


Article

Determinants of Young Adult Consumers' Environmentally and Socially Responsible Apparel Consumption

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Abstract: Social and environmental responsibility of apparel sector has been drawing rising attention of policymakers and researchers in recent years. One possible solution to curb the detrimental effects caused by the clothing industry is to invoke more responsible demand of its heavy users, such as young clothing customers. This study aims to examine a model of the determinants of environmentally and socially responsible clothing consumption of young adult customers in a developing economy. The study has been performed on a convenience sample of 439 respondents in Serbia, by means of structured online survey. Exploratory factor analysis (EFA), followed by two-step structural equation modeling procedure (SEM)—implying an examination of a measurement model, followed by testing of structural relationships—has been performed within data analysis. Results of the study indicate green consumption values as the most influential determinant of responsible apparel consumption, followed by conscious consumption and receptivity to green communication. Findings of the study contribute to the body of knowledge on responsible consumption and provide directions for practitioners and policymakers. Study limitations are noted and future research directions are provided.

Keywords: environmentally and socially responsible apparel consumption; young adults; green consumption values; conscious consumption; receptivity to communication; SEM



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1. Introduction

The excessive consumption of clothing represents a growing global phenomenon which brings harmful impacts on the natural and social surroundings [1]. The apparel industry faces serious criticism due to the excessive use of natural resources, air, soil, and water pollution and poor working conditions in producing countries and, thus, is facing significant pressure to reduce its environmental impacts [2,3]. Among industrial sectors in Europe, the apparel industry is the third largest in terms of water and land use, and the fifth largest regarding the usage of raw materials and greenhouse gases emission. Additionally, the consumption of textiles demonstrates the fourth highest environmental impact, following food consumption, housing, and mobility [4]. All phases of clothing product life cycle—from fibers manufacturing to clothing disposal—contribute to the degradation of the environment. As a consequence of that, fighting unsustainable textile and apparel consumption represents an increasingly significant phenomenon [5]. Sustainability in apparel production and fashion industry represents a field of huge, and continuously rising interests [6], and various global initiatives on this topic have emerged. On the production side, issues related to social and ecological responsibility in the apparel supply chain have been intensified in recent years, as organizations have adopted new business models. In order to face challenges and pressures to operate more socially and ecologically responsibly, many companies have incorporated environmentally responsible business practices in all business activities [7]. Fashion companies at the global level strive to produce more sustainable products, manufactured with fewer chemicals and toxic pigments, thereby

leaving a significantly lower ecological footprint [8]. However, sustainable clothing is still insufficiently represented in the market. Market data indicate that, in 2021, the share of sustainable clothing within total sales in the global apparel market amounted to approximately 3.9% and is expected to increase up to 6.1% in 2026 [9].

Intensifying environmentally friendly and green purchasing behavior represents an efficient way to reduce the impact of apparel consumption on the environment. Consumers are becoming more knowledgeable of environmental issues and more concerned regarding the impact of human behaviors on the environment, and developing more positive attitudes towards sustainable products such as clothing [10]. They are becoming more conscious of the necessity of more rational and ecological apparel consumption [11]. Improving sustainable behavior in the context of the apparel consumption demands changing consumers' mindsets away from overconsumption of fashion-trend-related clothes to investing in ecologically produced clothes and items which aim to last longer [12]. However, consumers' knowledge and attitudes do not always translate into actual behavior due to different internal and external barriers for those behaviors [13,14]. Therefore, in order to better understand clothing consumption behavior—and, thus, to identify methods to promote behavioral modifications—it is necessary to identify how and why consumers engage in particular behavior and which factors make an influence on that [4]. The topic of sustainable apparel consumption has become the subject of an increasing number of academic studies, among which some have especially focused on young consumers (e.g., [1,15,16]). Furthermore, there is a rising body of knowledge on the relationship between environmentally and socially responsible consumption in many fields and numerous antecedent variables. However, there is still a lack of empirical evidence in the field of responsible apparel consumption, especially in European developing countries where consumers are less educated on topics related to environmental protection. The focus of this paper is on environmentally and socially responsible apparel consumption of young adult consumers, taking into account that they are the most common consumers of fast fashion which is identified as the biggest culprit for environmental pollution in the apparel industry. The objective is to analyze whether or not young consumers' green values, receptivity to various forms of green communication, as well as their general conscious consumption, are related to their environmentally and socially responsible apparel consumption; and if so, to determine how these are related.

