Shopping for clothes and sensitivity to the suffering of others:

The role of compassion and values in sustainable fashion consumption

Sonja Maria Geiger & Johannes Keller

Ulm University

Corresponding Author:

Sonja M. Geiger,
Universität Ulm
Fakultät Ingenieurwissenschaften, Informatik und Psychologie
Institut für Psychologie und Pädagogik
Abt. Differentielle Psychologie und Psychologische Diagnostik
D-89069 Ulm

E-Mail: sonja.geiger@uni-ulm.de

Abstract

The positive relation of biospheric and altruistic values, as well as the negative relation of egoistic and hedonic values, to environmentally responsible behavior are established findings in environmental psychological research. Recent findings revealed that compassion, the sensitivity to the suffering of other individuals, is also relevant for pro-environmental intentions. We tested the role of compassion in combination with universal altruistic, biospheric, egoistic, and hedonic values concerning an environmentally responsible behavior with an explicit social and hedonic component: sustainable fashion consumption. In a large survey study (n=981) we found that compassion was positively linked to sustainable purchase criteria. The manipulation of compassion in an online study (n=197) resulted in a small, positive effect on the willingness to pay extra for fair trade clothes. Moreover, we found that hedonic values showed a consistent negative relation to sustainable fashion consumption in both studies, thus corroborating former research on the critical relevance of hedonic values in the context of pro-environmental behavior.

Key words: compassion, altruistic values, biospheric values, egoistic values, hedonic values, sustainable fashion consumption

Introduction

It has been well documented that the general values people endorse are significantly linked to pro-environmental concerns and behaviors (Karp, 1996; Schultz & Zelezny, 1999; Steg, deGroot, Dreijerink, Abrahamse, & Siero, 2011; Stern, 2000; Stern, Dietz, Abel, Guagnano, & Kalof, 1999). Generally speaking, individuals who strongly endorse values reflecting some type of self-interest (egoistic or hedonic values) are less likely to engage in pro-environmental behaviors compared to individuals who reject such values (deGroot & Steg, 2008; Steg et al., 2011). For example, individuals who strongly favor hedonic values (such as personal comfort) are less inclined to choose public transport over driving a car (Steg, Perlaviciute, van der Werff, & Lurvink, 2014). On the other hand, individuals who endorse values reflecting a concern for others (altruistic values) or for nature (biospheric values) are more likely to reduce their car use (deGroot, Steg, & Dicke, 2008) or consider environmental or social criteria in their consumption choices (Steg et al., 2014). For instance, individuals valuing social justice or respect for nature are more inclined to accept environmental protection policies and engage in environmental activism (Steg et al., 2011). Compassion is conceptualized as an other-related emotion that evokes pro-social tendencies such as relieving the suffering of others. Recent findings also documented that compassion fosters pro-environmental intentions (Pfattheicher, Sassenrath, & Schindler, 2015). Although superficially compassion seems related to altruistic values (e.g., the value of benevolence), it is distinct from related value concepts in that it provokes a concrete emotional and behavioral response in that person to alleviate the pain of another person. In contrast, altruistic values reflect the tendency to consider helping as a general, abstract moral principle. Given the affective quality of compassion and its well-documented potential to trigger pro-social behavior (Batson & Shaw, 1991; Dovidio, Allen, & Schroeder, 1990; Haidt, 2003; Mikulincer & Shaver, 2010), we propose that it plays an even more important role than altruistic values concerning the tendency to help individuals in need. This proposition is tested in two studies with an ecologically relevant behavior, shopping for clothes, that entails a social component

because it involves a marginalized group of people: employees in the fashion industry suffering from dangerous conditions. By examining the explanatory role of compassion concerning this ethically relevant behavior, we are addressing the proposition that compassion represents a prototypical moral emotion, that is, an emotion involving prosocial action tendencies (Haidt, 2003). Of note, the explanatory variable that we are proposing here (compassion) can be considered a variable that is quite distant from the behavior we intend to explain (sustainable fashion consumption). In contrast, (altruistic, biospheric, hedonic) values are located fairly closely to the behavioral outcome in question on the dimension of explanatory distance. That is, from a philosophy of science perspective, we are proposing a powerful theoretical notion in hypothesizing a positive impact of compassion on sustainable fashion consumption given that we refer to an explanans (explanatory concept) which is clearly distinct and distant from the explanandum (the behavior to be explained, cf. Fiedler, 2014).

The role of values in environmentally responsible behavior

Values are defined as "desirable transsituational goals […], which serve as a guiding principle in the life of a person or other social entity" (Schwartz, 1992, p.21). Schwartz` circumplex model of universal human values identifies 10 value types (e.g., power, achievement, benevolence) reflecting two basic dimensions of openness to change /conservation and self-enhancement/ self-transcendence. Of note, it has been shown that the types of values people endorse are linked to their environmentally relevant attitudes, beliefs, and decisions (Steg et al., 2011; Stern et al., 1999). In general, values directed at self-enhancement (e.g., power, hedonism) run counter to pro-environmental beliefs and engagement, while self-transcendence values (benevolence, universalism) are positively linked to pro-environmental beliefs (Stern, Dietz, & Guagnano, 1998) and behaviors such as sustainable consumption patterns, recycling engagement, and environmental activism (Guttierez Karp, 1996; Stern et al., 1999; Thøgersen & Ölander, 2002;). Based on these findings, deGroot and Steg (2007) constructed a short value scale comprising of three value

clusters that were shown to be especially relevant concerning environmental engagement: *egoistic* values (achievement and power), *altruistic* values (universalism and benevolence) and a second group of self-transcendental values that can be distinguished from altruistic values: *biospheric* values (preservation of nature). Various studies established that biospheric and (to a lesser degree) altruistic values positively predict different environmental outcomes, while egoistic values generally impede environmental engagement (deGroot & Steg, 2007; 2008; Steg et al., 2011).

More recently, Steg et al. (2014) argued for the need to additionally include *hedonic* values in the research on environmentally relevant behavior. The relevance of hedonic aspects in consumption has been proposed in consumer research as early as in the 1980s (Hirschman & Holbrook, 1982) highlighting the emotional aspects of purchase decisions that are expected to foster pleasurable experiences. For some environmentally relevant consumption decisions, such as the purchase and use of cars, the role of a hedonic motivation has been convincingly documented (deGroot et al., 2008; Jakovcevic & Steg, 2013; Steg, 2005; Steg et al., 2014). For the domain of clothes, it has been shown that hedonism is positively linked to impulsive buying behavior (Joo Park, Young Kim, & Cardona Forney, 2006) and it can be considered as an integral determinant of the shopping experience itself. This phenomenon is extensively researched in consumer research under the term "hedonic shopping value" (e.g., Babin, Darden, & Griffin, 1994), albeit with a conceptualization of "hedonic values" specific to shopping experiences that differs from values in the sense of a general moral guiding principle in life.

