

Vogel, Henrik

Working Paper

The influences of attitude toward responsible fashion consumption and environmental concern on Gen Z's CSR-driven fashion brand choice intention: Empirical evidence from Germany

IU Discussion Papers - Marketing & Kommunikation, No. 3 (November 2023)

Provided in Cooperation with:

IU International University of Applied Sciences

Suggested Citation: Vogel, Henrik (2023) : The influences of attitude toward responsible fashion consumption and environmental concern on Gen Z's CSR-driven fashion brand choice intention: Empirical evidence from Germany, IU Discussion Papers - Marketing & Kommunikation, No. 3 (November 2023), IU Internationale Hochschule, Erfurt

This Version is available at:

<https://hdl.handle.net/10419/279795>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

www.iu.de

IU DISCUSSION

PAPERS

Marketing & Kommunikation

The influences of attitude toward responsible fashion consumption and environmental concern on Gen Z's CSR-driven fashion brand choice intention: Empirical evidence from Germany

HENRIK VOGEL

IU Internationale Hochschule

Main Campus: Erfurt

Juri-Gagarin-Ring 152

99084 Erfurt

Telefon: +49 421.166985.23

Fax: +49 2224.9605.115

Kontakt/Contact: kerstin.janson@iu.org

Autorenkontakt/Contact to the author:

Prof. Dr. Henrik Vogel

ORCID-ID: 0009-0000-0932-2151

IU Internationale Hochschule - Campus München

Berg-am-Laim-Str. 47

81673 München

Telefon: +49-89 9213 1028 0

Email: henrik.vogel@iu.org

IU Discussion Papers, Reihe: Marketing & Kommunikation, Vol. 3, No. 3 (NOV 2023)

ISSN-Nummer: 2750-0667

Website: <https://www.iu.de/forschung/publikationen/>

The influences of attitude toward responsible fashion consumption and environmental concern on Gen Z's CSR-driven fashion brand choice intention: Empirical evidence from Germany

Henrik Vogel

ABSTRACT:

The fashion industry is considered one of the most relevant industries worldwide. At the same time, however, it is repeatedly accused of irresponsible behavior toward the environment and society. For fashion brands who identify Generation Z as an attractive customer target group, the increasing consumer sensitivity for environmental protection and corporate social responsibility (CSR) could offer promising potential for differentiation. Although this assumption is frequently cited, there has been surprisingly little research to date. In a quantitative-empirical study among n = 157 members of Generation Z in Germany, the impact, a) attitude toward responsible fashion consumption and b) environmental concern were analyzed. The results show that both, attitudes towards responsible fashion consumption and environmental concern have a positive effect on the intention to buy clothes from CSR-driven fashion brands. Furthermore, environmental concern has a reinforcing effect on the attitude-intention relationship. Recommendations for managerial practice and ideas for possible future research are derived from the results. The work is intended to contribute to a deeper understanding of the responsible fashion consumption behavior of Generation Z in Germany.

KEYWORDS:

brand choice, consumer behavior, corporate social responsibility (CSR), environmental concern, fashion, Generation Z, purchase intention

JEL classification: M14, M31, L67, L81

AUTOR:



Prof. Dr. Henrik Vogel is a Full Professor of Business and Marketing at IU International University of Applied Sciences, Campus Munich. His current research focuses on generation-specific consumer behavior, consumer skepticism, and strategic success factors for responsible corporate management. In addition to his IU activities, he regularly appears as a speaker on corporate social responsibility and brand purpose. Henrik Vogel studied business administration at the University of Mannheim and holds a PhD from University of Hohenheim.

Introduction

The textile and fashion industry is one of the most important economic sectors worldwide (Thorisdottir & Johannsdottir, 2020, p. 1). According to labour statistics, the global industry employs up to 300 million people along the entire value chain including design, production, distribution and retail (Fashion United, 2023). The global economic importance of the market is correspondingly high. In 2022, around 1.5 trillion euros were generated by apparel and shoes. Compared with 2014, this corresponds to a growth of 26% (Statista, 2023a). The cornerstone of the fashion industry's global success is the so-called "fast fashion" industry. The secret of success of big fast fashion players, such as Zara, H&M and Primark, is to create a permanent demand for clothing with constantly changing collection cycles, modern designs and low sales prices (McNeill & Moore, 2015, p. 213). So far, the strategy works. Globally, the lifecycle of clothing has nearly halved in recent years. Fast fashion shirts are now worn on average seven to eight times before they are banned from the closet and ultimately end up in landfills or washed up on the beaches of Africa (McKinsey, 2016; The Guardian, 2023). Despite or precisely because of this devastating situation, the fast fashion industry is booming. The continuous desire for inexpensive clothing has led to a global sales forecast of almost 1.9 trillion euros by 2027 - an increase of 28% compared to 2022 (Statista, 2023a). Other studies forecast a production volume of 206 billion garments by 2030, which would correspond to a doubling since 2014 (Greenpeace, 2021, p. 16).

While the (fast)fashion industry could look to the future with confidence from a sales perspective, criticism is growing among politicians and environmental associations. In addition to the repeated accusation of implicitly promoting a "throw-away" mentality, the fashion industry has long been accused of immense environmental and climate pollution. In particular, the excessive consumption of water, the use of chemicals and pesticides in washing and dyeing processes, energy consumption, and CO₂ emissions in production and global transport of garments are pointed out (Pérez et al., 2022, p. 796). In addition, the industry is regularly criticized for social and financial exploitation of its employees and inadequate safety standards in production facilities in Asia, Africa and the Middle East (Bailey et al., 2022, p. 1; Niinimäki et al., 2020, p. 189). Against the backdrop of these allegations, it is not surprising that the fashion industry is considered one of the dirtiest and least sustainable industries in the world (Boston Consulting Group 2021, p. 10.; Buchel et al., 2022, p. 231).

