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CONSUMER PREFERENCES FOR ECO-AND FAIR TRADE CLOTHES IN GOTHENBURG

- A CONTINGENT VALUATION STUDY

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Abstract

The aim of this thesis is to examine consumers' attitudes and preferences towards eco and fair trade clothes in Gothenburg. As the market of these products is inadequate we conducted a contingent valuation (CV) study asking respondents if they were willing to pay an extra price premium for an eco and fair-trade labeled t-shirt. We conducted the survey with a total sample of approximately 500 respondents. 75% of the sample stated a positive willingness to pay for the eco and fair trade labeled t-shirt. The mean value of the extra price premium was 44 SEK. We performed two regression models to determine personal characteristics and motives influencing the willingness to pay. We found that the willingness to pay is decreasing with age, no other socio demographic variables were strongly determining. Personal attitudes and preferences had greater influence. Respondents with a larger recognition of responsibility for environmental and social conditions and respondents with altruistic values, considering other people and future generations in their consumption decisions, had a higher probability for stating a positive willingness to pay.

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1. Introduction

The aim of this thesis is to analyze the attitudes for eco- and fair trade clothes in Gothenburg and whether consumers are willing to pay a price premium for these characteristics. We have investigated the matter by conducting a survey, designed in accordance with stated preference techniques, using a contingent valuation method.

In traditional micro economic theory, the origin of demand for goods is based on the assumption that people make rational choices to maximize their utility. Theory suggests that individuals weigh expected net benefits of a certain action against expected net costs of the same action. The alternative that brings the individual the highest net benefit or the lowest net cost is the one that will be chosen (Bateman et al, 2002). In consumption decisions, individuals maximize utility subject to their personal budget constraint. Hence, factors such as price of the good, price of other goods and future expected income have a great influence on the decision (Nicholson, 2008).

The benefits of a good are perceived subjectively by the consuming individual and made up by utility generated depending on the good's characteristics. Traditionally, the concept of utility was interpreted as explicit values benefiting the consumer exclusively (Carson, 1991). However, the total utility of a good has shown to be a much more complex matter as it also includes implicit values, in some cases not solely benefiting the consumer but also other people. Therefore, modern micro economic theory suggests that the total utility of a good consists of use-values as well as non-use values (Carson, 1991). Use-values are generated through a good's functional qualities and practical application. But they may also be generated through the option of future usage. Non-use values on the other hand do not generate direct value to the individual but indirect value through a number of factors. The literature usually focuses on three types of non-use values: existence values, altruistic values and bequest values. First, existence values generate utility to the individual as he/she has preferences to ensure a good's existence in a context where there is no actual planned use, neither for the individual nor for anyone else. Second, an individual derives altruistic value when he/she has preferences to ensure availability and existence of a good to others in the current generation. Third, bequest values are generated when individuals have a concern for the existence and availability of a good to future generations (Pearce et al, 2006, Cicchetti and Wilde, 1992).

This is important for our study since previous studies suggest that the demand for eco- as well as fair trade labeled products, to a large extent originate in consumers' altruistic values (Popp, 1999, Ojea, 2006, Schwartz 1977, Menges et al, 2005). People are willing to take on private costs, generating negative utility, as these are weighed up by the positive utility derived from non-use values such as supporting good work conditions and caring for the environment. Nonetheless, the demand for eco- and fair trade labeled products can also have impure altruistic motives, referred to as

warm glow. Warm glow is an expression for emphasizing one self as a morally and socially responsible person. Egoistic motives are thus the main drivers for impure altruistic actions (Ek and Söderholm, 2007). In order to increase consumption of environmental and fair trade labeled products, we need to be aware of individuals' different purchasing motives.

How people assess use and non-use values of a certain product is determined by individual preferences, which in turn are deeply embedded in social norms. Social norms include general societal guidelines which people are expected to follow. The perception of others' expectations and others' judgments of the own behavior can be important determinants for our actions. Imitation in consumption patterns of reference groups therefore constitutes a significant factor for individual consumer choices (Jackson, 2005). Both Nyborg et al (2006) and Welsh and Kühling (2009) suggest that ethical consumer behavior (such as purchasing eco- and fair trade labeled products) has enhancing effects. The larger the share of a population that is practicing a certain ethical norm, the more will follow. However, this is under the condition that fairness and reciprocity exists (Nyborg et al, 2006). People are willing to contribute to a public good under the permission that others are doing it as well and that others will perceive their contribution. Hence, consumption can be seen as a way of expressing individuals' group belonging and a tool through which people position themselves in society. The more visible a product's characteristics are in signaling group belonging, the more impact it has on our consumer choice. This explains why the demand for fair trade and eco-labeled food products are higher than the demand for green electricity, since the latter do not express group belonging in the same way as tangible packages with eco- and fair trade labels do (Welsh and Kühling, 2009).

Previous studies show that people generally state a positive willingness to pay a premium for eco- and fair trade labeled products in hypothetical situations (Ha-Brookshire and Norum, 2005). However empirical evidence show otherwise, as eco- and fair trade labeled products hold an extremely small market share of total sales¹. There is thus an evident attitude-behavior gap. In some cases this gap may be explained by low availability and supply of the good but it may also be explained by the phenomenon of hypothetical bias and the context and nature of the consumption decision itself.

The Norm Activation Theory that was created by S. Schwartz in 1977 suggests yet another reason for the attitude-behavior gap. The theory suggests that personal norms need to be activated in order to turn in to moral obligations and thus realized

¹ Out of the total sales, ecological foods and beverages currently holds a market share of 4% (www.scb.se, 2010) For fair-trade products, the market share is less than 1% (0,46%). In 2010 f air trade labeled cotton was sold in Sweden to a value of 22 million SEK, which represents a market share of less than 1% (Försäljningsstatistik Fairtrade, 2010).

actions. Personal norms (intentions, preferences and attitudes) are activated through two factors: awareness of consequences and the feeling of responsibility.

Regarding consumption decisions, consumers are unable to assess the full consequences of a consumption decision from an environmental and social point of view (Jackson, 2005). A consumption decision today may negatively affect other individuals both in time and space, including people in manufacturing countries and future generations exposed to environmental changes. Individuals' perceived responsibility, the other factor of activation according to Schwartz (1977), is problematic as we consider environmental quality and social conditions to be public goods². People may have difficulties recognizing their own responsibility in buying eco- and fair trade products as there are incentives to free ride, that is, rely on others contribution rather than the own contribution. Both the perception of individual responsibility and awareness of consequences of consumption decisions increase with relevant information about externalities generated from the production of a good (Schwarz, 1977, Nyborg et al, 2006). This implies that the government as well as private marketers have the possibility of activating personal norms into moral obligations, thus realized purchases of eco- and fair trade labeled products, by supplying individuals with this information (Nyborg et al, 2006). In line with this research we added an information treatment in our study to see if we could find any differences in willingness to pay by varying information. This will be discussed further in the "Survey design" section.

Several previous studies investigate matters concerning ethical consumer behavior, drivers behind contribution to public goods and willingness to pay a premium for eco- and fair trade labeled products. Ha-Brookshire and Norum (2005) observed the willingness to pay (WTP) for three different categories of sustainable labeling on a tshirt; organic cotton, sustainable cotton and US-grown (locally produced) cotton. They found that more than half of the respondents had a positive willingness to pay for t-shirts with these labels and significant factors influencing the WTP were age, gender and attitudes towards environment and attitudes towards socially responsible apparel. Hustvedt and Dickson (2008) investigated influence from attitudes and self-identity on consumers' likelihood to purchase organic cotton apparel. They conducted a mail survey and found that 38 percent of the respondents had an interest for apparel with organic cotton content, all of which had a selfidentity as socially responsible consumers. Nyborg et al. discuss in an article from 2003 the social dimension of perceived responsibility and the importance of fairness and reciprocity for individuals' contribution to a public good. Popp (1999) investigates the importance of altruism as opposed to self-interest in the demand for environmental quality. The results in previous studies unanimously show a large

² A public good differs from private goods because of the two following aspects. First, consumption of a public good is non-rival, that is, one person's consuming it does not reduce the amount available to others. Second, a public good is non-excludable, that is, it is not possible to supply the good only to those who choose to pay for it and exclude everyone else (Bateman et al, 2002).

share of the survey sample stating a positive willingness to pay a premium for environmental as well as social attributes on consumer goods. However, the motives behind these results vary. With our study we aim to contribute to the research on motives behind the willingness to pay a premium for eco- and fair trade labels using both socio-demographic and attitudinal factors.

