Psychosocial Factors Influencing Young Consumers’ Clothing Disposal Behaviour in Greece

- An Application of Triandis’ Theory of Interpersonal Behaviour

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Abstract
The following Master thesis deals with the problem of clothing disposal in Greece examining primarily the psychosocial factors that influence this behaviour. More specifically, the author sets a theoretical framework using the Triandis’ (1977) model of Interpersonal Behaviour and examines how the factors included in the model influence clothing disposition among young individuals in Greece as well as to what extend they do it. Furthermore, the author explores the clothing disposition behaviour of the above mentioned sample regarding an old t-shirt.

The thesis consists of six chapters. In the first chapter, the author examines the problem of clothing disposal in terms of how it is formulated and what are the environmental effects deriving from it. Due to the fact that there is no information about clothing disposal in Greece, the problem is examined in relation to countries like the USA and the UK and then the findings are connected to Greece so the reader can understand the importance of the problem in the country.

The second chapter sets the theoretical framework of the problem by examining the existing theories and studies in the fields of disposition and clothing disposition. Moreover, in this chapter there is a thorough analysis of Triandis’ (1977) Theory of Interpersonal Behaviour to guide the reader through the rest of the paper.

In the third chapter, the research methodology is analysed in respect to the general design, the sampling technique used and the questionnaire development and distribution.

After setting all the necessary elements, in chapter four the author analyses the results of the research with a statistical method based on SPSS. Findings of the three research questions are demonstrated in this chapter with a small discussion regarding them.

Chapter five consists of the discussion around the findings of the research. Under this section the author discusses how and why the psychosocial factors, as presented in Triandis’ (1977) Theory of Interpersonal Behaviour, influence clothing disposal behaviour among young individuals in Greece as well as the actual disposal behaviour.

Finally, in chapter six of this thesis a conclusion of the findings takes place with parallel suggestions about further research in this field and some proposals in relation to the problem.

Keywords: clothing disposal behaviour, Greece, Triandis’ Theory of Interpersonal Behaviour, deposition behaviour
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1. Introduction

Clothing disposal is considered a complex issue of great significance for the modern society. Although disposal in general and specifically disposal of clothes and textiles was in the past a neglected subject, it has recently drawn a lot of attention. Clothing disposal is considered primarily an environmental issue directly related to the amount of clothing waste that concludes to landfills, and consequently to the effects that arise from their decomposition. Furthermore, another issue that is connected to the clothing disposal is over consumption of garments which naturally leads to their over disposal (see figure 1 below).

![Figure 1: Problem of Clothing Disposal](image.png)

Greece is a country where environmental issues are not of central focus, regarding both governments and inhabitants. Information concerning clothing disposition or even textile disposition does not exist so the author examines the problem in respect to countries that data about textile and clothing waste are available, like the USA and the UK, and eventually tries to compare them to Greece in order to provide a measurement that reveals the significance of the problem. It is believed that information regarding clothing and textile waste generation and treatment in the USA and the UK can provide a comparison point to a country like Greece, where waste management policies are in an embryonic stage.

1.1 Problems Related to Clothing Disposal

The rise of environmental issues during the 1970’s, with the further establishment of international conferences and debates in the 1980’s and the 1990’s, led to the increase of environmental consciousness among consumers, communities, governments and academics (Jackson, 2005; Bianchi & Birtwistle, 2010). The outcome of these conferences was the realization that consumers’ choices, behaviours and lifestyles are critical in the efforts of establishing a sustainable development (Jackson, 2005).
Nowadays, in almost all countries there are programs regarding municipal solid waste management including materials like plastic, glass, and paper, but the same does not apply for textiles and clothing waste. Due to this lack of infrastructure a big amount of textile solid waste ends up into landfills. In the USA, in 2010, 13.12 million tonnes of textile solid waste were generated; from which 1.97 million tonnes were recovered consisting 15 per cent of the total textile waste (U.S. Environmental Protection Agency, 2012). This figure includes textile waste from residential, commercial and institutional sources. In particular for clothing and footwear only 14 per cent of the total waste was recovered either for export or for reprocessing (U.S. Environmental Protection Agency, 2012). According to Ha-Brookshire and Hodges (2009), on an average basis an individual discards around 30 kg of used clothing and textiles every year in the USA.

In the UK, one million tonnes of textile solid waste deriving from households as well as from commercial activities end-up in landfill (Bianchi & Birtwistle, 2010; I+G Cohen Ltd, 2012). This figure might be even higher according to a report for the University of Cambridge (2006) where it is claimed that the total waste of clothing and textiles in the UK reaches 2.35 million tonnes. From this amount 13 per cent goes to material recovery, 13 per cent to incineration and the remaining 74 per cent (that is 1.8 million tonnes) end-up in landfills. More specifically, regarding clothing waste 30 per cent is disposed in charity shops and clothing banks, 10 per cent is incinerated and the rest 60 per cent goes to landfills (Alwood, Laursen, de Rodriguez & Bocken, 2006).

In Europe the legislative framework changed, and in 2008 textiles were included in the legislation directive 2008/98/EC on waste (Waste Framework Directive). According to this directive, by 2020 50 per cent of certain materials from households and other sources similar to households should be prepared for re-use and recycling (European Commission, 2012). This means that, with the implementation of the appropriate programs, textiles and clothing should be collected in specific bins separated from other waste in order to be further treated in an efficient manner (Fletcher, 2006).

As argued above, the main method of textile waste disposal is landfilling, regardless of the fact that garments and textiles disposed into landfills contribute to environmental problems caused to air and soil. Besides that they primarily produce methane emissions to air when they decompose, they also pollute the groundwater due to toxic leachate (Fletcher, 2006; Caufield, 2009). To be more specific, when a woollen garment is thrown to landfill for decomposition, it produces large amount of ammonia and methane. Ammonia is highly toxic in terrestrial and aquatic environment and methane emissions are related to the greenhouse gases which contribute to the problem of global warming. Furthermore, garments made by manufactured fibres from synthetic polymers (nylon, acrylic and polyester) produce
leachate and gas for a long period of time, as they decompose in a very slow rate (Caufield, 2009). Another environmental effect, not typically discussed, is the amount of space required for land filling. Wallander (2012) sheds light to this issue supporting that eleven million tonnes of textile waste consist of 126 million cubic yards of landfill space.

1.2 The Rise of Disposable Fashion

Clothing disposal is, as mentioned above, strongly connected to the rise of fast-fashion in the sense that over consumption of garments lead to their over disposal. Morgan and Birtwistle (2009) argue that the relationship between clothing waste and fast-fashion is unmistakable. Fast-fashion retailers are able to offer garments that follow the new trends in very competitive prices and thus achieve large sales volume. Furthermore, they offer garments that are expected to be worn less than ten times and are mainly made of synthetic fibres that constitute, as discussed above, a threat to the environment in the case of disposition into landfills. Due to these facts, consumers tend to purchase garments with higher frequency and as a result they tend to dispose these garments more frequently than before, even if they are still wearable. The disposal of garments that are worn only a few times is characterized as disposable fashion or throwaway fashion (Birtwistle & Moore, 2007; Morgan & Birtwistle, 2009).

Evidence about this issue can be seen in the UK where, between 2001 and 2005, the consumer spending on clothing increased by 21 per cent for women’s garments and by 14 per cent for men’s. Moreover, prices decreased by 14 per cent therefore sales volume increased by 37 per cent (Alwood, Laursen, de Rodriguez & Bocken, 2006). Consequently, the proportion of textile waste rose from 7 per cent to 30 per cent between 2003 and 2008. This phenomenon is also known as the “Primark Effect”, due to UK's giant fast fashion retailer (Poulter, 2008).

Fast-fashion is not an ephemeral phenomenon and according to various researchers will grow, in a global level, even more due to the general economic recession. While the world’s economy faces challenges, consumer spending is concentrated either at the top or the bottom and this consists of further growth opportunities for fast-fashion retailers. Inditex*, for example, is expected to increase in terms of space at approximately 10 to 15 per cent in a five year period, while its annual revenue will eventually grow in midteens. On the contrary, fast-fashion retailers may face the threat of the decreasing spending of young consumers in the future, which at the time being does not seem to affect them since, according to Richard Perks, young people continue to spend in the same rate (Diderich, 2010).

* Inditex is one of the world's largest fashion retailers, with eight store formats -Zara, Pull & Bear, Massimo Dutti, Bershka, Stradivarius, Oysho, Zara Home and Uterqüe - counting 5.527 stores in 82 markets.
1.3 The Problem of Clothing Disposal in Greece

Greece is part of the European Union but at the same time there are many societal differences comparing to countries of Central and Northern Europe. Regarding waste management policy, Greece is far from the European average. Municipal solid waste in 2010 was 447 kg per person from which 374 kg were thrown into landfills, while during the same year the average in Europe was 502 kg per capita from which 186 kg were discarded to landfills (see Appendix - Table 1) (Eurostat, 2012). The comparison indicates that in Greece there is a huge gap in waste management policies. Although the amount of municipal waste processed through material recycling rose from 33 kg in 2000 to 79 kg in 2010, the overall result is again above the European average. Furthermore, waste treatment methods like composting and incineration do not exist in Greece (see Appendix - Table 1) (Eurostat, 2012).

Regarding landfills, there is a major environmental issue arising from the fact that only 30 organized landfills operate in Greece that receive 53 per cent of the total household waste. The remaining 47 per cent is disposed into uncontrolled landfills causing severe damages to the environment (Roussos, 2009). Whilst a trial was held against Greece for waste management issues and fines were imposed, governments continue to pay little attention to this matter (Roussos, 2009).

Based on the previous data, it is not surprising that a huge proportion of the total textile and clothing waste in Greece ends-up in landfills as there is no public infrastructure or private companies operating in this sector. In Athens, 100 thousand tonnes of textiles and clothes are discarded each year with 10 per cent donated to charities, 10 per cent being reused through second-hand shops or small companies and the remaining 80 per cent thrown into landfills (Kogka, 2005).

Even though in the recent years there is an increase in clothing exchange events in the form of bazaars and second-hand shops, the amount of garments disposed in these ways is limited. Second hand shops and bazaars are a new concept for the Greek society so they do not receive great attention. On the one hand people that attend bazaars or visit second hand shops expect specific garments, like vintage or luxury branded, and on the other hand the clothes disposed and sold in those events are in most cases imported (Psaila, 2010; Nikolaou, 2008). Nevertheless, it is quite optimistic that such shops and events are happening to Greece even after more than a decade that they are a trend in the rest of Europe and the US.

As it concerns charities, a large amount of used clothing is circulated through church. Each parish or even each neighbourhood church accepts used garments and gives to those in need. Although there is not a specific infrastructure, most citizens are aware of the church’s work and take their old clothes and shoes there. Moreover, there are different non-governmental organizations or philanthropic institutions that have programs concerning clothing disposal. They take the old clothes and deliver them in
orphanages, homeless people and generally to people they know are in need (Church of Greece, 2012).

Relating to the prevailing fashion purchasing model in Greece, the average household expenditure for clothing and footwear per month reached 162.84 € for 2009, decreased by 6.5 per cent compared to 2008 (see Appendix - Table 2). The above amount consists of 7.9 per cent of the total household expenditure which can be considered high as at the same time in the UK the monthly household expenditure for clothing and footwear in 2009 was 5.5 per cent and in France 4.4 per cent. Only in Italy this figure is higher consisting of 8.5 per cent (Hellenic Statistical Authority, 2012). Traditionally, Greek households spend a lot on clothing and footwear; however since 2000 there is a gradual decrease (Hellenic Statistical Authority, 2012).