The paper is structured as follows. After the introductory section, Section 2 is focused on the conceptual framework and explanation of constructs of the proposed model. Other researchers' findings related to those constructs are presented and the justification of the proposed hypotheses is given. The next section relates to the research methodology applied to collect and analyze the data. Obtained results and discussion of the findings are presented in the Section 4. Finally, concluding remarks, as well as scientific and practical contributions and limitations of the study are provided in the final section.

2. Theoretical Background and Conceptual Framework

2.1. Green Consumption Values

Consumers who possess green consumption values (GCV) tend to express the concern regarding environmental protection through decisions regarding responsible purchasing and consumption [17,18]. Environmental concerns are considered to positively influence purchase intentions [19–22]. Thus, individuals' green consumption values influence consumer attitudes and intentions [23] and various environmentally responsible consumption behaviors in a positive way [24]. They are found to predict consumers' preferences for environmentally friendly produced products [17,25] and demonstrate a positive impact on pro-environmental consumption intentions [26,27].

The impact of different values which fall into the category of green values has been investigated in the literature. Conservation value was found to be related to attitudes on environmental consequences of purchasing intentions in a positive way [28]. Similarly, consumers' environmental values were found to have a strong influence on their attitudes,

which further positively impacted consumers' green purchasing behavior [29]. The environmental values (egoism, altruism, and biospheric values) of Gen Z consumers was found to directly and indirectly influence their green apparel consumption behavior [30]. In some research, altruistic and biospheric values—among other environmental values—more strongly predicted intentions of consumers to behave in a pro-environmental way [31], which was also confirmed in the context of sustainable clothing purchases [32]. The findings of Sangroya and Nayak [33] indicated that consumers' emotional and social values stimulated green behavior more than the other two constructs of green perceived value (functional and conditional).

2.2. Receptivity to Green Communication

Today, many companies are developing strategies of green communications aiming to influence consumers and stimulate purchasing of green products or motivate certain behavior (e.g., waste sorting, recycling). Green communications include green marketing, green advertising, eco-labeling and seals, and all other forms of conveying environmentally friendly messages. The information on environmental impact of green products represents the important purchasing determinant for consumers [34]. Green marketing and advertising are considered to be influential means of communication in shaping consumers' attitudes, perceptions, and environmentally friendly behavioral intentions and consumption (e.g., [35–41]). Eco-labeling is also found to be influential in the context of stimulating environmentally responsible consumption [42,43]. It has been shown that the provision of positive/negative sustainability information at the point of purchase stimulated higher/lower evaluation of the product and increased/decreased purchasing choice [44].

Consumers' willingness to receive and accept a message oriented towards environmental protection represents a construct called 'receptivity to green communication' (RGC). However, not all consumers are equally receptive to green communication, which indicates that attentiveness and favorability of attitudes may be shaped by certain factors. Based on the development and validation of a REGRAD scale, Bailey, Mishra, and Tiamiyu [45] found different levels of consumers' receptivity to green advertising, which moderated their attitudes and intentions toward a communication source. In later research from these same authors, they explored the impact of consumers' green consumption values on responsiveness to green public relations and green advertising. They found that green values were basis of consumers' responses to green communications [23]. Do Paço et al. [18] emphasized that receptivity to green advertising was directly influenced by green consumption values; while, on the other hand, receptivity made only a weak influence on green behaviors.

It is understood that consumers who are highly concerned about environmental issues pay greater attention to green ads and process the message more thoroughly [46]. Chen and Chiu [47] concluded that perception of consumers who were more environmentally conscious was under greater influence of green messages. Empirical results indicate that environmentally concerned consumers rely more on eco-labels as sources of information for green product evaluation [48]. Additionally, consumers who express greater environmental concern appeared to be more responsive to eco-seals, which generate favorable purchasing intentions [36]. Tucker et al. [49] investigated the role of consumers' characteristics on the receptivity to green ads and found out that consumers who demonstrated positive attitudes toward environmental protection were receptive to different ad types. Furthermore, it was found that consumers' personal motivation (promotion vs. prevention) to conduct environmentally oriented behavior had an influence on the effectiveness of green marketing appeals [50]. Consumer perceptions of greenwashing can act as a moderator of their responses to green communication [51–53] and may have an influence on behavioral intentions [54,55]. Matthes and Wonneberger [56] investigated the generally believed notion that consumers with green values tend to distrust green advertising and found out that, in fact, they perceive greater informational utility of green advertisements, which actually decreases their skepticism. Tee et al. [57] confirmed that consumers with deeper concerns