Our thesis is organized as follows. Section 2 discusses the method used and design of the valuation survey. Section 3 contains descriptive statistics, highlighting interesting findings of the survey results. Section 4 describes the two econometric models used and the regression results. Section 5 presents general conclusions and section 6 contains a discussion of the findings.

2. Method and Description of the Survey

2.1 Stated Preference Techniques

The Stated Preference (SP) techniques contain models for economic valuation using individual's preferences as source of value, generally regarding goods for which there are no markets (Bateman et al, 2002). Monetary means of measurement is used to evaluate the preferences, this since most people can relate to the value of money as it represents purchasing power and is clearly divisible. Preferences are elicited as respondents are asked to either state their maximum willingness to pay (WTP) for a benefit or their willingness to accept (WTA) monetary compensation for a disadvantage. In our study we suggest that eco- and fair trade labels are benefiting the consuming individual why we use the former evaluating measure of WTP. Furthermore, SP-techniques enables a total economic valuation of a good, including individual utility derived from use- as well as non-use values (Bateman et al, 2002). It also provides the individual with the possibility to make perfect trade offs between wealth and utility gains or losses.

We have chosen to use the SP techniques in the design of our questionnaire mainly for two reasons. First, since the market of fair trade and eco- labeled clothes is limited, and thus people are constrained in their consumption decisions. Perhaps people would be willing to buy more eco- and fair trade labeled clothes if the supply was greater? Other techniques, known as revealed preferences (RP) use information from existing markets that are associated with the good being evaluated. However, since the market of eco- and fair trade labeled clothes is restricted, RP techniques will not provide sufficient information on the actual demand.

Secondly, we suggest that non-use values such as altruism, impure altruism, bequest and existence values are important motives for consumers choosing eco- and fair trade labeled clothes. As SP techniques elicit individuals' total economic value of a good it is the preferred valuation technique in our survey.

To illustrate how individual preferences towards eco- and fair trade labels are being measured monetarily in our study, we use a simple equation. Consider an individual with an initial utility level of U_0 at an income of W_0 , in the absence of eco- and fair trade labels on a white t-shirt X_0 . E_0 is a random unobservable element. The utility level is assumed to be increasing with an increase in both W and X (Pearce et al, 2006). The individual's initial utility function is denoted as:

$$U_0(W_0, X_0, E_0)$$

Now the individual is presented with an eco- and fair trade labeled t-shirt X_1 . This will, depending on individual preferences, change the initial utility function to U_1 . The income is held constant at W_0 , however we have a new random element E_1 . The new utility function is denoted as:

$$U_1(W_0, X_1, E_1)$$

Now we want to find out *if* and *by how much* the individual's utility level has changed in the presence of eco- and fair trade labels on a white t-shirt compared to the initial state of a t-shirt without labels, i.e. $U_1 - U_0$. As utility cannot be directly measured we need an indirect measure, the willingness to pay, to give us a monetary value on the individual preferences for the eco- and fair trade labels (Pearce et al, 2006). The individual is therefore indirectly asked, through a payment question, to make monetary trade offs that will yield the same utility level in the presence as well as in the absence of the eco- and fair trade labels on the white t-shirt:

$$U_0 (W_0 - WTP, X_1, E_1) = U_0 (W_0, X_0, E_0)$$

On the left hand side the individual's income is reduced by the price that he/she is willing to pay for eco- and fair trade labels on the white t-shirt. The right hand side represents the initial situation, where the individual is not yet presented with the eco- and fair trade labels and income is not reduced. The equation suggests, in line with previously described theory, that an individual is prepared to take on costs (generating negative utility), as these will be weighed up by benefits, (generating positive utility) related to the eco- and fair trade labels. The model elicits the value of equivalent variation, as it is in relation to the initial utility level, and represents the monetary value of the individual's preferences towards eco- and fair trade labels on a white t-shirt. When aggregating individuals' preferences we get an overview of the general demand for eco- and fair trade labels on clothes in Gothenburg. However, we need to be cautious when analyzing the results, as changes in unobservable random elements E₁-E₀ are unknown (Pearce et al, 2006). There may be other factors influencing peoples' utility function than just our good of investigation, namely the "be or not to be" of eco- and fair trade labels on a white t-shirt. Weaknesses that may affect the unobservable random element and bias our results will be further discussed in the section below. It is also worth mentioning that we do not assess for peoples' WTP on the margin, thus how much an increase of one unit of the good corresponds to a monetary increase. This, as the consumer is either

presented with the eco- and fair trade labels or not, there are no different levels of provision of our good which unable such analyze. We will however in the result section determine some factors that, on the margin, influence the probability for stating a positive WTP.

2.2 Contingent Valuation Method

The two most commonly used valuation methods in SP-techniques are Choice Experiment (CE) and Contingent Valuation (CV). CE originates from the conjoint analyses literature, which focuses on multi attributed stimuli in decision situations (Boxall et. al, 1996). In CE surveys, the respondent face a multi attributed decision in a hypothetical scenario and is asked to make continuous trade offs between these attributes. Thus, CE elicits the value of each attribute. In CV respondents are also faced with a hypothetical scenario, but they only have to take a stand on one payment question, rather than rating the importance of an array of attributes in a choice situation (Boxall et al, 1996). However, a problem with the CV approach is that it relies on accuracy of the information provided regarding the specific good and requires a level of understanding from the respondent in order to make a valid statement. Nevertheless, we judged the method of CV to be more suitable for our survey than the method of CE. Notably since CE is complicated to answer and therefore requires more from the respondent. This in turn can cause response bias, as individuals do not understand the task correctly. Our survey was conducted in downtown Gothenburg, handing out questionnaires to people passing by. We expected that these people would not have the time nor the motivation to participate in our study if they judged the questionnaire too complicated. Through the CV, we came close in facing the respondents with a real market transaction, including a somewhat multi attributed consumption decision, even if these attributes are not separately valued.

It should be mentioned that the CV has been subject to severe criticism, mainly concerning the validity and reliability of the results and the effects of different biases and errors. One evident criticism concerns the fact that CV valuation relies on statements made in hypothetical situations. Since the respondents do not have to face consequences of their statements it is not evident that stated behavior would be translated into realized actions if the situation occurred in real life. This phenomenon, that causes deviations between statements and actual behavior, is called hypothetical bias. Kahneman and Sudgen (2005) support this critique by arguing that CV is based on decision utility, i.e. the utility an individual derives from deciding on a certain statement in the survey and not the actual statement itself. Therefore they argue that CV only measures individuals' attitudes, as opposed to preferences, towards the matter of investigation. They suggest preferences to be a much stronger predictor of individual behavior, based on experience utility i.e. the reward an individual derives from a realized action, something that can never be measured in a CV study.

Another important critique on CV concerns focusing illusion. In a CV scenario, respondents' attention is drawn to a matter that they may not have considered otherwise. Asking respondents to think about something might prime affective responses, as there is a major redeployment of attention towards the matter of investigation. The perceived importance of the matter increases why there is a risk of an overestimation of the stated WTP (Kahneman and Sugden, 2005). This phenomenon is closely related to what is called framing effect, which lead respondents to make a certain statement as a result from how the matter of investigation is presented to them and what information they are supplied with. Respondents may also have incentives to intentionally state biased responses as they suspect truthful answers will be disadvantageous for them, this is called incentive bias. Another critique concerns embedding/scope problems, where respondents' valuation is insensitive to the scope of the good (Pearce et al, 2006).

