain how he was convinced by the elusive promises of fashion advertising, but contrary to that, owning more clothes didn’t make him happy. Instead, he is deeply ambivalent about his own behavior. Stating guilt and shame, he often feels bad about his own useless purchases and overspending habits. He realized that shopping does not lead to increased happiness in the long term. He experiences emptiness and boredom in between shopping periods, with feelings of restlessness and dissatisfaction fueling his desire for further shopping experiences.

"I realized early that I was going into the wrong direction and started some kind of self-disciplinary treatment. I am writing down the amount of money I am spending and the amount of clothes I am purchasing each week. That helps me to stay healthier and with more money" (he laughs).

Ask yourself, are you obsessed with shopping? If you are, gain the opportunity to feel better and shop less. Excessive shopping can give you a feeling of depletion, fatigue and emptiness after the shopping excitement fades away. If you care about your psychological health, you need to take your shopping patterns into consideration. By shopping in a moderate way, you can gain long-term benefits like emotional stability, happiness and psychological health in general.

Loss-framed text (male) Please see appendix 2

Gain-framed text (female) Please see appendix 2

Loss-framed text (female) Please see appendix 2



Thinking about the text you just read, on a scale from 1 (strongly disagree) to 7 (strongly agree), please indicate your level of agreement to the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The text is clear.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The text is credible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The text is trustworthy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The text is effective in making people think about their clothing shopping habits.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The text is effective in getting people's attention to shop in a more mindful way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the text you just read, on a scale from 1 (strongly disagree) to 7 (strongly agree), please indicate your level of agreement to the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
People who read the text will perceive it as personally relevant.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People who read the text will think about their personal benefits.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The text talks about something which concerns me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The text talks about something which is important for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thinking about the text you just read, on a scale from 1 (strongly disagree) to 7 (strongly agree), please indicate your level of agreement to the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The text is convincing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consumers will comply with the appeal in the text.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I intend to comply with the appeal in the text.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will comply with the appeal in the text.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

You are almost done!

In the following section, think about clothing basics only. Clothing basics may include plain t-shirts, sweaters and trousers.

How often do you shop for clothes?

▼ Three times a week or more ... Less than once a month

Please rank the following aspects according to their influence on your purchase decisions. Put the most influential aspect on top.

- _____ Environmental aspects
- _____ Social aspects
- _____ Personal aspects

Please rate the following aspects according to their influence on your purchase decisions. Indicate a number for each item. The total must give 100.

- Price : _____
- Comfort : _____
- Style : _____
- Country of origin : _____
- Materials : _____
- Chemicals involved in production : _____
- Convenience (store location, order clothes online, etc.) : _____
- Total : _____

Now, please indicate your assumed level of knowledge about the following aspects on a scale from zero to one hundred.

0 10 20 30 40 50 60 70 80 90 100

Environmental issues related to fashion	
Societal issues related to fashion	
Health issues related to fashion	

On a scale from 1 (strongly disagree) to 7 (strongly agree), please indicate your level of agreement to the following statements.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
The issue of corporate social responsibility is important to me (e.g., factory safety, fair labor practices, community service).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The issue of corporate environmental responsibility is important to me (e.g., recycling, energy efficiency, minimizing pollution).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is important to me that companies maintain high ethical standards in general.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

You made it, thanks!

Again, if you have any questions or simply want to go for a coffee, please hit me up on this e-mail: 152116256@alunos.lisboa.ucp.pt

Please **click on the button below** for ending the study and having a great day!

7.2 Appendix 2: Stimulus

[Loss Female/Gain Male]:

Overconsumption of fashion can put you at risk of negative psychological effects. The more clothes you buy, the larger the risk of suffering from addiction to buy more and more. Make sure you are not obsessed with shopping!