In order to initiate a shift in the industry and in consumer behavior, environmental associations are now increasingly taking action with exposure reports and awareness campaigns (e.g. Greenpeace, 2021). For their part, policymakers are pushing for change and increasingly introducing laws to limit greenhouse gas emissions, reduce water and chemical use, ensure minimum wages in production and promote recycling and circularity concepts. In addition to corporate commitments, measures also aim to establish awareness of responsible, sustainable apparel consumption on the consumer side (e.g. European Environment Agency, 2022). Although intensively covered by the media, the impact on success is still unclear. On the one hand, consumers across countries rank the topics of sustainability as well as CSR-related brand behavior as relevant purchase decision criteria (GfK, 2022; McKinsey, 2022, p. 78). On the other hand, the global sales growth of the leading fast fashion brands (e.g. Inditex, H&M, Shein) still reveals a discernible discrepancy between the attitude towards responsible fashion consumption and the intention to buy products from responsibly acting brands (Statista, 2023b).

The discrepancy between such a responsibility-oriented attitude and the corresponding behavioral reaction is receiving increasing attention in the literature as the so-called “*attitude-behavior-gap*” (ABG). For example, current research includes numerous papers that address possible causes of a gap between attitudes and various behaviors – for example, sustainable food consumption, mobility behavior, responsible energy consumption, or conscious waste reduction (e.g., Anisimova & Weiss, 2022; Fox, 2020; He et al., 2019; Nguyen et al., 2016; Sadiq et al., 2022; Viera et al., 2023; Wang et al., 2022; Wong, 2021). ABG is also playing an increasingly important role in the context of sustainable clothing consumption. In this context, the focus of scientific interest has so far been primarily on possible ABG causes and thus barriers to CSR-driven brand choice intention. These include consumers’ doubts about product quality and availability of sustainable clothing, off-putting sales options such as unattractively designed thrift stores, mistrust regarding the authenticity and honesty of sustainability commitments, or the presumption of overpriced responsibly produced clothing (e.g., Connell, 2010; McNeill & Moore, 2015; Rothenberg & Matthews, 2017; Williams & Hodges, 2022). Existing research agrees that closing the attitude-behavior gap is one of the key business imperatives across industries. Thus, despite its relatively young age, the concept is considered to have a strong impact on consumption and thus high entrepreneurial relevance. White et al. (2019, p. 23) summarize this core aspect as follows: *“This discrepancy between what consumers say and do is arguably the biggest challenge for marketers, companies, public policy makers, and nonprofit organizations aiming to promote sustainable consumption”*.

Despite its widely recognized importance, relevant research on responsible clothing consumption has so far been surprisingly one-sided. While the causes of an attitude-behavior gap have been intensively analyzed, there are still significant research gaps in answering the question of how to explicitly promote the relationship between attitude and behavioral intention. One feature that deserves particular attention in this context is environmental concern. Findings from behavioral research repeatedly demonstrate a positive effect of environmental concern on pro-environmental behaviors, such as planting trees (Gao et al., 2020), buying sustainable products in general (Durmaz & Akdogan, 2023), or food (He et al., 2019) and biofuels (Pagiaslis & Krontalis, 2014) in particular. However, there has been little quantitative empirical research to date on whether this can be transferred to clothing consumption. One notable exception is the work of Perez et al. (2022). In a survey of 450 Spanish consumers of different age groups, the authors have found a positive direct correlation between environmental concern and responsible clothing consumption. The fact that this correlation can be used on the corporate side as an effective and economically attractive feature of competitive differentiation is demonstrated, for example, by the company Patagonia. Supported by its mission statement *“We are in business to save our home planet,”* this well-known American supplier of outdoor apparel and gear has been involved in numerous projects of environmental and social protection for years. Moreover, Patagonia appeals to their customers to consume outdoor equipment in a responsible and reflective way (Patagonia, 2023). The strategic focus on responsibility and environmental protection is paying off. The company now stands as a pioneer of political activism and is one of the largest outdoor sports brands in the world, with sales of over 1 billion US-dollars (World Economic Forum, 2022). Although Patagonia is often used as a benchmark for the success of responsible action (Cascade, 2023), other fashion brands still find it difficult to recognize the relevance for consumer behavior and to make appropriate strategic changes (Hofmann et al., 2022).

According to the status quo in research and practice, there is a need for more empirical work that deal with responsible fashion brand choice intention and the effects of environmental concern. In particular, there is a lack of empirical studies that explicitly address the Generation Z in this context. This generational cohort represents a highly interesting research group for several reasons. First, clothing purchases account for a significant share of the available financial resources in this generation, due to the fact, that younger Generation Z members often still live at home and have relatively few domestic expenses to pay, like e.g. food, cleaning supplies, rent and electricity (Klarna, 2020). At the same time, fashion plays a significant role for the young generation in conjunction with social identification and personality development, leading to regular purchases and brand choice decisions (Williams & Hodges, 2022). Second, the so called “Gen Z” is often classified as a generational cohort that takes a particularly critical view on the issues of environmental protection and corporate responsibility with regard to fashion consumption (e.g., Nuh et al., 2023, p. 465; Tran et al., 2022, p. 3). Krasulja et al. (2020) even refer to members of Generation Y and Z as “agents of change” (p. 6), who take a critical look at existing grievances and advocate change. However, there is a tantalizing ambivalence between the critical, environmentally-oriented attitudes and actual behavior of Generation Z. Studies indicate that this generational cohort is one of the strongest consumer groups of fast fashion (Muralidhar & Raja 2019, p. 150), and thus is particularly susceptible to an attitude-behavior gap in fashion consumption (Calver et al., 2022, Zalando, 2021). In summary: While on the one hand Generation Z is seen as having a lot of potential for establishing a responsible fashion market, on the other hand it is not yet clear whether and how an attitude towards responsible fashion consumption also leads to a corresponding consumer behavior among the members of this generation.

Based on the limited state of research to date and the strategic relevance of consumer behavior of Generation Z for corporate practice, this paper is therefore dedicated to the following two research questions (RQ):

RQ1: Do positive attitudes towards responsible fashion consumption lead to adequate consumer behavioral intention in the form of preferred choice of CSR-driven fashion brands among Gen Z?

RQ2: How does the existing environmental concern affect the relationship between attitude and brand choice intention in fashion consumption among members of Gen Z?

The two research questions will be answered based on a survey of Gen Z members in Germany. The research pursues various goals. First, this study contributes to the important discussion about the relevance of responsible shopping intention of Gen Z fashion consumers. Second, this study contributes to clarifying whether and in what form environmental concern plays a role in the fashion brand choice decision process of young fashion consumers. Third, the present study among German Generation Z representatives contributes to an international extension and validation of the research. Fourth, this paper will provide valuable implications for business management (especially brand management) and possible future research.