Due to the hypothetical nature of the situation presented in the CV survey, it is likely that respondents have a tendency to overestimate their true WTP. Therefore, in order to remind respondents of their budget constraint, a useful tool is to include a cheap talk script (Diamond and Hausman, 1994). The cheap talk script not only reminds the respondents of their budget constraint but also give information about the general risk of overestimation of WTP in hypothetical surveys. This has shown to be an efficient method in minimizing hypothetical bias.

2.3 Survey Mode

When conducting a CV-survey the first step is to define the target population. Generally, the target population consists of those who will receive the benefits or the costs that the subject of investigation will generate (Bateman et al, 2002). In our survey, valuing the characteristics of eco- and fair trade labels on a white t-shirt, we judge the target population to be men and women approximately between the ages of 18 to 75. Next step is to put together a list of the target population, known as the sample frame population, from which the sample is ultimately drawn (Bateman et al, 2002). As mentioned above, we drew our sample from dwelling people within the city center of Gothenburg. This, as we judge these people to be exposed to consumption situations and thus can be defined as those who will bear the costs (and enjoy the benefits) connected to the attributes of fair trade and eco labeled clothes.

We chose a *drop-off method* as survey mode when we conducted our survey. This method combines features of mail surveys as well as personal interviews (Bateman et al, 2002). We handed out questionnaires to people in the city center who, after having completed the questionnaire themselves, returned it back to us. We feared that participation would be low if we stopped people on their way, why we instead choose to ask waiting people either at the central station, at Kungstorget or in Nordstan to participate in our survey. This was shown a successful move judging by the high response rates of approximately 80%. However, a drop-off survey mode,

like any other survey mode, may impact responses.

On the one hand the initial personal contact (interviewers personally handing out the questionnaire) gives the survey a "human face" which encourages respondents to participate, it also gives the respondents a chance to ask the interviewer for clarification if there are questions regarding the questionnaire. It also minimizes the risk of self-selection bias, which is a risk in mail survey modes, when only people who are concerned about the matter choose to answer. On the other hand, when using a drop-off survey mode, responses may be subject to interviewer bias, which implies that respondents modify their answers in order to satisfy the interviewer. It is also likely that the sample will not be representative for the whole population in Gothenburg (Bateman et al, 2002).

Before carrying out the final survey, in order to ensure the quality and relevance of our questionnaire, we conducted pilot studies and pre-tests. Our pilot group consisted of twenty individuals of varying age and sex. After having completed the questionnaire, we individually sat down with each pilot group member and discussed his or her experiences of the survey. Through the feedback that was given we eliminated uncertainties and unclear parts by rephrasing and adding and extracting questions. The pilot survey included an open-ended payment question for an eco- and fair trade labeled t-shirt. The pilot group's stated willingness to pay gave us an indicator on suitable levels of bids to the payment card that was later used as payment vehicle in the final version of the questionnaire, this will be further explained below.

2.4 Survey Design

The questionnaire that was handed out to respondents had the following structure. First a set of socio-demographic questions were asked, then a section of information regarding negative effect of clothes production was given to half of the respondents. Next, respondents were faced with a valuation scenario that included a payment vehicle for a hypothetical consumption decision. Lastly a set of attitudinal and behavioral questions were asked, all with the aim to elicit individuals' preferences for eco- and fair trade labeled products as well as explaining respondents stated WTP. Below, the different sections will be explained in more detail.³

Socio-demographic questions

Starting off with the first set of socio-demographic questions. These were asked with the aim to identify factors that impact individuals' propensity for stating a positive WTP. We chose to include socio-demographic parameters regarding respondents' sex, number of people in household, income, educational level and average amount of money spent on clothes each month.

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 $^{^{\}rm 3}$ The full version of the questionnaire can be found in the appendix (in Swedish).

Regarding the income question, we investigated total disposable household income rather than individual income. The reason behind this choice was our aim to define the purchasing power of the individual, which ultimately depends on the total household income and number of people in the household. Educational level was another socio-demographic parameter included in the questionnaire as this might have an effect on individuals' basic level of information about environmental and social conditions and thereby impacting WTP. Higher educational level might also result in a better ability to relate to abstract matters, which may also affects individuals' responses. The last socio-demographic parameter included was individuals' current clothes shopping patterns, this, in order to investigate whether frequent shoppers have different preferences for eco- and fair trade labels than others.

Treatment test – Effect of information

In the next section of the questionnaire we conducted a small experiment, investigating how information about negative externalities caused by clothes production affect respondents' WTP. This was inspired by Schwartz norm activating theory (1977) and the results by Nyborg et al (2006) claiming that norms are activated into becoming moral obligations through the recognition of responsibility and awareness of consequences. In order to investigate if information has positive effects on respondents' willingness to pay, we made a treatment test. To one half of the respondents, which we refer to as the treatment group, additional information regarding negative effects of clothes production was given. The other half, referred to as the control group, did not receive any additional information. The informational section was one page long, describing how clothes production may have negative effects on oneself, the environment and social working conditions for the manufacturers. By dividing the effects into three different categories we were not only able to investigate whether information have a positive effect on WTP, but also to elicit what category that respondents judged as most the most important.

Valuation Scenario

Next section contained the valuation scenario. The scenario had been carefully composed as it determined the context for the payment question and thus had a significant influence on respondents' valuation statements (Bateman et al, 2002). In order to limit hypothetical bias, we choose to include a cheap talk script, making respondents aware of the fact that many often state a higher willingness to pay in hypothetical surveys than they would be prepared to pay in real life. Our hope was that this reminder would make people reflect on their actual budget constraint and true consumer behavior before stating their WTP. Next, respondents were faced with a hypothetical consumption decision. They were asked *if and by how much* they would be willing to pay extra for a white t-shirt with eco- and fair trade labels as opposed to an identical t-shirt without labels. We choose to use a white t-shirt in the valuation scenario as we assume most people have a demand for this standard clothing item.

The significance of the eco- and fair trade labels was explained, providing the respondents with information representing the change of the good in question and thus the subject of our valuation. The price of the non-labeled white t-shirt was set to 200 SEK, which we consider a benchmark price. If respondents stated a willingness to pay an extra price premium for the eco- and fair trade labeled t-shirt, it needed to exceed the initial price of 200 SEK. Conditions for provision of the good and methods of payment was left out of the scenario, since people are familiar with similar consumption decisions and as the market, even if on an insufficient level, already exists.

Payment question

Next, a payment question was asked where respondents stated their willingness to pay in the hypothetical consumption decision described in the scenario. In a CV-survey the format of the payment question can vary, the two extremes being either open-ended or closed-ended. In an open-ended payment question, respondents state their maximum WTP for a good or a change without anchoring effects. In a closed-ended format, respondents either accept or reject a bid presented to them (Bateman et al, 2002). However, many other alternatives of payment vehicles exist, all developed with the aim to minimize hypothetical bias and increase validity of the statements.

We chose a double bounded payment vehicle. First we asked the respondents whether they at all would be prepared to pay extra for the characteristics of ecoand fair trade labels. This was followed with a payment card and an open-ended payment question. The payment card format has characteristics of being both openended and a close-ended (Bateman et al, 2002). Through a payment card, the respondents were given visual aid in their hypothetical consumption decision, in the form of a ladder containing a number of monetary amounts (illustrated below). We defined the monetary amounts based on the results from the pilot studies, where the payment question was open-ended. The payment card provides thereby the respondents with a context to their bids, making it easier to state a realistic price for eco- and fair trade labels. Additionally, the payment card is usually more comprehensive to respondents than pure open-ended questions (Bateman et al, 2002). This as it resembles a market transaction since the respondents are being faced with a fixed array of prices, however still avoiding starting point bias that is commonly detected in closed-ended payment questions. Our payment card was designed as follows.

