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FUTURE FASHION ALTERNATIVES
- a social marketing toolbox to
promote sustainable fashion
alternatives

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Future-fashion-alternatives.com

- A social marketing toolbox to promote sustainable fashion alternatives -

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Table of contents

I.	Introduction	4
II.	Theoretical Background	5
A.	<i>Clothing Consumer Behaviour.....</i>	5
	From consumer needs to consumer wants.....	5
	Prevalent Fashion Consumption Patterns: the fast fashion system.....	6
	Sustainable Clothing Consumption Alternatives	7
B.	<i>Models of Consumer Behaviour</i>	8
	Theory of Planned Behaviour (TPB).....	9
	Bridging the intention-behaviour gap: Motivation-Opportunity-Ability-Behaviour Model (MOAB)	9
	Bridging the intention-behaviour gap: action planning (HAPA).....	10
C.	<i>Social Marketing: Influencing behaviour for the good</i>	11
	Defining Social Marketing.....	11
	Characteristics of a successful social marketing plan	13
	Summary –Theoretical Background for future-fashion-alternatives.com	14
III.	Future-fashion-alternatives.com: an online-based workshop tool to promote more sustainable fashion consumption alternatives	15
A.	<i>Webquest: definition and use</i>	15
B.	<i>Social Marketing for behaviour change: Implementation of social marketing principles in our example</i>	16
	Background, purpose and focus.....	16
	Target Audience.....	17
	Defining behavioural and other objectives	19
	Identifying target audience barriers and benefits	20
	Developing strategies - Community based social marketing.....	24
	Piloting: evaluation and revision	29
C.	<i>Evaluation</i>	29
	Quantitative evaluation results.....	29
	Qualitative evaluation results.....	34
D.	<i>Summary and outlook</i>	38
	Acknowledgement	40
	References	41

Table of figures

Figure 1: Home site of future-fashion-alternatives.com.....	4
Figure 2: Functions of clothing.....	5
Figure 3: Good practice Nudie Jeans	7
Figure 4: Model underlying the current study	11
Figure 5: Exchange theory.....	12
Figure 6: Social marketing defined	12
Figure 7: Steps towards a successful social marketing strategy (after Lee & Kotler, 2011)	14
Figure 8: Sustainable alternatives	17
Figure 9: Common knowledge base for all participants	19
Figure 10: Levels of engagement with sustainable fashion. $N = 231/N(\text{total}) = 1336$	21
Figure 11: Usage of different channels among consumers between 16-19 years	23
Figure 12: Qualitative focus group results on the four alternatives	23
Figure 13: Change in self-perception through behaviour	26
Figure 14: Different types of norms	27
Figure 15: Example task for group work.....	28
Figure 16: Engagement in any of the four alternatives previous to the workshop	31
Figure 17: Significant changes between t1, t2 and t3	33
Figure 18: Exercise to reflect on consumption behaviour	35
Figure 19: Short animation films concentrating on the main topics.....	37

I. Introduction

Clothing is an inherent part of our culture. Clothes are one of the most personal and therefore most important consumer goods. However, the production of clothing consumes vast resources and is highly environmentally and socially unsustainable. High levels of energy and water use, generation of greenhouse gas, pesticide and other hazardous chemicals waste as well as numbers of unwanted clothes contributing to growing landfills are detrimental to the environment and impair the health of labourers of the manufacturing facilities (Lynch, 2009; hanace, 2011). Moreover poor working conditions in production countries contribute to social inequality. Low wages, long working hours, unsafe work places and labour exploitation characterise the unsocial working conditions for a large group of workers in the fashion industry (Allwood et al., 2006; Connell, 2010). The negative environmental and social impacts are exacerbated by current clothing consumer behaviour, which is characterised by tremendous overconsumption. The prevalent fast fashion system creates continuous demands by ever changing trends of garments with low price and quality. Within that system, clothing consumer behaviour is substantially influenced by marketing and advertisement. Fast fashion chains are not only selling the product clothing, but also create the image of further positive outcomes linked with buying the consumer good clothing (Solomon & Rabolt, 2004).

The present study aims to change consumer awareness and inspire behavioural change. In particular, we aim to reduce discarding of clothes and extend life of garments among young adults. To overcome the attitude-behaviour-gap we employ a social marketing toolbox. The toolbox is implemented within

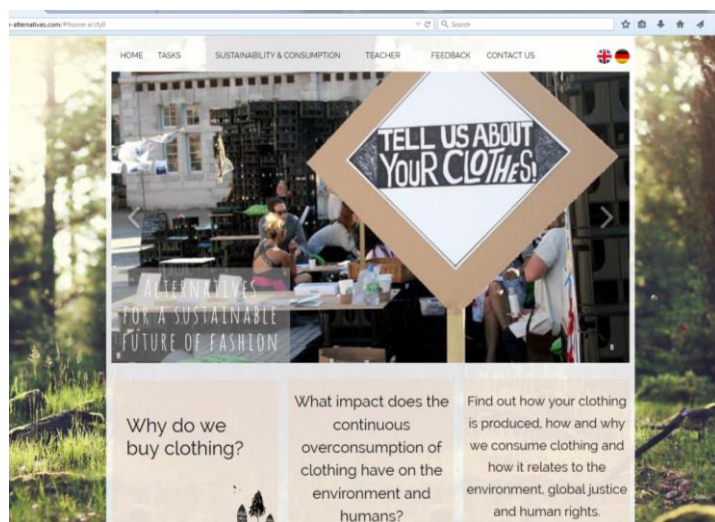


Figure 1: Home site of future-fashion-alternatives.com

the 'WebQuest' on www.future-fashion-alternatives.com (Figure 1). A WebQuest is a specific type of web-based workshop method, where the focus is on problem solving through obtaining information via internet searches (Dodge, 2007). It encourages

participants to deal with the topic of (un)sustainable fashion in an active and self-directed manner, while basing on principles of social marketing in order to enable reflection of own consumer behaviour and foster behaviour change.

II. Theoretical Background

A. Clothing Consumer Behaviour

The terms clothing, clothes, garments, apparel, fashion and many more are used with overlapping meanings in language and literature (Hansen, 2004). In the current study the terms clothes and clothing are used the most. Both terms are supposed to refer to the basic, utilitarian process of covering the body with a piece of garment as well as the more complex act of dressing “in fashion”, i. e. dressing in certain ways to communicate specific meaning. When referring to a specific piece of clothing the term garments is used.

From consumer needs to consumer wants

There are numerous reasons why we buy clothing (Figure 2).



Figure 2: Functions of clothing

First, clothing has a physiological function. As barrier between the skin and the environment it serves various biological needs: Protecting the body from wind, rain and cold and helping to keep the body temperature constant, clothing is used to keep the human body comfortable and healthy. Second clothing has a psychological or symbolic function that serves various psychological needs.

Shopping for clothes can be a fun or a leisure-time activity, a look for “new” and “hip” trends to stay up-to-date or a reward. Moreover clothing is used as a code to communicate and express meaning. Two main types of expression can be

differentiated: the expression of belonging and the expression of identity. Clothing enables to express the way one perceives her- or himself, to depict specific attributes or influence how others perceive one. Communicated attributes are manifold and can range from uniqueness, taste, wealth, sex appeal, youth and trend-consciousness to authenticity and trustworthiness, whereby the boundaries between communication of self and communication of image are fluent.

Furthermore there is always a fine line between expressing individuality with clothing choices on the one hand and expressing belonging to a specific group with particular norms and expectations on the other hand. These norms and expectations vary and depend on the broader culture in which the clothing decision takes place (e. g. Western cultural environment, Middle Eastern cultural environment), different subcultures (e. g. young professionals, youth subcultures like rockers or punks), the nearer social environment (e. g. group of friends, colleagues) or the specific situation and the so called “dress code” (e. g. wedding, funeral). Dressing in order to serve the expression of individuality as well as belonging can be a balancing act, whereby individual dressing choices often take place within the boundaries of norms and expectations of the social environment.

The physiological as well as psychological consumer needs manifest themselves in various consumer wants ((Solomon & Rabolt, 2004); Mahatoo, 1989). Thereby the need for weather protection, for example, can translate into the want for either an organic cotton scarf or a waterproof outdoor scarf made from polyester. Moreover the need for new and up-to-date clothing can be found in a high demand of garments and constant shopping or the membership with a clothing library. Which kind of want develops from various needs is influenced by diverse factors such as previous experiences, preferences and values play an important role, as well as availability, accessibility, affordability and other features of the purchasing context. At last marketing from big fast fashion chains, mostly in form of advertisement and image campaigns, has a big influence on the decision, which consumer goods are wanted to serve physiological and psychological needs.

Prevalent Fashion Consumption Patterns: the fast fashion system

The prevalent fast fashion system is characterized by tremendous overproduction, caused by ever changing trends, low prices and low quality or planned obsolescence (Schor 2005).

Simultaneously, fast fashion retailers do not only sell the mere textile product, but often a complete lifestyle that comes with it. Advertisement and brand image try to link the purchase of a garment, e. g. a jeans (Figure 3), with so called “meta goods” like freedom, adventure or happiness. The objective is to convince the consumer that by buying this specific garment they also obtain a piece of freedom and happiness for themselves. The actual demand of clothing starts to play a minor part, the satisfaction of the want for new items as well as the communication of identity and belonging have priority. Buying, wearing, discarding and buying again is the message communicated by the fast fashion system. Garments as good as new often disappear unworn in the wardrobe or are discarded as garbage. This mechanism

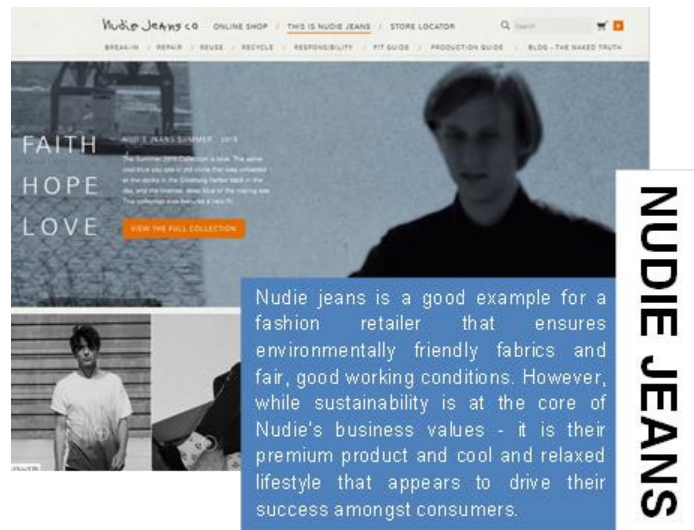


Figure 3: Good practice Nudie Jeans

creates high volumes of textile waste. The current fast fashion system is highly unsustainable, as continuous overproduction and overconsumption puts pressure on ecosystems and contributes to environmental as well as social degradation.

Sustainable Clothing Consumption Alternatives

The way towards sustainable clothing consumption raises the question about who takes responsibility for the transformation towards more sustainable consumption patterns. Amongst others, consumers are a strong force, creating a respective demand for socially and ecologically sound products. If consumers voice such a demand, sustainable products and services will potentially find their way from niche to mass market and could be established as competitive alternatives.