The fast-fashion companies have established a well-structured network in Greece the recent years. Inditex in 2010 operated 160 stores that can be considered a large number if compared to bigger countries, in terms of population. Inditex operates through 241 stores in France, 287 stores in Italy and 90 stores in the UK, all countries with population six times bigger than Greece. Furthermore, in Germany it operates through 73 stores even though Germany has around eight times more inhabitants (Inditex, 2012). The other fast-fashion giant retailer, the Swedish H&M, opened four new stores in 2011 reaching 22 in total, while the economic crisis shrunk the disposable income of Greek citizens. H&M further managed to increase its sales in Greece from 532 million SEK to 621 million SEK in 2011, while in most countries they dropped (H&M, 2012).

The above facts and figures demonstrate that fast-fashion retailers operate successfully in Greece, which is translated into increased sales of fast-fashion garments and consequently into increased clothing waste. The author suggests there is clear evidence that the phenomenon of disposing garments worn only a few times is very likely to be taking place in Greece as well. And if the existing infrastructures in countries like the UK and the USA can mitigate the effects of the increasing disposal of garments and textiles, this is highly unlikely to be happening in Greece. Due to these facts there is an obvious need for policies regarding clothing waste management in Greece, as also in the rest of the world. But in order to develop an efficient infrastructure and educate people about how they should dispose their garments it is of the utmost importance to explore and identify the factors that influence and shape clothing disposal behaviour. Especially as it concerns younger generations, the need to educate them about this subject should be of central focus for governments and policy makers as they consist of the steam engine for the future evolution of the world.
1.4 Aim and Purpose of the Study

The purpose of this study is to examine clothing disposal behaviour with an approach from the theory of social psychology in order to provide with insights of the particular behaviour. This study employs Triandis’ (1977) model of the Theory of Interpersonal Behaviour as theoretical framework, to explore what are the factors of the model that influence and shape the actual clothing disposal behaviour of young individuals in Greece and also to what extent they manage to do it. Triandis (1977) Theory of Interpersonal Behaviour is an integrated cognitive model that examines behavioural antecedents and the interrelation between them. Triandis’ (1977) argues that behaviour is directly related to the individual’s intentions and habits and is further moderated by the external situational conditions (Jackson, 2005). A more thorough analysis of the model and the different aspects of it will follow in the sections 2.3, 2.4 and 2.5.

This paper does not examine a particular disposal behaviour of clothing but rather the factors behind the throw away disposal behaviour (throwing the old garment to the rubbish bin). The author considers the disposition of a garment to the conventional garbage bin, which consequently ends-up in landfills, as a socially irresponsible behaviour therefore he explores to what extent this behaviour exists and how it is formulated. Moreover, due to lack of previous research in the field of clothing disposition regarding Greece, the author will further try to identify the main types of socially responsible clothing disposal behaviour. By conducting this quantitative research in Greece, the author aims to provide findings and motives for academics and policy makers in order to encourage further research on this subject in a country where environmental policies are still in an early stage. Furthermore, the use of an integrated behavioural model can provide a solid framework for future research related to the subject.

Finally, in this research there are limitations regarding the age group as well as the type of garment disposed by the participants. The sample consists of individuals between 18 to 35 years old, with access to education and a certain level of computer literacy that is believed to provide them with some kind of information about environmental issues. Moreover, by acknowledging the fact that different types of garments are involved in different emotional bonds with owners and therefore lead to different types of disposal behaviour, this research limits itself in exploring the disposition behaviour towards a t-shirt. This argument can be enhanced by the fact that a t-shirt is a strong representative of disposable fashion and thus involves a looser disposal approach. Furthermore, in respect to the TIB model that serves as theoretical framework, this paper examines only the factors and the relations in the second and the third level of the model (see chapters 2.4 and 2.5) in order to make the research more efficient.
1.5 Research Questions

1. How do young people (18-35 years old) in Greece dispose their old garments (t-shirt)?

2. What psychosocial factors influence clothing disposal behaviour in Greece among young people?

3. Which factors weight most towards the shape of the actual clothing disposal behaviour?

2. Theoretical Framework

2.1 Disposition Theories

According to Jacoby (1977, p.22), consumer behaviour can be defined as the “acquisition, consumption, and disposition of goods, services, time and ideas by decision making units”. Although consumer behaviour was a central field in the marketing research, little attention was given to the disposition component (Jacoby et al., 1977; Hanson, 1980; Harrell & McConocha, 1992; Roster, 2001; Lastovicka & Fernadez, 2005) until Jacoby et al. (1977) introduced the Disposition Decision Taxonomy, where consumers have three general choices of disposing a product and further divided into nine subcategories (see Appendix - Figure 1). Regarding the factors that influence consumers’ disposition choices, Jacoby et al. (1977) developed three categories. These are the psychological characteristics of the decision maker, the intrinsic factors to the product and the situational extrinsic factors to the product. Hanson (1980) further extended this development to a model in order to identify the stages of disposition processes that were related to those three categories (see Appendix - Figure 2).

During 1970’s there was an emergence of environmental issues that raised concern over consumers, governments and academics, and led to the establishment of international conferences and debates in the 1980’s and 1990’s (Jackson, 2005; Bianchi & Birtwistle, 2010). The emerging issue of sustainable development led consequently to the raise of notions like sustainable consumption (Bianchi & Birtwistle, 2010) and socially responsible consumer behaviour (Ha-Brookshire & Hodges, 2009). Ha-Brookshire and Hodges (2009, p.180) defines socially responsible consumer behaviour as “the behaviour of a consumer basing decisions on a desire to minimize or eliminate any harmful effects and to maximize any beneficial impacts on society in one or more consumption steps of the consumption process, including product information search, acquisition, usage, storage, disposal and post-disposal evaluation”. Again, most of SRCB (socially responsible consumer behaviour) research is centred on the element of purchase (Ha-Brookshire & Hodges, 2009;
Bianchi & Birtwistle, 2010). There is, although, a consequent amount of research that points out on the importance of disposition. Most of them examine the consumer recycling behaviour of household solid waste and specifically the factors (internal and external) that influence it, aiming at developing policies towards SRCB (de Young, 1986 & 1990; Oskamp et al., 1991; Hopper & Nielsen, 1991; Perrin & Barton, 2001). Furthermore, some researchers examine the disposition of meaningful objects (Roster, 2001; Lastovicka & Fernandez, 2005), some examine personal factors influencing disposition (Harrel & McConocha, 1992) and some how disposition is affected by the type of the product disposed (Walker, 2006).

In relation to this study, Harrel and McConocha (1992) highlight the fact that disposal by trashing carriers has negative consequences like pollution and loss in resources that could be further consumed and also take a step further by acknowledging that disposing a product through the garbage system consists of an irresponsible behaviour. In the same context the author justifies his selection of the particular disposition behaviour (throwing an old t-shirt to the rubbish bin) as socially irresponsible and identifies the need to explore it.

2.2 Clothing Disposition Studies

Ha-Brookshire and Hodges (2009) quote Winakor’s (1969) opinion that clothing consumption is different from food consumption as well as from housing consumption. Winakor (1969, as cited in Ha-Brookshire & Hodges, 2009, p.181) supports that each stage of clothing consumption from product information search, acquisition, usage, storage, disposal and post-disposal evaluation is experienced by everyone on a regular basis, thus examining clothing consumer behaviour towards SRCB is a unique and of great importance issue (Ha-Brookshire & Hodges, 2009). Consequently, the same applies to the clothing disposal consumer behaviour.

Research about consumer clothing disposal behaviour includes approaches regarding the method that consumers choose to dispose their garments, the motivation for disposing clothing and factors that influence disposition. More specifically, Albinsson and Perera (2009) explored the importance of relationships, values and self-concept in consumer voluntary disposal behaviour in clothing exchange events (CEs). Ha-Brookshire and Hodges (2009) examined the motivation for donating used clothes as a disposition method, in an internal approach to the consumers’ feelings, and proposed a conceptual model for used clothing donation behaviour (see Appendix - Figure 3). They resulted that consumers donated clothes due to need of storage space and the feeling of guilt that accompanied the method of discarding them. They further identified that consumers experienced utilitarian as well as hedonic values when donating and that affected their future disposal intentions. Fisher et al. (2008), in a research for DEFRA, identified three motives for clothing disposal. That is the condition of the garment, its fashionability and the change of its fit. Furthermore, they examined how consumers approach different disposal processes according to a
consumer taxonomy that they developed.

Birtwistle and Moore (2007), driven by the increased expenditure of consumers’ income in fashion and the fast-fashion phenomena that lead to disposal of garments worn only a few times, examined the consumer fashion disposal behaviour. They identified differences between the disposition processes of expensive and cheap garments, increased tendency for donating clothes to charity shops and lack of knowledge and media coverage regarding textile recycling. As a complement to this research, Morgan and Birtwistle (2009) investigated the habits of young fashion consumers and proposed a model of seven factors that influences consumer textile disposition behaviour (see Appendix - Figure 4). To conclude with, Bianchi and Birtwistle (2010) conducted a comparative research in Scotland and Australia to investigate the factors influencing three specific forms of clothing disposal, namely selling through E-Bay or second-hand shops, giving away to family or friends and donating to charity. Their findings showed differences between the disposal behaviour in the two countries but at the same time highlighted the importance of the general recycling consumer behaviour, the awareness of the environment and the fashion innovation level towards clothing disposal behaviour.

Undoubtedly, there is a need for further research in the field of consumer textile disposal and many researchers call for it (Birtwistle & Moore, 2007; Ha-Brookshire & Hodges, 2009; Morgan & Birtwistle, 2009; Bianchi & Birtwistle, 2010). Furthermore, most of the research, as mentioned above, examined specific clothing disposal methods and only few papers approached clothing disposal behaviour in relation to social psychology. Taking under consideration all the above elements of the clothing disposal behaviour literature, the author suggests the importance of research in relation to social psychology.

2.3 The Importance of Triandis’ (1977) Theory of Interpersonal Behaviour

Triandis’ (1977) Theory of Interpersonal Behaviour is considered to be a cognitive model with similarities to two other well-known cognitive models. These are the Theory of Reasoned Action of Ajzen and Fishbein (1975) and the Theory of Planned Behaviour of Ajzen (1991) (Robinson, 2010). The key factor of behaviour in the abovementioned models is the individual’s intention to perform this specific behaviour (Milhausen, Reece & Perera, 2006). At this point, it is crucial to mention that the Theory of Planned Behaviour is an extension of the Theory of Reasoned Action in order to include behavioural cases that individuals have no volitional control on their actions (Jackson, 2005).

Triandis (1977) Theory of Interpersonal Behaviour expands beyond these theories by including the notions of habits and facilitating conditions that influence behaviour in a
positive or negative manner (Milhausen, Reece & Perera, 2006). Furthermore, Triandis highlights the importance of emotions in formulating intentions. More specifically, in TIB intentions are formed by attitudes, social factors and affective factors and constitute immediate antecedents of behaviour. Behaviour is furthermore influenced by habits and both intentions and habits are moderated by the facilitating conditions that contribute highly towards the behaviour performed in the end (Jackson, 2005).