How much would you, <u>in total</u>, be prepared to pay for the eco- and fair trade labelled t-shirt? (Circle the price)

210 220 230 240 250 260 270 280 290 300

If you are willing to pay more than 300 SEK, what is your maximum willingness to pay?......SEK

In addition to the payment card we asked an open-ended payment question to ensure that we capture the respondents' maximum willingness to pay for eco- and fair trade labels on a white t-shirt, should it exceed 300 SEK.

Attitudinal and follow-up questions

The last section of the questionnaire contained thirteen attitudinal and follow-up questions, where respondents stated levels of agreement (on a scale from 1 to 5) to claims presented to them. The claims all concerned attitudes towards eco- and fair trade labels and ethical consumer behavior. Through respondents' statements we elicited attitudes, perceptions and feelings about the subject of interest –eco- and fair trade labeled clothes. It also provided us with indications as to why the respondents answered the way they did.

First investigated were respondents' current consumption patterns of eco- and fair trade labeled products. Current ethical consumer behavior was judged important as previous studies show that habits are often determining for individuals' consumption decisions (Jackson, 2005). The second claim investigated whether consumers experienced the supply of eco-and fair trade labeled clothes as being insufficient and if they would buy more if the supply would be greater.

The next three claims were stated with the aim to identify prejudices concerning eco- and fair trade labeled clothes. This gave the people stating zero WTP a chance to express their reasons for doing so. Perhaps they associate eco-and fair trade labels with being too pricey, not fashionable enough or with lower quality.

The three following claims aimed to identify what individuals' judge as most important when they shop for clothes, price, fashion or quality. The next set concerned perceived responsibility for social conditions and environmental effects in the manufacturing of clothes. These claims were included as the Norm Activation theory (Schwartz, 1977) suggests perceived responsibility to be an important driver for moral consumer behavior.

In the last two claims individuals were given a chance to state whether they believe their contribution would help creating a sustainable future and whether they consider future generations in their consumption decisions. These claims were included with the aim to give indications on bequest and altruistic non-use values as motivational drivers in the demand for eco- and fair trade consumption.

3. Willingness to Pay and Attitudes to Eco-and Fair Trade Consumption

In this chapter we present descriptive statistics and empirical results of the socio economic variables, the WTP question and the attitudinal questions. Below we refer to the respondents as either "yea-sayers" or "nay-sayers". "Yea-sayers" represents the respondents who have a *positive* WTP for the eco- and fair trade labeled t-shirt, while "nay-sayers" represents the respondents stating a *zero* WTP for the eco- and fair trade labeled t-shirt. We will start off with the descriptive statistics, explaining the characteristics of our sample population. Next we give an overview of the WTP elicited in the survey. This is followed by an analysis of general attitudes towards eco- and fair trade consumption of the whole sample. We also look closer on the differences in attitudes between people stating positive WTP in relation to those stating a zero WTP. Lastly we analyze the results from the treatment test.

3.1 Characteristics of the Sample Population

Our survey originally contained of 528 respondents. 15 respondents were under the age of 18 and removed from the data set. Primarily as under aged people usually don't have an own purchase power but are supported economically by their parents. Another 19 respondents misunderstood the payment question as they stated that they were not willing to pay a price premium and yet chose a bid on the following payment card, indicating a positive willingness to pay. We decided to omit their bids and instead count them as "nay-sayers". The final data set contains 513 respondents. We realize that the sample population is not representative for the population in Gothenburg. However, we accept a somewhat skewed sample, including a larger proportion of younger people and female respondents, as we suggest this to be in line with the target group of clothes consumers.

Table 1. Characteristics of the Sample Population – Socio Demographic Variables

Variable	Explanation	Mean	Med ian	Std. dev	Min	Max	Obs
Sex	0 if male 1 if female	0.59			0	1	511
Personal income	Personal income calculated as total household income divided by number of persons in the household over age 18 1 = 0 - 10 000 2 = 10 000 - 20 000 3 = 20 000 - 30 000 4 = 30 000 - 40 000 5 = 40 000 - 50 000 6 = 50 000 - 60 000 7 = 60 000 - 70 000 8 = 70 000 -	2.21	2	1.00	1	8	507
Age	Age by year	37.86	34	16.04	18	88	511
Education	Highest education, ongoing or finished	3.20	4	1	1	4	512
	1 = Comprehensive school 2 = Gymnasium / High School 3 = Post high school education 4 = Collage / University						
Clothing consumption	Total personal clothing consumption per month 1 = 0 - 250 2 = 251 - 500 3 = 501 - 1000 4 = 1001 - 1500 5 = 1501 - 2000 6 = 2001 -	2.75	3	1.35	1	6	510
Information	0 if not received survey containing extra information (control group) 1 if received survey containing extra information (treatment group)	0.32		0.47	0	1	513
WTP	Willingness to pay an extra (price premium) in Swedish kronor, total sample	43.87	50	45.91	0	300	513

Table 1 shows descriptive statistics of the sample population. Summarizing the socio demographic variables we find that 59% of the respondents are female. However, as stated above, we do not consider this a problem, as we suspect females to be slightly overrepresented among clothes shoppers and thus our sample is still in line with the target population.

In the questionnaire we asked the respondents to estimate their *total* disposable household income after tax, including monthly salary, subsidies and student loans. This was done in order to determine individual purchasing power, as this ultimately does not depend on personal income but rather on total household income. However, as we wanted the income parameter to be comparable between individuals regardless of however many people in the household, we created a new variable. This variable defined personal income by dividing total household income with number of people in household, extracting those under the age of 18. This

provided us with the following results. The majority of the respondents stated a monthly disposable income between 10 000 and 20 000 SEK. More precisely, 68 per cent of the sample population state that they have an income under 20 000 SEK.

Somewhat remarkable in the summary statistics is that the median of education is at the highest level (4). In our sample, 56.25% of the respondents state that they have a college/university degree or are currently studying at this level. The corresponding number for the population in Sweden is 33% (OECD – Education at a Glance 2011). This can probably be explained by the location in which we conducted our survey - the shopping districts in the city center of Gothenburg and at the central station. These are likely to be areas where well-educated people spend recreational time but also where they work and travel. Again, we do not find this problematic as we suggest the stated educational level to be representative for our target population.

The mean age in our sample is 38 years. This reflects on the fact that younger people are a large consumer group, targeted in the garment industry. It may also reflect on the fact that younger people have more time off during daytime because of studies, than older generations. Since we conducted our study during weekdays, the likelihood for younger participation in our study increased.

The mean expenditures on clothes per month is 2.75 according to our sample, implying that the respondents on average spend 500-1000 SEK per month on clothes.

50% of the respondents received the additional informational page. However only 32% seem to have read the page and answered the control question about what area of concern that they consider being most troubling. We choose only to include people who answered the control question as being part of the treatment group, as we could not assure that the others had read the informational page. The results will be further discussed below.

3.2 Willingness to Pay

In the survey respondents answered a hypothetical payment question, stating if and how much they were willing to pay for eco- and fair trade labels on a white t-shirt. Note that in our study we are only valuing the *extra* price premium that consumers are willing to pay and not the *total* price of the t-shirt. Below we illustrate the general results of the payment questions.

Figure 1.1 Share of respondents stating zero or positive WTP for eco- and fair trade labels

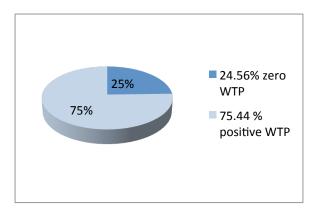
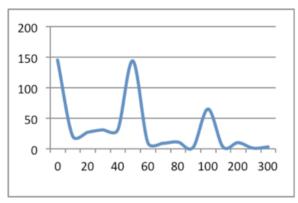


Figure 1.2 Distribution of WTP responses



Y-axis: Number of respondents, X-axis: WTP SEK

In figure 1.1 we observe substantially positive attitudes towards eco- and fair trade labels among the respondents. We found that 75% of the respondents stated that they were willing to pay an extra price premium for the eco- and fair trade labeled t-shirt. 25% stated that they were not willing to pay an extra price premium for the eco- and fair trade labeled t-shirt.