Sustainable clothing alternatives ideally should maximise positive and minimise negative environmental, social and economic impacts along the textile supply chain. There are two main forms of more sustainable clothing consumption behaviours that can be distinguished: buying more environmentally friendly and socially fair clothing products (e. g. clothing made from certified organic cotton or without toxic dyes, clothing products labelled as Fair Trade), thereby promoting more

sustainable production practices, or dealing with already existing clothing in a more responsible way (e. g. reselling and second hand buying, swapping, reusing and donating), thereby breaking the cycle of fast fashion and promoting more sustainable services. Reuse and recycling results in environmental benefit as a result of avoiding the environmental burden associated with the manufacture of new products and the disposal of wastes (Farrant, Olsen & Wangel, 2010; Woolridge et al., 2006) Thereby the energy burden of recycling is insignificant in comparison with the savings made through off-setting new production (Gracey & Moon (WRAP), 2012).

B. Models of Consumer Behaviour

What, where and how we consume in our everyday life is a complex phenomenon and influenced by multiple factors both externally (e. g. price, availability) and internally (e. g. normative beliefs, habits) in nature. The decision of consumers to make sustainable consumption choices is likewise affected by a wide range of potential influences, whereby sustainability concerns further add to the complexity of consumer behaviour. A vast amount of previous research is trying to determine the antecedents for sustainable behavioural intention and actual sustainable behaviour. Thereby consumers' intention to show a specific behaviour is often seen as the best predictor for that behaviour. However, as previous research has shown, there is often a gap between consumers' attitudes or intentions to consume in a sustainable way and their actual purchase behaviour (Devinney, Auger and Eckhardt, 2010; Carrigan and Attalla, 2001). In our theoretical approach we try to bridge that gap by combining different models of consumer behaviour. We mainly build on two well-established theoretical models: the Theory of Planned Behaviour (TPB) (Ajzen, 2012) and the Motivation-Opportunity-Ability-Behaviour model (MOAB) (Thøgersen, 2010; MacInnis, 1991). Both have been used to explain human behaviour in various contexts, i. a. different sustainable consumer behaviours (Donald, Cooper & Conchie 2014; Han, Hsu & Sheu 2010; Nigbur, Lyons, & Uzzell 2010; Vermeier & Verbeke 2008). In order to further address the intention-behaviour gap, we include a planning component in our model, as can be found within the Health Action Process Approach (HAPA) framework (Schwarzer, 2008). Planning is seen as a post-intentional factor that facilitates the translation of intentions into actions (Schwarzer et al., 2007).

Theory of Planned Behaviour (TPB)

The TPB is a framework to explain human behaviour in different contexts (Ajzen, 1991). It includes measures of attitude, subjective norm and perceived behaviour control to predict intention to perform a specific behaviour (Ajzen, 1985). Intention thereby is central as immediate antecedent for performing behaviour (Ajzen, 1991). Attitude, subjective norm and perceived behaviour are influenced by the likely consequences of a behaviour, beliefs about what other people expect and beliefs about which existing factors can facilitate or impede the behaviour. In general one can expect that the more attitudes as well as other people are in favour of a behaviour, the more likely the behaviour becomes. The TPB has previously shown to be applicable in different sustainable consumption contexts in different countries, e. g. with food consumption (Tanner & Kast, 2003; Robinson & Smith, 2002) or recycling (Pakpour et al., 2014; Ramayah, Lee & Lim, 2012).

Bridging the intention-behaviour gap: Motivation-Opportunity-Ability-Behaviour Model (MOAB)

According to the MOAB model, motivation, ability and opportunity play a crucial role for behaviour change. While the model has mostly been used to analyse environmentally friendly behaviour such as recycling or use of public transport (Thøgersen 2009; Thøgersen 1994), it can well be applied to social and ethical factors as well. In both cases, it helps to explain intention-behaviour inconsistencies (Ølander and Thøgersen 1995).

Important factors that have an influence on the type and strength of consumer motivation are individual values and attitudes, environmental concern, internalised norms and self-efficacy (Thøgersen 2010). All five factors have a crucial influence on consumer decisions and the intention to make specific consumer choices, yet alone are not sufficient on their own to explain consumer behaviour. Besides motivation, the MOAB model focuses on opportunity and ability as factors influencing consumer behaviour.

Opportunities refer to the contextual factors that facilitate or impede certain behaviours. The main attributes of the purchase situation can be characterised on the basis of the classical 4 P's (product, place, price and promotion) as well as with a focus on the Triple A's (availability, affordability, and accessibility) (Reisch, 1998) of sustainable product alternatives for the individual consumer.

As regards ability, internal resources and personal characteristics have an influence on consumer behaviour. Strong habits or limited resources (e.g. sufficient time, money, cognitive capacity, and knowledge) constitute the personal characteristics that determine the ability of consumers to make more sustainable consumption choices.

Including opportunities and abilities as predictors of consumer behaviour contributes to bridging the intention-behaviour gap, yet it does not fully explain the underlying psychological processes that lead from intention to behaviour. Sustainable consumption behaviour is frequently discussed from a “drivers and barriers” perspective, whereas the question of potential barriers and drivers for sustainable consumption behaviour is highly complex (Kollmuss and Agyeman, 2002). Abilities and opportunities can be seen as either drivers or barriers, but on their own do not explain which processes help consumers to benefit from drivers or overcome barriers.

Bridging the intention-behaviour gap: action planning (HAPA)

The Health Action Process Approach (HAPA) identifies possible underlying processes that are working when intentions are translated into actions are. It suggests that it is necessary to distinct between

- a. pre-intentional motivation state that leads to a behavioural intention and a
- b. post-intentional volitional state that lead to actual behaviour (Schwarzer, 2008).

Whereas factors influencing the development of an intention have been introduced within the TPB, the post-intentional state is not addressed by the previous models. Unforeseen barriers or temptations not to act might emerge and hinder the translation of intentions to actions. If attitude is already in favour towards more sustainable clothing alternatives, then ‘knowledge on how to act’ should be provided, combined with strategic plans on how, where and when in order to overcome the black-box between intention and behaviour. According to the HAPA, every good intention needs to be translated into detailed instructions on how to perform the desired behaviour (Schwarzer, 2008). Two different kinds of planning have been found to play a crucial mediating role in translation intentions into actual behaviour:

- action planning as planning specific situation parameters (when, where) and specific sequences of action (how)

- coping planning as anticipating barriers and thinking about alternative behaviours to overcome these barriers (Hassan, Shiu & Shaw, 2014; Bruijn, Gardner, van Osch & Sniehotta, 2013; Carrington, Neville & Whitwell, 2012).

We therefore add strategic planning as further factor influencing consumer behaviour to the model which underlies the current report (Figure 4).

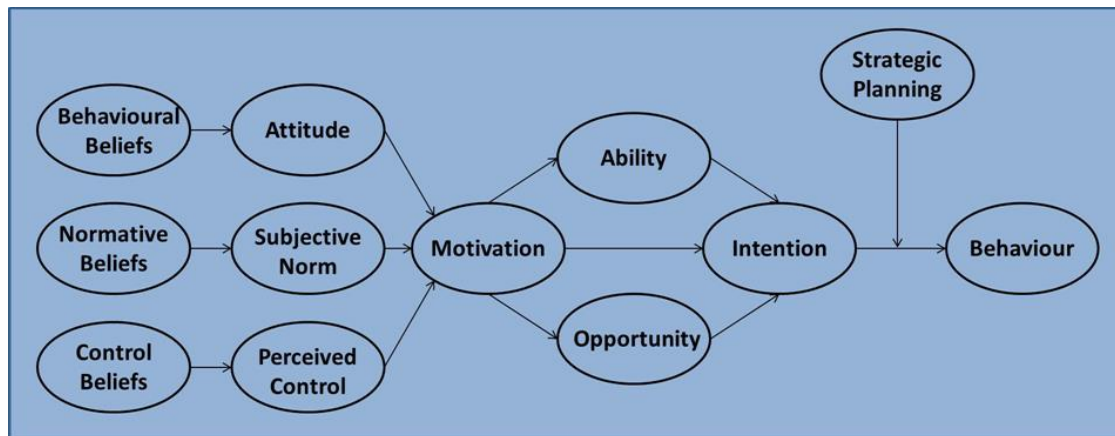


Figure 4: Model underlying the current study

C. Social Marketing: Influencing behaviour for the good

Defining Social Marketing

Marketing in its traditional sense, as defined by the American Marketing Association, is “the activity, set of institutions, and processes for creating, communicating, delivering and exchanging offerings that have value for customers, clients, partners, and society at large” (American Marketing Association, 2013).

Within the field of marketing, social marketing is a widely spread term that is used for distinct marketing efforts in various contexts (Lee & Kotler, 2011). Commonly it refers to marketing strategies that have a value for society or are aiming for “doing good”, i. e. influencing behaviour in order to improve health, prevent injuries, protect the environment, contribute to communities or enhance financial well-being.

Crucial for both commercial and social marketing is the consumer orientation. The promoted good, service or behaviour has to appeal to the target audience by solving a problem or satisfy a need they have. At the same time, the benefits of the promoted good, service or behaviour need to equal or exceed the costs (see Figure 6). In order to be successful, commercial marketing efforts as well as social marketing strategies need to make sure that they know their targeted recipients and understand and meet the target groups wants and needs (Figure 5).

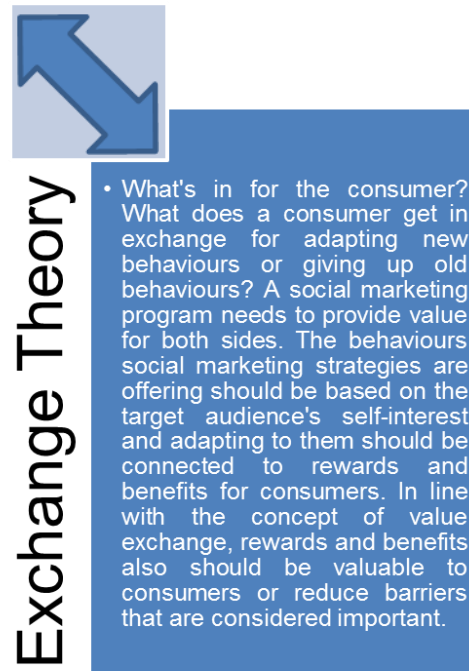


Figure 5: Exchange theory

However, whereas commercial marketing primary focuses on selling goods and services in order to produce financial gain for companies and corporations, social marketing aims to influence behaviours with societal gain (Lee & Kotler, 2011; Donovan & Henley, 2010). Defined in several ways, most scholars agree about basic principles that are common to all social marketing strategies (Figure 6). They

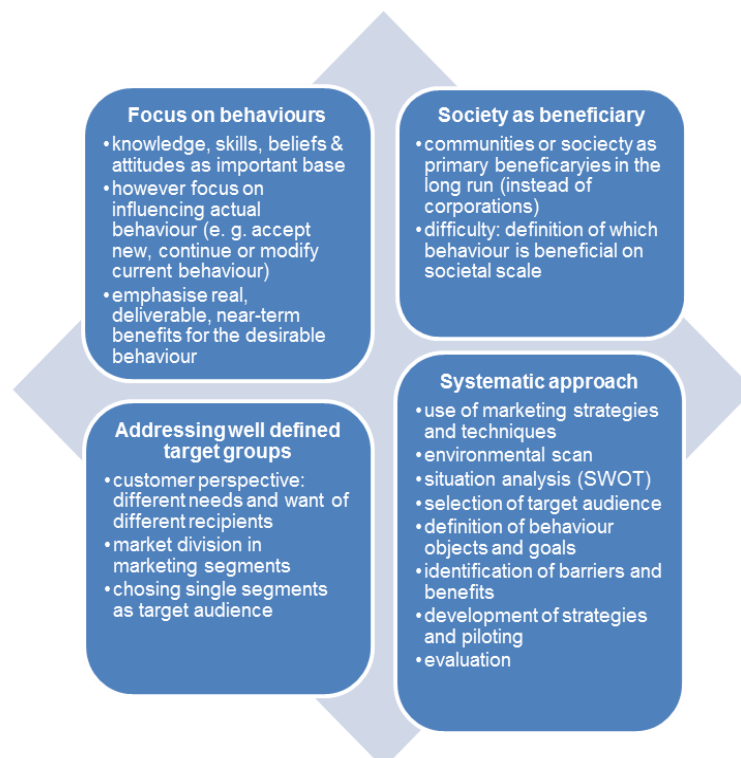


Figure 6: Social marketing defined

- a) influence behaviours
- b) that have a positive impact or benefit for individuals or the society
- c) through a systematic approach which applies marketing strategies and principles
- d) while concentrating on well-defined and characterised target groups.