Jackson (2005) highlights the importance of TIB by comparing it with Stern’s (2000) Attitude-Behaviour-Context model. Stern (2000) recognized the lack of habits in his model and mentioned that in order to form an integrated model of environmental behaviour this element is of high importance (Jackson, 2005). Therefore, Triandis’ Theory of Interpersonal Behaviour provides this integrated framework to examine environmental behaviour with greater accuracy in contrast to the existing literature (Jackson, 2005). Additionally, TIB can provide an understanding of complex human behaviour and a further analysis of the factors shaping this behaviour, mostly in cases where behaviours are affected by the social and physical environment of the individual (Milhausen, Reece & Perera, 2006).

According to Jackson (2005), behaviour is rooted in social and institutional contexts as it is influenced by peoples’ close environment, by social norms of society and also by their personal choices. Furthermore, on the grounds that models can provide insights into social and psychological influences on mainstream and pro-social consumer behaviour (Jackson, 2005), the author believes that the use of an integrated model can provide valuable insight into clothing disposal behaviour in a different context than the existing research.

2.4 The Model of Interpersonal Behaviour

Triandis’ (1977) Theory of Interpersonal Behaviour (TIB) is a tri-level model (see Figure 2 below) where behaviour is shaped by the intention of an individual to engage in an action, the frequency of his/her past behaviour (habit) and the facilitating conditions that consist of present situational constrains and conditions (Robinson, 2010).

In the first level of the model, Triandis (1977) examines how personal characteristics and experiences formulate the individual’s personal attitudes, beliefs and social factors related to the behaviour. In the second level of the model, he explains how cognition about the consequences of an action, social factors and affects about a certain behaviour influence and shape the intention towards this behaviour. Finally, in the third level Triandis supports that intentions, habits and facilitating settings influence the actual behaviour (Robinson, 2010).
In this section, the author analyzes the factors that shape the TIB model as well as the relations between them in the second and the third level of the model. The first level of the model is not examined thoroughly, due to efficiency purposes, but is rather used for the formulation of the measurement items of the questionnaire for the second level.

As mentioned above, in the second level of the TIB model, behavioural intention is determined by the attitudes (or perceived consequences) that an individual attaches to a specific behaviour, by social factors (norms, roles, self-concept) and finally by the emotions that a person attaches to the behaviour (Triandis, 1980 cited in Robinson, 2010).

The notion of attitudes or perceived consequences consists of the individual’s subjective belief that specific consequences will derive from specific behaviours and the evaluation of these consequences (Robinson, 2010). Perceived consequences of certain behaviour may differ from the actual ones to a lesser or a greater degree (Triandis, 1977) and are accompanied by values, which refer to negative or positive feelings that the individual would experience in case these consequences occurred (Limayem et al, 2004). In the case of clothing disposal, attitudes may involve personal beliefs and evaluation about the consequences of the impacts of different disposal methods.
behaviours on the environment.

_Social factors_ include the norms and roles that affect an individual’s behavioural intention and the self-concept of the individual. Norms are “beliefs that certain behaviours are correct, appropriate, or desirable and other behaviours are incorrect, inappropriate, immoral and undesirable” (Triandis, 1977, p.8). In a few words, norms are the social rules that state what should be done or not (Jackson, 2005). Roles are “sets of behaviours that are considered appropriate for persons holding a particular position in a group” (Triandis, 1977, p.8). Although in the past social roles where relatively stable, in contemporary societies they change with great speed and as a result people frequently find themselves belonging to a number of contradicting social groups and consequently experiencing role conflict (Robinson, 2010). Self-concept, at last, refers to the perception that a person has of him/herself, the appropriate goals that this type of person should pursue or eschew, and the behaviours that fit or not to the perceived profile (Jackson, 2005). According to the above mentioned, the disposal behaviour towards a garment can be affected by societies where environmental responsible behaviour is encouraged or in cases that the opposite is considered inappropriate or immoral.

_Affect_ refers to the emotions of an individual that arise when thinking of a particular behaviour. More specifically, it consists of feelings of elation, pleasure, distaste or discontentment in relation to the behaviour (Robinson, 2010). These emotional responses can be either positive or negative and their strength varies depending on the case (Jackson, 2005). According to Triandis (1977), affective factors are more or less a subconscious input to decision-making, and are mainly guided by instinctive responses to specific situations (Jackson, 2005). As concerns clothing disposal, affective factors are related to the feelings that individuals have towards different disposal methods. For example, it is proved that donation creates a feeling of pleasure in many people, since they feel that they do a good deed or give pleasure to someone else by their action (Ha-Brookshire & Hodges, 2009; Bianchi & Birtwistle, 2010).

In the _third level_ of the TIB model, Triandis (1977) examines the determinants of the actual behaviour. Behaviour, according to Triandis (1977), is determined by behavioural intention, habit, and the facilitating conditions.

_Intentions_ “is a cognitive antecedent of an act” (Triandis, 1977, p.5). The determinants of behavioural intention are discussed above. While intentions can be either specific or general (specific intentions consist of the manifestation of different general intentions), only specific intentions are connected to behaviour because behaviour is organized, sequential, and directly related to a specific goal (Triandis, 1977). Intention is also considered to be an immediate precursor of behaviour in other theories of social behaviour like the Theory of Reasoned Action by Fishbein and Ajzen (1975) and its extension, the Theory of Planned Behaviour of Ajzen (1991) (Jackson, 2005).
Habit is the strength of previous behaviour in producing the target behaviour (Triandis, 1977 as cited in Robinson, 2010) and is equal to the repetition of a particular behaviour that a person performed in the past. Habit is a strong factor towards the final output of behaviour due to the fact that increased repetition of a certain behaviour can lead the individual to act in a natural way. Furthermore, if the individual receives positive and frequent reinforcement by conducting a particular behaviour in the past it is highly likely to perform this behaviour again due to his/her expectation of this further reinforcement (Triandis, 1977). In relation to clothing disposal behaviour, the habit of discarding old garments to the garbage bins (as in this study) can influence the total outcome by transforming this behaviour into a natural one and thus preventing the person from examining alternatives.

Facilitating conditions, according to Triandis (1980), refer to the ability of a person to perform the behaviour, the person’s level of arousal in relation to the behaviour, the difficulty of performing it, the knowledge needed to do so, and the environmental settings that increase the probability of the act (Robinson, 2010). Facilitating conditions act as a moderator towards the final outcome (Jackson, 2005). Regardless the levels of habit or intention, facilitating conditions play a critical role with their presence or their absence (Robinson, 2010). In the case of this research the author limits the facilitating conditions to the infrastructure regarding clothing disposal and the educational campaigns towards this matter.

Behaviour, according to Triandis (1977), is determined partly by intention, partly by habitual responses, and partly by environmental constraints and situational factors around each behavioural situation (Robinson, 2010). Behaviours do not apply to the same rules and have different antecedents whether they are natural for a person or they occur relatively rarely or even occur for the first time (Triandis, 1977).

The relations between the different factors of the model will be further analyzed in regard to the findings of the research under the analysis section.

In order to further move on to the research design and the examination of the research questions the author determined seven hypotheses.

Hypotheses:
- There is a positive relationship between individuals’ negative perceived consequences or attitudes (of throwing their old t-shirt to the rubbish bin) and their intention to choose a responsible clothing disposal behaviour.
- There is a positive relationship between positive social factors and the individuals’ intention to choose a responsible clothing disposal behaviour.
- There is a positive relationship between individuals’ negative affect towards throwing their old t-shirt to the rubbish bin and their intention to choose a responsible clothing disposal behaviour.
There is a positive relationship between individuals’ intention to responsibly dispose a garment (t-shirt) and the actual responsible disposal behaviour of it.

There is a positive relationship between negative habit and responsible clothing disposal behaviour. (Clothing disposal behaviour is non-habitual)

Facilitating conditions moderate the relationship between the individuals’ intention to responsibly dispose a garment (t-shirt) and the actual disposal behaviour.

Facilitating conditions moderate the relationship between habit and clothing disposal behaviour.

3. Research Design

3.1 Design
The author conducted a quantitative, non-experimental, deductive research to investigate how psychosocial factors, as presented in Triandis’ Theory of Interpersonal Behaviour (1977), influence clothing disposal behaviour in Greece as well as what are the prevailing types of clothing disposal behaviour among young people. The design of this research is characterized non-experimental as there is no manipulation over the independent variables of the research and additionally there is no establishment of a control group (Bryman, 2012). The decision for conducting a quantitative research was made due to the nature of the research and the parallel use of TIB model, in terms that a statistical approach is believed to be the most appropriate measurement in such studies. Furthermore, the fact that in relevant studies concerning the field of social psychology many researchers conducted quantitative research with very good results enhanced the above mentioned decision.

3.2 Sampling Technique and Sample
For conducting this research the author designed and developed an online questionnaire on freeonlinesurveys.com, a website that is specialized in the field of online surveys. For the elaboration of this survey the author used a probability sampling technique, in terms that the sample units were randomly selected (Bryman, 2012). Besides the online survey, the same questionnaire was handed over in a smaller sample in the city of Thessalonica in Greece. In this case the author used a probability sampling technique by visiting different places and approaching different types of people. What is important to mention is that the sample was designed to have an age limitation, between 18 to 35 years old, as for this research the interest draws upon clothing disposal behaviour of young people.

The online survey was open for eight days from the 7th of May until the 14th of May of 2012. In order to promote the survey and attract the participants the author
primarily emailed the survey link to friends that belong to the specific age group of the research asking them to forward the survey and at the same time participate themselves. Secondary, there was a contact with the Technological Institution (University) of Thessalonica as well as with its department of Kilkis, where the faculty was asked to promote the survey link on its website. Students in the department of Kilkis study Garment Production and Design Technology, while in the rest of departments there is a variety of different study subjects. Afterwards, the author posted the online survey link with a participation request on facebook.com on the wall of the group that the students of the faculty created.

Regarding the handed over method, during the period from 10th until 13th of May of 2012, a close friend of the author distributed the questionnaires in different places in the city of Thessalonica. People in this case were asked if they wanted to participate and afterwards they were given the questionnaire. No extra help was provided to these participants except from reading the introductory note of the questionnaire. Both online questionnaires and handed over questionnaires were exactly the same (the handed over ones were printed as the online survey provided this option) so findings are examined in the same way. The only reason for conducting the handed over method was to expand the range of the sample as much as possible.

The total sample consisted of 201 participants from which 177 completed the online survey and 24 were recruited through personal contact. From this respondent sample 49 were male, 151 were female and one value was missing. Regarding the age groups, 55 participants were between 18 to 24 years old, 84 were between 25 to 29 years old and 62 people belonged to the group age from 30 to 35 years old (see figure 3).

As it concerns the educational level, 25 individuals graduated from High School, 88 graduated from Technological Universities (Colleges), 53 studied at Universities, 32 people had a Master’s Degree and finally there were 3 participants that acquired a PHD Degree (see figure 4).

The participation in the survey was voluntarily and anonymous. Finally regarding the online survey, five participants
failed to answer two of the questions and 15 failed to answer one question but no participant was excluded, as the exclusion criteria were set to four missing answers.