The paper is structured as follows: the introduction is followed by the theoretical framework and hypotheses development. Dedicated to each of the two research questions, this chapter is divided into two sub-chapters. As third part, the theoretical framework is followed by a description of the methodology in the proven structure of a scientific paper. Several regression models are calculated for

the empirical investigation. The methodology is finally followed by an interpretation of the results, as well as recommendations for managerial practice and possible future research.

Theoretical framework and hypotheses development

ATTITUDE AND BEHAVIOR TOWARDS RESPONSIBLE FASHION CONSUMPTION

The first step focuses on the relationship between attitudes toward responsible clothing consumption and a resulting choice of responsible clothing brands. The assumption that the positive attitude towards a topic serves as an affective predictor of a resulting intention and subsequent behavior is based on the social science theory of planned behavior according to Ajzen (1985). In the scientific literature, the attitude-behavior relationship finds broad consideration and multiple confirmation. For example, a positive impact of attitude on behavior has been demonstrated for Generation Z in choosing sustainable products in general (Michel et al., 2022) and food in particular (Robichaud & Yu, 2022), sustainable tourism (Nowacki et al., 2023), and sustainable mobility concepts (Grzesiuk et al., 2023). It is therefore assumed in this study of Gen Z that a positive attitude towards responsible clothing consumption leads to a corresponding brand choice. Accordingly, the following first hypothesis is formulated:

H1: The more positive the attitude towards responsible clothing consumption, the more pronounced an intention to buy from responsibly operating clothing brands.

ENVIRONMENTAL CONCERN AS DIRECT AND INTERACTING IMPACT FACTOR

In addition to attitude as a first key driver for the choice of responsible apparel brands, environmental concern is examined as a second influencing variable. In many ways, the environment is said to have a behavior-determining effect. For example, Chen (2009, p. 172), in his study of the purchasing behavior of Taiwanese consumers, concludes that environmental attitudes are a main motive for the purchase of organic food. Bamberg and Möser (2007, p. 21) found that existing environmental knowledge leads to increased environmental awareness and thus to more sustainable behavior. In a broad study, Lee (2009, p. 92) found that, among other factors, the perceived relevance of environmental problems and perceived environmental responsibility influence conscious sustainable purchasing behavior.

The influence of the environment and concern about environmental impacts on consumption decisions can be explained by the theory of conscious behavior according to Hines et al. (1987). Therewith, environmentally conscious (or responsible) consumption behavior is based on knowledge, understanding, and sensitivity to environmental problems. Before people consciously act in an environmentally (and implicitly socially) responsible manner, they must be aware of the underlying problems. This awareness may be reflected in perceived environmental concern (He et al. 2019, p. 459).

Referring to the existing evidence and theoretical behavioral foundation, it is hypothesized that environmental concern is a positive predictor of responsibility-based brand choice behavior. Accordingly, the second hypothesis of this paper is:

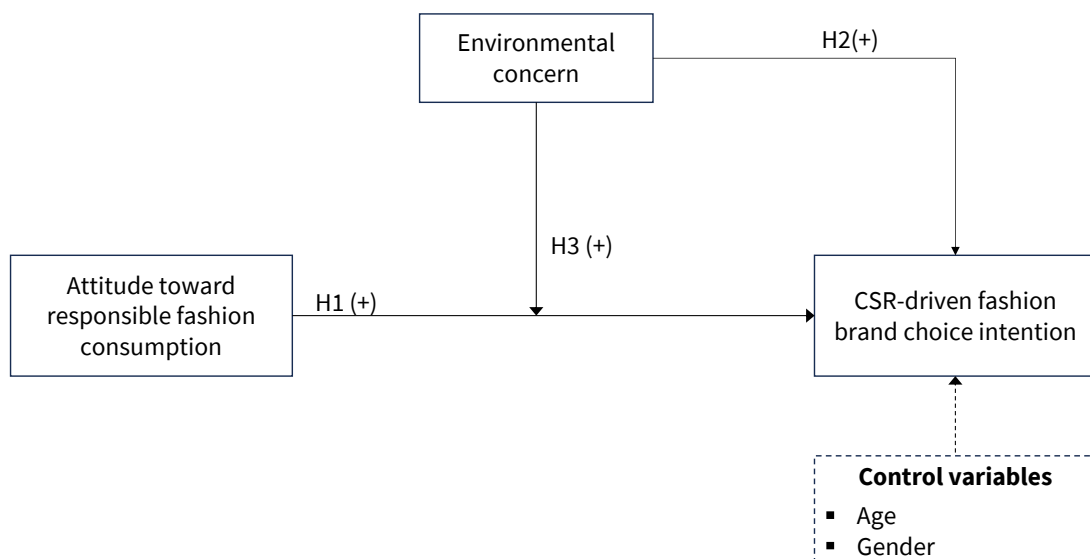
H2: The stronger the environmental concern, the more pronounced an intention to purchase from responsible apparel brands.

In addition to the direct influence on brand choice, a positive interacting influence of environmental concern is also hypothesized. This is based on the assumption that Gen Z consumers, who already have a pronounced positive attitude towards responsible clothing consumption, are more receptive and informed with regard to the environmental impact of the actions (production, logistics) of clothing manufacturing (Kollmuss & Agyeman, 2002, p. 257). This leads to the following third hypothesis of this thesis:

H3: Environmental concern strengthens the positive relationship of attitude toward responsible apparel consumption on intention to purchase from responsible apparel brands.

The following research framework emerges from the hypotheses described. As first independent variable serves the attitude towards responsible fashion consumption. This variable reflects the evaluation and the openness to buy clothes from CSR-driven fashion brands. Environmental concern serves as second independent variable as well as interacting variable. Consistent with the description above, environmental concern is defined as the level of perceived environmental threat caused by others' and one's own behavior, combined with the goal to act in an environmentally supporting way. CSR-driven brand choice intention is introduced into the model as the dependent variable. This variable reflects the specific willingness to select socially and environmentally responsible fashion brands.