In the context of the present report the working definition of social marketing is to a great extent based on 'community based social marketing' (CBSM) (McKenzie-Mohr, 2011). According to that, "social marketing is a process that involves (a) carefully selecting which behaviours and segments to target, (b) identifying the barriers and benefits to these behaviours, (c) developing and pilot testing strategies to address these barriers and benefits, and, finally, (d) broad scale implementation of successful programs." (McKenzie-Mohr, 2011).

Numerous studies have shown that information provision alone often has little influence on sustainable consumption behaviour (e. g. Prothero et al., 2011; Vermeir & Verbeke, 2006). That is because enhancing consumers' knowledge does not necessarily lead to altering their attitudes and changed attitudes do not always translate into behaviour change. This so called 'attitude-behaviour-gap' can be found due to various barriers of either external or internal nature (see previous Chapter 'Models of consumer behaviour' and Figure 4)

To overcome the weakness of solely information-based campaigns we develop a toolbox of communication strategies based on the principles of social marketing (McKenzie-Mohr, 2011). In line with our understanding of social marketing the important difference is that this toolbox will be based on the analysis of concrete barriers and benefits of external and internal nature for a specific behaviour. The developed communication strategies within the toolbox will include behaviour-change tools that address these specific barriers and benefits.

Characteristics of a successful social marketing plan

Developing a concrete, detailed plan for a social marketing campaign is essential and has numerous benefits. Basing social marketing efforts on thorough strategic reflections and analyses on purpose and focus of the social marketing strategy, suitable target audiences and their characteristics as well as realistic behaviour objects and goals allows developing effective social marketing strategies that enable behaviour change in an efficient way. For the current report we focused on seven steps as base for a systematic social marketing tactic (Figure 7).

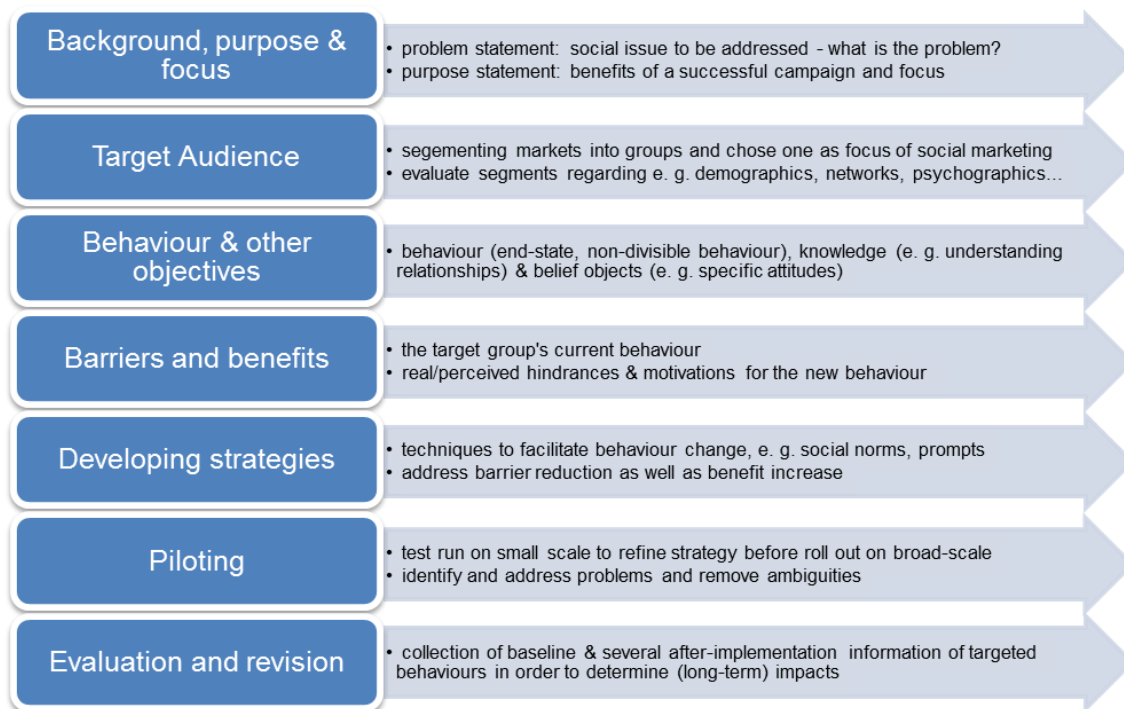


Figure 7: Steps towards a successful social marketing strategy (after Lee & Kotler, 2011)

Summary –Theoretical Background for future-fashion-alternatives.com

Combining traditional and more recent models of consumer behaviour to identify relevant factors connected to behaviour explanation and prediction (see Figure 4), as well as community-based social marketing strategy tools in order to address these factors, the online-based workshop ‘future-fashion-alternatives.com’ has been developed as an offer for students between 15-19 years. Its goal is fostering more sustainable clothing consumption behaviours by imparting knowledge on how and where clothes are produced and what typical clothing consumption behaviours are in a first step. Building on target group relevant barriers and benefits, it introduces suitable and more sustainable clothing consumption alternatives as well as strategic planning exercises on how, when and where to perform these alternatives in a second step. The workshop is conceptualised as an online-based WebQuest. This has many advantages. It can be easily conducted in many different setting by many students, whereby only selected materials are needed (e. g. poster paper, marker). It is flexible in its application, depending on the conditions in the respective settings (e. g. number of computers, further technical equipment) and the time available. In a next step, it makes it possible for teachers to conduct the workshop on their own, without a researcher from Mistra Future Fashion necessarily on site. Conceptualising the workshop based on the principle of WebQuests enabled us to develop a program that considers a broad amount of topics and comprises a vast amount of information connected to clothing and fashion.

III. Future-fashion-alternatives.com: an online-based workshop tool to promote more sustainable fashion consumption alternatives

A. Webquest: definition and use

'WebQuests' are web based and project orientated educational offers, which were invented by Professor Bernie Dodge, a lecturer at San Diego State University, California, in 1995. The term WebQuest is made up of the two words 'Web' and 'Quest'. The term 'Web' represents the World Wide Web or the global network of the Internet, the term 'quest' describes an act or instance of seeking. This method therefore denotes the approach of problem solving, where the focus is on obtaining information via internet searches (Dodge, 2007).

WebQuests are based on the principles of constructivism. It is assumed that knowledge is the result of subjective interpretation and construction. Therefore, learning can be understood as a self-directed, active process (Gerber, 2007). From the perspective of constructivism, complex situations must not be broken down into small components for learners. It makes more sense, if the learners acquire topic relevant knowledge themselves by using examples. The aim of a WebQuest is the study of specific topics with a self-selected focus, with the desired outcome of forming an own opinion. Ideally, students intensify their knowledge so that they can internalise and recall it for a lifetime. Learners, who take up the topic again, are able to extend this knowledge. The use of the World Wide Web makes it easy for teachers to provide the necessary amount of information to enable learners to work according to the constructivist approach (March, 1998).

When looking for appropriate information sources, guiding students is important. By providing resources and links, WebQuests offer the possibility of obtaining information and providing instructions on how to process this information. Due to its structure, WebQuests can be adapted to the needs of the target group. As a result, it is possible to teach and learn in a constructivist way from primary school to adult education.

There are two variations of WebQuests. On the one hand, *short-term* WebQuests target knowledge acquisition and integration in one to three lessons. On the other hand *long-term* WebQuests can be flexible in time. In a classroom setting,

these usually require one week to one month (Dodge, 2007). This kind of WebQuest aims to extend and to refine the existing knowledge, but also to enable students to transfer and use it:

‘After completing a longer term WebQuest, a learner would have analyzed a body of knowledge deeply, transformed it in some way, and demonstrated an understanding of material by creating something that others can respond to, on-line or off-line’ (Dodge, 1997).

Another important aspect of WebQuests is that they are also suitable for cooperative learning. Cooperative learning refers to an activity, in which students share their knowledge, develop a common understanding of the problem and work guided on a solution for the task (Cf. Gerber, 2007). Among others, pair and group work are examples of cooperative learning. By using the Internet, students have the opportunity to work together independent of location and time. Due to different attitudes and ways of dealing, different groups can gain different results and solutions for the same topic (Cf. March, 1998). This provides a key added value for all participants in the subsequent group discussion.

The aspects of constructivism and cooperative learning provide an effective teaching and learning solution in connection with the WebQuest format. Through both, research, as well as joint work in groups, learners are motivated and achieve the best possible learning progress. Due to their didactic variability, WebQuests can be used for all age groups and all subjects.

B. Social Marketing for behaviour change: Implementation of social marketing principles in our example

Based on previous research within the Mistra Future Fashion project and with regard to a potential second phase with the theme circular economy we have decided to concentrate on the end of life phase. Specifically we want to promote a decrease in discarding unwanted apparel and an increase in recycling and reusing behaviours, i.e., prolonging the garments’ life. Namely, we want to promote four sustainable alternatives: swapping, donating, reselling and reuse/DIY.

Background, purpose and focus

The prevalent fast fashion system is far from being sustainable. Constant overproduction and overconsumption put enormous pressure on the environment and workers in the textile industry. After the three main consumption areas,

transportation, housing and food, clothing ranks among the product categories with the highest environmental impact (EIPRO, 2006). Big fast fashion chains make use of marketing and advertisement to maximise sales figures and profit. Whereas 91 billion garments are sold annually (Ellen MacArthur Foundation, 2013), estimates suggest that at least 30 percent of the clothes in our wardrobe is unused (WRAP, 2012). On average 23 clothing items are disposed by consumers dispose within a period of one year (WRAP, 2013).