3.3 Questionnaires

Questionnaires (see Appendix - Questionnaire in English) consisted of 16 items that measured the psychosocial factors according to Triandis’ model of Interpersonal Behaviour (1977), two items that explored the alternative disposal behaviour (except from throwing the old garment to the garbage bin) and three items that explored demographics. More specifically, two questions measure the clothing disposal behaviour of the participants and 14 items measure the TIB variables, namely the attitude or perceived consequences, the social factors, the affective factors, the behavioural intention towards clothing disposal, the habit of disposing clothes and the facilitating conditions around clothing disposal. Although the research’s aim is primarily not to explore demographics, the remaining three items are related to gender, age group and educational level. Due to the lack of research in Greece in the field of clothing disposal the researcher was motivated to look for patterns in disposal behaviour related to these factors. Furthermore, items number three and four, which concern the alternative type of disposal behaviour of the participant besides throwing his/hers garment (t-shirt) to the conventional bin, is not included in the overall behaviour variable in the analysis but was integrated to explore the types of responsible clothing disposal behaviour of the sample. In total the questionnaire included 21 items and could be completed in 3 to 5 minutes.

The questionnaire was translated in Greek (see Appendix - Questionnaire in Greek) in order to be applicable for this study and this may have led into certain discrepancies in comparison to the original items, since there are no standardised items available in Greek. Of course due to the pilot test (see chapter 3.4) these discrepancies are thought to be eliminated as much as possible.

Regarding the attitude or perceived consequences scale, the questionnaire included two items that were self constructed using a 4-point Likert scale with a forced choice (1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree). According to the theory the consequences of throwing an old garment (in this case an old t-shirt) to the conventional garbage bin mainly refer to the environment, so as a result the questions examined the participant’s perceived consequences towards this issue.

As it concerns the scale of social factors, the two items were retrieved from Robinson’s (2010) scale, which demonstrated an acceptable internal reliability (Cronbach’s alpha=0.85). The items of course were reworded to include t-shirt disposal behaviour. The following example shows how the items were reworded. Robinson’s (2010) original item was “People who are important to me think it is ok to make unauthorised copies of software” and the modified item was “Most people who
are important to me think it is ok to throw my old t-shirt to the conventional garbage bin”. A reversed 4-point Likert scale was used in these items (4=strongly agree, 3=agree, 2=disagree, 1=strongly disagree).

For the affect scale, three items were taken from Robinson’s (2010) scale and they were also reworded. That is because the internal reliability of this scale was acceptable as well (Cronbach’s alpha=0.87). According to the general design of the questionnaire these items were answered with a 4-point Likert scale while in one of them the scale was reversed. For example, Robinson’s (2010) item was “To me, making unauthorised copies of software is: very good / good / bad / very bad”. In this research the revised item was “To me, throwing my old t-shirt to the conventional garbage bin is: very good / good / bad / very bad”.

In relation to the intention scale, there were used two items from which one was self constructed and the other was borrowed from Robinson’s (2010) intention scale because in this scale the items had a high reliability (Cronbach’s alpha=0.92). The items were developed according to a 4-point Likert scale (1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree) while one of them was a reversed one. Robinson’s (2010) item was “I may make unauthorised copies of software in the future” and was reworded to “In the future, I intent to throw my old t-shirt to the conventional garbage bin”. The author integrated the word “intent” after the pilot test as the reliability of this scale was found to be below the satisfactory level of 0.70 (Cronbach’s alpha=0.658).

Two more items were developed for the habit scale and both were retrieved from Robinson’s scale (Cronbach’s alpha=0.87). They were answered according to a 4-point Likert scale (1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree) and one was developed with a reversed scale. One of the items was revised into “I do NOT think twice before throwing my old t-shirt to the conventional garbage bin” from Robinson’s (2010) item “I don’t think twice before making unauthorised copies of software”.

For the facilitating conditions scale, three items were formulated from which one was borrowed from Robinson’s scale (Cronbach’s alpha=0.80). The other two items were self developed and concerned the lack of infrastructure in Greece to support alternative clothing disposal behaviour and the availability of time needed to search for alternative behaviour. The borrowed item from Robinson (2010) was “There is a lack of awareness and educational campaigns in my institution to prevent the use of unauthorised copies of software” and the item for this research was “There is a lack of educational campaigns about how to dispose my old t-shirt responsibly”. In respect to the rest of the questionnaire the items used the reversed 4-point Likert scale (4=strongly agree, 3=agree, 2=disagree, 1=strongly disagree). In this point it is important to mention that an item was removed from the final analysis because it lowered the internal reliability of the scale (more details will be discussed in the
To conclude with, in relation to the *behaviour scale*, three items were constructed by the author measuring the disposal behaviour of an old t-shirt, the general clothing and textile disposal and if the participants preferred to dispose their old t-shirt in an alternative more sustainable way. Two of the items in this scale were developed according to a 5-point Likert scale (1=never, 2=1-2 times, 3=3-4 times, 4=5-8 times, 5=above 9 times) and one was a dichotomous question. Robinson’s (2010) items in the behaviour scale were developed with a 4-point Likert scale (1=never, 2, 3, 4=very often) but the author considered this scale to be ambiguous (Bryman, 2012).

### 3.4 Pilot Test

The pilot test was conducted between the 1st and 5th of May of 2012 with 15 participants, where they were asked to answer the questionnaire and make suggestions about questions that were not clearly understood. The contact took place twice through internet with the use of a certain program called skype. During the first contact the author explained the survey purpose and asked the participants to fill out the answers. In the second contact the participants sent the completed questionnaires and made their observations regarding the clarity of the items. In cases that there were problems with the items, a discussion followed and the author asked for further suggestions about improvements. All the suggestions were taken under consideration for the final form of the questionnaire. Finally, the sample for the pilot test consisted of author’s friends in the same age range as in the survey. More particularly, two people were between 18 to 24 years old, six people were between 24 to 29 years old and seven of them belonged to the age group 30 to 35 years old.

### 4. Results

#### 4.1 Internal Reliabilities of Scales

A Cronbach alpha test is important to ensure the internal consistency reliability of the scales in this research (Bryman, 2012). There were seven scales in this research so in Table 1 (see below) Cronbach alphas for all scales are demonstrated. A figure of 0.80 is considered to be an acceptable level of internal reliability, although in a number of researches figures like 0.70 were thought to be “satisfactory” or even more, alphas in the level of 0.60 were considered to be “good” (Bryman, 2012). Typically, Cronbach alphas above 0.70 indicate a good internal reliability of a scale (Robinson, 2010).
Table 1: Internal Reliability of Scales

<table>
<thead>
<tr>
<th>Scales</th>
<th>Cronbach alpha</th>
<th>Items in Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td>0.65</td>
<td>2</td>
</tr>
<tr>
<td>Social Factors</td>
<td>0.80</td>
<td>2</td>
</tr>
<tr>
<td>Affect</td>
<td>0.83</td>
<td>3</td>
</tr>
<tr>
<td>Intention</td>
<td>0.74</td>
<td>2</td>
</tr>
<tr>
<td>Habit</td>
<td>0.53</td>
<td>2</td>
</tr>
<tr>
<td>Facilitating Conditions</td>
<td>0.78</td>
<td>2</td>
</tr>
<tr>
<td>Behaviour</td>
<td>0.77</td>
<td>2</td>
</tr>
</tbody>
</table>

According to Table 1, most of the alpha values are above 0.70 and this fact shows that the scales are sufficiently reliable. However, the attitudes scale’s Cronbach alpha is 0.65, a little lower than the typical acceptable level, and habit scale’s alpha is 0.53, showing that there is a reliability problem. As a result, the scores regarding these scales should be examined with caution, especially in the case of habit. Finally, it is crucial to mention that as concerns the facilitating conditions scale the author decided to remove an item, as the Cronbach alpha of the scale with the specific item was 0.49, indicating that the item was not properly formulated or it was inconsistent with the rest of the items in the scale.

4.2 Distribution Analysis

Next in the research findings there is a distribution analysis for all scales of the study in terms of mean, standard deviation, skewness and kurtosis as shown in Table 2 below. In this part of the analysis the variables are computed into new variables that measure the mean of the items in each scale. For example, the attitudes variable is the mean of the two items used to measure this scale and so on. Skewness and kurtosis are two features of the distributional shape of the scores of each scale. Both indices, according to the majority of the researchers, can be considered approximately normal between the values -1 to +1, while when they are equal to zero the distribution is normal. The negative and the positive value indicate the direction of the distribution (Huck, 2008).

Table 2: Distribution Analysis

<table>
<thead>
<tr>
<th>Scales</th>
<th>N</th>
<th>Mean</th>
<th>S.D.</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td>191</td>
<td>1.83</td>
<td>0.52</td>
<td>-.13</td>
<td>-.55</td>
</tr>
<tr>
<td>Social Factors</td>
<td>189</td>
<td>2.39</td>
<td>0.64</td>
<td>-.20</td>
<td>-.17</td>
</tr>
<tr>
<td>Affect</td>
<td>184</td>
<td>1.68</td>
<td>0.46</td>
<td>-.10</td>
<td>-.73</td>
</tr>
<tr>
<td>Intention</td>
<td>185</td>
<td>1.45</td>
<td>0.48</td>
<td>.71</td>
<td>-.27</td>
</tr>
<tr>
<td>Habit</td>
<td>188</td>
<td>1.80</td>
<td>0.72</td>
<td>.60</td>
<td>-.12</td>
</tr>
<tr>
<td>Facilitating Conditions</td>
<td>186</td>
<td>3.50</td>
<td>0.50</td>
<td>-.90</td>
<td>.43</td>
</tr>
<tr>
<td>Behaviour</td>
<td>191</td>
<td>1.70</td>
<td>0.64</td>
<td>.88</td>
<td>.26</td>
</tr>
</tbody>
</table>
According to Table 2, skewness and kurtosis fluctuate inside the limits even though intention, facilitating conditions and behaviour are either positive or negative skewed. In the case of affect the score of kurtosis is somehow high as well but again it is acceptable for further calculations. In this point it is significant to mention that when a mean score is close to one (1) it presents a positive tendency towards responsible clothing disposal behaviour, while if it is closer to four (4) it shows a negative tendency or an inclination to irresponsible disposal behaviour. For example in the case of habit, the mean is 1.80 showing that the participants in this research do not consider that throwing their old t-shirt to the rubbish bin is a habitual behaviour which the author believes it is positive towards responsible clothing disposal behaviour. In the opposite case that the mean was close to four (4), it would then indicate that this behaviour is habitual which shows a negative tendency.

4.3 Clothing Disposal Behaviour in Greece

The first research question in this study is about how young people in Greece dispose their old garments and especially their old t-shirts. To answer this question an analysis will follow.

As shown in Table 2 above, the distribution of the behaviour variable indicates that clothing disposal behaviour of young Greek consumers is relatively responsible. In order to be more analytical the next four figures below demonstrate the actual findings.

Figure 5 show how many times the participants threw their old t-shirt to the conventional garbage bin during the last two years. A very high proportion of the sample (60 per cent) supports that they have never thrown their old t-shirt to the garbage bin indicating a general responsible disposal behaviour. Furthermore, around 33 per cent argue that they threw their old t-shirt to the garbage bin only 1 to 2 times
in the past two years. According to the grading scale of the behaviour this figure is close to being responsible. This can be seen more clearly if it is combined with the fact that 92.5 per cent of the participants (186 people) chose a responsible alternative way to dispose their old t-shirt (see figure 6 below) (as argued before, whatever disposal option except from throwing to garbage bin is responsible) to dispose their old t-shirt.

![Figure 6: Responsible Disposal Behaviour of T-shirt](image)

Figure 7 demonstrates how many times the people of the sample discarded another garment or another fabric in the garbage bin during the last two years. This figure is used to examine the general textile disposal behaviour in order to provide a more accurate insight of the total behaviour of the participants. In this figure one can notice that the participants’ behaviour is not so responsible compared to the disposal of a t-shirt, which is natural since limiting the behaviour to one product

![Figure 7: General Disposal Behaviour](image)
limits the range of findings. Around 30 per cent of the sample support that they never threw another garment or a textile in the garbage bin while 50 per cent argues that disposed it to the garbage bin one or two times.