In a study including general "macro-societal" values in life, Dickson (2000) found that altruistic and biospheric concerns were related to supporting fair trade regulations in the fashion industry, but did not predict intention to buy clothes from a socially responsible fashion business. Apart from this study, there is little evidence available concerning the role of human values as conceptualized in the Schwartz value circle with respect to fashion consumption as an example of an ecologically *and* socially responsible behavior.

Compassion: More than altruistic values

Following the definition of Lazarus (1991), we refer to compassion as the concrete feeling for the suffering of others. According to this view, compassion is an other-oriented emotion that is elicited when we see others suffer and is characterized by the wish to help and relieve the pain (Haidt, 2003). It is distinct from empathy, which is additionally comprised of the cognitive capacity for perspective taking, and thus is a broader concept also involving a compassionate aspect (for a more detailed description of this distinction between compassion and empathy, see Goetz, Keltner, and Simon-Thomas, 2010). With regard to altruistic values such as social justice or helpfulness, compassion differs in its quality as an emotional response to a specific situation compared to an abstract moral basis of decision making.

A recent study showed that compassion for *other people* can foster *pro-environmental* intentions (Pfattheicher et al., 2015), a case in which the subject of compassion (other people) is incongruent with the subject of the target behavior (nature). This finding extends former research on the congruent case documenting a positive relation of compassion for the *environment* to *environmental* engagement (Berenguer, 2007; Tam, 2013) and leaves open questions regarding the involved mechanisms. Pfattheicher et al. (2015) propose that evoking compassion for people might elicit general moral considerations based on core values people hold thus leading to enhanced pro-environmental intentions. However, none of these studies considered the congruent case of compassion for people and its link to a sustainable behavior that involves a certain element of concern for the well-being of other people. To address this gap, we tested the role of compassion towards other people (with values as complementing predictors) concerning a target behavior with partial congruency: fashion consumption. Here the social sustainability aspect is quite salient, specifically the working conditions of employees in the textile and fashion industry.

Sustainable fashion consumption: Ecological and social aspects

In the last four decades, worldwide fiber production has grown from 35 million tons in 1975 to almost 158 million tons in 2015 with a growing share of synthetic fibers (Statista,

2016). Main environmental issues in the textile industry, spanning production phases from fiber production, spinning, weaving, and finishing of the textiles, are excessive water and pesticide use, prolonged degrading times of artificial fibers in landfills, and the use of chemicals in the refinement processes. The fashion industry, spanning the design, tailoring, distribution, and retail of manufactured clothes, accounts for environmental impacts in terms of energy consumption, greenhouse gas emissions, and waste production (Gardetti & Torres, 2013; Draper, Murray, & Weissbrod, 2007). Regarding social issues in the textile and fashion industry, the same authors point out poor working conditions, human rights violations, and health issues of fashion industry workers across the whole globalized value chain. The German Federal Ministry for Economic Cooperation and Development details these issues as low and declining wages, overly long working hours, prohibition of trade unions, and a lack of health and security standards in the launching document for their international textile alliance (BMZ, 2014). The same report counts a death toll of nearly 1,500 people in the years 2012/13 alone in various factories in India, Pakistan, and Bangladesh, illustrating the fatal consequences of largely unregulated working conditions.

Taking into account ecological and socio-economic problems, the corridor approach by Leach, Raworth, and Rockström (2013) places sustainable consumption in between ecological, or planetary boundaries as e.g., climate change, biodiversity loss or ocean acidification and social foundations, as e.g., food security, shelter or poverty eradication, that guarantee a dignified life for all. Based on this corridor model, Geiger, Fischer, and Schrader (2017) present a definition of general sustainable consumption behavior comprising different consumption areas. Confining their definition to the consumption area of clothes, we refer to sustainable fashion consumption as "individual acts of […] acquiring, using and disposing of [clothes] that do not compromise the ecological and socio-economic conditions of all people (currently living or in the future) to satisfy their […] needs."

This definition, when applied to everyday fashion consumption behavior, can refer to different practices (Paulins & Hillery, 2009). In a first instance, it implies purchase patterns

that take into account the environmental impact of products as production devoid of chemicals, products made of organically grown cotton, etc. (Kang, Liu, & Kim, 2013). Furthermore, it alludes to social conditions under which textile workers produce garments. These aspects comprise working conditions, wages, health care, union membership etc. and are under scrutiny by quality labels as e.g., FairTrade. A third approach, targeting the core of unsustainable consumption patterns, consists in consuming fewer clothes overall by e.g., buying high quality items and extending usage times. As sustainable fashion consumption shares features with other pro-environmental behaviors, it should be affected by general values in a similar way. Additionally, social issues of the conventional textile industry have been covered extensively in the media since the Bangladesh garment factory collapse in Plaza Rana in 2013. The suffering of employees in the conventional textile industry is a widely acknowledged fact and this supports the supposition that compassion should play a significant role in sustainable fashion consumption.

However, fashion consumption has not been explicitly addressed in environmental psychology so far. Thus, little is known about how general values are related to fashion consumption beyond hedonic shopping values. Likewise, the role of compassion concerning fashion customers' choices and willingness to pay has not been investigated yet, although the overt social issues in fashion consumption renders the proposed positive relation very plausible.

Research aims

To fill these research gaps, there are four aims of this paper:

- *Aim 1* is to empirically identify criteria for sustainable fashion consumption in an explorative approach given the lack of consolidated evidence.
- *Aim 2* is to validate a German version of the well-established value instrument designed by Steg and colleagues (deGroot & Steg, 2008; Steg et al., 2014).
- *Aim 3* is to investigate the role of different value clusters for sustainable fashion consumption with a focus on hedonic values.

Following research of Steg and colleagues regarding other sustainable behaviors, we expect self-enhancement values (hedonic and egoistic) to be negatively related and self-transcendental values (altruistic and biospheric) to be positively related to sustainable fashion consumption.

- *Aim 4* is to test the role of compassion concerning sustainable fashion consumption, using an experimental design. Since the suffering of employees seems currently an integral part of the conventional textile industry, we expect compassion to influence fashion consumption beyond altruistic values.

We investigated these aims through two studies: a large survey study ($n= 981$, Study 1) and an experimental study manipulating the level of compassion ($n= 197$, Study 2).