Figure: Research framework



Methodology

DATA COLLECTION AND SAMPLE

The data collection took place in January and February 2023 and was based on an anonymous online survey of members of Generation Z (18 - 26 years). The participants were informed in advance about the purpose of the survey. There was no evaluation of specific fashion brands. Rather, the survey asked for a general assessment of the social responsibility of brands in the fashion industry. On the one hand, this was to prevent confrontation with unknown brands in the survey. On the other hand, a bias due to particularly positive or negative brand perceptions in the response behavior was thus avoided (cf. Geuens & de Pelsmacker, 2017, p. 85). Incentives to participate were not provided. A total of n = 157 fully completed questionnaires were included in the analysis. The average age of the participants was 21 years (female: n = 102; 65.0%).

Prior to the main study, the questionnaire was evaluated in a pretest by n = 7 persons (average age: 43.4 years; female: n = 3; 42.9%), including 4 university scientists, for comprehensibility and plausibility of content. The comments from the pretest were incorporated into the final design of the questionnaire. Among other things, the terminology of "social responsibility of fashion brands" was explained to the participants at the beginning of the survey to ensure an equal understanding.

CONSTRUCT MEASURES

For the study, proven constructs from marketing and management literature were used and adapted to the present research questions. Attitude toward responsible fashion consumption was measured using four items on a seven-level semantic differential (Bagozzi et al., 2003, p. 281). For conceptualizing environmental concern, three items were adopted from Chang (2011, p. 22). The items were measured using a seven-point Likert scale with anchor points of 1 = "strongly disagree" and 7 = "strongly agree". CSR-driven fashion brand choice intention was also measured using a seven-point Likert scale. Two items from Casalegno et al.'s (2022, p. 1016) scale were used for this purpose. In addition to the main constructs, two control variables, age and gender, were included in the analysis. The inclusion of age is based on findings from previous work that older consumers are more responsible shoppers than younger consumers (e.g. Williams & Hodges, 2022, p. 663). In addition, there are findings in the literature that women compared to men are more willing to select sustainable products and brands (e.g., Dagher et al., 2015; Lee, 2009; Migheli, 2021) Table 1 provides an overview of the constructs and control variables.

Table 1: Scale items for construct measures

Construct	Items	Individual item reliability	Factor reliability / Cronbach alpha	Average variance extracted
Attitude toward responsible fashion consumption (adapted from Bagozzi et al., 2003)	Buying clothes from socially responsible brands is something I find		.87 / .83	.63
	...bad (1) ...good (7).	.52		
	...wrong (1) ...right (7).	.69		
	...foolish (1) ...wise (7).	.62		
	...useless (1) ...useful (7).	.69		
Environmental concern* (adapted from Chang, 2011)	I am concerned about the environment.	.45	.81 / .71	.51
	The state of the environment affects my quality of life.	.53		
	My actions affect the environment.	.46		
	I am willing to make sacrifices to protect the environment.	.61		
CSR-driven fashion brand choice intention* (adapted from Casalegno et al., 2022)	I prefer to buy clothes from socially responsible brands.	.72	.84 / .76**	.73
	I usually buy clothes from brands that are more socially responsible than other brands.	.74		
Age (CV)	Age	--	--	--
Gender (CV)	Gender	--	--	--

CV = Control variable
 * 7-point rating scales with anchors 1 = "strongly disagree" und 7 = "strongly agree"
 ** Spearman-Brown coefficient due to two-item measurement: .77

MODEL SPECIFICATION AND ESTIMATION

SPSS statistic software was used to test the model and construct quality and to perform the regression analyses. The model goodness of fit was measured using confirmatory factor analysis with varimax rotation along the independent and dependent variables. The extraction leads to three variables with eigenvalues >1.00. For the construct attitude toward responsible fashion consumption, there is one extracted factor (eigenvalue: 3.68) with 36.8 percent variance explanation. As second construct, environmental concern (eigenvalue: 1.72) contributes to the model with 17.2 percent variance explanation. As a third factor, CSR-driven fashion brand choice intention (eigenvalue: 1.19) leads to 11.9 percent variance explanation in the model. Overall, the three extracted variables thus explain 65.9 percent of the total variance in the model which can be considered a good result. The highest variance explanation of one factor is 36.8 percent and therewith well below the critical threshold of 50.0 percent (Podsakoff et al., 2003).

The Kaiser-Meyer-Olkin criteria (KMO) for evaluating the coherence of variables in the model is .77, well above the recommended threshold of .50 (Kaiser & Rice, 1974, p. 112). Bartlett's test for sphericity is highly significant ($p < .01$). The null hypothesis that there is no commonality between the items can therefore be rejected. Overall, the model quality can be described as good.

The analysis of construct quality also yields good results. The required minimum levels for indicator reliability ($> .40$), factor reliability ($> .70$), average variance extracted ($> .50$), and Cronbach alpha ($> .70$) are consistently achieved (see Table 1; cf. Bagozzi & Yi, 1988; Nunnally, 1978). If a construct is measured by two items, there exist different recommendations in the literature. While some authors recommend Cronbach alpha as a measure of internal consistency (e.g. Casalegno et al., 2022, p. 1016), other authors call for a reliability measurement using the Spearman-Brown coefficient (e.g., Eisinga et al., 2013, p. 8). As a combined result, for CSR-driven fashion brand choice intention, a Spearman-Brown coefficient of .77 and a Cronbach Alpha of .76 were determined. Analogous to common interpretation, both measures can be rated as good (Bagozzi & Yi, 1988; Eisinga et al., 2013; Nunnally, 1978). Thus, the constructs can be considered suitable for the upcoming regression models. Table 2 provides an overview of the correlations and descriptive statistics in the model.

Table 2: Correlations and descriptive statistics

Variables	1	2	3	4	5
1. Attitude toward responsible fashion consumption	1.000				
2. Environmental concern	.278	1.000			
3. CSR-driven fashion brand choice intention	.369	.335	1.000		
4. Age (CV)	.181	.281	.123	1.000	
5. Gender (CV)	-.248	-.168	-.131	.043	1.000
Descriptive statistics					
Mean	5.75	5.15	3.72	20.99	--
Standard Deviation	1.01	1.00	1.25	1.79	--
Min	2.25	1.50	1.00	18	--
Max	7.00	7.00	6.83	26	--

Sig.: bold font = significant $p < .05$, CV = Control variables

Results

To test the hypotheses, several regression models were calculated using PSPP. The regression analysis procedure is particularly suitable for investigating possible interaction effects (see the arguments of Allison, 1999 and Dawson, 2014). Accordingly, this analysis technique is widely used in empirical science (e.g., He et al., 2019, Homburg et al., 2009, Santoro et al., 2020).