As concerns the types of alternative disposition for an old t-shirt among young people in Greece (see figure 8 below), 59 participants (29.4 per cent) gave their old t-shirt to a family member or a friend, 51 people (25.4 per cent) donated it to charities, and 45 participants (21.9 per cent) made it cleaning rag.

![Figure 8: Main Types of Alternative T-shirt Disposal](image)

All these figures indicate that the participants combine behaviours but the overall disposal behaviour tends to be positive in regards to social responsibility. Furthermore, the question of how much time young individuals in Greece keep their garments to their wardrobe becomes essential and should be examined in following studies, even though overall the author believes that the two years period of examining the t-shirt disposal behaviour is enough to avoid this issue in a way that it does not change the findings.

To conclude with, no interesting results were found in relation to demographics as the distribution was relatively the same in all cases. To be more specific, there were no differences (only minor changes) in the behaviour between genders, age groups and different educational levels.
4.4 Correlations among Scales

In order to examine the second research question about the psychosocial factors, as presented in Triandis’ (1977) Theory of Interpersonal Behaviour, that influence clothing disposal behaviour of young people in Greece as well as the third research question regarding the weight of these influences, the seven formulated hypotheses of the research will be used (see chapter 2.5). To answer them, the author presents a correlation calculation between the relative variables as well as a regression analysis. Besides the fact that the correlation scores show if a relationship exists, they also measure the level of strength in this relationship and its direction. On the other hand, the regression analyses show the weight of each factor towards the final outcome. That is the explanation proportion of each factor towards clothing disposal behaviour.

The first three hypotheses examined in this section where that (i) there is a positive relationship between individuals’ negative perceived consequences or attitudes (of throwing their old t-shirt to the rubbish bin) and their intention to choose a responsible clothing disposal behaviour, (ii) there is a positive relationship between positive social factors and the individuals’ intention to choose a responsible clothing disposal behaviour, and (iii) there is a positive relationship between individuals’ negative affect towards throwing their old t-shirt to the rubbish bin and their intention to choose a responsible clothing disposal behaviour. The results are shown in Table 3 below.

| Table 3: Pearson’s Correlations between each Variable selected and Intention |
|-----------------------------------------------|-----|----------------|----------------|
| Variables          | N   | Pearson’s coefficient (r) | Significance (p) |
| Attitudes          | 185 | .329**          | .000            |
| Social Factors     | 183 | .182*          | .014            |
| Affect             | 180 | .539**          | .000            |

*significant at p<0.05, **significant at p<0.01

As seen at Table 3, attitudes, social factors, and affect are positively related to intention. The relationship between affect and intention (r=0.539) is considered moderate to high and is further significant at p<0.01 level which means that there is only one possibility in a hundred that this relationship occurred by chance. Moreover, the relationship between attitudes and intention (r=0.329) is moderate to weak, with high (p<0.01) significance as well, while the relationship between social factors and intention is found to be weak (r=0.182) with a lower significance (p<0.05).

In order to further explore the above mentioned relationships, a multiple backward and stepwise linear regression analysis was conducted with intention as dependent variable and the remaining three as independent variables. According to this analysis,
attitudes, social factors and affect explained 31.1 per cent of intention’s variability. However, social factors explained only 0.2 per cent of it and attitudes only 1.1 per cent, while the significance in these cases was low. Below, in Table 4, the analysis is presented more thoroughly.

Table 4: Multiple Backward and Stepwise Linear Regression Analysis of the Independent Variables of Intention

<table>
<thead>
<tr>
<th>Variables</th>
<th>Partial R squared</th>
<th>Standardised B Coefficient</th>
<th>t-value</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudes</td>
<td>.011</td>
<td>.124</td>
<td>1.758</td>
<td>.080</td>
</tr>
<tr>
<td>Social Factors</td>
<td>.002</td>
<td>-.047</td>
<td>-.689</td>
<td>.492</td>
</tr>
<tr>
<td>Affect</td>
<td>.298</td>
<td>.508</td>
<td>6.949</td>
<td>.000</td>
</tr>
</tbody>
</table>

The same analysis, namely a Pearson’s correlation calculation and a multiple backward and stepwise regression analysis, was conducted for the fourth and fifth hypotheses of the research. These hypotheses are that (i) there is a positive relationship between individuals’ intention to responsibly dispose a garment (t-shirt) and the actual responsible disposal behaviour of it and that (ii) there is a positive relationship between negative habit and clothing disposal behaviour.

Table 5: Pearson’s Correlations between each Variable selected and Behaviour

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Pearson’s coefficient (r)</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>185</td>
<td>.298**</td>
<td>.000</td>
</tr>
<tr>
<td>Habit</td>
<td>188</td>
<td>.366**</td>
<td>.000</td>
</tr>
</tbody>
</table>

*significant at p<0.05, **significant at p<0.01

As Table 5 shows, both intention and habit are positively related to behaviour and even more the significance of these relations is high (p=000). Both relations are considered moderate to weak, although the relation between habit and behaviour is stronger (0.366 > 0.298). Besides the fact that habit is stronger related to behaviour the mean of this variable indicates that disposal of an old t-shirt is not a habitual behaviour.
Table 6: Multiple Backward and Stepwise Linear Regression Analysis of the Independent Variables of Behaviour

<table>
<thead>
<tr>
<th>Variables</th>
<th>Partial R squared</th>
<th>Standardised B Coefficient</th>
<th>t-value</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>.030</td>
<td>.188</td>
<td>2.503</td>
<td>.013</td>
</tr>
<tr>
<td>Habit</td>
<td>.115</td>
<td>.264</td>
<td>3.518</td>
<td>.001</td>
</tr>
</tbody>
</table>

Table 6, as seen above, demonstrates the results of the multiple backward and stepwise analyses of intention and habit as independent variables and behaviour as dependent. The results show that together intention and habit explain at 14.5 per cent the variance of behaviour. However, habit explains the most of it, as the relative score is 11.5 per cent compared with 3 per cent of intention at the same time that significance is in good levels for both variables.

In order to examine the sixth and the seventh hypotheses, two new variables are created, namely intentions*facilitating conditions and habit*facilitating conditions. These variables consist of the multiplication of intentions, habit and facilitating conditions.

The sixth hypothesis concerns if facilitating conditions act as moderator in the relationship between intention and behaviour. According, to the criteria of Baron and Kenny (1986), if the interaction of intention and facilitating conditions (intention*facilitating conditions) is significant towards behaviour and at the same time intention and facilitating conditions become non-significant then facilitating conditions is actually a moderator (Robinson, 2010). To investigate if this is correct, two stepwise regression analyses were developed, where in the first only intention and facilitating conditions were included and in the second the new variable, intention*facilitating conditions, was added as well.

Table 7: Multiple Stepwise Linear Regression Analysis of the Independent Variables of Behaviour

<table>
<thead>
<tr>
<th>Variables</th>
<th>Partial R squared</th>
<th>Standardised B Coefficient</th>
<th>t-value</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>.092</td>
<td>.311</td>
<td>4.394</td>
<td>.000</td>
</tr>
<tr>
<td>Facilitating Conditions</td>
<td>.021</td>
<td>.144</td>
<td>2.032</td>
<td>.044</td>
</tr>
</tbody>
</table>

As seen in Table 7, in the first analysis intention explains 9.2 per cent of behaviour while facilitating conditions are limited to 2.1 per cent. Furthermore, both variables are significant, with intention being significant at p<0.01 and facilitating conditions at
p<0.05.

Table 8 (see below) presents the results of the analysis when the interaction variable is added. It is obvious that when the interaction variable is calculated intention and facilitating conditions are non-significant showing that facilitating conditions moderate the relationship between intention and behaviour.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Partial R squared</th>
<th>Standardised B Coefficient</th>
<th>t-value</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intention</td>
<td>-</td>
<td>-.074</td>
<td>-.448</td>
<td>.655</td>
</tr>
<tr>
<td>Facilitating Conditions</td>
<td>-</td>
<td>.004</td>
<td>.049</td>
<td>.961</td>
</tr>
<tr>
<td>Int.*Fac. Con.</td>
<td>.122</td>
<td>.350</td>
<td>4.996</td>
<td>.000</td>
</tr>
</tbody>
</table>

The same analysis was also conducted for the seventh hypothesis, to examine whether facilitating conditions act as a moderator of the habit-behaviour relationship. Tables 9 and 10 show the results of this analysis.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Partial R squared</th>
<th>Standardised B Coefficient</th>
<th>t-value</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habit</td>
<td>.101</td>
<td>.318</td>
<td>4.520</td>
<td>.000</td>
</tr>
<tr>
<td>Facilitating Conditions</td>
<td>.013</td>
<td>.111</td>
<td>1.587</td>
<td>.114</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>Partial R squared</th>
<th>Standardised B Coefficient</th>
<th>t-value</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Habit</td>
<td>-</td>
<td>.038</td>
<td>.180</td>
<td>.858</td>
</tr>
<tr>
<td>Facilitating Conditions</td>
<td>-</td>
<td>.010</td>
<td>.131</td>
<td>.896</td>
</tr>
<tr>
<td>Habit*Fac. Con.</td>
<td>.111</td>
<td>.333</td>
<td>4.749</td>
<td>.000</td>
</tr>
</tbody>
</table>
According to the findings, when the interaction variable habit*facilitating conditions is integrated in the model analysis habit and facilitating conditions become non-significant. In concern to facilitating conditions, the analyses show that the variable is not significant also in the first case but again when in the interaction model the significance drops highly.

As a result the hypothesis is correct, so facilitating conditions can be considered as a moderator in the relationship between habit and behaviour.

To sum up, all the hypotheses set in the chapter 2.5 are found to be correct even though there are no strong relations except from the one between affect and intention. Negative affects are the stronger factor towards intention to dispose an old t-shirt in a socially responsible way, followed by attitudes (or perceived consequences). Social factors are related to behavioural intention, but the relation is weak. Furthermore, the mean of this variable suggests relative neutrality towards the final outcome. As it concerns intention, habit and facilitating conditions towards the actual disposal of an old t-shirt, habit is the stronger influence, although this shows that this behaviour is not habitual. Intention is related to disposal behaviour moderately, even though in respect to habit’s findings the author expected a stronger relationship. To conclude with, facilitating conditions act indeed as a moderator in the relations between intention, habit and behaviour, but based to the results they do not change them. A discussion in relation to the results is presented in chapter 5 below.

5. Discussion

In this chapter of the research the author discusses the findings of the three research questions starting from the clothing (old t-shirt) disposition behaviour of young people in Greece and moving on to the remaining two. These are the psychosocial factors that influence the particular behaviour as well as which of these factors weight most towards the final outcome.

5.1 Factors Influencing Clothing Disposal Intention

Under this section of the research the author discusses the influences of attitudes (perceived consequences), social factors and affective factors towards clothing disposal intentions of young people in Greece. More specifically, the first, second, and third hypotheses are discussed in relation to the findings, starting from the variables that were less related to intention and move on to the ones that demonstrated stronger relations.