The focus of the social marketing strategy therefore will be to enable young consumers to make more sustainable clothing consumption choices by offering easy



Figure 8: Sustainable alternatives

accessible alternatives to the fast fashion system (Figure 8). It will contribute to increase young consumers' appreciation of clothing and decrease the amount of unwanted clothing becoming solid waste or being incinerated. In order to do so,

knowledge units about clothing production, consumption and the fast fashion system lead participants towards four more sustainable alternatives being introduced: swapping, donating, reselling and reusing/DIY.

Target Audience

Successful communication strategies need to be tailored to their target audience. It is necessary to segment the hypothetical consumer audience and clearly define as well as characterise a target group. By defining segments of consumers that are substantial homogenous with regard to e. g. values, attitudes and preferences we are able to develop targeted and therefore effective and efficient communication strategies for specific groups (Parment, 2013). Segmentation approaches can be based on demographic variables, for example in reference to the age of consumers. Due to exposure to similar social, political and technological developments and the experience of similar historical events, consumers within one age group are likely to have similarities in their value system (Noble & Schewe, 2003; Schewe & Meredith, 2004).

When trying to alter consumer behaviour towards more sustainable consumption, young consumers are one of the most relevant target groups for two main reasons.

First, they are regularly visiting numerous fashion stores and try to stay 'in tune' with what is 'in' at the moment – they show excessive consumption and variety-seeking purchase behaviour (Lachman & Brett, 2013; Parment, 2013; Hume, 2010). Due to abundance and availability of products and services, the young consumer generation is considered the most consumption orientated generation (Sullivan & Heitmeyer, 2008). Also the available income and hence purchasing power of young consumers has increased steadily in the last decades (Brusdal & Langeby, 2001). Today's young consumers have greater levels of affluence and lower levels of responsibility for necessary purchases than any generation before (Farris, Chong & Dunning, 2002). This personal and financial freedom significantly contributes to increased and less careful consumption (Hume, 2010). Especially in the area of fast fashion, shorter fashion life cycles and increased availability of low-priced clothing items are promoting extended consumption behaviour with clothing items being discarded after rarely being worn (Birtwistle & Moore, 2007; Morgan & Birtwistle, 2009).

Second, due to their characteristics they can also play a crucial role in the diffusion of more sustainable consumption alternatives for fashion. Young consumers are the most open to changes of all generations and therefore more likely to adopt new consumption behaviours (Pew Research Center, 2010). A large amount of these behaviours is of habitual nature. Habits simplify consumers' life and leave cognitive capacity to concentrate on other problems. Habitual behaviours are convenient solutions we once learned and that have proven to be successful in the past (Zimbardo & Gerrig, 1999). In young age learned consumption habits are most likely to be kept as basis for consumer behaviour in subsequent phases of lives. It is therefore crucial to nudge young consumers' consumption habits towards more sustainable consumption alternatives. Young consumers will be the consumers of tomorrow and the way they will consume is shaped today. Furthermore they will be role models for future generations and change of today's young generation will set the stage for future generations (Fien et al., 2008).

We therefore have chosen young consumers as our target group. For reasons of accessibility at schools and in order to be able to offer a social marketing strategy

that fits the specific needs of students with a similar level of abilities we further restricted our target group to students between 15-19 years. We believe they are influential members of households and future decision makers themselves. It is important to educate and empower them in order to foster their potential to act as agents of change towards more sustainable fashion consumption alternatives.

Defining behavioural and other objectives

To create a common knowledge base the WebQuest aims to enhance knowledge by providing information, facts and statistics related to sustainability in general (Figure 9), current production conditions and consumption behaviours within fast fashion. In a condensed way it deals with main environmental and social problems of the fast fashion system and why we consume fashion.

Beyond the knowledge objective, we also implement a behaviour objective in our WebQuest, i. e. to induce behavioural change. In order to develop a successful program for



Figure 9: Common knowledge base for all participants

behaviour change, it is important to define exactly which behaviours should be tackled and which are desirable behaviour alternatives. As benefits and barriers are often behaviour specific, this is an important step prior to the benefits and barriers analysis. In order to reduce clothing waste and the discarding of unwanted clothes a range of possible alternatives can be applied.

As far as possible, selected behaviours should be non-divisible, i. e. referring to one single specific action that can be done by the consumer. For example, prolonging the use phase of clothing is for sure a sustainable way of handling clothing; however it can be done in many different ways. In order to tackle specific barriers and promote specific benefits, behaviour needs to be defined more precisely. Furthermore, behaviours should be end-state, i. e. producing the desired environmental outcome. Clearing one's wardrobe for example would be a good and

important step towards handling unwanted clothing in a sustainable way, however, it does not have the desired impact on its own. Further steps are necessary.

Considering the target group and their financial constraints as students, we decided to focus on the following non-divisible and end-state (but still relevant) behaviours:

- Resell unwanted apparel
- Swap unwanted apparel
- Reuse/DIY: upcycle and downcycle of unwanted apparel
- Donate unwanted apparel to charity

The goal is to reduce clothing waste by increasing the use of at least one of these four alternatives when handling unwanted clothes. There is evidence for the impact of these behaviours on the environment. Reuse and recycling results in environmental benefit as a result of avoiding the environmental burden associated with the manufacture of new products and the disposal of wastes (Farrant, Olsen & Wangel, 2010; Woolridge et al., 2006). The energy burden of recycling is insignificant in comparison with the savings made through off-setting new production (Gracey & Moon, 2012). Using clothes only three months longer is estimated to reduce each the carbon, water and waste footprint about 5-10 % (WRAP, 2012).

Moreover evidence can be found that consumers are not unfamiliar with the idea of reducing clothing waste and reselling, swapping, reusing/DIY and donating of unwanted clothes. According to WRAP (2012) 65 % of the participants of a survey state that they 'already do everything I can to minimise my contribution to clothing waste' and 24% say that they 'could do more to cut back on unnecessary clothing purchases and to repair and maintain clothes AND would like to do so'.

Identifying target audience barriers and benefits

Our target group are students aged 15-19 years which we reach through their schools. With regard to the target behaviour we have defined, i. e. reduce discarding of unwanted apparel, qualitative data on potential barriers and benefits was collected by means of focus groups with students between 15 and 19 years. In combination with the quantitative data from the consumer survey among young consumers, we have a database to understand barriers and benefits for not discarding unwanted clothing with one of the alternatives and are able to develop a targeted communication strategy.

Quantitative survey results on barriers and benefits

All of the following statistics are based on the German subsample of the consumer survey 2014.

The distribution of participants within the group similar to the target group from 16-19 over four continuous levels of engagement with sustainable fashion behaviour from does not care at all to is engaged already can be seen in Figure 10.

Participants were asked to 'please take a moment to think about the part played by one or both of the following issues when you are deciding what to buy: (1) how companies behave toward their employees, the community, and the environment and (2) the environmental impact of the product'. It is similar to the distribution within the whole sample. Therefore there is no concern to only work with a subgroup of 16-19 year old consumers and results may be transferable to groups of other age to a certain extent. More than 2/3 of all participating consumers are within the first three levels, therefore indicating that an intervention in order to move them a next step towards sustainable consumption would be helpful. As a lot of consumers see themselves in the second or third level it we want to specifically concentrate on them and implement specific communication strategies to move them to the next level. Both levels refer to external barriers (*'too difficult'*, *'when it is easy'*) as well as a lack of internal resources (*'time-consuming'*) – two barriers that will be emphasised in the communication strategy.

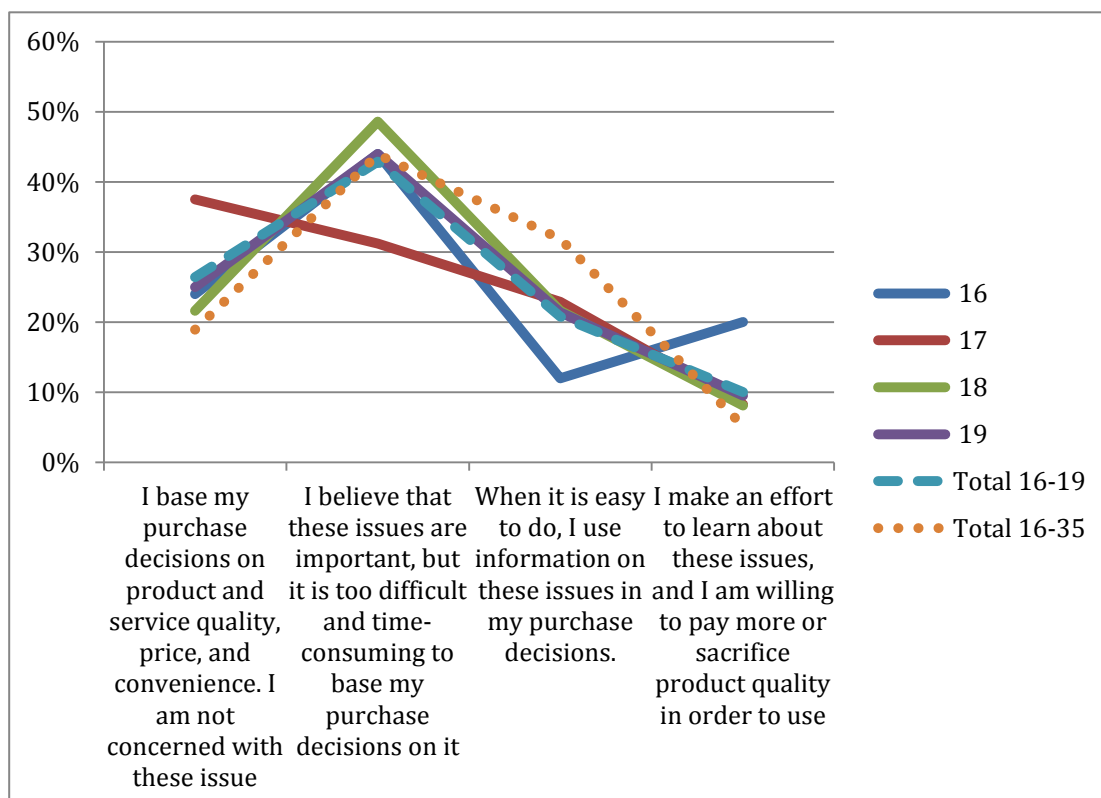


Figure 10: Levels of engagement with sustainable fashion. N = 231/N(total) = 1336

Comparing the level of environmental concern between the different levels within the target group of 16-19 year old via ANOVA suggests that there is a significant difference in environmental concern between the four levels ($F(3, 227) = 11.16, p = .00$). Post-hoc tests show that there is a significant difference in environmental concern between level 2 and level 3, however no significant difference between level 3 and level 4. This might imply that a communication strategy in order to move consumers

from level 2 to level 3 should aim for raising environmental concern, whereas consumers already in level three possibly will not move to level 4 through an increase in environmental concern. They will need specific knowledge on how to act.

The survey questions related to reuse and recycling show that both are still rather unused alternatives that could contribute to a more sustainable way of clothing consumption from a life cycle point of view. When asked for their opinion in regard to reuse and recycling as a topic of interest or as a hassle consumers rated their agreement on a scale from (1) 'Completely disagree' to (5) 'Completely agree'.