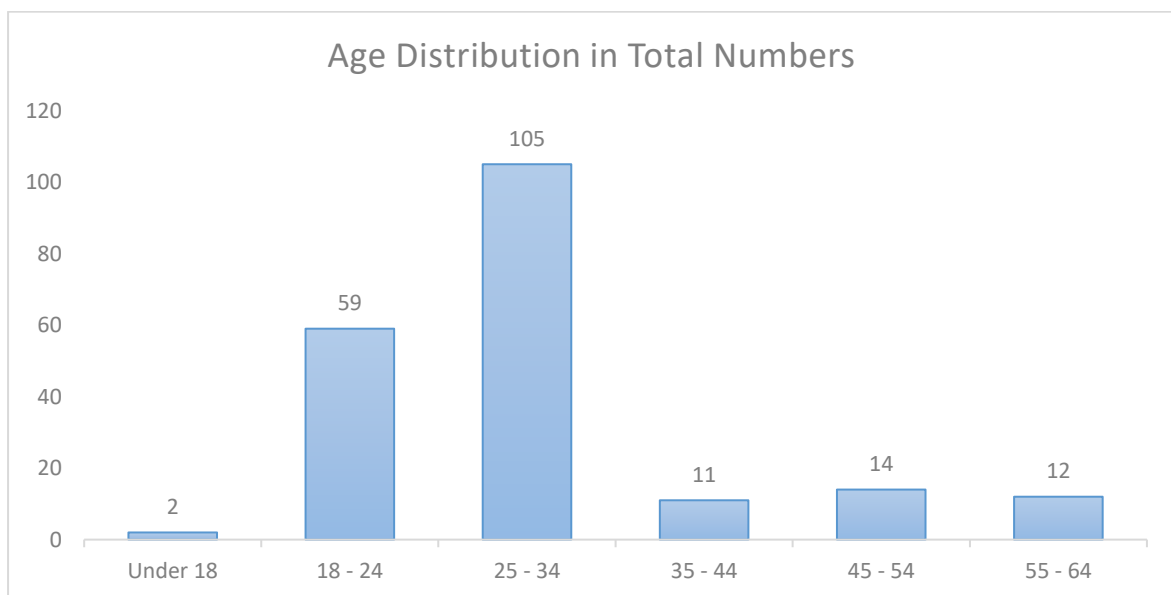
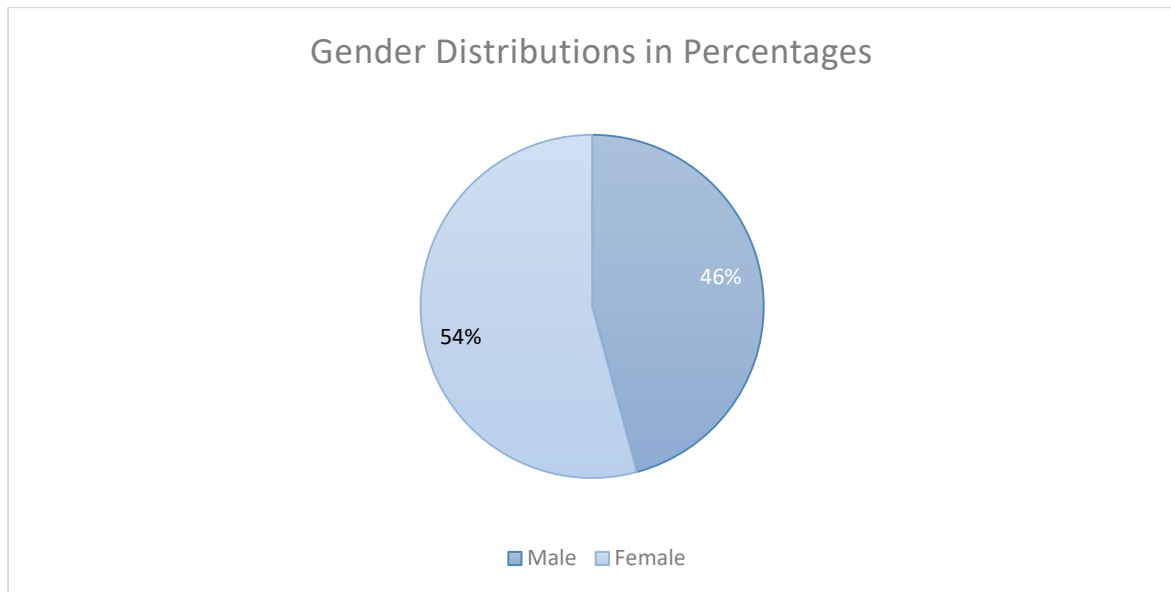
Daniela/Peter is a 24-year-old **woman/man**. **She/he** is an excessive shopper. **She/he** became one when **she/he** broke up with **her/his boyfriend/girlfriend** two years ago. We asked **Daniela/Peter** about the beginnings of **her/his** obsession. **She/he** said, "I never thought I would turn into such a shopping **queen/maniac**. I enjoyed purchasing clothes before, but I usually went to a store only when **an important event was coming up or when I really needed a new piece of clothing/I really needed a new piece of clothing**. Okay, sometimes I went to a shopping tour with my **friends/girlfriend** for no good reason. Then, I usually limited myself to try-ons without buying or basically advising **my friends/her**. I rarely bought something without proper need for it. How could this have happened to me? I know what excessive shopping is, but I thought that it could only happen to people who are mindless about their shopping habits and spend money at will. When my **boyfriend/girlfriend** and me broke up some years ago I was looking for happiness and self-worth in buying clothes. For some people it is sweets, for some it is partying, for me it was fashion." **She/he** went on to explain how **she/he** was convinced by the elusive promises of fashion advertising, but contrary to that, owning more clothes didn't make **her/him** happy. Instead, **she/he** is deeply ambivalent about **her/his** own behavior. Stating guilt and shame, **she/he** often feels bad about **her/his** own useless purchases and overspending habits. **She/he** realized that shopping does not lead to increased happiness in the long term. **She/he** experiences emptiness and boredom in between shopping periods, with feelings of restlessness and dissatisfaction fueling **her/his** desire for further shopping experiences.