As seen before, social factors are not a strong antecedent of a young person’s
intention towards clothing disposal behaviour as the mean of this variable is 2.39 (see Table 2, chapter 4.2 above) indicating that social factors are almost neutral, which consequently means that participants believe that their social surrounding is not concerned about this specific behaviour. Furthermore, Pearson’s correlation coefficient is 0.182 (see Table 3, chapter 4.4 above) showing that the relation between social factors and intention is weak but at the same time significant (p=0.014). Besides the obvious explanation that important people in young individuals’ social environment in Greece are not concerned about how they dispose an old t-shirt mainly due to lack of awareness about this issue, an additional explanation could be discussed and involves the frequency of occurrence of this behaviour as well as the appearance level of it.

To be more specific, social surrounding is perceived as neutral by participants in this research either because important people in their life actually do not care about clothing disposal, or because they are not aware of how the individual disposes his/her old garments due to the fact that this behaviour occurs rarely and is moreover not transparent. In the latter case, even if the social environment of the individual supports a responsible disposal behaviour it is not likely to express its opinion because it is not informed about the behaviour.

Triandis (1977) argues that the weight of the social factors is higher when a person is afraid to deviate from a norm because of the disapproval or distastement of his/her social surrounding. According to this argument, when a behaviour is being observed or it is of great interest to the society, the weight of social factors towards the behavioural intention of either engaging or not to this behaviour will be large. On the other hand, if the behaviour is private or does not concern the societal environment the weight of social factors is smaller. In the case of this study, social factors are not of great importance towards the clothing disposal intention of the participants, suggesting that either the behaviour is not considered important or that is not known to the individuals’ social environment. Moreover, one should consider the lack of infrastructure and informational campaigns that makes responsible clothing disposal a matter of very small social importance. Subsequently, the subjects of the study cannot perceive the importance of the behaviour themselves.

Regarding attitude or perceived consequences and the relation with intention, the research shows that the specific relation is moderate to weak (r=0.329) and highly significant. The mean of this variable is 1.83 (see Table 2, chapter 4.2) representing that young peoples’ perceived consequences from throwing an old t-shirt to a rubbish bin are of negative value mainly towards the environment. To put it simpler, young individuals in Greece believe that throwing an old garment to the conventional garbage bin is bad for the environment and acting in such way consists of an
irresponsible behaviour.

According to Triandis (1977) the influence of perceived consequences on intention is stronger when the particular behaviour occurs frequently, thus the individual experiences the actual consequences in a greater degree and connects them easily to the expected outcome of his/her behaviour. The more times a behaviour takes place, the more likely it is that the actual and the expected outcomes will be similar. Furthermore, the strength of the attitudes is higher when the outcome of the behaviour directly affects the person committing this action and the particular consequences are consistent through time (Robinson, 2010).

Concerning this research, it is obvious that clothing disposal behaviour does not occur as frequently as other behaviours so it is not surprising that the strength of the relation between attitude and intention is moderate to weak. On the grounds that the behaviour examined in this study is the irresponsible behaviour of throwing the old t-shirt to the rubbish bin, one can argue that the outcome of this behaviour does not directly affect the individual’s everyday life as the environmental effects of this action can not be observed, except maybe in the case that the individual visits a landfill or lives close to one. The pollution is not obvious to people and consequently they can not relate their action to the actual outcome. Furthermore there are no great information or media discussions in Greece concerning the effect of garment disposal to the environment as opposed to other materials, such as plastic. Findings of further research also support that environmental consequences of clothing disposition were poorly understood (Birtwistle & Moore, 2007).

One the other hand, findings of the study support that participants understand the negative consequences of this action but this does not indicate that they actually experience the consequences or they are aware of them, but rather that their attitude towards this specific behaviour is part of a bigger picture consisting of the total recycling and environmental attitude that they posses. In a previous research of Morgan and Birtwistle (2009) regarding young fashion consumers’ habits, there was no correlation between the awareness of the environment and the textile disposal behaviour. However, Bianchi and Birtwistle (2010) found that awareness of the environment was positively related to donation and that the general recycling behaviour was further positively connected to socially responsible clothing disposition behaviours. Thus, there are indications that positive attitude towards environmental issues can lead to positive attitude towards environmental friendly disposal behaviour. The author argues that this is exactly the case of young individuals in Greece, on the grounds that they perceive the consequences of throwing their old t-shirt to the rubbish bin in relation to their generally responsible environmental behaviour that in recent years is becoming stronger and stronger.
The last component of the intention to dispose an old t-shirt is the affect related to the behaviour. Affect is found to be the strongest influence toward intention with Pearson’s coefficient shaped at 0.539 (see Table 3, chapter 4.4) showing the strongest relation, while it also accounted for approximately 30 per cent of intention’s variability. The mean of this variable was 1.68 (see Table 2, chapter 4.2), showing that young people in Greece have negative affects when considering throwing their old garment to the rubbish bin.

As seen in other studies concerning clothing disposition, affective factors play an important role in the type of disposal behaviour that the individuals choose. The choice of donation as a disposal method involves emotions of pleasure about doing the right thing (Morgan & Birtwistle, 2009; Birtwistle & Moore, 2007) or consists of a choice of avoiding feelings of guilt (Ha-Brookshire & Hodges, 2009). In the context of throwing an old t-shirt or another garment to the conventional garbage bin, individuals support that feelings of distastement or discontentment arise in the thought of this behaviour. One factor influencing the arousal of these emotions is that people in most cases develop an emotional bond with their garments due to the fact that through fashion they express their personalities, their taste and their social position. Furthermore, especially young people use to portrait themselves through clothing and transmit the message of belonging to a specific subculture group.

Disposition is a complex issue in cognitive and emotional terms, when the object or the product that is about to be disposed contains symbolic and meaningful associations to the individual (Roster, 2001). If a product posses a meaning for the owner the disposition process can highly affect the owner’s emotional state and lead him/her in different disposal behaviours (Roster, 2001). In the same context, donation is considered to be a highly appropriate method of disposal when it comes to special goods on the ground that actions of altruism can be linked to the elimination of negative feelings (Walker, 2006). So according to the above mentioned arguments it is natural for young people in Greece to choose clothing disposal methods like donation to charities or give to friends and family members in order to avoid the negative feelings deriving from throwing their old garments to the rubbish bin.

Furthermore, another aspect that enhances the affective factors towards clothing disposal intention in Greece could be the recent economic crisis in the country that subconsciously leads to an increase in emotions of guilt that accompanies irresponsible clothing disposal. It is natural for a person who everyday faces economic problems in his/her social surrounding to be more sensitive regarding the further use of a product that is no longer of his/her use but can be of use to another person.
To conclude with the discussion about the antecedents of clothing disposal intention of young consumers in Greece, the author believes that the findings demonstrate that there is no social pressure towards the specific behaviour either because this issue does not concern the society or because this behaviour is private. Furthermore, as it concerns the attitude towards this behaviour, it is positive on the grounds that it is connected to the overall attitude towards environmental issues which is getting stronger through time. Finally, regarding the affective factors accompanying this behaviour, the author believes that young individuals engage in emotional bonds when it comes to clothing disposition that consequently lead them to search for socially responsible ways of disposal.

5.2 Factors Influencing Clothing Disposal Behaviour

In this section the author discusses the findings related to the antecedents of clothing disposal behaviour of young people in Greece, namely intention, habit and facilitating conditions. The discussion includes the influences from habit and intention towards clothing disposal behaviour as well as how facilitating conditions moderate these relations.

The fourth hypothesis concerns the positive relation between the intention to responsibly dispose an old t-shirt and the actual disposal behaviour. According to the findings this relation exists, it is significant but it is considered to be moderate to weak (r=0.298). Furthermore, the mean of intention is 1.45 (see Table 2, chapter 4.2) which shows that young people in Greece highly intent to find an alternative way of disposing their old garments except from throwing them to the rubbish bin.

The fifth hypothesis concerns the relation between habit and behaviour and particularly argues that clothing disposal behaviour is not a habitual behaviour by supporting that negative habit is related to responsible clothing disposal behaviour. The mean of this variable is 1.80 (see Table 2, chapter 4.2) indicating that the specific behaviour is close to be non habitual and thus involves a more cognitive approach when it is about to take place. The relation between habit and behaviour can be considered as moderate to weak (r=0.366) with high significance and is further stronger than the relation between intention and behaviour. This is demonstrated also by the fact that habit explains most of the variance in behaviour (11.5%) compared to intention (3%) (See Table 6, chapter 4.4).

According to Triandis (1977), intention and habit are related in a theoretical level on the grounds that when intentions remain stable over time, they lead the individual to act in the same way and consequently lead to an increase in habit for the reason that
the same behaviour is repeated over and over. The difference between intention and habit is that while intention involves a cognitive process of the information given to a person, habit is considered to be a subconscious process, something that you do without actual cognitive process. Moreover, between intention and habit there is an inversely proportional relation that can be explained by the fact that when a behaviour is new and unlearned, intention is the only responsible variable for it, while when the behaviour becomes more frequent habit’s weight increases towards it (Triandis, 1977). Habit is also thought to be in control of behaviour when the person involved is highly emotionally aroused (Triandis, 1977).

According to the author’s expectations of this study, intention should be stronger than habit as disposition of garments is not a frequent behaviour and it further includes some thinking about what type of disposition is better to follow. Habit indeed was found to be negative, meaning that young people in Greece do not consider throwing their old t-shirt to rubbish bin as a habitual behaviour but the paradox is that in this case intention should be the strongest variable towards the specific behaviour. Overall both variables’ means, namely intention’s and habit’s, indicate that clothing disposal behaviour is an intentional behaviour that involves an individual’s cognitive procedure.

Of course, in this point the author has to remind that habit’s internal reliability is low (Cronbach’s alpha is 0.53), so the findings should be viewed with caution. Furthermore, habit should be more appropriately examined in respect to the alternative disposal behaviours that young people in Greece prefer, since the majority of the participants dispose their old garments in alternative ways as well. In other words, throwing the old t-shirt to the rubbish bin may not be a habitual behaviour but this may be the case for donating it to charities or giving it to friends and family members.

Except from intention and habit, there is a third variable that influences clothing disposal behaviour, namely the facilitating conditions around this behaviour. Hypotheses six and seven argue that facilitating conditions act as a moderator in the relations between intention, habit and behaviour. Findings of this research indicate that facilitating conditions indeed act as a moderator influencing the total outcome which is whether young people in Greece dispose their old t-shirt in a socially responsible or irresponsible way.

Facilitating conditions consist of any environmental or social conditions that influence a behaviour and either makes it easier or more difficult to take place. In this study, the author only examined the infrastructure regarding responsible clothing disposal in Greece and the level of awareness and educational campaigns about responsible
disposition. It is important to mention that the author considers as infrastructure only the organised one (from governments and companies). The mean of this variable is 3.50 (see Table 2, chapter 4.2) indicating that there is a huge lack of infrastructure, awareness and educational campaigns towards this issue that deter young people from disposing their old garments (an old t-shirt in this case) in a socially responsible way.

This argument can be further demonstrated by examining the types of alternative disposition chosen by the participants (see chapter 4.3) in this research consisting of donation to charities (mainly expressed through church), give away to friends and family members, and turn the old garments into cleaning rags. All the above mentioned types of disposition, according to the author, can not be clearly considered part of an organised infrastructure as they do not involve organised actions that directly aim to the deal with the problems deriving from clothing disposition and educate individuals towards acting responsibly in the future. On the one hand, it is encouraging that young people in Greece use the existing infrastructure, but in some point the extension of the product’s life cycle is not enough. Maybe for the needs of the research, other items should have been added to the questionnaire in order to address the variable of facilitating conditions more deeply.