Levels of engagement	Disinterest in Reuse/Recycling	Reuse/Recycling as a Hassle
(1)	2.91	2.71
(2)	2.66	2.45
(3)	2.57	2.47
(4)	2.52	2.17

Table 1: Scale means of attitudes towards recycling (disinterest in recycling and reuse or experiencing it as a hassle) rated on a Likert scale from 1-5 within the age group of 16-19 years

Even though the interpretation of reuse and recycling as uninteresting or as a hassle declines from level to level, even level 4 still has an indifferent attitude towards reuse and recycle (Table 1). This goes in line with the findings regarding different reuse and recycling channels (Figure 11). Apart from traditional reuse and recycle channels, e. g. passing on to family and friends, young consumers are quite inexperienced with newer forms of reuse and recycle. The communication strategy will therefore help consumers to get familiar with new reuse and recycle alternatives. Moreover it will provide action knowledge on how to overcome barriers like time restrictions when it comes to reusing or recycling unwanted clothes.

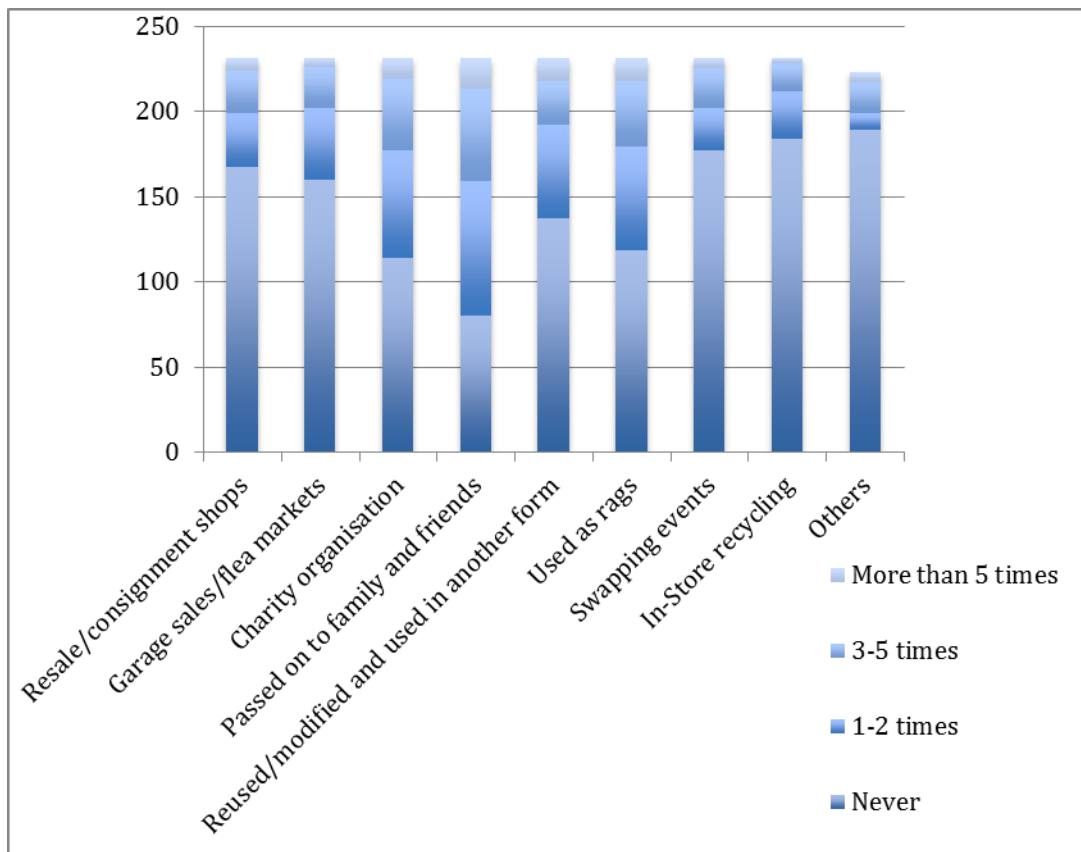


Figure 11: Usage of different channels among consumers between 16-19 years

Qualitative focus group results on barriers and benefits

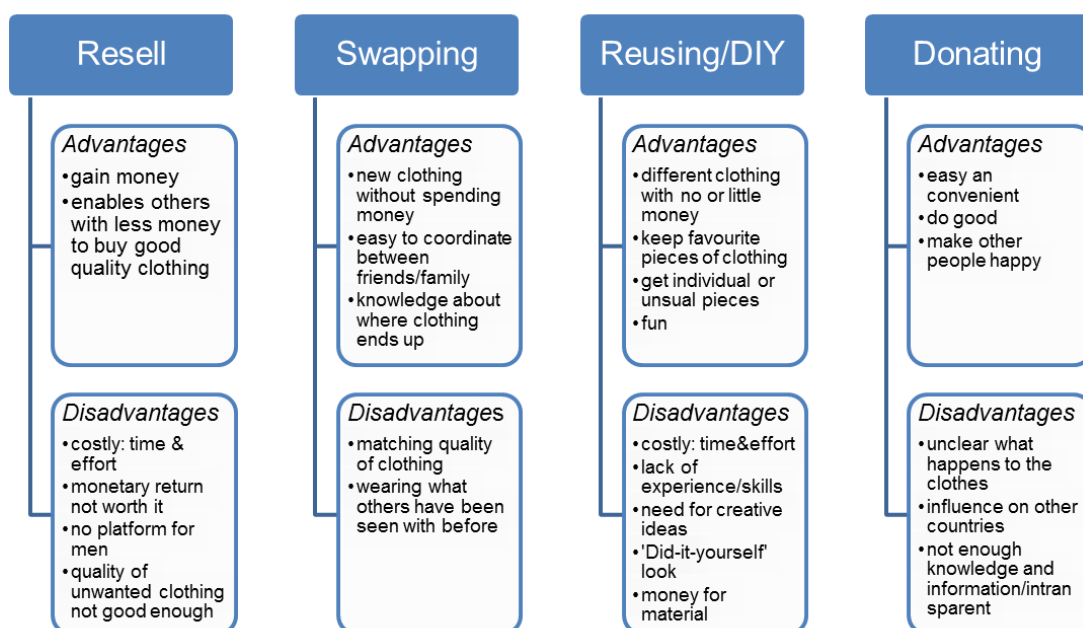


Figure 12: Qualitative focus group results on the four alternatives

In order to get a better understanding of the perceived potential barriers and benefits of our target group for using one of the sustainable alternatives we conducted focus group interviews with 25 students aged between 16 and 18 years. The main results of the focus group interviews are summarized in Figure 12. Even though it is not possible to address all collected advantages and disadvantages within our WebQuest program, the analysis of these benefits and barriers has yielded indispensable insights and builds the basis for our WebQuest material.

Developing strategies - Community based social marketing

Programs solely providing informational material about potential environmental and social harms of a specific behaviour have shown little or no effect on actual behaviour (e. g. Prothero et al., 2011; Vermeir & Verbeke, 2006).

With our WebQuest we provide important information on the function of clothing, production conditions as well as consumption habits and the fast fashion principle in order to establish a common knowledge base between all participants. In contrast to only information-based campaigns however our communication strategy for the WebQuest program is based on a pragmatic approach drawing on the analysis of specific barriers and benefits for the specific behaviour alternatives swapping, donating, reselling and reuse/DIY. The WebQuest content is based on the following main principles:

- making action knowledge accessible and the use of alternative behavioural strategies appear easy and convenient
- changing attitudes via committing to a responsible handling of (unwanted) clothing
- building social norms in favour of the four behaviour alternatives within the classroom situation

Influencing perceived control: action knowledge and convenience

Informing consumers about production conditions and the possible negative influence the production of their purchased product can have on the environment and human beings at the production sites is an important first step to influence their motivation to change current consumption behaviours. Moreover, knowledge on why we consume clothing helps to better understand one's own consumption patterns and enables to reflect on them. However, this information has little influence if it is not

accompanied by concrete knowledge on possible behaviour alternatives. Consumers need to perceive their ability to make a difference or having control over performing specific behaviours. The promotion of specific behavioural alternatives for consumers to engage in is a crucial key in order to move consumers towards more sustainable fashion consumption.

The selected behaviour has to be relevant for the target group as well as convenient. Quite likely there is no one-fits-all behaviour alternative. It is important to offer several behaviour alternatives and illustrate their integrability in consumers' everyday life. The WebQuest program offers different alternatives as each of them serves different needs consumers might have within the area of handling unwanted clothing. E. g. the need to reduce the amount of clothes one possesses can be served via the want to donate unwanted clothing in an easy and convenient way, or to sell unwanted clothing and gain money. Which alternative is chosen depends on the consumer and his or her preferences.

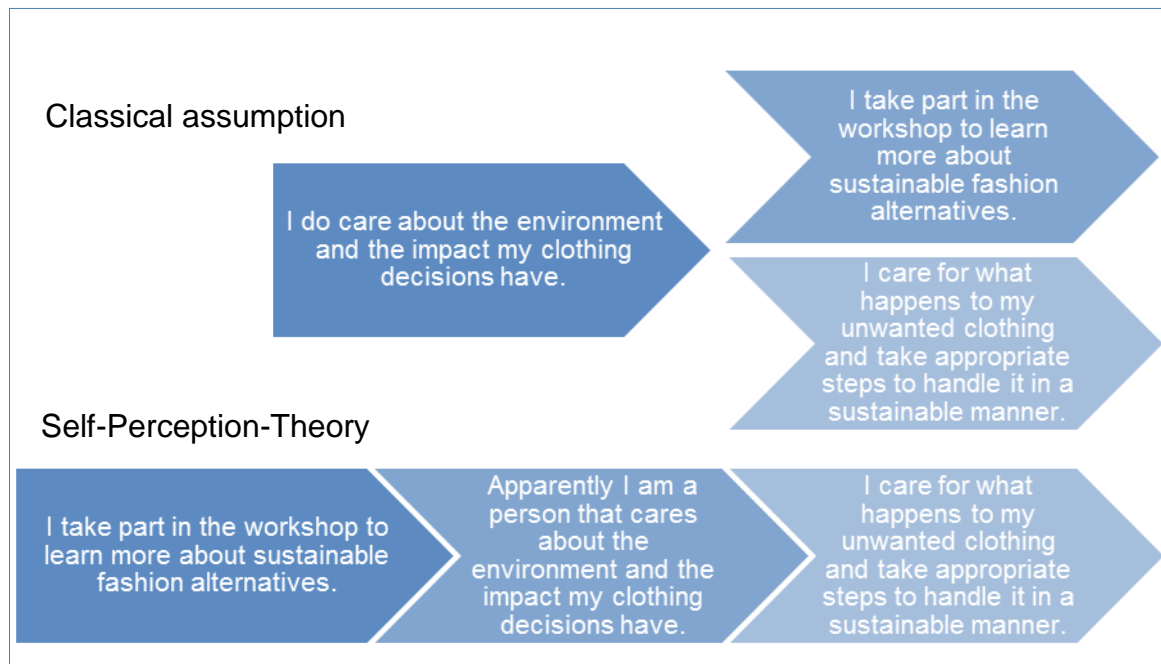
In a second step, the WebQuest material discusses the 'price' of choosing one of the behaviour alternatives. Based on the identified barriers (e. g. time costly, lack of experience and skills, lack of transparency) specific exercises and tasks have been designed in order to let the four alternatives appear convenient. For example,

- websites with DIY-ideas without sewing are introduced,
- tips and tricks to simplify and speed up reselling of unwanted clothing on online platforms are presented
- and material to gain more insight into what happens to donated clothes or where the next donation place can be found is provided.