In total, four regression models were calculated, building stepwise on each other. In the first model, only the influence of the control variables, age and gender, on the dependent variable CSR-driven

fashion brand choice intention was considered. The control variables were retained in the subsequent models. Overall, nearly no impact of the control variables can be detected through the whole analysis. Only in the original model (model 1) does gender show a significant intention to buy responsible clothing brands ($\beta = -.14$; $p < .10$). The result thus confirms previous studies that female consumers are more open to "green" consumption routes (see, e.g., Lee, 2009; Migheli, 2021).

In the second and third model, the direct influence of the two independent variables, attitude toward responsible fashion consumption (H1) and environmental concern (H2), on the dependent variable was examined. Finally, in the fourth model, the moderating influence of environmental concern on the relationship between attitude toward responsible fashion consumption and CSR-driven fashion brand choice intention was examined (H3). As expected, the gradual addition of further design parameters improved the model quality (see adjusted R^2 , F-value). Concerning the direct impact of the independent variables, the data show the following: An existing attitude toward responsible fashion consumption results in an intention to purchase clothing from responsibly acting fashion brands ($\beta = .35$; $p < .01$). Hypothesis H1 can thus be confirmed. Furthermore, a significant positive influence on the described brand choice intention was found for perceived environmental concern ($\beta = .31$; $p < .01$). Thus, hypothesis H2 can also be confirmed.

To examine a possible interaction effect (model 4), the two independent variables attitude toward responsible fashion consumption and environmental concern, were first mean-centered (cf. Aiken et al., 1991). Following Cohen et al. (2003), an interaction term was then formed by multiplying the mean-centered independent variables. The data demonstrate a positive interaction of environmental concern on the attitude-brand choice relationship ($\beta = .12$; $p < .10$; H3 confirmed). The parallel observed influence of the two independent variables on the dependent variable remained highly significant for both predictors (attitude: $\beta = .28$; $p < .01$; environmental concern: $\beta = .27$; $p < .01$).

If multiple independent variables are considered in parallel in a regression model, there is a risk of mutual bias due to excessive correlation between these variables (Adeboye et al., 2014). To test whether such multicollinearity exists, the variance inflation factor (VIF) was determined as a supplementary measure. The VIF value between the independent variables is 1.8, well below the limit of 2.5 mentioned by Adeboye et al. (2014, p. 4). Thus, multicollinearity is not a problem in this study. Table 3 provides an overview of the results of the hypothesis tests.

Table 3: Results of the regression analyses

	Dependent variable: CSR-driven fashion brand choice intention			
	Model 1	Model 2	Model 3	Model 4
Control variables				
Age	.13 (n.s.)	.06 (n.s.)	.04 (n.s.)	.00 (n.s.)
Gender	-.14 *	-.05 (n.s.)	-.08 (n.s.)	-.03 (n.s.)
Independent variables				
Attitude toward responsible fashion consumption		H1: .35 ***		.28 ***
Environmental concern			H2: .31 ***	.27 ***
Interaction effect				
Attitude toward responsible fashion consumption x Environmental concern				H3: .12 *
R ²	.03	.14	.12	.21
Adjusted R ²	.02	.12	.10	.18
F-Value	2.68 *	8.41 ***	6.90 ***	8.01 ***

Sig.: *** p < .01; ** p < .05; * p < .10; n.s. = non significant

Discussion and implications

DISCUSSION OF RESULTS

The study conducted expands the previously limited findings on the drivers of responsible fashion purchasing behavior among Gen Z member in Germany. Attitudes toward responsible fashion consumption have been shown to be an important predictor of Generation Z's choice of responsibly acting fashion brands. This means that with increasingly positive attitudes, young clothing consumers in Germany are more willing to choose brands that act in a socially and ecologically responsible manner. This study thus follows the findings from behavioral science, according to which the attitude towards a significant topic influences a person's own course of action in a corresponding manner (cf. Bagozzi et al., 2003, p. 279). With regard to fashion consumption, the present study thus also arrives at a result for the German market that has already been achieved in a similar form in comparable studies in China (Su et al., 2019), India (Khare & Sadachar, 2017), Spain (Pérez et al., 2022) and the USA (Su et al., 2019, Williams & Hodges, 2022).

The particular importance of the environment should be emphasized. Environmental concern and the accompanying critical self-assessment of one's own environmental impact and awareness of the need to act lead to a clear influence on brand choice behavior. This is reflected in a direct significant effect of environmental concern on brand choice intention. Gen Z members who feel a responsibility and concern for the environment are more likely to choose socially and environmentally responsible fashion brands. Moreover, the demonstrated interaction effect also proves a reinforcing effect from attitude and environmental concern on brand choice intention. The strong effect of environmental concern can be justified by the fact that Gen Z has been shown to attach high importance to environmental and climate protection and to follow concern with behavioral intention (Krasulja et al., 2020).

MANAGERIAL IMPLICATIONS

The results provide helpful implications for apparel brands, which identify the Generation Z as an interesting but equally mysterious consumer target group. In order to reach this young, reflective group of buyers, responsible decision-makers should initiate targeted measures that clearly emphasize the company's social and ecological responsibility. Therewith for example, implementing socially and ecologically sustainable production and sales processes is recommended. The pursuit of long-term visionary environmental goals and the substantial medial promotion of social projects, as successfully practiced by the brand Patagonia, for example, can also be identified as a model for success. If a clothing brand succeeds in implementing and communicating its social and ecological strategy in a credible manner, this can also lead to an increase in environmental awareness among its customers.

However, the social, ecological and consumer-related relevance of CSR measures, their consistency with the corporate DNA and the transparency of target setting and achievement are crucial. The latter in particular appears to be a key success factor for the relationship between customers and the company. Byrd and Su (2021) even come to the conclusion that *"Transparency has become an increasingly important issue for consumers who want to support brands that are doing good in the world"* (p. 4). However, the practical implementation of a convincing monitoring system is often still very difficult for fashion companies. In practice, reference is often made to the dynamics of the environment and the need for flexible adjustment of activities, which make it impossible to firmly anchor social and ecological measures and an adequately transparent system of key figures. This in particular offers valuable opportunities for recognizable differentiation from the competition, long-term building of brand image, trust and loyalty, referral behavior, and ultimately the economic success of the company.