Considering all the above, it is obvious that facilitating conditions, as defined in this research, moderate the relation between intention, habit and behaviour but not in a degree that is able to change the behaviour deeply as individuals find alternatives. Intention, even if it is not clearly suggested from the findings, seems to be the main driver of behaviour on the grounds that young people manage to dispose their old t-shirts in relatively socially responsible manner through the existing means.

5.3 Clothing Disposal Behaviour among Young People in Greece

As analysed before, the overall clothing disposal behaviour of the sample can be characterised as close to being responsible due to the fact that the mean of the behaviour is 1.70 (see Table 2, chapter 4.2), while 1.00 shows that the individual never disposed a garment in an irresponsible way during the last two years and 2.00 represents the fact that the individual threw an old garment to the rubbish bin once or twice. Moreover, the fact that 92.5 per cent of the sample further disposed their old garments in a socially responsible manner (see figure 6, chapter 4.3) enhances the abovementioned argument.

However, the alternative disposition behaviours of the participants are of great interest on the ground that they show the existing infrastructure in Greece in concern to clothing disposing. Options like donation to charities and give away to a family
member or a friend consisted of approximately 55 per cent while turning the old t-shirts into cleaning rags comprised of 22 per cent. These figures point out that there is a lack of infrastructure in textile and clothing recycling as well as in second-hand shops and voluntary clothing exchange events. Besides the limitations in the existing infrastructure, young people in Greece choose to dispose their old t-shirts in a manner that extends the life cycle of them and this behaviour shows that people are likely to use alternative disposal ways that are known to them.

Donation to charities, especially through the Orthodox Church, is a common behaviour in Greece mainly because it is considered a known choice, it involves feelings of pleasure and altruism, and besides all there is easy accessibility since every neighbourhood has at least one church. In fact most of the charities in Greece are made through the church that has a very wide infrastructure to support them. Consequently it is convenient for people to dispose their old garments in this way. Disposing through giving the old t-shirt (or any other garment) to friends or family members can again be considered convenient and pleasant for individuals as there is relatively no effort in contacting friends or family members, while at the same time the person that disposes the garment feels good about helping his/her surrounding and further in case of emotional bond knows that his/her possession is used by someone familiar.

According to the disposition theory, when a disposition of a product extends its life cycle it can be considered as socially responsible but on the other hand in a certain point during its life cycle the product will be of no more use and eventually it will be thrown away. In this moment of the garment’s life cycle it is essential that an organised infrastructure exists to make sure that this product, in our case an old t-shirt, is properly reused or properly discarded for recycling and not end up into landfills until it decomposes. Findings further demonstrate that young people in Greece are eager to be socially responsible regarding clothing disposal and the development of a proper recycling infrastructure as well as educational campaigns would lead to a certain increase of this behaviour. The main finding of this research is that among Greek young individuals there is a high intention of responsibly disposing their old or unwanted garments but the lack of infrastructure and adequate information (facilitating conditions) often leads to behaving otherwise.

6. Conclusions
This research demonstrates in a clear manner that young individuals in Greece are likely to adopt a socially responsible behaviour towards clothing disposition. The analysis of the psychosocial factors behind this behaviour indicate that there are
things to be done in a governmental level which can lead to an increase in this behaviour as the base for further enhancement already exists.

Affective factors and intention, even in an indirect way, are found to explain clothing disposal behaviour in the greatest degree. Even if according to the findings habit is stronger towards the specific behaviour, the fact that habit indicates that the behaviour is not habitual gives greater weight towards intention. Concerning facilitating conditions, although they moderate the relation towards the final outcome they do not achieve to change the overall behaviour. That is mainly due to the definition of facilitating conditions in this study where they consist of the organised infrastructure and the educational campaigns. Attitudes of young individuals about how they intend to dispose an old t-shirt are considered to be influencing them in a positive manner but the relation to intention is not strong. Finally, social factors in Greece are neutral towards this issue so naturally the relation is weak.

As it concerns the weaknesses of this study, it is important to mention the need for wider measuring factors scales in order to examine clothing disposition in respect to Triandis’ (1977) Theory of Interpersonal Behaviour. Due to the fact that this theoretical model includes a lot of variables the items used for examining these scales are considered to be limited and consequently lead to results that are not of great accuracy. Furthermore, the author recognises the lack of standardised items in Greek as it is believed that the translation from English to Greek might have influenced their primary meanings.

Regarding further research on this subject, the author believes that Triandis’ (1977) Theory of Interpersonal Behaviour can be a valuable tool in examining clothing disposition as it is an integrated model and according to this research there are indications that can be applied to this behaviour. Psychosocial factors can be of great interest for researchers and policy makers as findings in this field can lead to the development of measures and campaigns well pointed to the factors behind this behaviour. As it concerns Greece, this study is unique as far as the author knows and can provide a good framework for further research. The author suggests that primarily there is a need for an exploratory study about how people in Greece dispose their old garments involving more aspects as for example wardrobe keeping. After identifying the main disposal options it is essential to examine each type of disposition more thoroughly and this is the case where Triandis’ (1977) Theory of Interpersonal Behaviour can be a valuable tool. Further research could explore beliefs and attitudes of Greek people towards an organized infrastructure concerning garment disposal and the tendencies of the population in using these facilities in the future.

However, even if the need for infrastructure is widely recognized and further supported by the findings of this specific essay it is not as important as education and proper information of the population. Considering the fact that proper infrastructure might be quite expensive and taking into consideration the difficult situation of the
Greek economy one suggestion of this paper is to promote education. If society was more informed about the harm landfill disposal of clothes causes, people might be more sensitive and concerned about recycling their garments. Even if proper governmental infrastructure takes a while to implement in Greece if there is adequate information about the consequences of their behaviour more people will use more often the alternatives of throwing their clothes to the garbage bin (exchange, donation, etc.). Some suggestion to achieve that is through wide television campaigns, creating some school activities concerning the matter or each municipality organizing once per month a bazaar where people could exchange or buy in a very low price used garments. This kind of promoting is low cost and might prove to be more effective.
Appendix - Tables

Table 1: Waste Management in Greece

<table>
<thead>
<tr>
<th>Area / Year</th>
<th>1995</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total waste generated</td>
<td>474</td>
<td>523</td>
<td>531</td>
<td>526</td>
<td>514</td>
<td>513</td>
<td>516</td>
<td>522</td>
<td>523</td>
<td>520</td>
<td>519</td>
<td>502</td>
</tr>
<tr>
<td>EU (27 countries)</td>
<td>407</td>
<td>416</td>
<td>422</td>
<td>427</td>
<td>432</td>
<td>437</td>
<td>442</td>
<td>447</td>
<td>452</td>
<td>457</td>
<td>467</td>
<td>467</td>
</tr>
<tr>
<td>Greece</td>
<td>67</td>
<td>83</td>
<td>95</td>
<td>97</td>
<td>100</td>
<td>105</td>
<td>109</td>
<td>116</td>
<td>120</td>
<td>123</td>
<td>123</td>
<td>121</td>
</tr>
<tr>
<td>Total waste treatment</td>
<td>434</td>
<td>500</td>
<td>501</td>
<td>514</td>
<td>505</td>
<td>501</td>
<td>498</td>
<td>509</td>
<td>513</td>
<td>499</td>
<td>493</td>
<td>489</td>
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<td>EU (27 countries)</td>
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<td>416</td>
<td>422</td>
<td>427</td>
<td>432</td>
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<td>442</td>
<td>447</td>
<td>452</td>
<td>457</td>
<td>457</td>
</tr>
<tr>
<td>Greece</td>
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<td>83</td>
<td>95</td>
<td>97</td>
<td>100</td>
<td>105</td>
<td>109</td>
<td>116</td>
<td>120</td>
<td>123</td>
<td>123</td>
</tr>
<tr>
<td>Municipal recycling</td>
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<td>55</td>
<td>58</td>
<td>65</td>
<td>69</td>
<td>74</td>
<td>78</td>
<td>82</td>
<td>84</td>
<td>73</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>EU (27 countries)</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>7</td>
<td>9</td>
<td>9</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Greece</td>
<td>65</td>
<td>79</td>
<td>81</td>
<td>85</td>
<td>84</td>
<td>89</td>
<td>95</td>
<td>99</td>
<td>100</td>
<td>102</td>
<td>107</td>
<td>103</td>
</tr>
<tr>
<td>Total incineration (including energy recovery)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>EU (27 countries)</td>
<td>266</td>
<td>288</td>
<td>278</td>
<td>269</td>
<td>255</td>
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<td>220</td>
<td>219</td>
<td>212</td>
<td>199</td>
<td>191</td>
<td>195</td>
</tr>
<tr>
<td>Greece</td>
<td>372</td>
<td>380</td>
<td>385</td>
<td>383</td>
<td>389</td>
<td>389</td>
<td>386</td>
<td>385</td>
<td>387</td>
<td>372</td>
<td>371</td>
<td>374</td>
</tr>
</tbody>
</table>

Self constructed, data retrieved from Eurostat, 2012

Table 2: Monthly Household Expenditure for Clothing and footwear in Greece

<table>
<thead>
<tr>
<th>Year</th>
<th>€ per Month</th>
<th>% of Monthly Expenditure</th>
<th>Monthly Household Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>90.46</td>
<td>10.6%</td>
<td>851.66</td>
</tr>
<tr>
<td>1998</td>
<td>128.94</td>
<td>9.3%</td>
<td>1383.24</td>
</tr>
<tr>
<td>2004</td>
<td>150.15</td>
<td>8.4%</td>
<td>1792.28</td>
</tr>
<tr>
<td>2008</td>
<td>174.24</td>
<td>8.2%</td>
<td>2117.67</td>
</tr>
<tr>
<td>2009</td>
<td>162.84</td>
<td>7.9%</td>
<td>2065.18</td>
</tr>
</tbody>
</table>

Self constructed, data retrieved from the Hellenic Statistical Authority (EL.STAT.), 2012
Appendix - Figures

Figure 1: Jacoby et al. (1977) Disposition Decision Taxonomy

Retrieved from Jacoby, Jacob, Carol K. Berning, and Thomas F. Dietvorst. “What about Disposition?”, 1977

Figure 2: A Paradigm of Consumer Product Disposition Processes

Retrieved from Hanson, James W. “A Proposed Paradigm for Consumer Product Disposition Processes.”, 1980
Figure 3: Consumers’ Used Clothing Classification Process Prior to Donation

![Diagram of Consumers' Used Clothing Classification Process Prior to Donation](image)


Figure 4: Model for Young Consumers’ Fashion Disposal Habits

![Diagram of Young Fashion Consumers’ Disposal Habits](image)

Appendix - Questionnaire in English

Attitude / Perceived Consequences Scale
1. Throwing my old t-shirt to the conventional garbage bin is bad for the environment:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

2. Throwing my old t-shirt to the conventional garbage bin is an irresponsible behaviour:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

Social Factors Scale
3. Most people who are important to me think it is ok to throw my old t-shirt to the conventional garbage bin:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

4. If I throw my old t-shirt to the conventional garbage bin, most people who are important to me would:

<table>
<thead>
<tr>
<th>Highly Approve</th>
<th>Agree</th>
<th>Disagree</th>
<th>Highly Disapprove</th>
</tr>
</thead>
</table>

Affect Scale
5. To me, throwing my old t-shirt to the conventional garbage bin is:

<table>
<thead>
<tr>
<th>Very Good</th>
<th>Agree</th>
<th>Disagree</th>
<th>Very Bad</th>
</tr>
</thead>
</table>

6. To me, throwing my old t-shirt to the conventional garbage bin is:

<table>
<thead>
<tr>
<th>Very Foolish</th>
<th>Agree</th>
<th>Disagree</th>
<th>Very Wise</th>
</tr>
</thead>
</table>

7. To me, throwing my old t-shirt to the conventional garbage bin is:

<table>
<thead>
<tr>
<th>Highly Unattractive</th>
<th>Agree</th>
<th>Disagree</th>
<th>Highly Attractive</th>
</tr>
</thead>
</table>

Intention Scale
8. In the future, I intent to throw my old t-shirt to the conventional garbage bin:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

9. In the future, I intent to choose an alternative way of disposing my old t-shirt other than throwing it to the conventional garbage bin:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

Habit Scale
10. I do NOT think twice before throwing my old t-shirt to the conventional garbage bin:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

11. Throwing my old t-shirt to the conventional garbage bin is automatic for me:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>
Facilitating Conditions Scale
12. There is a lack of infrastructure in responsible clothing disposition:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

13. There is a lack of awareness and educational campaigns about how to dispose my old t-shirt responsibly:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

14. I do not have the time to search for alternatives about other ways of disposing my old t-shirt except from throwing it to the conventional garbage bin:

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

Behaviour Scale
15. During the last two years, how many times did you throw your old t-shirt to the conventional garbage bin?