Study 1

In Study 1, we explored the factor structure of purchase criteria for clothes and identified sustainability related criteria. Second, we corroborated the factorial structure of the general value scale by Steg et al. (2014) in a German sample with a confirmatory factor analysis. Finally, we tested whether dispositional compassion accounts for additional variance in the endorsement of sustainable consumption criteria beyond the explanatory power of universal values.

Method

Participants. The study was run as part of a living lab project in South Germany on sustainable textile production and consumption. All inhabitants of the small town aged 18 and older ($n= 5671$, reference population) were sent a paper and pencil survey via mail in November 2015. The response rate was 17.1%, amounting to a sample size of $n = 1014$ persons who filled out the questionnaire and sent it back. From this sample, all data sets with more than one item missing per scale were excluded ($n=33$). Of the remaining sample ($n=981$), 52.4% were female [Population: 50.3%, according to the demographic data of the town´s registration office for 2015] and 47.2% were male [Population: 49.7%]. The youngest respondent was 18 years old and the oldest 94, with a mean age of 50.2 years [Population:

M=49.0yrs] (*SD*=16.9 years). The distribution of the sample in four age groups (18-29 years, 30-45 years, 46-65 years, >66 years old), did not differ from the town´s age distribution, $\chi^2(3) = 3.07$, $p = .38$. Likewise, the gender ratio in our sample did not differ significantly from the town´s ratio (*Z*=1.32, $p = .91$). Regarding education level, 0.6% did not graduate from high school, 29.5% graduated from high school after 9 years of education, 36.2% graduated from high school with a regular 10-year education, a further 10.7% graduated with a university entrance degree, and 22.3% had an (applied) university degree. Of their monthly income (median category: 2501-3000€), 107.28 € are spent on average on clothes (compared to 410.88 € on food).

Measures.

Endorsement of (sustainable) purchase criteria for clothes. To assess the criteria based on which people buy their clothes, we asked the following question: "When shopping for clothes, what do you pay attention to?" Answers were given on a 5-point Likert scale ranging from (0= absolutely disagree to 4= absolutely agree). The list of 19 criteria was based on the work by Niinimäki (2010) on eco-fashion purchasing behaviors and extended by four more items we deemed relevant: *personal style, special bargain offers*, *free of chemicals,* and the *company´s working conditions*. For the complete list of criteria, see Table 1. Six sustainability related criteria ($\alpha = .88$) were extracted via an exploratory factor analysis.

Values. To assess basic universal values, we employed a short 16- item scale based on the universal value theory by Schwartz (1992) in the version presented by Steg et al. (2014). The scale asks on an 8-point asymmetrical Likert scale (from -1 "against my values", 0= "not important", 7 = "of utmost importance") how important each value was to the respondent as a guiding principle in life. It contained three hedonic values ($\alpha = .80$) such as *enjoying life,* five egoistic values ($\alpha = .77$) such as *social power*, four altruistic values ($\alpha = .73$) such as *world peace,* and four biospheric values ($\alpha = .87$) such as *respect for nature*. For the complete list, see Table 2.

Compassion. We measured dispositional compassion with an adaptation of the emotional empathy scale by Mehrabian and Epstein (1972). A sample item from this reads "*I cannot continue to feel OK if people around me are depressed*". We employed an 8-item version of this scale used by Keller and Pfattheicher (2013) with a good internal consistency ($\alpha = .81$).

Socio-demographic variables. Along with the socio-demographic variables *age*, *gender*, *income, money spent on clothes,* and *education,* we assessed the subjective perception of socio-economic status (SSES) with a graphic ladder task (Goodman et al., 2001), where participants are asked to locate themselves on the steps of a ladder according to their subjectively perceived place in society ranging from 0 (on the very bottom of society) to 10 (at the very top of society). Mean subjective socio-economic status (SSES) was $M = 5.1$ (*SD* $= 1.53$).

Results and discussion

   Exploration of purchase criteria (Aim 1). To establish the factor structure of a wide range of possible purchase criteria for clothes, we conducted an exploratory factor analysis (EFA) using the maximum likelihood extraction method with an oblique rotation (allowing factors to be correlated). The EFA yielded five factors, with one item without any substantial factor loading; for the results of the rotated factor solution, see Table 1. The six items that showed primary loadings on the first factor (what we called the "sustainability factor") comprised ecological criteria (avoiding environmental harm and chemicals) as well as social criteria (working conditions, country of origin) of sustainability, referring to the life conditions of other people involved in the production process. Item 14 refers to the longevity of products that can be seen as a frugality aspect of sustainable consumption. The explorative results show that people employ a comprehensive idea about sustainability including a social as well as an ecological dimension (Leach et al., 2013) in everyday purchase decisions. Further analyses are based on the scale mean score of these six items.

   Validation of the value scale (Aim 2). We calculated a confirmatory factor analysis on the proposed value clusters by Steg et al. (2014) obtaining a good fit with $\chi^2(98) = 575.2$, *p*

< .01; *RMSEA* = .070; *CFI* = .921 (the high χ^2 value being due to the large sample size). For detailed results and the factor loadings for each item, see Table 2. The obtained relations between the latent value factors were somewhat stronger than those reported by Steg et al. (2014). Egoistic and hedonic values were strongly positively correlated ($r = .64$, $p < .001$), as well as altruistic and biospheric values ($r = .75$, p < .001). We also observed a positive relation between altruistic and hedonic values ($r = .30$, $p < .001$). The remaining pairwise correlations were small, but significant ($r = .16$ for biospheric and hedonic values, $r = .15$ for egoistic and altruistic values, $r = .10$ for egoistic and biospheric values). We replicated the factor structure obtained in various studies before (deGroot & Steg, 2007; Jakovcevic & Steg, 2013; Steg et al., 2014) with high and consistent factor loadings throughout, and will base further analyses on the scale mean scores of each value cluster.

Role of values in endorsement of sustainable purchase criteria (ESPC) (Aim 3).
Zero-order correlations of all study variables (see Table 3) showed that age, biospheric and altruistic values, and compassion showed the strongest bivariate relations with ESPC. Before testing the controlled relationships in an overall regression, potential interaction terms (value clusters x compassion) were tested in four regression analyses, where only the compassion x egoistic values interaction emerged as a significant predictor of ESPC. To control for the potential error influences of demographic variables (results summarized in Table 4) we entered these variables in the first step of a hierarchical regression analysis. Only age and subjective socio economic status predicted the extent to which sustainability criteria were considered, whereas the overall amount of money spent on clothes did not. The four value clusters entered in the next step replicated former research on the role of values in sustainable behavior. Biospheric values emerged as the strongest (positive) predictor of ESPC, while hedonic values showed a small negative relation. Neither the previously observed negative role of egoistic values, nor the positive role of altruistic values in sustainable consumption was detectable in our data. Especially the latter finding is surprising, given that the sustainable textile purchase criteria tested here encompass the well-being of other people

more than the ecologically-focused values and behaviors tested in former research (e.g., car use in Jakovcevic & Steg, 2013 or attitudes towards recycling in deGroot & Steg, 2008). This might be partially due to the high correlation with biospheric values.