on the environmental protection trusted green advertisement more. By taking into account previous research findings, we propose the following:

Hypothesis 1 (H1). *Green consumption values (GCV) of young adult apparel consumers positively influence their receptivity to green communication (RGC).*

2.3. Conscious Consumption

Environmentally responsible consumption represents consumers' implementation of a wide range of responsible behavioral practices during acquisition, usage, and disposal of products, aiming to reduce the negative impact of consumption on the environment [14,24,58]. One segment of Gupta and Agrawal's [59] ERC scale is a construct called 'conscious consumption' (CC) which includes behaviors such as avoiding wasteful consumption, using things in moderate way, ensuring as little waste as possible, and purchasing amounts which could be actually used. In this paper, we explain conscious consumption as a frugal behavior towards natural resources, which is connected with consumers' caring for environmental well-being. In their study, Agrawal and Gupta [60], aimed to identify varieties of consumers' environmentally responsible consumption behaviors, and found out that—regarding conscious consumption—respondents made conscious efforts to decrease the volume of the personal consumption, limit consumption to a necessary level, and avoid excessive consumption.

Environmentally responsible behavior is, in general, shaped with consumers' internalized personal norms [61]. Consumers who behave in an environmentally responsible way are strongly motivated by environmental values they possess. In a study by Pinto et al. [62], the relation between values and environmentally responsible consumption was investigated, and the results showed that green values correlated with certain dimensions of responsible consumption, such as environmental awareness and wasteful habits. Consumers' environmental beliefs are found to positively impact environmentally responsible behavior [63,64]. Urien and Kilbourne [65] found out that consumers who believe that the consequences of their current behavior extend into future generations were more likely to engage in environmentally responsible consumption behaviors. Findings of Gupta and Agrawal [24] indicated that consumers' green consumption value (value orientation towards environmental protection) was associated with all variations of environmentally responsible consumption behaviors in a positive way. By addressing the question of green values as antecedents of conscious consumption, we developed the following hypothesis:

Hypothesis 2 (H2). *Green consumption values (GCV) of young adult apparel consumers positively influence their general conscious consumption (CC).*

Conscious consumption, reflected in environmental benefits, as well as personal savings related to reasonable consumption has been often promoted through green and social advertising [60]. Green marketing, advertising, and other forms of environmentally oriented communication are found to directly or indirectly influence customers' intentions towards purchasing environmentally friendly products (e.g., [41,66]) or conducting environmentally responsible behavior (e.g., [67,68]). It was found that knowledge of eco-labels represents one of the significant variables influencing environmentally responsible behavior [58]. Based on these findings, we can assume that consumers who react more to different forms of green communication are more likely to engage in activities that fall into conscious consumption, and suggest the following:

Hypothesis 3 (H3). *Young adult consumers' receptivity to green communication (RGC) positively influences their conscious consumption (CC).*

2.4. Environmentally and Socially Responsible Apparel Consumption

Environmentally responsible consumption behavior is the topic which has been attracting academic attention (e.g., [69–73]). Accordingly, environmentally responsible con-

sumption has emerged as a fundamental concept in academic research related to apparel consumption (e.g., [74,75]). Sustainable clothing consumption behaviors are defined as “variety of behaviors that consumers engage in, to minimize their environmental and social impacts in relation to their clothing consumption decisions” [1]. Environmentally sustainable clothing consumption relates to activities in all consumption phases (acquisition, storing, using, maintaining, and disposal), which are more environmentally friendly than mainstream clothing consumption behavior [76]. Some of the research focused on young consumers’ sustainable clothing consumption in particular (e.g., [1]).