LIMITATIONS AND RESEARCH IMPLICATIONS

This empirical study provides insights for a deeper understanding of the influences of a) attitudes towards responsible fashion consumption and b) environmental concern on the brand choice intention of Gen Z consumers in Germany. The work thus extends the manageable existing research that has so far addressed this young topic mainly through qualitative analyses (e.g., Williams & Hodges, 2022) or in other regional markets (e.g., Khare & Sadachar, 2017; Pérez et al., 2022; Su et al., 2019).

However, like any scientific contribution, this work is subject to certain limitations. These should serve as a stimulus for future research. The core of the present study is the CSR-driven brand choice intention of Generation Z fashion consumers. Although interesting findings were obtained in this regard, it would be interesting to compare the strengths of influence between Generation Z and other generations. For example, it could be determined whether and how concern for the environment is reflected in the clothing purchase and brand choice behavior of older consumers. In addition, further research is recommended that addresses complementary factors influencing responsible apparel purchasing behavior. Given the importance of online retailing in apparel, for example, it would be exciting to see whether and how CSR-focused online brand communication influences purchasing behavior. In this context, it could be investigated, for example, whether and to what extent responsibility-oriented online communication on the part of companies (management, employees), contractually bound social

media influencers and independent institutions (e.g. free press) differ in their effect on credibility and consumer influence. Valuable recommendations for action for corporate practice can also be derived from this.

References

- Adeboye, N. O., Fagoyinbo, I. S., & Olatayo, T. O. (2014). Estimation of the effect of multicollinearity on the standard error for regression coefficients. *IOSR Journal of Mathematics*, 10(4), 16-20.
<http://www.iosrjournals.org/iosr-jm/papers/Vol10-issue4/Version-1/D010411620.pdf>
- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Sage.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp. 11-39). Springer.
- Allison, P. D. (1999). *Multiple regression: A primer*. Pine Forge Press.
- Anisimova, T. & Weiss, J. (2023). Toward a better understanding of the attitude–behavior gap in organic food conative loyalty: a moderation and moderated mediation analysis. *Asia Pacific Journal of Marketing and Logistics*, 35(6), 1474-1493.
<https://www.emerald.com/insight/content/doi/10.1108/APJML-06-2021-0420/full/html>
- Bagozzi, R. P. & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94. <https://link.springer.com/article/10.1007/BF02723327>
- Bagozzi, R. P., Dholakia, U. M., & Basuroy, S. (2003). How effortful decisions get enacted: The motivating role of decision processes, desires, and anticipated emotions. *Journal of Behavioral Decision Making*, 16(4), 273-295. <https://onlinelibrary.wiley.com/doi/abs/10.1002/bdm.446>
- Bailey, K., Basu, A., & Sharma, S. (2022). The environmental impacts of fast fashion on water quality: A systematic review. *Water*, 14(7), 1-11. <https://www.mdpi.com/2073-4441/14/7/1073>
- 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(1), 14-25.
<https://www.sciencedirect.com/science/article/abs/pii/S0272494406000909>
- Boston Consulting Group (2021). *Consumers' adaption to sustainability in fashion. 1-82*.
<https://web-assets.bcg.com/27/f3/794284e7437d99a71d625caf589f/consumers-adaptation-to-sustainability-in-fashion.pdf>
- Buchel, S., Hebinck, A., Lavanga, M., & Loorbach, D. (2022). Disrupting the status quo: A sustainability transitions analysis of the fashion system. *Sustainability: Science, Practice and Policy*, 18(1), 231-246. <https://www.tandfonline.com/doi/full/10.1080/15487733.2022.2040231>
- Byrd, K., & Su, J. (2021). Investigating consumer behaviour for environmental, sustainable and social apparel. *International Journal of Clothing Science and Technology*, 33(3), 336-352.
- Calver, J., Littlewood, G., Duffy, M., & Watts, J. (2022). *Wearing your ethics: The sustainability gap between purchasing intentions versus actions. The case of generation z students*.

- <https://shura.shu.ac.uk/30235/>
- Casalegno, C., Candelo, E., & Santoro, G. (2022). Exploring the antecedents of green and sustainable purchase behaviour: A comparison among different generations. *Psychology & Marketing*, 39(5), 1007-1021. <https://onlinelibrary.wiley.com/doi/abs/10.1002/MAR.21637>
- Cascade (2023). *How Patagonia became the benchmark in sustainable clothing*.
<https://www.cascade.app/studies/patagonia-strategy-study>
- Chang, C. (2011). Feeling ambivalent about going green. *Journal of Advertising*, 40(4), 19-32.
<https://www.tandfonline.com/doi/abs/10.2753/JOA0091-3367400402>
- Chen, M. F. (2009). Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle. *British Food Journal*, 111(2), 165-178.
<https://www.emerald.com/insight/content/doi/10.1108/00070700910931986/full/html>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2013). *Applied multiple regression/correlation analysis for the behavioral sciences*. (3rdEd.). Routledge.
- Connell, K. Y. H. (2010). Internal and external barriers to eco-conscious apparel acquisition. *International Journal of Consumer Studies*, 34(3), 279-286.
<https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1470-6431.2010.00865.x>
- Dagher, G., Itani, O., & Kassar, A. N. (2015). The impact of environment concern and attitude on green purchasing behavior: Gender as the moderator. *Contemporary Management Research*, 11(2).
<https://cmr-journal.org/article/view/13625>
- Dawson, J. F. (2014). Moderation in management research: What, why, when, and how. *Journal of Business and Psychology*, 29(1), 1-19.
<https://link.springer.com/article/10.1007/s10869-013-9308-7>
- Durmaz, Y. & Akdoğan, L. (2023). The effect of environmental responsibility on green consumption intention: The moderator role of price sensitivity and the mediator role of environmental concern. A case study in Turkey. *Environment, Development and Sustainability*, 1-26.
<https://link.springer.com/article/10.1007/s10668-023-03083-6>
- European Commission (2023). *Proposal for a directive on green claims*.
https://environment.ec.europa.eu/publications/proposal-directive-green-claims_en
- European Environment Agency (2022). *Textiles in the environment: The role of design in Europe's circular economy*. <https://www.eea.europa.eu/publications/textiles-and-the-environment-the>
- Eisinga, R., Grotenhuis, M. T., & Pelzer, B. (2013). The reliability of a two-item scale: Pearson, Cronbach, or Spearman-Brown?. *International Journal of Public Health*, 58, 637-642.
<https://link.springer.com/article/10.1007/s00038-012-0416-3>
- Fashion United (2023), *Global fashion industry statistics. General data*.
<https://fashionunited.com/global-fashion-industry-statistics>
- Fox, C. (2020). *Will clearer messages close the green gap? An examination of attitude formation in organic produce buying* (No. 3/2020). IUBH Discussion Papers-Marketing.
<https://www.econstor.eu/handle/10419/225089>
- Gao, H., Winterich, K. P., & Zhang, Y. (2016). All that glitters is not gold: How others' status influences the effect of power distance belief on status consumption. *Journal of Consumer Research*, 43(2), 265-281. <https://academic.oup.com/jcr/articleabstract/43/2/265/2572270>
- GfK (2022). *Sustainability megatrend – German consumers' expectations of the fashion industry*.