<table>
<thead>
<tr>
<th>Never</th>
<th>1 or 2 times</th>
<th>3 or 4 times</th>
<th>5 to 8 times</th>
<th>Above 9 times</th>
</tr>
</thead>
</table>

16. During the last two years, how many times did you throw another old garment or another textile to the conventional garbage bin?

<table>
<thead>
<tr>
<th>Never</th>
<th>1 or 2 times</th>
<th>3 or 4 times</th>
<th>5 to 8 times</th>
<th>Above 9 times</th>
</tr>
</thead>
</table>

17. During the last two years, instead of throwing your old t-shirt to conventional garbage bin did you choose an alternative way of disposing it?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>

18. If Yes, which of the following alternative ways did you choose?

1. Threw it to the textile recycle bin
2. Donated it to charities (church, etc.)
3. Donated it to a second-hand shop (with no refund)
4. Gave it to a friend or a family member
5. Exchanged it with another t-shirt (or different garment)
6. Sold it to a second-hand shop or directly to another person (eg. through ebay, etc)
7. Turned it into cleaning rag
8. Other

Demographics
19. What is your age group?

<table>
<thead>
<tr>
<th>18 – 24 years old</th>
<th>25 – 30 years old</th>
<th>30 – 35 years old</th>
</tr>
</thead>
</table>

20. What is your gender?

| Male | Female |
21. What is your education level?
   1. High School
   2. Technological Institution (College)
   3. University
   4. Master
   5. Doctoral
Appendix - Questionnaire in Greek

ΕΡΩΤΗΜΑΤΟΛΟΓΙΟ
Στο παρακάτω ερωτηματολόγιο που πρόκειται να συμπληρώσετε, οι ερωτήσεις αφορούν τη συμπεριφορά σας σχετικά με τον τρόπο που επιλέγετε να διαχειριστείτε κάποιο παλαιό σας ρούχο και ειδικότερα ένα παλαιό σας t-shirt. Οι ερωτήσεις έκδινον ερευνώντας την παρούσα συμπεριφορά σας και συνεχίζουν εξετάζοντας κάποιους παράγοντες που ο ερευνητής πιστεύει ότι την επηρεάζουν.

Η παρούσα έρευνα πραγματοποιείται στο πλαίσιο της πτυχιακής εργασίας με τίτλο “Factors Influencing Clothing Disposal Behaviour in Greece” του φοιτητή Κουκουβίνου Δημήτρου, για το μεταπτυχιακό πρόγραμμα MSc in Fashion Management στο πανεπιστήμιο του Boras που βρίσκεται στη Σουηδία.

Το ερωτηματολόγιο είναι ανώνυμο και θα εξασφαλίστε αυστηρά η ανωνυμία τόσο κατά τη συγκέντρωση των ερωτηματολογιών όσο και κατά την επεξεργασία των δεδομένων.

Παρακαλείσθε θερμά να απαντήσετε όλες τις ερωτήσεις.

Το ερωτηματολόγιο αυτό αφορά ανθρώπους που είναι μεταξύ 18 έως 35 ετών.

Για να απαντήσετε βάλτε ένα ν’ στο κουτάκι που αντιστοιχεί στην απάντησή σας.

Το ερωτηματολόγιο δεν διαρκεί πάνω από 5 λεπτά. Αν υπάρχει κάποια ερώτηση μη διερεύνηστε με τον ερευνητή στην ηλεκτρονική διεύθυνση dim_kouk_03@hotmail.com ή στην S112823@student.hb.se.

Ευχαριστώ πολύ για τη συνεργασία σας. Η βοήθειά σας είναι πολύτιμη.

Κουκουβίνος Δημήτριος,
MSc student in Fashion Management,
University of Textiles, Boras, Sweden.

1. Τα τελευταία 2 (δύο) χρόνια, πόσες φορές πετάξατε το παλιό σας t-shirt στα σκουπίδια;

☐ Ποτέ
☐ 1 ή 2 φορές
☐ 3 ή 4 φορές
☐ 5 - 8 φορές
☐ Πάνω από 9 φορές
2. Τα τελευταία 2 (δύο) χρόνια, πόσες φορές πετάξατε κάποιο άλλο ρούχο ή κάποιο ύφασμα στα σκουπίδια:

- Ποτέ
- 1 ή 2 φορές
- 3 ή 4 φορές
- 5 - 8 φορές
- Πάνω από 9 φορές

3. Τα τελευταία 2 (δύο) χρόνια, αντι να πετάξετε το παλιό σας t-shirt στα σκουπίδια προτιμήσατε κάποιον άλλο τρόπο διαχείρισης:

- Ναι
- Όχι

4. Εάν ναι, ποιον ή ποιους από τους παρακάτω τρόπους προτιμάτε:

- Το πέταξα σε κάδο ανακύκλωσης για υφάσματα
- Το πέταξα σε κάδο ανακύκλωσης για άλλα υλικά όπως γυαλί, αλουμίνιο, χαρτί, κ.α.
- Το δώρισα σε φιλανθρωπικά ιδρύματα όπως στην εκκλησία, κ.α.
- Το έδωσα σε second-hand μαγαζί χωρίς χρηματικό αντίτιμο
- Το έδωσα σε κάποιο φίλο ή κάποιο μέλος της οικογένειάς μου
- Το αντάλλαξα με κάποιο t-shirt ή κάποιο άλλο αντικείμενο
- Το πωλήσα σε second-hand μαγαζί ή απευθείας σε άλλο άτομο
- Το μετέτρεψα σε χειροκόπητα ή πανί καθαρισμού
- Διάλεξα κάποιον άλλο τρόπο

5. Το να πετάξω το παλιό μου t-shirt στα σκουπίδια, είμαι κακό για το περιβάλλον:

- Συμφωνώ
- Διαφωνώ

Απόλυτα

Απόλυτα
6. Το να πετάξω το παλιό μου t-shirt στα σκουπίδια, είναι μια ανεύθυνη συμπεριφορά:

☐ Συμφωνώ ☐ Συμφωνώ ☐ Διαφωνώ ☐ Διαφωνώ Απόλυτα
Απόλυτα

7. Οι περισσότεροι άνθρωποι που είναι σημαντικοί για μένα πιστεύουν ότι ΔΕΝ δημιουργώ κάποιο πρόβλημα πετώντας το παλιό μου t-shirt στα σκουπίδια:

☐ Συμφωνώ ☐ Συμφωνώ ☐ Διαφωνώ ☐ Διαφωνώ Απόλυτα
Απόλυτα

8. Εάν πετάξω το παλιό μου t-shirt στα σκουπίδια, οι περισσότεροι άνθρωποι που είναι σημαντικοί για μένα:

☐ Το εγκρίνουν ☐ Το εγκρίνουν ☐ Το αποδοκιμάζουν
απόλυτα εγκρίνουν απόλυτα

9. Πετώντας το παλιό μου t-shirt στα σκουπίδια, αισθάνομαι:

☐ Πολύ όμορφα ☐ Όμορφα ☐ Άσχημα ☐ Πολύ άσχημα

10. Πετώντας το παλιό μου t-shirt στα σκουπίδια, αισθάνομαι:

☐ Πολύ ανόητος ☐ Ανόητος ☐ Έξυπνος ☐ Πολύ έξυπνος

11. Το να πετάξω το παλιό μου t-shirt στα σκουπίδια:

☐ Δεν είναι καθόλου ☐ Δεν είναι εκλεκτικό ☐ Είναι εκλεκτικό ☐ Είναι πολύ εκλεκτικό

12. Στο μέλλον, σκοπεύω να πετάξω το παλιό μου t-shirt στα σκουπίδια:

☐ Συμφωνώ απόλυτα ☐ Συμφωνώ ☐ Διαφωνώ ☐ Διαφωνώ απόλυτα

13. Στο μέλλον, σκοπεύω να επιλέξω έναν εναλλακτικό τρόπο διαχείρισης του παλιού μου t-shirt από το να το πετάξω στα σκουπίδια:

☐ Συμφωνώ απόλυτα ☐ Συμφωνώ ☐ Διαφωνώ ☐ Διαφωνώ απόλυτα
14. ΔΕΝ σκέφτομαι πολύ για να πετάξω το παλιό μου t-shirt στα σκουπίδια:

- [ ] Συμφωνώ απόλυτα
- [ ] Διαφωνώ
- [ ] Διαφωνώ απόλυτα

15. Το να πετάω το παλιό μου t-shirt στα σκουπίδια είναι συνήθεια για μένα:

- [ ] Συμφωνώ απόλυτα
- [ ] Διαφωνώ
- [ ] Διαφωνώ απόλυτα

16. Υπάρχει έλλειψη υποδομών ανακύκλωσης υφασμάτων:

- [ ] Συμφωνώ απόλυτα
- [ ] Διαφωνώ
- [ ] Διαφωνώ απόλυτα

17. Υπάρχει έλλειψη ενημέρωσης όσον αφορά τον κοινωνικά και περιβαλλοντικά υπεύθυνο τρόπο διαχείρισης του παλιού μου t-shirt:

- [ ] Συμφωνώ απόλυτα
- [ ] Διαφωνώ
- [ ] Διαφωνώ απόλυτα

18. ΔΕΝ έχω το χρόνο να ψάξω εναλλακτικός τρόπος διαχείρισης του παλιού μου t-shirt από το να το πετάξω στα σκουπίδια:

- [ ] Συμφωνώ απόλυτα
- [ ] Διαφωνώ
- [ ] Διαφωνώ απόλυτα

19. Σε ποια ηλικιακή ομάδα ανήκετε;

- [ ] 18 - 25
- [ ] 25 - 30
- [ ] 30 - 35

20. Ποιο είναι το φύλο σας;

- [ ] Άνδρας
- [ ] Γυναίκα
21. Ποιο είναι το επίπεδο εκπαίδευσής σας:

- Αύκειο/ΙΕΚ
- ΤΕΙ
- ΑΕΙ
- Μεταπτυχιακό
- Διδακτορικό
Reference List


<http://www.kathimerini.gr/4dcgi/_w_articles_kathcommon_1_10/12/2005_1284900 >.