Altering attitudes: commitments and self-perception theory

The classical theoretical assumption is, that our attitudes influence our behaviour and make us decide in favour or against a behaviour (Figure 13). However, agreeing to smaller requests or taking smaller efforts often leads people to subsequently accept bigger requests or take up behaviours that require bigger efforts, a phenomenon referred to as 'foot-in-the-door-technique' (Burger, 1999). The reason can be found in self-perception theory (Bem, 1972). The assumption then is, that engaging in a small step concerning more sustainable fashion consumption (e. g. taking part in the WebQuest and committing to process the information as well as solve the tasks), will change the way how consumers think about themselves, i. e.

their attitudes, regarding the given topic. Reflecting upon their participation in the WebQuest and observing their behaviour, participants will see themselves as the type of person who is interested in more sustainable fashion alternatives and thereupon change their attitudes towards the topic (Bem, 1972). In that sense own attitudes are used to explain and make sense of a behaviour that has already



occurred. Furthermore participants will be more likely to act in sustainable ways in

Figure 13: Change in self-perception through behaviour

the future,

as they can feel a strong internal pressure to behave consistently with previous behaviour. Therefore providing opportunities to take action even on a smaller scale can change behaviour in the long term on a larger scale, because actions are able to change attitudes upon retrospective reflection of the action.

We try to implement this principle in different ways within the WebQuest. In a first step, participants receive homework prior to the WebQuest. They are asked to have a look into their wardrobe and answer questions related to its content (e. g. How many pieces of clothing do I have in my wardrobe?; How many percent have I used within the last three month ca.?). The goal of the homework is, among others, to get participants to see themselves as being concerned about the amount of clothing in their wardrobe and their usage behaviour. We aim for creating a basic involvement of participants with their clothes in respect of relevant aspects for sustainable handling of clothing.

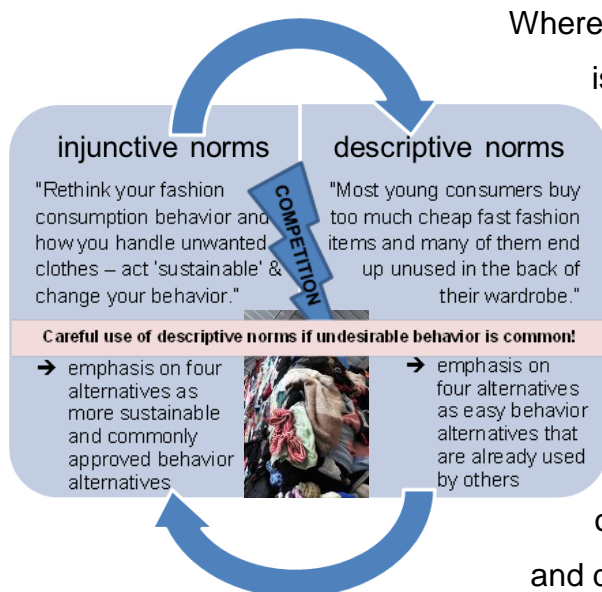
Secondly, the basic conception of the workshop as WebQuest is supposed to get participants more involved than other workshop approaches. The format enables students to decide on their own where to put an emphasis and which topics to research in detail. The WebQuest materials and exercises only serve as guidance for this process. By reflecting upon their own interests and setting their own goals or goals within the group, we assume participants to get more involved and committed to solve their tasks. This is furthermore supported by the WebQuest material. We often make use of involving questions in the beginning of each topic (e. g. 'Why do we buy clothing?'; 'Do you want to get active?').

Moreover we make use of the assumption that written commitments are more effective than verbal commitments and that making commitments public makes it more likely that later behaviour will be in line with the commitment. It is the basis for the concluding task of the WebQuest: making notes on when, where and how to use one of the four alternatives and subsequently announcing it within the WebQuest plenum. This exercise also aims to foster strategic planning as possible process to close the intention-behaviour gap (see Figure 4).

Implementing social norms: injunctive and descriptive norms

In social settings, human behaviour is dependent on normative influences, i. e. the attitudes, perceptions and behaviour of others. These so called social norms have a strong impact on our behaviour.

There are two main forms of social norms: injunctive and descriptive norms.



Whereas injunctive norms refer to which behaviour

is generally approved or disapproved of or

what we are supposed to do, descriptive

norms reflect behaviours which others

around us normally engage in. It is

important to acknowledge the existence

of and difference between both.

Messages and programs using social

norms have to be carefully constructed in

order to avoid conflicts between injunctive

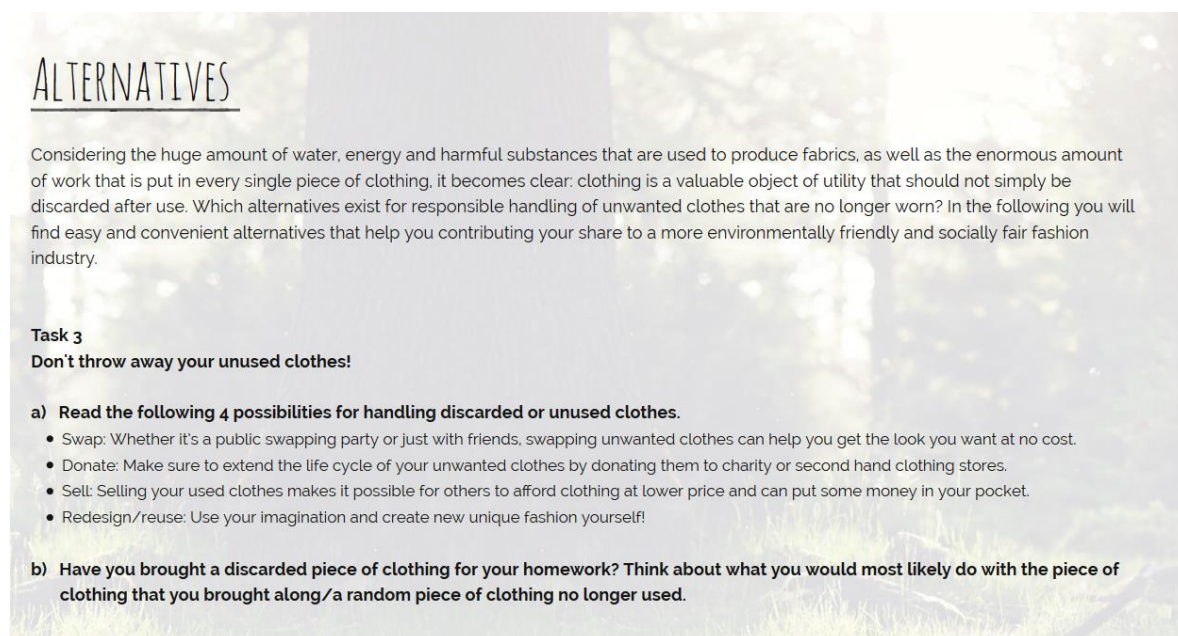
and descriptive norms (see Figure 14). Often

unsustainable behaviours, e.

Figure 14: Different types of norms

g. buying extensive amounts of clothing for cheap prices, are the normal behaviour or behaviour standard. By using descriptive norms – pointing towards this behaviour and emphasising its occurrence – messages and programs can make the undesirable behaviour seem common and therefore encourage consumers to engage in it. This is especially true for when the behaviour is shown by others that are perceived as similar to oneself. We therefore tried to avoid discussing common fast fashion consumption among young consumers more than on a basic level needed for understanding the problem. We rather concentrate on the four behaviour alternatives (swapping, donating, reselling and reuse/DIY) as more sustainable, commonly approved and easy alternatives that are used by many people already.

Social norms are most effective if they are communicated through direct contact between people (Dough McKenzie-Mohr, 2011). In line with this assumption, we mainly try to establish the alternatives as norm through group work (Figure 15). Tasks and exercises are worded in a way that encourages students to exchange their experiences with one or more of the four alternatives (descriptive norm) and built up an expectation to engage in this easy to use alternatives as well (injunctive norm).



ALTERNATIVES

Considering the huge amount of water, energy and harmful substances that are used to produce fabrics, as well as the enormous amount of work that is put in every single piece of clothing, it becomes clear: clothing is a valuable object of utility that should not simply be discarded after use. Which alternatives exist for responsible handling of unwanted clothes that are no longer worn? In the following you will find easy and convenient alternatives that help you contributing your share to a more environmentally friendly and socially fair fashion industry.

Task 3
Don't throw away your unused clothes!

a) Read the following 4 possibilities for handling discarded or unused clothes.

- Swap: Whether it's a public swapping party or just with friends, swapping unwanted clothes can help you get the look you want at no cost.
- Donate: Make sure to extend the life cycle of your unwanted clothes by donating them to charity or second hand clothing stores.
- Sell: Selling your used clothes makes it possible for others to afford clothing at lower price and can put some money in your pocket.
- Redesign/reuse: Use your imagination and create new unique fashion yourself!

b) Have you brought a discarded piece of clothing for your homework? Think about what you would most likely do with the piece of clothing that you brought along/a random piece of clothing no longer used.

Figure 15: Example task for group work

We thereby also draw on principles of social diffusion. Behaviours are more likely to be accepted if they are conducted and recommended to us by persons we trust or we perceive as similar to us. By talking about their own experiences when handling unwanted clothing, participants make behaviour alternatives visible to

others. This kind of personal information often is superior compared to information and recommendations communicated through non-personal communication channels (e. g. websites, brochures).

Piloting: evaluation and revision

The WebQuest has been carried out and piloted at five different schools or institutions of extracurricular education. The results of the evaluation can be found under C. Evaluation. All feedback and lessons learned from the piloting have been implemented in the WebQuest program immediately.

C. Evaluation

The process of evaluation can be defined as determining the worth, benefit, merit or impact of a program for behaviour change, whereby the evaluation is the result of this process (Scriven, 2007). In order to analyse the current social marketing strategy a formative evaluation took place. The process of formative evaluation is composed of the systematic collection of qualitative as well as quantitative data. All collected information was implemented in the WebQuest immediately. Thereby we were able to adjust and improve the WebQuest constantly by means of immediate feedback.

Quantitative evaluation results

Referring to the Theory of Planned Behaviour as well as the Motivation-Ability-Opportunity-Behaviour Model an online survey has been developed. The survey was conducted twice, once before the WebQuest (t1) and again immediately after the WebQuest took place (t2). 58 participants answered the survey at t1, from whom 38 answered the survey at t2. A smaller group of participants (n = 12) was also able to answer the survey a third time (t3). The collection of data on three different points in time enables us to make assumptions about the impact of the WebQuest content on potentially relevant variables for behaviour change (see Figure 4). The survey comprises the following concepts:

- Past behaviour: Which of the four alternatives did WebQuest participants use in the past already?
- Attitudes & behavioural outcome believes: Which attitudes do WebQuest participants have towards the four alternatives? How do WebQuest participants evaluate possible positive outcomes related to the use of the four

alternatives? How important are possible positive outcomes related to the use of the four alternatives to WebQuest participants?