Role of compassion in ESPC (Aim 4). In the final step of the regression analysis, compassion emerged as an additional predictor of ESPC, whereas the interaction term (compassion x egoistic values; which emerged as significant in a preliminary analysis) did not. In other words, the feeling of compassion for vulnerable others robustly related to considering sustainability criteria (including the well-being of others) when buying clothes.

Study 2

In a second study, we investigated research aims 2-4, but this time with an experimental design. Concerning research aims 2 and 3, we sought to replicate the explanatory role of values on willingness to pay for FairTrade labeled clothes using the same instrument as in Study 1. We expected negative relations with egoistic and hedonic values, a strong positive relation with altruistic values, and a somewhat weaker positive relation with biospheric values. This is because the social dimension of sustainability is deemed more salient in the FairTrade context than in other types of pro-environmental behavior. However, the fourth and main aim of Study 2 was to explore whether the explanatory power of *dispositional* compassion found in Study 1 can be conceptually replicated focusing on *state* compassion induced in a specific situation. That is, we addressed the potential causal effect of compassion on sustainable fashion consumption in this study. We hypothesized that people exposed to a compassion-inducing manipulation are willing to pay a higher extra price for clothes with a FairTrade label compared to control condition counterparts.

Method

Participants. We conducted an online survey with the survey tool Unipark, published online from June to August 2016. The link was advertised on a University newsletter and spread on social media webpages. Of the 264 people who participated in our online study, we excluded 57 with implausible duration times of either less than five minutes or more than 30

minutes. Nine more did not fully complete the questionnaire and one person produced an answer pattern of zero variance, leaving a sample of $n=197$. The mean age of our respondents was 29.8 years, with a range from 18 to 81 years. Of our participants, 83.9% ($n=167$) were female, 15.6% ($n=31$) were male, and one person chose to not identify with either gender group. The biggest group were students (60.8%), followed by those working (29.1%), retired (6%), and unemployed (3%). Mean SSES was $M=6.4$, $SD = 1.3$.

Procedure and Experimental Manipulation. The online experiment started with the assessment of socio-demographic variables. It proceeded with the manipulation of compassion employing the procedure outlined by Pfattheicher et al. (2015). All participants were presented with two pictures consecutively for 15 seconds each. Before they were shown each picture, participants read one of the following instructions according to the condition to which they were randomly assigned.

Compassion condition (n=97): "It is important for the study that you imagine how the pictured persons feel. Try to feel what the persons are currently going through and how they feel. You can let yourself be guided by your feelings."

Control condition ($n=100$): "It is important for the study that you stay objective when viewing the pictures. Try not to let yourself be guided by your feelings. That is, try to stay neutral and detached." The only change compared to the original material was made with regard to the pictures. We chose photos showing a homeless man and a severely ill child, both of Caucasian ethnicity to reduce associations with people usually involved in unsustainable textile production (e.g., iconic Asian female employees in the sewing industry). Directly after the compassion manipulation, participants continued with the questionnaire containing the two dependent measures and remaining variables.

Measures.

State Compassion. We employed the manipulation check used by Pfattheicher et al. (2015), measuring state compassion by embedding the words *sympathetic, tender, soft-hearted,* and *compassionate* into the short version of the Positive and Negative Affect Scale (Mackinnon et

al., 1999). Based on the answers to these four items plus the original PANAS item *moved,* we computed a state compassion index (α = .88). The lead-in statement read: Please indicate how you currently feel (on a 7- point Likert Scale from 0 = "momentarily not experiencing this feeling to 6 = an important part of my current experience").

Willingness to pay for FairTrade labeled clothes (WtP+FT). As an approximation to real world sustainable fashion consumption, we asked people how much they were willing to pay extra for FairTrade labeled clothes. The FairTrade mark is a registered quality label that guarantees ecological and social standards in the production and international trade of consumer products, including textile products. Its standards on environmental protection and social justice comprise the two dimensions of sustainability also reflected in the purchase criteria of Study 1. In Germany, it is the label with one of the highest recognition levels in the clothes sector (76%, UBA, 2014; 74.9% in our Study 1).

To avoid confounding this measure with the prize or purchase power and taste of participants, we let them choose one of two options of four clothes categories (trousers, t-shirt, blouse/shirt, cardigan) and asked two questions for each garment:

1) How much would you be willing to pay for this garment?

2) How much would you be willing to pay for it, if it were produced under fair conditions? (Showing the FairTrade label graphically next to the question)

We computed the willingness to pay extra for fair clothes as the mean ratio = fair price divided by general price over the four categories, resulting in a mode value of 1.3 (i.e., the biggest group of people was willing to pay 30% extra for fair clothes).

Covariates.

Values. Universal values were assessed with the 16-item scale by Steg et al. (2014) that was also used in Study 1.

Socio-demographic variables. We assessed age, gender, education, and subjective socio-economic status.

Results and discussion

Manipulation check. The analysis of state compassion indicates that the manipulation of compassion was successful. We found a significant, albeit modest difference ($t(195) = 2.25$, $p = .026$, Cohen´s $d = 0.32$) between the compassion condition ($M = 4.75$, $SD = 1.19$) and the control condition ($M = 4.32$, $SD = 1.46$) in *state compassion*.

Validation of the value scale (Aim 2). We tested the factor structure of the value clusters proposed by Steg et al. (2014) obtaining comparably good fit indices as in Study 1 ($\chi^2(98) = 212.6$, $p < .01$; *RMSEA* = .077; *CFI* = .903; for detailed results of factor loadings of items, see Table 2).

Role of values in WtP+FT (Aim 3). Table 5 shows the zero-order correlations of all study variables indicating bivariate relations for age, altruistic, hedonic, and egoistic values with the willingness to pay extra money for FairTrade labeled clothes. As in Study 1, we explored moderating effects by testing the interaction terms between each value cluster and the compassion manipulation in individual regressions. Since none of the interaction terms reached significance, we conducted a hierarchical regression following the procedure applied in Study 1, just without any interaction term. For detailed results, see Table 6. Demographic variables were entered first and only age was related to the willingness to pay, this time negatively indicating that younger people were more likely to pay extra. Of the value clusters introduced in the second step of the regression, hedonic values had the strongest relation, negative in direction, to the willingness to pay extra, followed by altruistic values showing a positive relation. Biospheric and egoistic values did not reliably predict willingness to pay extra. Since the wording of our measure emphasized "fairly produced" and did not mention "environmentally friendly" (albeit part of the FairTrade standards), stronger relationships with altruistic than with biospheric values were expected.