The mean of the extra price premium for the eco- and fair trade labeled t-shirt, all respondents included, is 43.87 SEK. The median WTP is 50 SEK, shown in figure 1.2 as the WTP curve peaks on the monetary value of 50. The amount of people stating zero WTP equals the amount of people stating the mean WTP of 50 SEK. The WTP curve has another peak on 100SEK. Thus, it seems respondents have a tendency to state "even" number such as 0, 50 or 100 SEK rather than uneven ones. This could be a sign of anchoring bias, when individuals statements depends on the bids presented to them rather than on own preferences.

3.3 Attitudinal Variables

The questionnaire contained 13 attitudinal questions presented to the respondents as claims. The respondents were asked to state level of agreement to the claims on a 1-5 scale where 1 was "Do not agree at all" and the highest level of 5 was "Fully

agrees". We are aware of the fact that these statements are subjective ratings, but they will however give us indications on individual's attitudes towards eco- and fair trade labels on clothes. We interpret stated agreement levels of 1-2 as rather strong disagreement to the claims presented. Respectively, stated levels of 4-5 we interpret as rather strong preferences of agreement to the claims presented. However, a stated agreement level of 3 on the scale is more complex to interpret and can both be seen as a non-answer or simply a vague statement. In table 2 we present descriptive statistics of the attitudinal variables for the whole sample.

Table 2. Descriptive Statistics – Attitudinal Variables
Total Sample

^{5 =} fully agrees

Variable	Explanation	Obs.	Mean	Std.dev
				•
Current habits	I frequently choose eco- and fair trade labeled products when I shop	506	3.11	1.16
Supply	I would buy more eco- and fair trade labeled clothes if the supply was greater	507	3.60	1.10
Expensive	I think eco- and fair trade labeled clothes are more expensive than other	501	4.07	1.01
Quality	I think eco- and fair trade labeled clothes have worse quality than other	500	1.79	0.98
Fashionable	I think eco- and fair trade labeled clothes are less fashionable than other	504	2.38	1.15
Style	Style and fit is determining when I buy clothes	506	4.37	0.79
Price	The price is determining when I buy clothes	504	3.46	1.13
Material	The material is determining when I buy clothes	506	3.88	0.94
Consumer	I think consumers have responsibility for the environment and social conditions in the clothing industry	507	3.73	1.05
Government	I think the government has responsibility for the environment and social conditions in the clothing industry	507	3.79	1.11
Company	I think company's has responsibility for the environment and social conditions in the clothing industry	507	4.37	0.95
Affect	I believe I can impact on a sustainable future by buying eco- and fair trade labeled clothes	507	3.69	1.07
Consequences	I consider the consequences that my consumptions choices will have on future generations and other people	505	3.38	1.11

^{1 =} do not agree at all

The mean value of the variable *Current habits*, explaining respondents' current purchasing habits of eco- and fair trade labeled products, is 3.11 and the spread among the stated answers is quite wide. As we know that the market for eco- and fair trade products is inadequate, we would expect a significantly lower value here. In the next claim we find that people state that they would purchase more eco- and fair trade clothes if the supply was larger which is an indication of an interest of a greater market of such products.

Furthermore, we stated three claims with the aim to elicit respondents' ratings of importance of price, style and material as determinants in their clothing consumption decisions. Style and fit was by far the most important factor for clothing consumption decisions with a mean value of 4.37. This can be compared to the stated relative importance of price (mean 3.5) implying that the respondents don't seem to be too price-sensitive in their consumption decisions.

The next three claims concerned impressions and prejudges that consumers may have towards eco- and fair trade labeled clothes. A large majority of the respondents considered eco- and fair trade labeled clothes to be more expensive than others (mean 4.07). However, this result is not surprising since this question was asked after the payment question in the questionnaire, which may affect peoples' statements. Few respondents believed the quality of eco- and fair trade labeled clothes to be worse (mean 1.79) neither did they consider eco and fair trade labeled clothes less fashionable than other clothes (mean 2.38).

On average, the respondents think that companies have the largest responsibility for the environment and social conditions in the clothing industry, with a mean of agreement level of 4.37. This can be compared to the means of agreement of perceived governmental responsibility of 3.79, and of perceived consumer responsibility 3.73.

3.4 Differences in Attitudinal Variables Between Yeasayers and Nay-sayers

In this chapter we examine differences in attitudes between yea-sayers and nay-sayers towards eco- and fair trade labeled clothes and sustainable consumer behavior. As shown in figure 1.1 above, 75% of the respondents are yea-sayers, stating a positive willingness to pay (WTP>0) and 25% are nay-sayers, stating zero willingness to pay (WTP=0). Despite some identified attitudinal differences, we conclude that both groups on average have rather positive attitudes towards the matter of investigation.

Table 2.1. Attitudinal differences "Supply"

"I would buy more eco- and fair trade labeled clothes if the supply was greater"

(1= Do not agree, 5= Fully agree)

	Mean
WTP = 0	2.81
WTP > 0	3.85

Table 2.2. Attitudinal differences "Current habits"

"I frequently choose eco- and fair trade labeled products when I shop"

(1= Do not agree, 5= Fully agree)

	Mean
WTP = 0	2.35
WTP > 0	3.36

As shown in table 2.1, yea-sayers stated a higher mean value than nay-sayers to the claim that they would buy more eco- and fair trade labeled clothes if the supply of these products was greater. We conducted a two-tailed t-test and found a statistically significant difference (p-value 0.00) in stated value of the variable *supply* between the groups yea-sayers and nay-sayers.

As shown in table 2.2, yea-sayers on average stated that they currently purchase eco- and fair trade labeled products to a larger extent than nay-sayers. We conducted a two-tailed t-test and found a statistically significant difference (p-value 0.00) in stated value of the variable *current habits* between yea-sayers and nay-sayers. It confirms theories that people have a tendency to stay faithful to their current consumption patterns. This as well as the above result regarding supply shows consistency of the responses, that the general attitude towards eco- and fair trade labeled clothes is more positive among yea-sayers than nay-sayers.

Table 2.3. Attitudinal differences "Responsibility"

"I think X has responsibility for the environment and social conditions in the clothing industry"

(1= Do not agree, 5= Fully agree)

	WTP > 0	WTP = 0	P-value
Consumer	3.91	3.17	0.0000
Government	3.88	3.5	0.0009
Company	4.45	4.10	0.0001

As shown in table 2.3, the mean of the three areas of responsibility differs significantly between yea- and nay-sayers. Yea-sayers do to a larger extent than nay-sayers believe that governments, companies as well as consumers have responsibility for the environment and social conditions in the clothing industry. After having conducted a two-tailed t-test we found statistically significant differences in stated values between yea- and nay-sayers concerning the issue of responsibility. Thus, yea-sayers recognize a greater overall human responsibility for negative environmental and social externalities caused by the clothing industry. The difference is particularly large on the variable *consumer* where yea-sayers recognize a much higher level of personal responsibility. This is in line with Schwarz norm theory (1977), suggesting that the feeling of responsibility activates personal norms into moral obligations. This is evident in our survey as a higher recognition of responsibility increases stated WTP for eco- and fair trade labeled products.