- Subjective norm & normative beliefs: To what extent perceive WebQuest participants the use of the four alternatives as good behaviour? In how far do they perceive an injunctive or descriptive norm to use one of the four alternatives?
- Self-efficacy & control beliefs: To what extent do WebQuest participants believe in their own ability to use one of the four alternatives? How far do WebQuest participants perceive their behaviour has an influence and that they have the control over their behaviour with regard to the use of one of the four alternatives?
- Ability and Opportunity: To what extent perceive participants opportunities and rate their own ability to use one of the four alternatives?
- Intention: How likely rate WebQuest participants the use of the four alternatives in the upcoming three months?

In the following only significant differences between t1, t2 and t3 will be discussed.

Starting point: past behaviour and other model variables at t1

Before the WebQuest participants have been introduced to all four alternatives briefly. In addition, they were asked whether they were engaged in any of the four alternatives respectively within the last three months previous to the WebQuest. Figure 16 shows that donating was the most common alternative used by the participants, followed by reuse/DIY, selling and swapping. In general, none of the alternatives was completely new to the participants and all alternatives have been previously used by at least 11 or more participants.

Attitudes towards using one of the four alternatives are mostly positive.

Measured by six bipolar items ranging from negative (e. g. is bad, unpractical, environmentally unfriendly) to positive (e. g. is good, practical, environmentally friendly) on a five point scale, means between $x = 3.35$ to 4.71 . Specifically, participants rate the alternatives as 'good' ($x = 4.71$) and environmentally friendly ($x = 4.66$). Furthermore the four alternatives are perceived as being accepted as good ways to handle unwanted clothing ($x = 4.00$, range = 1-5) and as used by other

people ($x = 3.18$, range = 1-5). Participants are convinced that they are able to use one of the four alternatives ($x = 4.26$, range = 1-5). They agree to different aspects of ability and opportunity to use one of the four alternatives on average with $x = 3.62$ (range = 1-5), whereby 'I have enough time to use one or more of the four alternatives' is rated the lowest ($x = 3.32$) and 'I have access to one or more of the four alternatives' is rated the highest ($x = 3.92$).

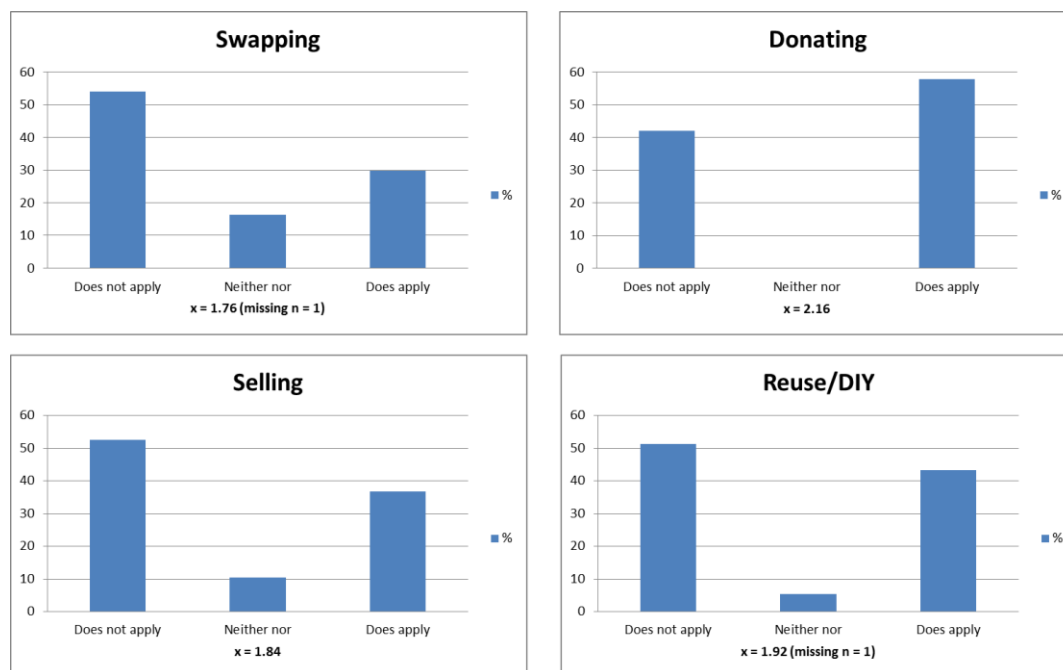


Figure 16: Engagement in any of the four alternatives previous to the workshop

Differences between t1 and t2

Across all workshops, $n = 38$ participants successfully completed the survey for t1 and t2. The answers have been tested for significant mean differences between t1 and t2 via paired t-tests. The results are as shown in Table 2.

Variable	Mean t1	Mean t2	t	p-value
Behavioural outcome evaluation	3,22	3,53	-2,73	0,01
Please indicate how IMPORTANT the following things are for you: By using one of the four alternatives				
... can I help to reduce the big amount of clothing waste.	3,61	4,06	-2,46	0,02
... can I save money.	3,15	3,52	-1,88	0,07
... can I help people to buy good quality clothing for small prices.	3,15	3,39	-1,61	0,12
... do I not know what happens to my clothes.	2,36	3,18	-3,88	0,00
... can I do good.	3,76	4,06	-1,71	0,10

Norm	3,19	3,45	-2,84	0,01
Most people I know are using at least one of the four alternatives for handling unwanted clothing.	3,17	3,69	-2,93	0,01
<i>Injunctive Norm</i>	2,68	3,14	-3,26	0,00
I believe, that				
... my classmates expect me to use one or more of the four alternatives.	2,52	3,12	-3,38	0,00
... my friends and acquaintances expect me to use one or more of the four alternatives.	2,71	3,19	-2,80	0,01
... members of my family expect me to use one or more of the four alternatives.	2,82	3,15	-1,82	0,08

Table 2: Significant differences between t1 and t2

With reference to the three community based social marketing strategies the WebQuest is based on – commitment, social norms and action knowledge or convenience – the data shows that only the perception of social norms has changed over the WebQuest. Taking the important role that other people, their behaviour and their expectations, play for our behaviour, this possibly is an important step towards behaviour change. Noticeably the subjective descriptive norm has increased significantly, as well as the injunctive normative beliefs with regard to significant others. This reflects our effort to communicate that using one of the four alternatives is a common behaviour consumers normally engage in. At the same time we have tried to avoid communicating the average consumers' involvement with fast fashion (descriptive norm). Furthermore the four alternatives are significantly more rated as socially accepted behaviour that is expected from my friends and family (injunctive norm). As norms are supposed to rather develop through direct contact with people, our workshop is ideally suited for building up and internalise norms due to its conception as WebQuest in combination with group work. The large amount of group work as well as reciprocal exchange of knowledge and experiences might be one reason for the significant change in the perception of normal expectations.

As a higher commitment did not reflect a higher intention to show one of the four behaviours after the WebQuest, as well as perceived ability and opportunity have not changed, the revision of the WebQuest tried to focus more on both strategies. Written commitments are more effective than verbal commitments. Therefore the final résumé task has been changed to a written commitment task in the revised WebQuest. Participants are asked to write down, which of the four alternatives they would chose for their unwanted piece of clothing. Equally a bigger

emphasise was put on the communicating of the four alternatives as easy and convenient alternatives to handle unwanted clothing.

Whereas there are no significant changes in the outcome evaluation of using one of the four alternatives with respect to positive outcomes for the environment and humans, there is a significant increase in the importance of these outcome beliefs. Especially the items ‘... can I do good.’, ‘... can I help to reduce the big amount of clothing waste.’ and ‘... can I save money.’ have gained importance for the WebQuest participants. Therefore the personal as well as environmental and social benefits of using one of the four alternatives are named more clearly in the revised WebQuest version.

Differences between t1/t2 and t3

For twelve participants it was possible to repeat the survey on a third point of time eleven weeks after the WebQuest. As for behaviour, we have compared participants rating of their use of one of the four alternatives at t1 and t3. The data shows a significant change in behaviour for reuse/DIY with participants stating to have used this alternative more than before the WebQuest with an increased used from t1 to t3. Furthermore we compared all three measurement points via repeated measures ANOVA tests. Results show that attitudes towards the four alternatives changed significantly between the different measurement points, whereby the assessment of the alternatives is more positive eleven weeks after the WebQuest (Figure 17).

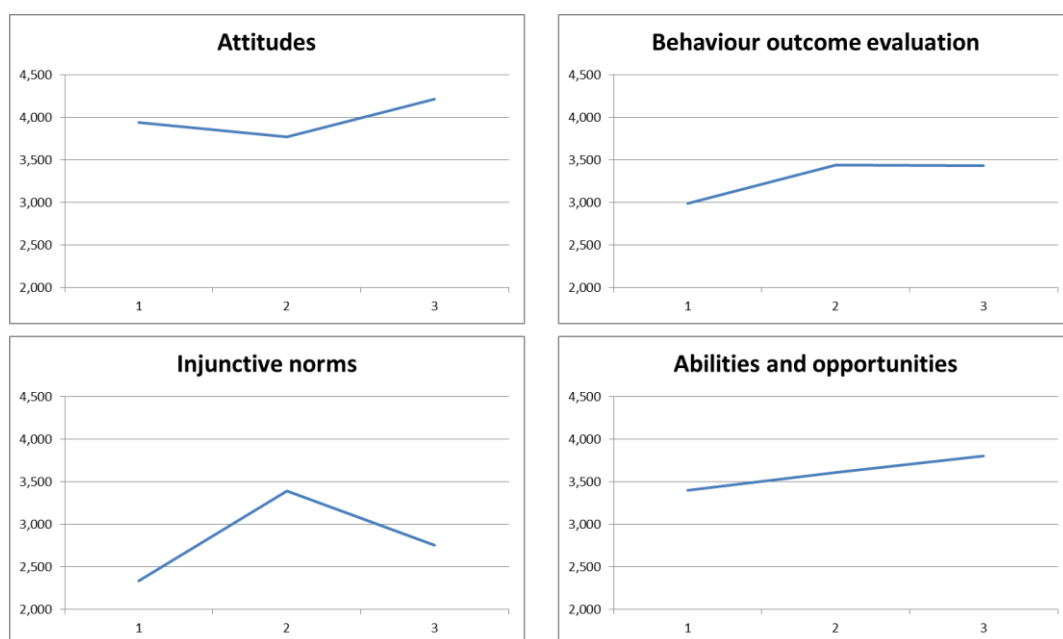


Figure 17: Significant changes between t1, t2 and t3

The increase in behaviour outcome evaluation from t1 to t2 remained constant and a higher level of importance of behaviour outcomes connected to using one of the four alternatives can be also found at t3 compared to t1. Likewise the increase in injunctive norm is significant across all three measurement points, whereby it decreased eleven weeks after the WebQuest at t3 compared to t2. The same is the case for perceived descriptive norm in terms of 'Most people I know are using at least one of the four alternatives for handling unwanted clothing.'. Participants rated their agreement with this item higher at t2 compared to t1, however a decrease in agreement can be seen between t2 and t3. It seems reasonable that the rating of social norms, either descriptive or injunctive in nature, might be higher immediately after the WebQuest and group work with peers compared to eleven weeks after. The perception of abilities and opportunities improved to a significant difference at t3 compared to t1 (see Figure 15).