Role of compassion in WtP+FT (Aim 4). In a third step, the manipulation of compassion was entered into the regression, yielding a (small) additional contribution to the variance explained in the willingness to pay extra. This effect complements the explanatory role of altruistic values and speaks to the relevance of considering the suffering of others

when determining the appropriate price for clothes. The present effect, albeit small, is noteworthy, since the suffering of people involved in producing conventional clothes was not explicitly mentioned in the experiment. An even stronger effect might have emerged under conditions where the avoidance of "exploitative fashion" or similar statements referring to poor working conditions were mentioned.

Further descriptive results. A vast majority our participants (91.4%) said that they were willing to pay extra for fairly produced clothes, on average 52.5% of the original price. This result coincides with data from Weiss, Trevenen, and White (2014) who also found a large number of potential of customers were willing to buy fairly produced clothes if the existing price differences could be held within a certain limit. Given the very low retail prices of unsustainably produced clothes, it is hard to produce fashion sustainably at only a 50% higher price unless companies were forced to include externalized costs of their production practices, e.g., environmental damage, in their conventional prices.

General discussion

Table 7 summarizes the results of both studies. With respect to the role of universal values, our results corroborate Steg et al.´s (2014) claim that hedonic values are indeed a relevant factor in explaining sustainable behaviors, in this case sustainable fashion consumption. It was the only value cluster that predicted endorsement of sustainable purchase criteria as well as the willingness to pay extra for FairTrade products, albeit to different extents. This should be taken into account when trying to promote fairly produced clothes (or other products) to a predominantly hedonist clientele. Since biospheric and altruistic values were strongly correlated in both studies, it is not surprising that only one type of values predicted sustainable behavior when we controlled for the other. Biospheric values emerged as the crucial predictor, when ecological aspects were more prominent (part of sustainable purchase criteria in Study 1) and altruistic values prevailed as predictors of an outcome variable with a stronger social component (Price for FairTrade clothes in Study 2). One surprising result is the absence of a negative effect of egoistic values, given that such values

are usually negatively associated with sustainable behaviors, especially with cost sensitive behaviors (Steg et al., 2014). A possible explanation might be that both target behaviors include an egoistic benefit (possible health gains by wearing organically / Fairtrade clothes) that is offset by the disadvantages (higher costs).

Our major novel finding, though, is the additional role of compassion in fashion consumption above and beyond the values people endorse. Compassion explained additional variance in both outcome variables: the consideration of sustainable purchase criteria and the willingness to pay higher prices for fairly produced clothes, respectively. The effect on willingness to pay extra in the experimental study emerged despite the fact that the compassion manipulation yielded a rather weak effect on state compassion compared to Pfattheicher et al.´s (2015) study. Furthermore, the material used in Study 2 (pictures of homeless and sick persons) did not have a direct connection to the people involved in the target behavior (e.g., child workers in typical Asian sweat shops or exposure of workers to chemicals in textile refinement were not mentioned in the study). This supports the general character of the relatively small compassion effect, which was not restricted to the people mentioned or depicted in the compassion assessment or manipulation.

A modest, but significant role of compassion emerged in both studies, after the influence of values – including altruistic ones - was controlled for. This means that compassion as a moral emotion plays a meaningful role complementing the abstract-level altruistic values (such as helpfulness or social justice) as moral guiding principles in life. Since sustainable fashion consumption can be considered an ethically relevant behavior, the results support the notion that compassion represents a prototypical moral emotion (Haidt, 2003). Specifically, we propose that the behavioral pro-social tendencies attributed to compassion (to relieve the potential pain of others) drive increased sustainable behavior.

With regard to the size of the effect, it is not too surprising that the overall effect was small, considering that compassion is relatively distant from the behavior it is supposed to explain. According to Fiedler (2014) it is this "explanatory distance", the remote location of

an explanatory variable from the outcome variable that is to be explained that reflects the theoretical strength of an argument. In this sense, the strong contribution of this work is to document the explanatory role of a general individual difference variable concerning a specific and distant behavioral outcome.

The amount of explained variance in purchase criteria variables was astoundingly high (40%, Study 1) given that our study only focused on a limited set of predictors compared to existing complex models used to explain sustainable behavior (Bamberg & Möser, 2007; Klöckner, 2013). The lower figure for willingness to pay (14% in Study 2) may be due to the financial quality of the outcome variable, which is obviously influenced by factors we did not take into account.

An unexpected finding was the negative relation of age on willingness to pay for FairTrade labeled clothes in Study 2. This adds to the much debated role of age concerning sustainable behaviors, which after controlling for cohort and epoch effects, is generally thought to be positive (Wiernik, Ones, & Dilchert, 2013). While a positive age effect for sustainable purchase criteria is very plausible (becoming less interested in fashion related criteria with increasing age), willingness to pay for FairTrade labeled clothes might hinge on familiarity with the label, which was negatively correlated to age in Study 1.

Limitations of the study

Obviously, the dependent measures used in both studies differ from real life purchase choices and expenditures. The endorsement of sustainable purchase criteria and the strong willingness to pay extra for FairTrade clothing coincide with strong concerns and willingness to change purchase habits reported by consumer research since the 1990s (see Rudell, 2006). Nevertheless, the market share of fairly produced clothes in Germany is still estimated to be below 4% (Schaus, 2013), more than two decades later. The strong discrepancy between self-reported ecological concerns and the actual purchase behavior in the context of fashion consumption was reported already in an early study on the subject (Butler & Francis, 1997). Furthermore, in our online study only a small selection of clothes could be included for

practical reasons. Since the sample items of clothing do not represent the full variety of fashion items in the real world, it cannot be ruled out that personal taste distorted the chosen price ratio.

Concerning external validity, our survey study has an ample sample size, which was representative for the town´s population from which it was drawn, and in addition, is fairly typical for the German population in many aspects (age, gender, range of income, and education). The second study was conducted with a mainly female sample that might be more susceptible to the manipulation inducing state compassion.

Future avenues for sustainable consumption compassion research

To dispel the validity considerations in both studies based on the self-report nature of our dependent variables, future research should involve real-life experiments with actual fashion retailers measuring actual purchase behavior. The online paradigm could be repeated with the cooperation of a real online shop, in order to guarantee the full choice of fashion items with real prices. In an offline version of the experiment, the purchase ratio of fairly versus conventionally produced clothing as a function of compassion-related primes could be assessed.