Table 2.4. Attitudinal differences "Determinants"

"X is determining when I buy clothes"

(1= Do not agree, 5= Fully agree)

	WTP > 0	WTP = 0	p-value
Style	4.36	4.40	0.6288
Price	3.36	3.76	0.0005
Material	3.95	3.65	0.0017

Table 2.5. Attitudinal differences "Prejudges of eco and fair trade labeled clothes"

"I think eco and fair trade labeled clothes are X than other clothes"

(1= Do not agree, 5= Fully agree)

	WTP > 0	WTP = 0	p-value
			p value
More Expensive	4.06	4.10	0.6789
Less Fashionable	2.30	2.65	0.0033
Lower Quality	1.71	2.01	0.0040
•			

In two groups of attitudinal questions, concerning determinants for consumption decisions and prejudges of eco- and fair trade labeled clothes we conducted two-tailed t-tests in order to compare attitudes of yea- and nay-sayers. As shown in table 2.4, we found statistically significant differences in all variables but two, namely *style* and *price*. The results indicates that yea-sayers on average are less price sensitive and do to a larger extent care about the material of the clothes they buy. However, there is no significant difference in attitudes regarding the importance of style and fit of clothes as the mean value of this variable is high across the total sample and the spread among respondents stated values is not very wide.

In table 2.5 there is a statistically significant difference between nay-sayers and yea-sayers regarding prejudges of the quality and level of fashion of eco- and fair trade labeled clothes. Nay-sayers tend to think that the quality of eco- and fair trade labeled clothes is worse and that they are less fashionable than other clothes. There is however no significant difference between the two groups regarding the claim that eco- and fair trade labeled clothes are more expensive than others. Both nay-sayers and yea-sayers judge eco and fair trade labeled clothes to be more expensive relative to other clothes. This result may be due to the fact that the payment question is asked before the attitude questions, which may influence respondents to think that the price for eco- ad fair trade labeled clothes must be higher.

Table 2.6 Attitudal differences "Awareness of consequences and ability to affect"

	Mean WTP > 0	Mean WTP = 0	p-value
Consequences	3.61	2.66	0.000
Affect	3.86	3.19	0.000

The previously discussed results concerning yea-sayers' greater recognition of responsibility for environmental and social responsibility than nay-sayers is also evident when analyzing the variables *affect* and *consequences*. These variables explain to what extent the respondents think they can affect a sustainable future through consumer behavior and whether they consider environmental and social consequences of their consumption decisions. Here, we note a large difference in attitudes with regards to consideration of consequences. Yea-sayers' stated mean value regarding consideration of consequences is much higher than nay-sayers mean value, the difference is statistically significant. Respectively, yea-sayers think that they can affect a sustainable future to a greater extent than the nay-sayers, this result is also statistically significant.

3.5 Treatment Test – Effect of Information on WTP

We conducted a treatment test in order to investigate whether additional information about environmental and social externalities caused by clothes production influence the respondents attitudes and probability for stating a positive WTP for the eco- and fair trade labeled t-shirt. The additional informational page (included in the survey in the appendix) that half of the respondents received was phrased in simple and easy to grasp wording, aiming to emotionally engage the respondents. Picture 1.3 presents the results of the areas of concern that the respondents found most troubling.

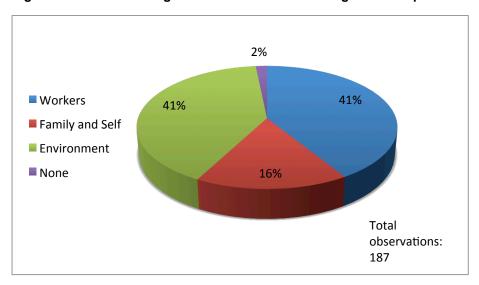


Figure 1.3 Most troubling areas of concern according to the respondents

The areas of concern being exposed to externalities from clothes production that the treatment group found most troubling was social and health related conditions for the workers (41%) as well as effects of pollution on the environment (41%). Probability tests were conducted that showed no statistically significant difference

(p-value 0.9302) between these areas of concern. The area of concern regarding health effects on family and self due to chemicals not yet washed out in clothes was judged as least important. A probability test showed a statistically significant difference between the variables *environment* and *workers* on the one hand and the variable *family* on the other hand (p-value 0.000). Three respondents judged none of the areas of concern to be important.

Interestingly, the treatment groups' responses in the attitudinal section towards sustainable consumption seem not to have been significantly influenced by the additional informational page. After having conducted t-tests, we concluded that there was no significant difference in attitudinal answers between the control and treatment group. Nor did we detect any statistical difference in stated WTP towards eco- and fair trade labels between the treatment and the control group (p-value 0.1108).

Regardless of our results, we still believe information to be important for peoples' attitudes and consumer behavior. One possible explanation to the lack of treatment effect in our study could be due to the time pressure of the respondents, resulting in negligent reading of the additional information sheet. Another explanation could be due to the hypothetical nature of our survey. We suspect that the survey itself caused framing effects, positively impacting statements of WTP and attitudinal responses for all respondents (both control and treatment groups). Therefore, the additional informational page (only given to the treatment group) did not did not generate a great treatment effect.

4. Econometric Analysis

There are two main objectives with the econometric analysis. The first objective is to distinguish between respondents stating a zero WTP and those who have a positive WTP. The second objective is to analyze parameters that impact expected levels of WTP (given that the respondent stated a positive WTP). We have chosen to present the results from two different econometric models, the logit model and the OLS model, analyzing data collected from the CV-study.

In the first logit model, the dependent variable is binary. It can only take two values as respondents state either "yes" or "no" to whether they are prepared to pay an extra price premium for the eco- and fair trade labeled t-shirt compared to an identical t-shirt with no labels. This model elicits socio-demographic and attitudinal factors affecting respondents' probability for stating a positive WTP:

P[WTP>0]

In the second OLS regression model, the dependent variable is continuous. This, as it aims to elicit expected monetary levels of WTP depending on individual characteristics, both socio demographic and attitudinal, among the respondents who stated "yes" to the initial payment question:

E[WTP|WTP>0]

4.1 Factors Impacting the Probability of a Positive WTP Response

We begin by analyzing factors influencing respondents' probability for stating a positive WTP. This is done by using a binary logit model, the dependent variable is equal to zero if the respondent stated a zero WTP or equal to one if the respondent stated a positive WTP.

Based on knowledge from earlier studies we have made the hypothesis that socio demographic questions are possible determinants behind ecological and ethical consumption. Also, the attitude questions are possible important determinants behind eco- and fair trade consumption and by performing stepwise regression analysis we choose to include a selection of them in the model. The results are presented in Table 3. Note that the estimated coefficients for the attitude variables (ranked on a 5 graded scale) should be interpreted as individual dummy variables where the results from the dummies are compared to the lowest number in the scale (1). Hence, for example comparing the effect on the probability of stating a positive WTP of fully agreeing to a statement (5) vs not agreeing at all (1).

Table 3. Logit model. Marginal Effects for the Probability of Stating a Positive Willingness to Pay

Variable	Coefficient	Std. error	p-value
Sex	-0.50	0.038	0.183
Age	-0.003	0.001	0.024
Income	0.033	0.020	0.106
Education	0.025	0.018	0.183
Clothing consumption	0.002	0.015	0.880
Information	-0.021	0.039	0.587
Consequences 2	0.000	0.076	0.998
Consequences 3	0.138	0.061	0.024
Consequences 4	0.230	0.049	0.000
Consequences 5	0.223	0.039	0.000
Consumer 2	0.031	0.087	0.721
Consumer 3	0.146	0.067	0.028
Consumer 4	0.214	0.067	0.001
Consumer 5	0.229	0.058	0.000
Price 2	-0.332	0.167	0.047
Price 3	-0.189	0.123	0.125
Price 4	-0.287	0.130	0.027
Price 5	-0.374	0.151	0.013

No of observations: 493

Consequences The model suggests that altruism has an impact on the likelihood for stating a positive WTP for paying a price premium for eco- and fair trade labeled clothes (stated importance of the attitudinal claim: "I consider other people and future generations in my consumption decisions"). This, since a respondent stating a high level (5) of consideration for future generations and other people has a 22% higher probability to state a positive WTP than those who state the lowest level of consideration (1). This is significant on a 1% level.

Consumer responsibility Another factor of impact for the probability of respondents stating a positive WTP is the level of recognition of consumer responsibility (stated importance of the attitudinal claim "I think consumers have responsibility for environmental and social conditions in the clothing industry". If a respondent think that consumers have responsibility (and not just companies and the government) for externalities caused by the clothing industry (stating a 5), the probability that this person will state positive WTP increases with approximately 23 % in relation to respondents stating the lowest number of responsibility recognition. This is significant on a 1% level.