As defined by Kim and Damhorst [77], the concept of environmentally responsible apparel consumption (ERAC) includes purchasing clothes made from recycled, organic, or environmentally friendly materials; made from easily washed and ironed materials; avoiding clothing items that may be produced in an environmentally harmful way and buying clothes with a low level of environmental impact; as well as choosing clothes that can be worn for the longer term. It also includes a social dimension of fair trade and environmentally friendly packaging.

One of the segments of ERAC scale was buying clothes which have labels indicating that they are produced in an environmentally friendly way. Research showed that consumers responded positively to product-related green messages in promotion of clothing brands [78]. Additionally, it was found that advertisements promoting eco-friendly efforts of luxury fashion products generated favorable attitudes and increased behavioral intentions [79]. The results of one more study on the topic of green advertising of clothing products revealed that consumers who considered eco-friendly clothing as personally relevant reported more favorable attitudes toward the advertising [80]. This leads to the proposition that consumers who pay attention to green messages and react to information provided in eco-labels are more likely to choose clothes which are produced in a more environmentally and socially responsible way. Thus, we formulate the following hypothesis:

Hypothesis 4 (H4). *Young adult consumers’ receptivity to green communication (RGC) positively influences their environmentally and socially responsible apparel consumption (ESRAC).*

It was found that general environmentally friendly behavior of consumers—which includes a variety of behaviours such as preserving of the environment, sorting of waste, and sustainable consumption—is positively related to purchase behavior of green products [72]. In one of the earlier studies, it was found that environmentally responsible apparel consumption behavior was strongly influenced by general environmentally responsible behavior [77]. Furthermore, some new findings pointed out that the extended usage of fashion items (so-called slow fashion consumption) is influenced by consumers’ intention of conscious consumption and ethical considerations [81]. Based on a systematic literature review of the research focused on anti-consumption as the pathway to sustainable clothing consumption, Vesterinen and Syrjälä [82] concluded that acquiring and disposing of clothing can be decreased by prolonging its usage, which slows down the life cycle of fashion items. The findings of Gupta and Agrawal [24] indicated that consumers’ frugality was significant predictor of their participation in various environmentally responsible consumption behaviors. A discussion of the constructs affecting environmentally responsible apparel consumption, brought about the following hypothesis:

Hypothesis 5 (H5). *Young adult consumers’ conscious consumption (CC) positively influences their environmentally and socially responsible apparel consumption (ESRAC).*

Consumer values are found to be leading to their behavioral intentions regarding fashion products [83]. The findings of Gam [84] indicated that environmental concern and eco-friendly behavior of young female consumers were identified as factors strongly associated with purchase intention and environmentally friendly consumption of clothing. There are also empirical results that apparel sustainability knowledge and personal values of

young Millennials had significant and positive effects on their attitude towards sustainable clothing, which, in turn, strongly and positively influenced purchase intention [16]. In the study of Liang et al. [30] focused on Gen Z members, it was found that environmental values (egoism, altruism, and biospheric) had different direct and indirect impacts on green apparel consumption behavior. Environmental apparel knowledge was found to positively influence environmentalism, which consequently positively influenced environmentally responsible apparel consumption behavior [75]. Similarly, Kozar and Hiller Connell [85] found out that possessing environmental knowledge significantly predicts socially and environmentally responsible apparel purchasing behavior. Based on empirical evidence gained so far, we propose that:

Hypothesis 6 (H6). *Young adult consumers' green consumption values (GCV) positively influence their environmentally and socially responsible apparel consumption (ESRAC).*

Hypothesized relationships are graphically displayed in Figure 1.