- <https://www.gfk.com/press/sustainability-megatrend-german-consumerexpectations-fashion-industry>
- Geuens, M. & De Pelsmacker, P. (2017). Planning and conducting experimental advertising research and questionnaire design. *Journal of Advertising*, 46(1), 83-100.
<https://www.tandfonline.com/doi/abs/10.1080/00913367.2016.1225233>
- Greenpeace (2021). *Self regulation: A fashion fairytale (Part 1)*.
https://www.greenpeace.de/publikationen/20211122-greenpeace-detox-fashion-fairytale-engl-pt1_0.pdf
- Grzesiuk, K., Jegorow, D., Wawer, M., & Głowacz, A. (2023). Energy-Efficient City Transportation Solutions in the Context of Energy-Conserving and Mobility Behaviours of Generation Z. *Energies*, 16(15), 5846. <https://www.mdpi.com/1996-1073/16/15/5846>
- He, Q., Duan, Y., Wang, R., & Fu, Z. (2019). Factors affecting consumers' purchase intention of eco-friendly food in China: The evidence from respondents in Beijing. *International Journal of Consumer Studies*, 43(5), 457-470. <https://onlinelibrary.wiley.com/doi/abs/10.1111/ijcs.12525>
- Hines, J. M., Hungerford, H. R., & Tomera, A. N. (1987). Analysis and synthesis of research on responsible environmental behavior: A meta-analysis. *The Journal of Environmental Education*, 18(2), 1-8.
<https://www.tandfonline.com/doi/abs/10.1080/00958964.1987.9943482>
- Hofmann, K. H., Jacob, A., & Pizzingrilli, M. (2022). Overcoming growth challenges of sustainable ventures in the fashion industry: a multinational exploration. *Sustainability*, 14(16), 10275.
<https://www.mdpi.com/2071-1050/14/16/10275>
- Homburg, C., Bornemann, T., & Totzek, D. (2009). Preannouncing pioneering versus follower products: What should the message be? *Journal of the Academy of Marketing Science*, 37, 310-327.
<https://link.springer.com/article/10.1007/s11747-009-0134-4>
- Kaiser, H. F. & Rice, J. (1974). Little jiffy, mark IV. *Journal of Educational and Psychological Measurement*, 34(1), 111-117.
<https://journals.sagepub.com/doi/abs/10.1177/001316447403400115?journalCode=epma>
- Khare, A. & Sadachar, A. (2017). Green apparel buying behaviour: A study on Indian youth. *International Journal of Consumer Studies*, 41(5), 558-569.
<https://onlinelibrary.wiley.com/doi/abs/10.1111/ijcs.12367>
- Klarna (2020). *Why Generation Z is leading fashion retail's recovery*.
<https://www.klarna.com/us/blog/why-gen-z-is-leading-fashion-retails-recovery/>
- Kollmuss, A. & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239-260.
<https://www.tandfonline.com/doi/abs/10.1080/13504620220145401>
- Lee, K. (2009). Gender differences in Hong Kong adolescent consumers' green purchasing behavior. *Journal of Consumer Marketing*, 26(2), 87-96.
<https://www.emerald.com/insight/content/doi/10.1108/07363760910940456/full/html>
- McNeill, L. & Moore, R. (2015). Sustainable fashion consumption and the fast fashion conundrum: fashionable consumers and attitudes to sustainability in clothing choice. *International Journal of Consumer Studies*, 39(3), 212-222. <https://onlinelibrary.wiley.com/doi/abs/10.1111/ijcs.12169>
- McKinsey (2022). *The State of Fashion 2023*.
<https://www.mckinsey.com/industries/retail/our-insights/state-of-fashion>
- McKinsey (2016). *Style that's sustainable: A new fast-fashion formula*.