Price Price sensitivity is another parameter that influences the probability for stating a positive WTP (stated importance of the attitudinal claim: "Price is determining for my consumption decisions"). If a respondent considers price as a highly determining factor in clothes consumption decisions (in relation to style and quality) they are by 37% less likely to state a positive WTP. This is significant on a 5% level.

Clothes consumption Whether an individual is a large clothes consumer or not, judging by respondent' stated monthly average expenditure on clothes (explained by the variable clothes) have no effect on the probability that he or she will state a positive WTP for the eco- and fair trade labeled t-shirt. Environmental awareness seems therefore not to be correlated to the frequency of clothes consumption. Possible explanations for this may be that an environmentally aware person may make an active choice not to buy clothes in order to minimize environmental impact. Large clothes consumers may be environmentally aware by buying expensive yet sustainable clothes. This may cause great variance in the correlation between level of clothes consumption and environmental awareness which renders it insignificant.

Information The treatment group (those who received an additional page of information regarding social, environmental and health related externalities caused by clothes production and also answered the follow up question) does not, on a statistically significant level, have a greater likelihood for stating a positive WTP than the control group (those who did not receive information). Many evidently did not read the information, which may be an explanation to this result. The framing effect of the questionnaire itself actualizes the question of eco- and fair trade labels why info does not increase the probability for stating a positive WTP (thus it does not imply a framing effect solely from the information). This is further interpreted in the descriptive statistics section above.

Age As age increases with one unit, the likelihood that the respondent will state a positive WTP decreases with 0.3% on a 5 % significance level. This implies that age has impact on the margin. In our survey however, the size of young respondents outweighs the number of respondents over 50. Why we need to be cautious when interpreting this variable.

Personal income Our model suggests that personal income have a weak impact on respondents' probability for stating a positive WTP. As income increase with one level (equal to 10 000 SEK), the probability for a yes response increases with 3.3%. This tendency is however observed on a low level of significance.

Sex According to our model, respondent's sex does not have a statistically significant impact on the likelihood for stating a positive WTP. We further investigated this result as previous studies often state that women have a greater likelihood for a positive WTP. After having conducted a t-test we conclude that the likelihood for stating a positive WTP does not significantly differ between men and women (p-value 0.9636), thus the model does not confirm the findings of other studies that women have greater likelihood for stating positive WTP.

Education Nor does the level of education have a significant impact on the likelihood for stating a positive WTP in our model. This may be due to the fact that there is an overrepresentation of well-educated people in our sample.

The chi2 has a value of 0,000, which implies that we can reject the null hypothesis that our model is completely random, thus the likelihood that a respondent state a positive WTP is partly explained by the parameters included.

4.2 Factors Impacting Expected Levels of WTP

Now we turn to analyzing what determines the levels of willingness to pay premium for eco- and fair trade labeled clothes given that the respondent stated a positive WTP.

We are estimating a stepwise ordinary least square regression with the continuous variable of WTP. All respondents with a zero WTP were removed as well as those respondents that stated that they were not willing to pay a price premium and yet stated a premium. The dependent variable range price premiums from 10 to 300 SEK above the initial price of 200 SEK presented to the respondents. We again use socio demographic and attitudinal questions as explanatory variables by performing stepwise regression analysis. The model contains 356 observations and the results are presented in table 4.

Table 4. OLS Regression Model. Willingness to Pay in SEK

Variable	Coefficient	Std. error	p-value
Sex	1.018	4.557	0.823
Age	-0.260	0.152	0.088
Income	-2.033	2.489	0.414
Education	-0.565	2.310	0.807
Clothing consumption	1.435	1.834	0.434
Information	-5.866	4.657	0.209
Consumer responsibility	5.054	2.302	0.029
Price	-9.181	2.138	0.000
Style and fit	6.460	2.951	0.029
Current habits	7.226	2.103	0.001
Constant	32.559	19.989	0.104

R- squared: 0.1335

The two regression models show similar results as to what factors that affects respondents' probability for stating a positive WTP as well as what affects the levels of WTP. None of the socio demographic variables, but age (significant at a 10% level), show statistically significant results. After running the two regression models with the same explanatory variables, it was evident that the coefficients did not significantly vary between the models. Below, we therefore choose not to discuss all the variables included (as the interpretations have not changed). However, we included two new variables in the OLS regression explaining the expected levels of WTP among yea-sayers. By including these we had to exclude others as they were correlated, which ultimately could have biased the results.

Current habits The new variable *current habits* (i.e. the greater the extent to which respondents' state that they choose to buy eco- and fair trade labeled products) impacts the level of stated WTP and is significant at a 1% level. By a one level stated increase in the current habit variable, the average WTP is expected to increase by 7.23 kronor. The current habit variable is highly correlated (0.6) with consumers' awareness of consequences included in the logit model above why we cannot include both in the same model. However, since the parameters explain different things, we want to highlight their importance in the two different models.

Style and fit Respondents who value style and fit high in their clothing consumption decisions state a higher level of WTP for an eco- and fair trade labeled t-shirt. A one level increase of stated importance of style and fit is expected to increase the average WTP by 6.46 kronor. The coefficient is significant at a 5% level.

Price Price is also a highly significant variable. It shows that price sensitive respondents state lower levels of WTP. Respondents that state that price is a determinant factor when making consumption decision are less willing to pay a high premium. A one level increase of stated importance of price on average decreases the WTP by 9.18 kronor.

Consumer responsibility In accordance with the logit model respondent's level of recognition of consumer responsibility is an important determinant for the level of stated WTP. For each increased stated level of recognized consumer responsibility, the WTP increases by approximately 5 kronor at a 5% significance level.

Information The variable information is not significant in the model.

The R-squared is 0.135 and the F-value is 0.000. This implies that our regression model includes variables that can determine the level of WTP and we can reject the null hypothesis that the model is completely random.

5. Conclusions

In this thesis we investigated attitudes for eco- and fair trade labeled clothes in Gothenburg and whether consumers were willing to pay an extra price premium for these characteristics on a white t-shirt. A CV-study was conducted, designed in accordance with stated preferences techniques, eliciting attitudes and preferences for eco- and fair trade labeled clothes of approximately 500 individuals.

In a hypothetical consumption decision, 75% of the respondents stated that they were prepared to pay an extra price premium for an eco- and fair trade labeled white t-shirt over an identical white t-shirt without eco- and fair trade labels. The respondents were on average willing to pay 43.87 SEK above the initial total price of 200 SEK. The median of the willingness to pay (WTP) was 50 SEK, which equals 25% of the initial total price of the t-shirt.

According to the survey results, respondents' probability for stating a positive WTP decreased with age and increased with income (however on a weak significance level). The sex of the respondent did not have any impact on the WTP. Most of the socio demographic variables were not shown to have any, or just little impact on the WTP, suggesting that preferences for eco- and fair trade labels on clothes are randomly distributed within the sample population. Important factors influencing the probability of stating positive WTP were rather personal attitudes, preferences and priorities. Respondents considering environmental and social consequences of their consumption decisions, as well as respondents recognizing a level of personal responsibility for negative externalities generated from the clothing industry, generally stated a higher WTP. Price sensitive respondents were more likely to state lower or zero WTP.

We performed a treatment test, investigating whether information about negative externalities caused by clothes production affects WTP. The results showed that information had no significant impact on WTP. The treatment group found externalities affecting social and health related conditions for workers within the manufacturing process and environmental damage of pollution as equally important areas of concern. Even if not concluded in our treatment results, we still suggest that relevant information stimulate ethical consumer behavior. We suspect the lack of treatment effect to be due to the hypothetical nature of the survey (causing respondents to state unrealistically positive levels of WTP) and time pressure of the respondents (resulting in negligent reading of the additional information sheet).