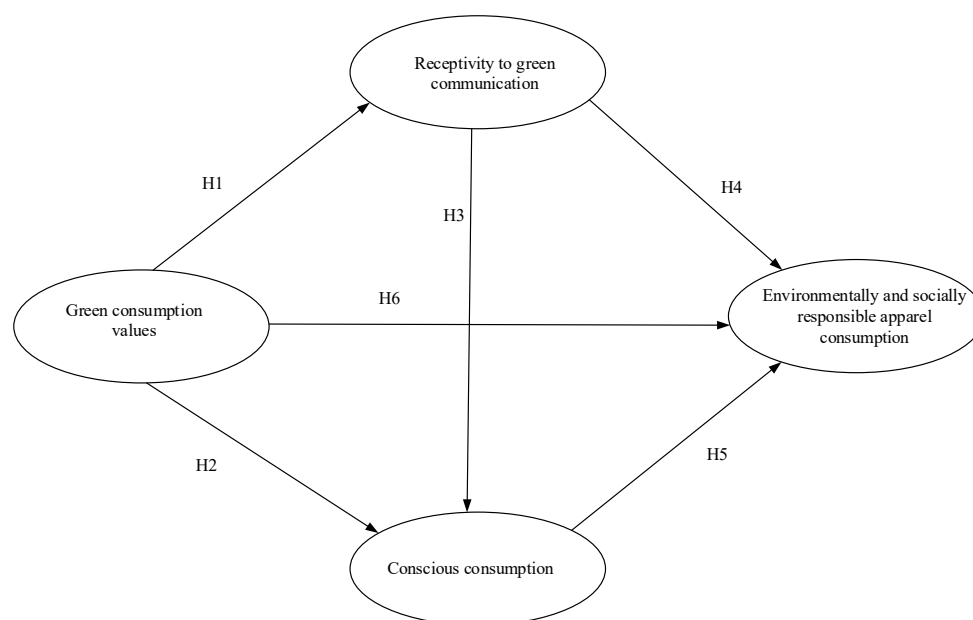


Figure 1. Conceptual framework of the study.

3. Methodology

3.1. Sampling and Data Collection

Data were collected on a convenience sample of young adult clothing customers in Serbia, aged between 18 and 35 years of age. A web-based structured questionnaire was used for data collection. The survey took place in a period from November 2021 until July 2022. To avoid the provision of socially desirable responses, participation in the survey was anonymous. Researchers who organized the study shared a link to the questionnaire with students attending courses at a state university in Serbia. Students who were willing to participate in the study were also asked to share the link to the questionnaire with their friends and acquaintances who might have been interested in the study's topic. In total, 439 young clothing customers responded to the questionnaire.

3.2. Questionnaire

Review of the literature on sustainable (a.k.a. green, eco-friendly, environmentally responsible) consumption preceded the formulation of the questionnaire. All but demographic items were measured on a seven-point Likert-type scale, ranging from 1 ('strongly disagree' or 'never') to 7 ('strongly agree' or 'always'), depending on the wording of the questionnaire items. The questionnaire was proposed in English language and translated

into respondents' native language. For control purposes, to ensure that the meaning of the constructs remained the same in a different language, items were translated back into English language. Two Serbian professors examined the relevance of the measurement instrument and dealt with the issues resulting from the translation of the items from English into Serbian language. After experts reviewed the measurement instrument, a pilot test was performed on a small sample of clothing customers, prior to a large-scale survey. On the grounds of pilot testing, minor modifications were made related to the wording of the questionnaire items.

Green consumption values (GCV) were measured with six items which were adopted from the study of Haws et al. [17]. To measure receptivity to green communication (RGC), nine items were used, based on a recent study [18]. Six items were borrowed from a recent study [52] to measure the level of consciousness when it comes to consumption in general (CC). Environmentally and socially responsible apparel consumption (ESRAC) was measured with ten items borrowed from the study of Kim and Damhorst [77]. Although the aforementioned authors named the construct environmentally responsible apparel consumption, as it also addressed customers' care for fair trade practice of apparel companies, we deemed it appropriate to slightly rename the constructs.

3.3. Data Analyses

To examine dimensionality of multiple item constructs included in the study and obtain inputs for item parceling procedure, exploratory factor analysis (EFA) with varimax rotation was performed first. Structural equation modeling (SEM), with maximum likelihood as a method of parameter estimation, was applied to examine relationships among the constructs and their influence on environmentally and socially responsible apparel consumption. Anderson and Gerbing's [86] two-step procedure was followed, which implies the estimation of a measurement model and examination of constructs' reliability and validity prior to the examination of structural relationships. Confirmatory factor analysis (CFA) was performed to estimate measurement model. To examine indirect and total effects on environmentally and socially responsible apparel consumption, we performed maximum likelihood bootstrapping procedure, with 1000 subsamples and 95% bias-corrected confidence intervals, following recommendations of Cheung and Lau [87]. SPSS v.17 and Amos 16 were used for data processing.