The small compassion effect we found in our online experiment was a general effect in the sense that the persons serving as targets in the compassion manipulation were not related to the fashion industry context. To make use of the compassion effect for the promotion of sustainably produced garments, the suffering of people actually involved in the conventional textile industry could be made more salient, e.g., by showing the working conditions in a sweat shop in Asia producing conventional fashion. Since our compassion manipulation was rather weak, future experimental studies on the compassion effect on sustainable behavior should also consider a more powerful manipulation of state compassion, e.g., by using real life objects of compassion. Furthermore, it should be tested whether the compassion effect can be extended to other sustainable consumption behavior, e.g., child labor conditions in

African mine sites on home electronics consumption or testing the effects of slaughterhouse conditions on vegetarianism /veganism.

Conclusion

In two studies we documented the importance of widening the scope from positive determinants of sustainable behaviors, such as biospheric values (or other pro-environmental attitudinal measures) to potential hurdles, such as hedonic values. The affective factor of compassion emerged as an additional construct that is relevant in explaining sustainable fashion consumption, beyond the moral guiding principles in life as reflected in values. That this effect emerged for an ethically relevant behavior of sustainable fashion consumption provides strong support for the notion that compassion represents a prototypical moral emotion (Haidt, 2003).

In the current economic system, the suffering of people (and animals) involved in the whole production chain is an inherent downside of many current consumption choices. This is not only true for the textile industry, but for many other sectors of consumption goods as well (e.g., home electronics, meat production). Our findings suggest that if the social sustainability aspect is rendered salient, compassion-based interventions might be a fruitful complement to current educational approaches to foster sustainable consumption.

In closing, we want to emphasize the fact that our main explanatory variable (compassion) can be considered a concept that is located a long way from the behavioral outcome in question on the dimension of explanatory distance. Accordingly, we were able to document evidence supporting a powerful theoretical notion, precisely because of the general nature of the effect (Fiedler, 2014).

References

Babin, B., Darden, W., & Griffin, M. (1994). Work and/or fun: Measuring hedonic and utilitarian shopping Value. *Journal of Consumer Research*, *20*, 644–656. Retrieved from http://www.jstor.org/stable/2489765

Bamberg, S., & Möser, G. (2007). Twenty years after Hines, Hungerford, and Tomera: A new meta-analysis of psycho-social determinants of pro-environmental behaviour. *Journal of Environmental Psychology*, *27*, 14–25. doi:10.1016/j.jenvp.2006.12.002

Batson, C. D., & Shaw, L. L. (1991). Evidence for altruism: Toward a pluralism of prosocial motives. *Psychological Inquiry*, *2*, 107–122. doi:10.1207/s15327965pli0202_1

Berenguer, J. (2007). The effect of empathy in proenvironmental attitudes and behaviors. *Environment and Behavior*, *39*, 269–283. doi:10.1177/0013916506292937

BMZ. (2014, August). *Zum Thema: Nachhaltige Textilien - was tut die deutsche Entwicklungspolitik* [Regarding: Sustainable textiles – what does German development policy do]. [Brochure] Retrieved from https://www.textilbuendnis.com/images/pdf/Materialie247_textilbuendnis_zumThema.pdf

Butler, S. M., & Francis, S. (1997). The effects of environmental attitudes on apparel purchasing behavior. *Clothing and Textiles Research Journal*, *15*, 76-85. doi:10.1177/0887302X9701500202

deGroot, J. I. M., & Steg, L. (2007). Value orientations and environmental beliefs in five countries: Validity of an instrument to measure egoistic, altruistic and biospheric value orientations. *Journal of Cross-Cultural Psychology*, *38*, 318–332. doi:10.1177/0022022107300278

deGroot, J. I. M., Steg, L., & Dicke, M. (2008). Transportation trends from a moral perspective: Value orientations, norms, and reducing car use. In F. N. Gustavsson (Ed.), *New transportation research progress* (pp. 76–91). New York, NY: Nova Science.

deGroot, J. I., & Steg, L. (2008). Value orientations to explain beliefs related to environmental significant behavior: How to measure egoistic, altruistic, and biospheric value orientations. *Environment and Behavior*, *40*, 330–354. doi:10.1177/0013916506297831

Dickson, M. A. (2000). Personal values, beliefs, knowledge, and attitudes relating to intentions to purchase apparel from socially responsible businesses. *Clothing and Textiles Research Journal*, *18*, 19–30. doi:10.1177/0887302X0001800103

Dovidio, J. F., Allen, J. L., & Schroeder, D. A. (1990). Specificity of empathy-induced helping: Evidence for altruistic motivation. *Journal of Personality and Social Psychology*, *59*, 249–260. doi:10.1037/0022-3514.59.2.249

Fiedler, K. (2014). From intrapsychic to ecological theories in social psychology: Outlines of a functional theory approach. *European Journal of Social Psychology, 44*, 657-670. doi: 10.1002/ejsp.2069

Gardetti, M. Á., & Torres, A. L. (2013). *Sustainability in fashion and textiles: Values, design, production and consumption*. Sheffield: Greenleaf Publishing. Retrieved from http://www.greenleaf-publishing.com/content/pdfs/fashion_intro.pdf

Geiger, S. M., Fischer, D., & Schrader, U. (2017). Measuring what matters in sustainable consumption: An integrative framework for the selection of relevant behaviors. *Sustainable Development*. Advance online publication. doi:10.1002/sd.1688

Goetz, J. L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin*, *136*, 351–374. doi:10.1037/a0018807

Goodman, E., Adler, N. E., Kawachi, I., Frazier, A. L., Huang, B., & Colditz, G. A. (2001). Adolescents' perceptions of social status: development and evaluation of a new indicator. *Pediatrics*, *108*, E31.

Haidt, J. (2003). The moral emotions. In H. H. Goldsmith, K. R. Scherer, & R. J. Davidson (Eds.), *Series in affective science. Handbook of affective sciences* (pp. 852-870). New York: Oxford University Press.

Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, *46*, 92-101. doi:10.2307/1251707

Jakovcevic, A., & Steg, L. (2013). Sustainable transportation in Argentina: Values, beliefs, norms and car use reduction. *Transportation Research Part F: Traffic Psychology and Behaviour*, *20*, 70–79. doi:10.1016/j.trf.2013.05.005

Joo Park, E., Young Kim, E., & Cardona Forney, J. (2006). A structural model of fashion-oriented impulse buying behavior. *Journal of Fashion Marketing and Management: An International Journal*, *10*, 433–446. doi:10.1108/13612020610701965

Kang, J., Liu, C., & Kim, S.-H. (2013). Environmentally sustainable textile and apparel consumption: The role of consumer knowledge, perceived consumer effectiveness and perceived personal relevance. *International Journal of Consumer Studies*, *37*, 442–452. doi:10.1111/ijcs.12013

Karp, D. G. (2016). Values and their effect on pro-environmental behavior. *Environment and Behavior*, 28, 111-133. doi:10.1177/0013916596281006

Keller, J., & Pfattheicher, S. (2013). The compassion-hostility paradox: The interplay of vigilant, prevention-focused self-regulation, compassion, and hostility. *Personality & Social Psychology Bulletin*, *39*, 1518–1529. doi:10.1177/0146167213499024

Klöckner, C. A. (2013). A comprehensive model of the psychology of environmental behavior - A meta-analysis. *Global Environmental Change*, *23*, 1028–1038. doi:10.1016/j.gloenvcha.2013.05.014

Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.

Leach, M. A., Raworth, K., & Rockström, J. (2013). Between social and planetary boundaries: Navigating pathways in the safe and just space for humanity. In International Social Science Council (ISSC) & United Nations Educational, Scientific and Cultural Organization (UNESCO) (Eds.), *World Social Science Report 2013. Changing Global Environments* (pp. 84–89). Paris: OECD Publishing and UNESCO Publishing.

Mackinnon, A., Jorm, A. F., Christensen, H., Korten, A. E., Jacomb, P. A., & Rodgers, B. (1999). A short form of the positive and negative affect schedule: Evaluation of factorial validity and invariance across demographic variables in a community sample. *Personality and Individual Differences*, *27*, 405–416. doi:10.1016/S0191-8869(98)00251-7

Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of Personality*, *40*, 525–543. doi:10.1111/j.1467-6494.1972.tb00078.x

Mikulincer, M., & Shaver, P. R. (2010). *Prosocial motives, emotions, and behavior: The better angels of our nature*. Washington: American Psychological Association.

Niinimäki, K. (2010). Eco-clothing, consumer identity and ideology. *Sustainable Development*, *18*, 150–162. doi:10.1002/sd.455

Paulins, V. A., & Hillery, J. L. (2009). *Ethics in the fashion industry*. New York, NY: Fairchild Books.

Pfattheicher, S., Sassenrath, C., & Schindler, S. (2015). Feelings for the suffering of others and the environment: Compassion fosters proenvironmental tendencies. *Environment and Behavior.* 48, 929-945. doi:10.1177/0013916515574549

Rudell, F. (2006). Shopping with a social conscience: Consumer attitudes toward sweatshop labor. *Clothing and Textiles Research Journal*, *24*, 282–296. doi:10.1177/0887302X06293063

Schaus, K. (2013). *Gutachten nachhaltige Kleidung: Der Weg zu nachhaltiger Kleidung: Standards, Siegel und politische Rahmenbedingungen.* [Report on sustainable clothing: The road to sustainable clothing: standards, logos and political conditions] Konstanz: It Fits. Retrieved from https://www.gruene-bundestag.de

Schultz, W. P., & Zelezny, L. (1999). Values as predictors of environmental attitudes: Evidence for consistency across 14 countries. *Journal of Environmental Psychology*, *19*, 255–265. doi:10.1006/jevp.1999.0129

Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries, In M. Zanna (Ed.), *Advances in experimental social psychology* (vol. 25, pp. 1-65). Orlando, FL: Academic Press.

Statista. (2013). Gestützte Bekanntheit von Gütesiegeln in Deutschland. [Supported degree of familiarity of quality labels in Germany] Retrieved from https://de.statista.com/statistik/daten/studie/273322/umfrage/gestuetzte-bekanntheit-von-guetesiegeln-in-deutschland/

Statista. (2016). Worldwide production volume of chemical and textile fibers from 1975 to 2015 (in 1,000 metric tons). Retrieved from https://www.statista.com/statistics/263154/worldwide-production-volume-of-textile-fibers-since-1975/

Steg, L. (2005). Car use: Lust and must. Instrumental, symbolic and affective motives for car use. *Transportation Research Part A: Policy and Practice*, *39*, 147–162. doi:10.1016/j.tra.2004.07.001

Steg, L., deGroot, J. I. M., Dreijerink, L., Abrahamse, W., & Siero, F. (2011). General antecedents of personal norms, policy acceptability, and intentions: The role of values, worldviews, and environmental concern. *Society & Natural Resources*, *24*, 349–367. doi:10.1080/08941920903214116

Steg, L., Perlaviciute, G., van der Werff, E., & Lurvink, J. (2014). The significance of hedonic values for environmentally relevant attitudes, preferences, and actions. *Environment and Behavior*, *46*, 163–192. doi:10.1177/0013916512454730

Stern, P. C. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*, *56*, 407–424. doi:10.1111/0022-4537.00175

Stern, P. C., Dietz, T., Abel, T., Guagnano, G. A., & Kalof, L. (1999). A value-belief-norm theory of support for social movements: The case of environmentalism. *Research in Human Ecology*, *6*, 81–97.

Tam, K.-P. (2013). Dispositional empathy with nature. *Journal of Environmental Psychology*, *35*, 92–104. doi:10.1016/j.jenvp.2013.05.004

Thøgersen, J., & Ölander, F. (2002). Human values and the emergence of a sustainable consumption pattern: A panel study. *Journal of Economic Psychology*, *23*, 605–630. doi:10.1016/S0167-4870(02)00120-4

UBA. (2014). *Umweltbewusstsein in Deutschland 2014*. [Environmental consciousness in Germany 2014] Retrieved from https://www.umweltbundesamt.de

Weiss, C., Trevenen, A., & White, T. (2014). The branding of sustainable fashion. *Fashion, Style & Popular Culture*, *1*, 231–258. doi:10.1386/fspc.1.2.231_1

Wiernik, B. M., Ones, D. S., & Dilchert, S. (2013). Age and environmental sustainability: A meta-analysis. *Journal of Managerial Psychology*, *28*, 826–856. doi:10.1108/JMP-07-2013-0221

Table 1. Factor loadings of items reflecting different purchase criteria in an Exploratory Factor Analysis. All loadings < 0.3 have been deleted.