"I **wish I would have realized sooner that I was going into the wrong direction. Then I could have started some kind of self-disciplinary treatment earlier/realized early that I was going into the wrong direction and started some kind of self-disciplinary treatment. Now** I am writing down the amount of money I am spending and the amount of clothes I am purchasing each week. That **could have helped/helps** me to stay healthier and with more money **for longer**"(he laughs).

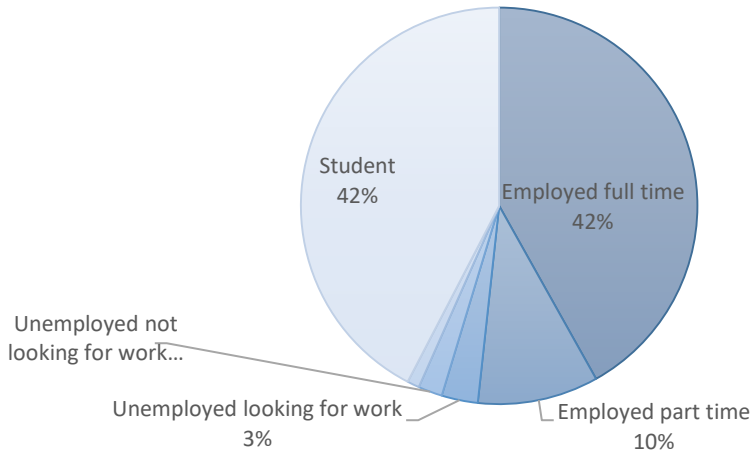
Ask yourself, are you obsessed with shopping? If you are, **don't lose out on/gain** the opportunity to feel better and shop less. Excessive shopping can give you a feeling of depletion, fatigue and

emptiness after the shopping excitement fades away. If you care about your psychological health, you need to take your shopping patterns into consideration. By shopping in **an exaggerated/a moderate** way, you can **lose out on/gain** long-term benefits like emotional stability, happiness and psychological health in general.