4. Results and Discussion

4.1. Demographic Characteristics of the Sample

Demographic profile of respondents was as follows: Significantly more female (78.1%) than male respondents (21.9%) participated in the study. The average age among respondents was 22.34 (St.Dev. = 2.739). The majority of respondents were students (65.8%), followed by students who were also employed (19.8%), whereas those who are only employed accounted for 11.2% of the sample. Living with parents and/or siblings was indicated by majority of respondents (67.4%), followed by sharing accommodation with another adult person to whom they were not related (13.7%), whereas 10% of respondents indicated living with a spouse and 8.9% of respondents indicated living in a single-member household. More than one third of respondents (35.3%) indicated spending between 101 and 200 EUR on acquiring new apparel per season, followed by those who indicated spending up to 100 EUR on new clothes per season (23.5%), whereas 16.6% of respondents indicated spending between 201 and 300 EUR on new clothes per season. Buying up to 5 clothing items per season was indicated by 39.4% of respondents, followed by buying between 6 and 10 items per season (35.3%), and more than 10 items per season (15%), whereas 10.3% of respondents indicated not being able to estimate the amount of new clothing items bought per season.

4.2. Exploratory Factor Analysis

We first examined the presence of common method bias in the data [88] by performing Harman's single factor test. As first extracted factor of an unrotated solution accounted for 35.74% of variance in the data, common method bias was not a problem in this study. Principal component analysis (PCA) with varimax rotation was performed to examine underlying dimensions of the constructs included in this study, as with the exception of GCV and CC, other latent variables were measured with more than six items. Extraction of factors was based on eigenvalues higher than one, whereas factor loadings less than 0.40 were suppressed. Kaiser–Meyer–Olkin measure of sampling adequacy above 0.80 ($KMO = 0.932$) and significance of Bartlett's test of sphericity ($\chi^2_{(465)} = 9341.991, p < 0.001$) imply that there is significant correlation among at least some of the variables included in the analysis [89], indicating the adequacy of the sample data for factor analysis. During the iterative procedure, two items were excluded from further analysis, one loading above 0.40 on two factors and the other with a loading lower than 0.40 on each factor, which finally resulted in a four-factor structure explaining 64.682% of the variance in the data. Latent factors which resulted from PCA exhibited satisfactory internal consistency. Results of exploratory factor analysis and Cronbach's alpha values corresponding to latent factors are presented in Table 1.

Table 1. Rotated component matrix.

		Components			
		1	2	3	4
RGC5	I am the kind of consumer who responds favorably when brands use green messages in their ads.	0.884			
RGC4	I respond favorably to brands that use green messages in their advertising.	0.883			
RGC6	I think that green advertising is valuable.	0.874			
RGC7	Green advertising is a necessary form of advertising.	0.792			
RGC2	I tend to pay attention to advertising messages that talk about the environment.	0.783			
RGC3	The use of green messages in ads affects my attitude toward the ads.	0.782			
RGC1	I support brands that support the environment.	0.743			
RGC8	I am the kind of consumer who is willing to purchase products marketed as being green.	0.743			
RGC9	I tend to pay attention to green advertising messages.	0.722			
ESRAC8	I buy apparel with environmentally friendly labeling.		0.802		
ESRAC7	I buy apparel of low impact or no dye processing.		0.791		
ESRAC6	I buy clothing made of organically or eco-friendly fibers.		0.751		
ESRAC4	I avoid an apparel product because of environmental concern.		0.746		
ESRAC10	I buy apparel brought to market with fair trade practices.		0.708		
ESRAC1	I buy apparel from recycled material.		0.640		
ESRAC9	I buy apparel with environmentally friendly packaging techniques.		0.639		
ESRAC3	I purposely select fabrics that require cooler washing temperatures, shorter drying time, or less ironing.		0.592		
ESRAC5	I select apparel that you can wear over a longer term compared to trendy apparel that goes out of style quickly.		0.419		

Table 1. Cont.