Qualitative evaluation results

Open feedback questions have been asked in addition to the survey. The qualitative data obtained helps to understand in detail, which parts of the WebQuest are being appreciated and what needs to be developed. The answers of the participants are a valuable feedback with improvement suggestions that often were translated into the WebQuest material immediately. At the end of each WebQuest participants were asked to answer the following five questions shortly:

1. Was the WebQuest/the website easy to use? If no, what was difficult?
2. Which topics have appealed to me especially in the WebQuest/on the website?
3. Which exercises have appealed to me especially in the WebQuest/on the website?
4. What went through my head in course of the WebQuest (what have learned/experienced)?
5. I would have liked this to be different (regarding topics, exercises or the implementation in the WebQuest/on the website):

Feedback with regard to these five questions was overall positive. Most participants agreed that the WebQuest was understandable and easy to use. Whereby some appreciated the small amount of given information and text, others

wished for more details and in-depth insights and discussions. In connection to this, a lack of time in general or not enough time for specific task was criticised. The visual appearance of the WebQuest was described as 'not appealing' and 'too old'.

Concerning the selection of main topics (sustainability and consumption, clothing production, clothing consumption, alternatives) participants nominated all topics to various extents as interesting. They rate a lot of new information within the clothing production section, the reflection on own behaviour within the clothing consumption section as well as the discussion about actual behavioural alternatives as especially interesting.

Within the alternatives, reuse and DIY has been mentioned by a few, which goes in line with our quantitative results. Similar results can be found for the

exercises, with every exercise mentioned by at least one participant as especially appealing. Creating own statistics, working with additional links and videos in order to obtain more detailed

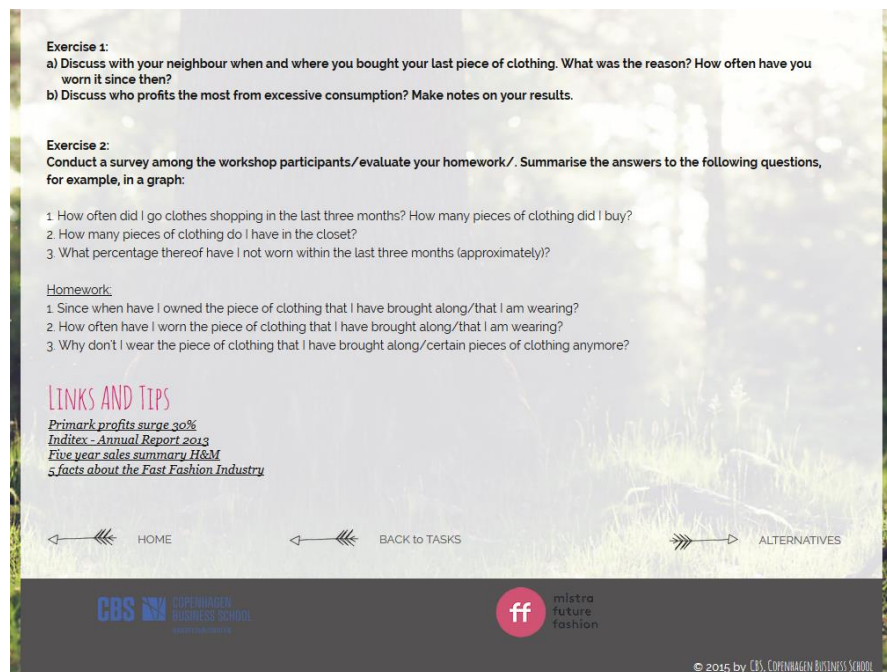


Figure 18: Exercise to reflect on consumption behaviour

information as well as designing posters with acquired knowledge among others were well received exercises. In line with our quantitative results participants point out that the exercises encouraged group work and reflection about own behaviour and experiences within the groups (Figure 18). Many participants emphasise the resulting dialogue and discussion in the class room as especially interesting.

Answers for question four, what went through the participants head in course of the WebQuest, are various and allude to different topics of the WebQuest program. All statements show an involvement with the topic (un)sustainable clothing, however from different angles. Whereas one part of the students emphasises their improvement in knowledge about clothing production, others reflect more on their

own consumer behaviour and fast fashion consumption patterns. Also the examination of possible alternatives for own behaviour is named as learning experience.

As for improvement suggestions participants stated that they would wish for more detailed information and content. A more critical perspective is demanded from few, with more emphasises on the urgency of the topic. Some also would have liked to discuss more with their groups or have more time for specific tasks. Furthermore they wished for a more modern and optical appealing website and shorter videos that sum up the important information better.

Taking this valuable feedback into account, we improved the WebQuest and made it more focused on main points in order to be able to work more detailed, while having the same time for completion of the WebQuest available. We put an emphasis on explaining the functioning principles of the workshop as WebQuest and encouraged participants to see themselves as experts in a specific topic, who are responsible for communicate their area of expertise to the rest of the group. Even more than before, students are asked to organise work on different topics between each other in order to manage working through the vast amount of information within a limited amount of time.

We furthermore differentiated between tasks, which need to be done and afterwards are presented in the plenum, and exercises, which are suggestions and can be helpful in order to solve the tasks. Thereby students were reinforced to find a way of acquiring and communicating knowledge autonomously within their group. Furthermore we encouraged students to put an emphasis on the topics they find most interesting and research them in detail, given the restricted time on hand. These changes are also supposed to lead to more discussion and reflexion within the groups.

Moreover we developed a new website which complies with modern standards and requirements for visual content communication and navigation. Three short animation films concentrating on the main topics (clothing consumption, clothing production and alternatives) have been produced and provide a short, comprehensive overview over each topic for the students (Figure 19).

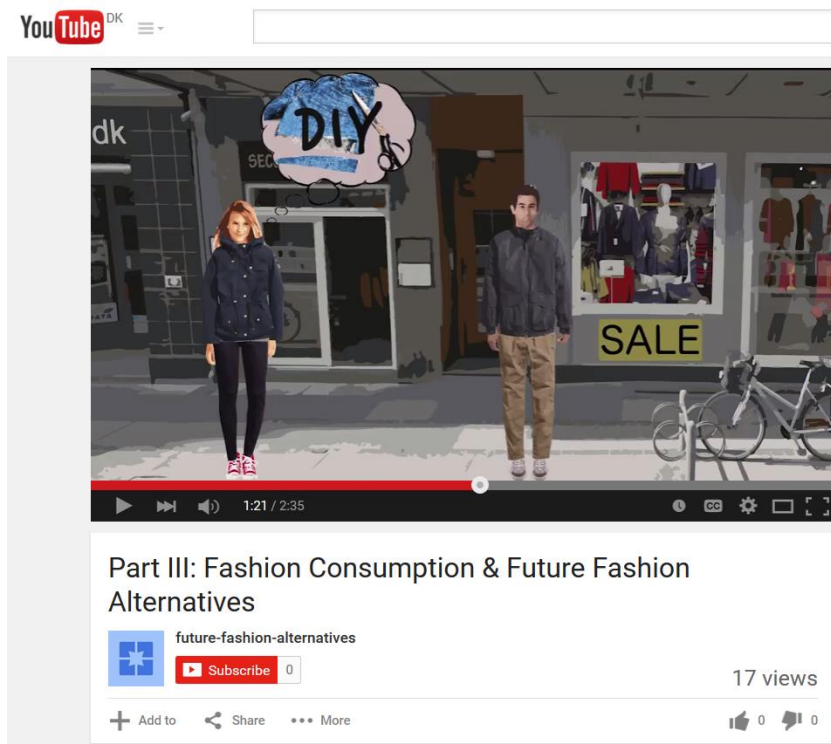
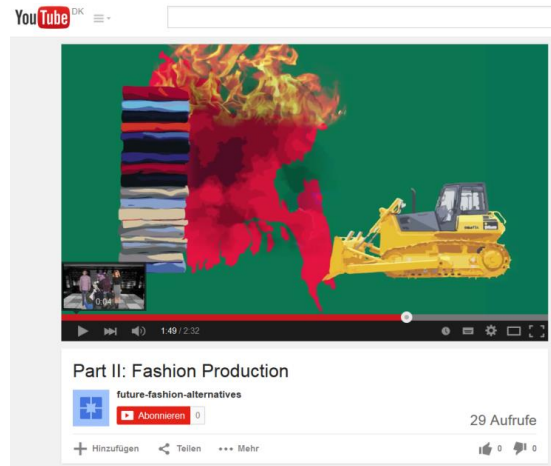
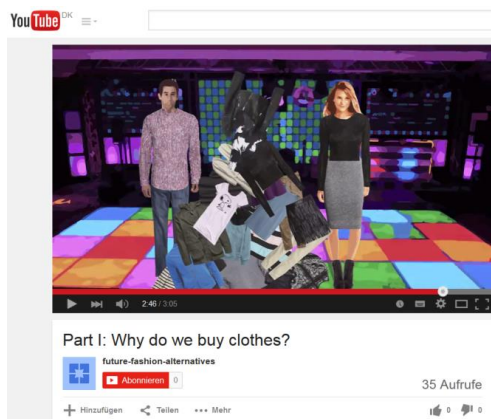


Figure 19: Short animation films concentrating on the main topics

D. Summary and outlook

The current WebQuest and website future-fashion-alternatives.com introduces a social marketing toolbox in order to inform consumers about the possible results of their fashion consumption decisions and enable them to make better informed consumption choices, which are socially and environmentally more sound. Moreover, based on literature and research concerning behaviour change it employs principles and strategies of community-based social marketing, thereby aiming not only for knowledge increase and attitude altering, but behaviour change.

As the evaluation results and experience with the WebQuest show, fashion recently has become a questioned product category with regard to sustainability matters and consumers start wondering and challenging producers about where and how their clothing is produced. Future-fashion-alternatives.com therefore is a valuable educational tool within a school or other educational settings. The functional principle of group work fits to enhance perceived normative pressure to conduct more sustainable. Furthermore attitudes change in favour of the four alternatives and perceived abilities and opportunities are increased after participating in the WebQuest. This indicates that the WebQuest is able to have a substantial influence on variables crucial for behaviour change.

However, fashion consumer behaviour takes place in a larger context. Within fast fashion, different actors, such as retailers, producers, media, etc., create a framework of conditions that sometimes does not leave much space for individual consumer decision. It is difficult to fully understand and explain personal consumption patterns detached from the environment they are taken in. In order to transform the current fast fashion system into a socially fairer and environmentally friendlier business with clothing, we need all actors to get involve in the change process.

The WebQuest on future-fashion-alternatives.com aims for helping motivated consumers to find their own personal way towards more sustainable consumption. It encourages young consumers to contribute 'their bit' to support the development of a more sustainable fashion industry.

In a next step a more large-scale implementation with more young consumers participating in the WebQuest could help to further improve the tools and procedures of the WebQuest. It is freely available online and can serve as valuable tool for schools and other educational institutions to acquire knowledge in the area of (un)sustainable fashion in a systematic and field-tested way. It could be of interest to

extend the target group and apply and possibly adjust the WebQuest within older and younger age groups. Moreover could the basic principles be used for developing similar WebQuests for different consumer goods, e. g. food.

Acknowledgement

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