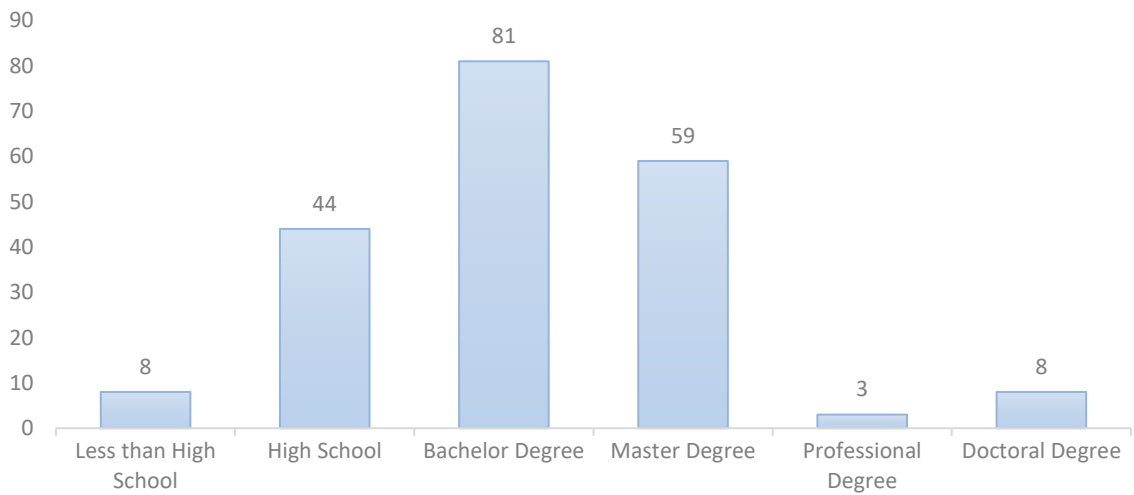
7.3 Appendix 3: Sample Characteristics



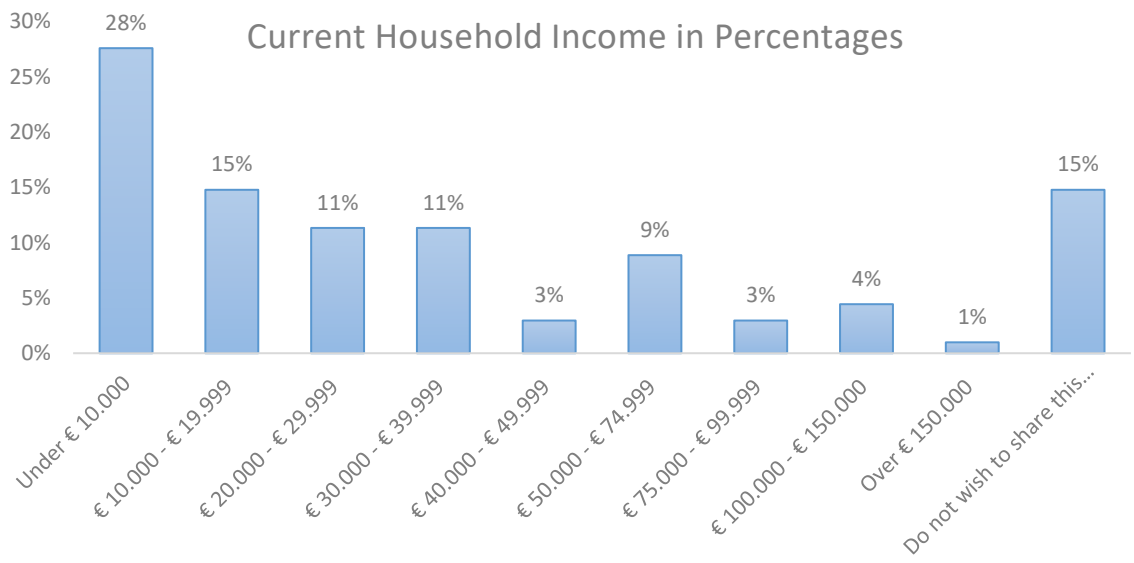
Occupation Distributions in Percentages



Education Levels in Total Numbers



Current Household Income in Percentages



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