When shopping for clothes, I … / pay attention to…	Factor				
	Sustain-ability	Fashion/ Design	Functio nality	Price	Brand
the working conditions under which they have been produced. (7)	.909				
the country of origin. (8)	.878				
that they have been produced in Germany. (16)	.692				
that it does not contain poisonous chemicals.(4)	.669				
avoid brands and companies that harm the environment (18)	.667				
that they can be repaired easily (e.g., shoes). (14)	.565				
that it underlines my personal style. (6)		.792			
that the article is compatible with my existing clothes. (5)		.578			
the look / the design. (3)		.467			
current fashion trends. (1)		.370			
that they are comfortable and fit well. (11)			-.762		
that they are practical and functional. (12)			-.759		
that I really need the article. (10)			-.551		
that they are made from high quality material and processed well. (13)			-.422		.314
refrain from unnecessary articles. (19)			-.350		
the price. (2)				-.813	
special bargain offers. (15)				-.643	
the brand. (9)					.787
spontaneous impulses. (17)					

Extraction method: Maximum-Likelihood. Rotation method: Oblimin with Kaiser-Normalization. All loadings < |.30| are omitted.

Note. Numbers in parenthesis indicate the position of the item in the questionnaire.

Table 2. Factor loadings of the single values on the value cluster in a Confirmatory Factor Analysis (Study 1/ Study 2)

	Value cluster			
Values:	Egoistic	Hedonic	Altruistic	Biospheric
Social Power	.62/ .77			
Wealth	.65/ .62			
Authority	.74/ .83			
Influential	.70/ .55			
Ambitious	.50/ .45			
Pleasure		.74/ .63		
Enjoying life		.77/ .82		
Gratification for oneself		.77/ .74		
Equality			.62/ .61	
A world at peace			.63/ .58	
Social Justice			.71/ .83	
Helpfulness			.58/ .52	
Respecting earth				.74 /.74
Unity with nature				.80/ .74
Protecting the environment				.85/ .92
Preventing pollution				.80/ .82

Fit indices for study 1: $\chi^2(98) = 575.2$, p < .01; *RMSEA* = .070; *CFI* = .921
Fit indices for study 2: $\chi^2(98) = 212.6$, p < .01; *RMSEA* = .077; *CFI* = .903

All loadings were significant at the *p* < .01 level

Table 3. Zero-order correlations of all variables (Study 1)

	1. Age	2. SSES	3. BV	4. AV	5. HV	6. EV	7. C	8. ESPC
2. SSES[1]	.17*	-						
3. Biospheric Values	.29**	.06	.87					
4. Altruistic Values	.13*	.03	.60**	.73				
5. Hedonic Values	-.19*	-.15**	.13**	23**	.80			
6. Egoistic values	.08*	.05	.08*	.12**	.51**	.77		
7. Compassion	.16*	-.09**	.43**	.51**	.12**	.09**	.81	
8. Endorsement of Sustainable Purchase Criteria	.49**	.19**	.49**	.30**	-.09**	.03	.37**	.88

* $p < .05$, ** $p < .01$

Where applicable, Cronbach´s Alpha is reported in the diagonal

[1]SSES = subjective socio-economic status

Table 4. Results of the hierarchical multiple regression of endorsement of sustainable fashion purchase criteria on values and compassion (Study 1)

Steps	Predictors	Step 1		Step 2		Step 3	
		β	t	β	t	β	t
1.	*Demographic variables*						
	Age	.46	15.68**	.36	12.58*	.35	12.57**
	Gender	-.14	4.61**	-.08	2.76	-.04	1.41
	SSES[1]	.12	3.90**	.11	3.99**	.10	3.79**
	Money spent on clothes	.04	1.36	.03	1.23	.03	1.23
	$R^2 = .261$						
2.	*Value Clusters*						
	Biospheric values			.37	12.98**	.31	10.17**
	Altruistic values			-.01	.28	.00	.61
	Hedonic values			-.05	1.55	-.07	2.41*
	Egoistic values			-.00	.20	-.02	.65
	$R^2 = .384$ $(\Delta R^2 = .123**)$						
3.	*Compassion*						
	Dispositional Compassion					.16	5.14**
	Compassion x Egoistic values					-.01	-.44
	$R^2 = .402$ $(\Delta R^2 = .019*)$						

$*p < .05, **p < .01$

[1]SSES = subjective socio-economic status

Table 5. Zero-order correlations of all study variables (Study 2)

	1. Age	2. SSES	3. BV	4. AV	5. HV	6. EV	7. WtP
2. SSES[1]	.01	-					
3. Biospheric Values	.09	-.06	*.88*				
4. Altruistic Values	.05	-.01	.35**	*.73*			
5. Hedonic Values	-.22*	.09	.03	-.18*	*.77*		
6. Egoistic values	-.07	.15*	-.19**	.14*	.31**	*.77*	
7. Willingness to Pay Extra	-.17*	.03	.13	.15*	-.15*	-.19*	*.84*

* p < .05, ** p < .01
Where applicable, Cronbach´s Alpha is reported in the diagonal
[1]SSES: subjective socio-economic status

Table 6. Results of the hierarchical multiple regression analysis to test the relationship between demographic characteristics, value orientation, and compassion and willingness to pay extra for FairTrade labeled clothes (Study 2)

Steps	Predictors	Step 1		Step 2		Step 3	
		β	t	β	t	β	t
1.	*Demographic variables*						
	Age	-.16	2.34*	-.24	3.47	-.24	3.45**
	Gender	-.07	.94	-.04	.64	-.05	.76
	SSES[1]	.02	.30	.05	.78	.04	.62
	$R^2 = .027$						
2.	*Value Clusters*						
	Biospheric values			.06	.85	.06	.88
	Altruistic values			.27	3.72**	.28	3.76**
	Hedonic values			-.30	3.96	-.31	4.10**
	Egoistic values			-.05	.73	-.05	.72
	$R^2 = .125$ ($= .098$**)						
3.	*Compassion*						
	Compassion manipulation					.14	2.04*
	$R^2 = .143$ ($\Delta R^2 = .018$*)						

* $p < .05$, ** $p < .01$
[1]SSES = subjective socio-economic status

Table 7: Synthesis of research aims and results

	Study 1	Study 2	Overall
Aim 1: Exploration of purchase criteria	ecological and social sustainability criteria form one sustainability factor	-	the link between ecological and social aspects of sustainable consumption is empirically documented
Aim 2: value scale validation	replication of four value clusters	replication of four value clusters	stability of value clusters confirmed
Aim 3: the role of values	positive relation of biospheric values, negative relation of hedonic values to sustainable purchase criteria	positive relation of altruistic values, negative relation of hedonic values to willingness to pay extra for fairly produced clothes	positive influence of self-transcendental values hinge on characteristics of target behavior, hedonic values universally detrimental to sustainable fashion consumption
Aim 4: the role of compassion	positive relation of dispositional compassion to endorsement of sustainable purchase criteria	influence of state compassion on the willingness to pay extra for fairly produced clothes	compassion, a distant explanatory variable, plays a significant role concerning sustainable fashion consumption