6. Discussion

One of the basic theoretical assumptions in our study is that people maximize utility under personal budget constraints. The prerequisite for an individual to state a positive willingness to pay for an eco- and fair trade labeled t-shirt is therefore that these characteristics bring additional value to the individual, weighing up the extra cost that a positive WTP implies. The results from our study indicate different factors generating additional utility to the consumer. These factors are worthwhile taking into consideration by marketers as well as policy makers in order to increase the demand for eco and fair trade labeled clothes.

Altruism is concluded as one of the main factors generating additional utility to respondents stating a positive WTP for the eco- and fair trade labeled t-shirt. This, as awareness of consequences of consumption decisions and recognition of responsibility for externalities caused by clothes production were shown to be statistically significant variables in positively impacting WTP. It implies that eco- and fair trade labels generate added utility to consumers through the concern for others.

Another factor that we suggest generate utility for the consumer, weighing up the extra cost in the case of a positive WTP is impure altruism. The theory of impure altruism suggests that additional utility from making an ethical action can be derived through egoistic motives. For example, consumers may enjoy warm glow - the feeling of doing the right thing, emphasizing oneself as a morally responsible person when buying eco and fair trade labeled clothes. This tendency increases when others can perceive the purchasing behavior. We were unable to test whether impure altruism generate utility to the individual in the in the CV-study. However, according to our results, consumers who highly value style and fit stated higher levels of WTP. This raises the question of whether eco and fair trade labels are considered as being "trendy". Then perhaps eco- and fair trade labels are adding value to consumers as they are conceived "fashionable" attributes. We interpret this result that it is not particularly the look or style of the eco- and fair trade labeled clothing item that adds value to the consumer, but rather the labels' signaling to others of environmental and social responsibility. This may thus be interpreted as a sign of impure altruism.

We conclude in our study that people have different preferences and motives for being willing (or not) to pay an extra price premium for an eco- and fair trade labeled t-shirt. The great majority (75%) states that they would be willing to pay an extra price premium. They also state that they would buy more eco- and fair trade labeled clothes if the supply was greater. The results unanimously show that the sample population has positive attitudes and preferences towards eco- and fair trade labels on clothes. We therefore suggest that there is great opportunity in developing the market. In order to increase the demand and to turn people's positive attitudes into realized purchases of eco- and fair trade labeled clothes, the added value connected to these characteristics need to be identified and communicated.

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8. Appendix – The Questionnaire

1.	Är du?	
	□ Man □ Kvinna	
2.	Ålder? år	
3.	Hur många personer finns i ditt hunder 18 år.	ushåll?personer, varavär
4.	Vilken är ditt hushålls ungefärliga (Inkomster som lön, pension, bidr	
	□ 0 - 10 000 □ 10 001 - 20 000 □ 20 001 - 30 000 □ 30 001 - 40 000	☐ 40 001 - 50 00 ☐ 50 001 - 60 000 ☐ 60 001 - 70 000 ☐ 70 000 -
5.	Vilken är din högsta pågående/av	rslutade utbildning?
	☐ Grundskola el. motsv.☐ Gymnasium, realskola, folk!☐ Eftergymnasial utbildning.☐ Studier vid högskola/unive	Ej högskola/universitet
6.	Hur mycket pengar köper du kläd	ler (ej skor) för <u>till dig själv</u> i månaden?
	□ 0 - 250 □ 251- 500 □ 501 - 1000 □ 1001 - 1500	□ 1501 – 2000 □ 2001-

Visste du detta om klädframställning?

Så påverkas miljön:

- Bomull är den fiber som används mest i kläder. Det är också den gröda som kräver mest bekämpningsmedel och konstgödsel i världen, vid odlingar rubbas ekosystem och marker blir obrukbara.
- Giftiga kemikalier som tyg behandlas med är svåra att bryta ner och sprids långt. Kemikalierna har återfunnits bl.a. i isbjörnar på Antarktis och i bröstmjölk hos svenska kvinnor. Konsekvenserna av dessa farliga ämnen är svåra att överskåda idag men lokalt dödar de växt och djurliv, försurar vattendrag och förstör odlingsmarker.

Så påverkas du och din familj:

- **Giftiga kemikalier** kan delvis sitta kvar i det färdiga plagget i butiken. Somliga är **cancer- och allergiframkallande, andra påverkar nervsystemet, är hormonstörande och kan påverka fertiliteten.** Främst rör detta multifunktionella plagg. Kemikalierna tvättas med tiden ur plaggen och sprids vidare via vattendrag.
- **Barn är extra utsatta** för de giftiga kemikalierna, eftersom deras immunoch nervsystem ännu inte är färdigutvecklat.

Så påverkas textilarbetarna:

- Månadslönen för en arbetare på en textilfabrik i ett tillverkningsland är mellan 200-300 kr. De förväntas ofta arbeta tolv timmar om dagen, sju dagar i veckan.
- **Arbetarn**a **utsätts** för giftiga kemikalier och bekämpningsmedel i tillverkningsprocessen. Farliga ämnen som **kan leda till allvarliga sjukdomar och en för tidig död.**

Vilket informationsområde tycker du är mest bekymmersamt?

□ Miljön	□ Du och din familj	☐ Textilarbetarna	□ Inge
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Nedan kommer du ställas inför ett köpbeslut. I undersökningar svarar folk ofta att de är villiga att betala mer än vad de skulle göra i verkligheten. Försök därför att svara så ärligt som möjligt. Hur hade du gjort i följande situation?

Du ska köpa en vit t-shirt, i butiken står du och väljer mellan två identiska varianter, med samma passform och kvalitet.								
*	Den ena är tillverkad av traditionellt odlad bomull, inga garantier finns för att den är tillverkad utan farliga kemikalier eller under humana arbetsförhållanden. Priset är 200 kronor.							
*	Den andra är miljö- och rättvisemärkt, tillverkad av ekologisk bomull, utan giftiga kemikalier/bekämpningsmedel och under humana arbetsförhållanden.							
7.	Skulle du vara villig att betala ett högre pris för den miljö- och rättvisemärkta t-shirten? (Om du svarar nej på denna fråga, hoppa då över fråga 8)							
	□ Ja □ Nej							
8.	8. Hur mycket skulle du <u>totalt</u> vara villig att betala för den miljö- och rättvisemärkta t-shirten? (Ringa in priset)							
21	0 220 230 240 250 260 270 280 290 300							

Om mer än 300 kronor, hur mycket? kronor

9. I vilken utsträckning håller du med om nedanstående påståenden?

(Markera det alternativ mellan 1-5 som du tycker stämmer bäst överens med ditt beteende)

	Instäm- mer inte alls	←		→	Instäm- mer helt och hållet
	1	2	3	4	5
Jag försöker att välja miljö- och rättvisemärkt när jag handlar					
Jag skulle köpa mer miljö- och rättvisemärkta kläder om utbudet vore större					
Jag har intrycket av att miljö- och rättvisemärkta kläder är dyrare än andra kläder					
Jag har intrycket av att miljö- och rättvisemärkta kläder håller sämre kvalité än andra kläder					
Jag har intrycket av att miljö- och rättvisemärkta kläder är mindre moderiktiga än andra kläder					
Plaggets form och stil är avgörande när jag köper kläder					
Plagget pris är avgörande när jag köper kläder					
Plaggets material och kvalitet är avgörande när jag köper kläder					
Jag anser att konsumenter har ansvar för miljön och sociala förhållanden i klädindustrin					
Jag anser att staten har ansvar för miljön och sociala förhållanden i klädindustrin					
Jag anser att företag har ansvar för miljön och sociala förhållanden i klädindustrin					
Jag tror att jag kan påverka en hållbar framtid genom att köpa ekologiska och rättvisemärkta kläder					
Jag tänker på vilka konsekvenser mina konsumtionsval får för andra människor och kommande generationer					

Tack för dina svar! Nu kan du lämna tillbaka enkäten till oss.