- <https://www.mckinsey.com/capabilities/sustainability/our-insights/style-thats-sustainable-a-new-fast-fashion-formula>
- Michel, J. F., Mombeuil, C., & Diunugala, H. P. (2022). Antecedents of green consumption intention: A focus on generation Z consumers of a developing country. *Environment, Development and Sustainability*, 1-22. <https://link.springer.com/article/10.1007/s10668-022-02678-9>
- Migheli, M. (2021). Green purchasing: the effect of parenthood and gender. *Environment, Development and Sustainability*, 23(7), 10576-10600. <https://link.springer.com/article/10.1007/s10668-020-01073-6>
- Muralidhar, A. & Raja, A. S. (2019). Understanding the purchase intention characteristics of Gen Y and Gen Z and introspecting the modern demand variables in fashion industry. *International Journal of Scientific and Engineering Research*, 10(12), 144-170. <https://www.ijser.org/onlineResearchPaperViewer.aspx?Understanding-the-purchase-intention-characteristics-of-Gen-Y-and-Gen-Z-and-introspecting-the-modern-demand-variables-in-fashion-industry.pdf>
- Nguyen, T. N., Lobo, A., & Greenland, S. (2016). Pro-environmental purchase behaviour: The role of consumers' biospheric values. *Journal of Retailing and Consumer Services*, 33, 98-108. <https://www.sciencedirect.com/science/article/abs/pii/S0969698916301795>
- Niinimäki, K., Peters, G., Dahlbo, H., Perry, P., Rissanen, T., & Gwilt, A. (2020). The environmental price of fast fashion. *Nature Reviews Earth & Environment*, 1(4), 189-200. <https://www.nature.com/articles/s43017-020-0039-9>.
- Nowacki, M., Kowalczyk-Anioł, J., & Chawla, Y. (2023). Gen Z's attitude towards green image destinations, green tourism and behavioural intention regarding green holiday destination choice: A study in Poland and India. *Sustainability*, 15(10), 7860. <https://www.mdpi.com/2071-1050/15/10/7860>
- Nuh, A., Munir, M. M., & Muhibban, M. (2023). Fashion engagement and pro-environmental attitudes: Drivers of sustainable fashion consumption in Indonesia. *Journal of Enterprise and Development*, 5(3), 460-478. <https://journal.uinmataram.ac.id/index.php/jed/article/view/7292>
- Nunnally, J. C. (1978). *Psychometric theory*. (2nd Ed.) McGraw-Hill.
- Pagiaslis, A. & Krontalis, A. K. (2014). Green consumption behavior antecedents: Environmental concern, knowledge, and beliefs. *Psychology & Marketing*, 31(5), 335-348. <https://onlinelibrary.wiley.com/doi/abs/10.1002/mar.20698>
- Patagonia (2023). *Werte & Projekte*. <https://eu.patagonia.com/de/de/core-values/>
- Pérez, A., Collado, J., & Liu, M. T. (2022). Social and environmental concerns within ethical fashion: General consumer cognitions, attitudes and behaviours. *Journal of Fashion Marketing and Management: An International Journal*, 26(5), 792-812. <https://www.emerald.com/insight/content/doi/10.1108/JFMM-04-2021-0088/full/html>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. <https://psycnet.apa.org/buy/2003-08045-010>
- Robichaud, Z. & Yu, H. (2022). Do young consumers care about ethical consumption? Modelling Gen Z's purchase intention towards fair trade coffee. *British Food Journal*, 124(9), 2740-2760. <https://www.emerald.com/insight/content/doi/10.1108/BFJ-05-2021-0536/full/html>

- Rothenberg, L. & Matthews, D. (2017). Consumer decision making when purchasing ecofriendly apparel. *International Journal of Retail & Distribution Management*, 45(4), 404-418.
<https://www.emerald.com/insight/content/doi/10.1108/IJRDM-06-2016-0099/full/html?fullSc=1>
- Sadiq, M., Adil, M., & Paul, J. (2022). Organic food consumption and contextual factors: An attitude-behavior-context perspective. *Business Strategy and the Environment*. 1-15.
<https://onlinelibrary.wiley.com/doi/abs/10.1002/bse.3306>
- Santoro, G., Bresciani, S., Bertoldi, B., & Liu, Y. (2020). Cause-related marketing, brand loyalty and corporate social responsibility: A cross-country analysis of Italian and Japanese consumers. *International Marketing Review*, 37(4), 773-791.
<https://www.emerald.com/insight/content/doi/10.1108/IMR-11-2018-0310/full/html>
- Statista (2023a). *Umsatz mit Bekleidung weltweit in den Jahren 2014 bis 2022 mit einer Prognose bis 2027*. *Statista Consumer Market Outlook*.
<https://de-statistacom.pxz.iubh.de:8443/statistik/daten/studie/1362989/umfrage/umsatz-mit-bekleidungsweltweit/>
- Statista (2023b). *Umsatz führender Fast Fashion-Konzerne weltweit in den Jahren 2021 und 2022*.
<https://de.statista.com/statistik/daten/studie/814197/umfrage/umsatz-fuehrender-fast-fashion-konzerne-weltweit/>
- The Guardian (2023). “It’s like a death pit”: how Ghana became fast fashion’s dumping ground.
<https://www.theguardian.com/globaldevelopment/2023/jun/05/yvette-yaa-konadu-tetteh-how-ghana-became-fast-fashion-dumping-ground>
- Thorisdottir, T. S. & Johannsdottir, L. (2020). Corporate social responsibility influencing sustainability within the fashion industry. A systematic review. *Sustainability*, 12(21), 9167.
<https://www.mdpi.com/2071-1050/12/21/9167>
- Tran, K., Nguyen, T., Tran, Y., Nguyen, A., Luu, K., & Nguyen, Y. (2022). Eco-friendly fashion among generation Z: Mixed-methods study on price value image, customer fulfillment, and pro-environmental behavior. *Plos one*, 17(8), 1-22.
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0272789>
- Wang, B., Luo, W., Zhang, A., Tian, Z., & Li, Z. (2020). Blockchain-enabled circular supply chain management: A system architecture for fast fashion. *Computers in Industry*, 123, 103324.
<https://www.sciencedirect.com/science/article/abs/pii/S0166361520305583>
- Wang, D., Weisstein, F. L., Duan, S., & Choi, P. (2022). Impact of ambivalent attitudes on green purchase intentions: The role of negative moods. *International Journal of Consumer Studies*, 46(1), 182-199.
<https://onlinelibrary.wiley.com/doi/abs/10.1111/ijcs.12663>
- White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing*, 83(3), 22-49.
<https://journals.sagepub.com/doi/full/10.1177/0022242919825649>
- Williams, A. & Hodges, N. (2022). Adolescent Generation Z and sustainable and responsible fashion consumption: exploring the value-action gap. *Young Consumers*, 23(4), 651-666.
<https://www.emerald.com/insight/content/doi/10.1108/YC-11-2021-1419/full/html>
- Wong, M. C. (2021). Does corporate social responsibility affect Generation Z purchase intention in the food industry. *Asian Journal of Business Ethics*, 10, 391-407.
<https://link.springer.com/article/10.1007/s13520-021-00136-9>

World Economic Forum. (2022). *Company given away to support the fight in saving our planet and tackle the climate crisis.*

<https://www.weforum.org/agenda/2022/09/the-size-company-given-away-to-save-the-planet-earth/>

Zalando (2021). *It Takes Two. Attitude-Behavior-Gap Report.*

<https://corporate.zalando.com/de/unserimpact/nachhaltigkeit/nachhaltigkeitsberichte/attitude-behavior-gap-report>