		Components			
		1	2	3	4
ESRAC2	<i>I buy second-hand apparel *</i>				
GCV3	My purchase habits are affected by my concern for our environment.			0.776	
GCV2	I consider the potential environmental impact of my actions when making many of my decisions.			0.768	
GCV1	It is important to me that the products I use do not harm the environment.			0.690	
GCV5	I would describe myself as environmentally responsible.			0.682	
GCV4	I am concerned about wasting the resources of our planet.			0.650	
GCV6	I am willing to be inconvenienced in order to take actions that are more environmentally friendly.			0.642	
CC3	I avoid using things in a wasteful manner.				0.882
CC2	I use things in moderation.				0.859
CC1	I avoid wasteful consumption.				0.824
CC6	I take only as much as I can consume, to avoid wastage.				0.778
CC4	I turn/switch things off when not in use.				0.520
CC5	<i>I use things completely to ensure zero waste *</i>				
Cronbach's alpha		0.948	0.890	0.886	0.852
Eigenvalues		6.541	4.935	3.735	3.546
Cumulative % of variance		22.556	39.573	52.453	64.682

Note: RGC—receptivity to green communication; ESRAC—environmentally and socially responsible apparel consumption; GCV—green consumption values; CC—conscious consumption. * Items which were excluded during the iterative procedure of EFA.

Due to a number of items per factor above five, with the exception of CC, we subsequently applied subset-item-parcel approach [90] in line with Dabholkar et al.'s [91] recommendations for partial aggregation, taking into account the magnitude of factor loadings of items loading on the same factor. Item parcels, which were subsequently used as new indicators of latent constructs in confirmatory factor analysis, were created by two—or at most three—original items, as a mean value of an item with the highest and an item with the lowest loading on the same factor. Item parcels were created for each latent variable being explained by more than five items. Composition of item parcels is presented in Table 2.

4.3. Measurement Analysis

Confirmatory factor analysis was applied on the four-factor structure emanating from EFA—whereas item parcels, instead of original variables—were used as indicators of latent constructs, in case of all constructs being measured by more than five items. One item related to conscious consumption (CC4) was eliminated from the model, due to a standardized estimate below 0.50. Measurement analysis indicated acceptable fit of the model to the data, as indicated by obtained fit indices, which are displayed in Table 2. Statistically significant standardized factor loadings ranging in magnitude from 0.698 to 0.942 indicated convergent validity of the constructs [86]. Evidence in support of convergent validity was also provided by average variances accounted for by the constructs in relation to the amount of variance due to measurement error (AVEs) which were above 0.50 [92]. Reliability of the constructs was also supported, as composite reliability scores (CR) and

Cronbach's alpha values were above the recommended level of 0.70 [89], as displayed in Table 2.

Table 2. Results of measurement model estimation.

Item Parcels	Composition of Item Parcels	St. Estimates	t-Value	AVE	CR	Cronbach's Alpha
GCV_IP1	Mean (GCV3, GCV6)	0.898	24.116	0.771	0.909	0.907
GCV_IP2	Mean (GCV2, GCV4)	0.885	23.664			
GCV_IP3	Mean (GCV1, GCV5)	0.851	-			
RGC_IP1	Mean (RGC5, RGC9)	0.942	-			
RGC_IP2	Mean (RGC4, RGC8)	0.934	37.983	0.833	0.952	0.952
RGC_IP3	Mean (RGC6, RGC1)	0.849	28.193			
RGC_IP4	Mean (RGC7, RGC2, RGC3)	0.921	36.142			
CC1	CC1	0.856	16.589			
CC2	CC2	0.871	16.848	0.697	0.901	0.895
CC3	CC3	0.900	17.292			
CC6	CC6	0.698	-			
ESRAC_IP1	Mean (ESRAC8, ESRAC5)	0.807	-			
ESRAC_IP2	Mean (ESRAC7, ESRAC3)	0.777	17.913	0.687	0.898	0.897
ESRAC_IP3	Mean (ESRAC6, ESRAC9)	0.841	19.893			
ESRAC_IP4	Mean (ESRAC4, ESRAC10, ESRAC1)	0.888	21.286			
Obtained fit indices	$\chi^2 / df = 2.365$, GFI = 0.941, AGFI = 0.916, CFI = 0.979, NNFI = 0.974, NFI = 0.964, RMSEA = 0.056, SRMR = 0.035					
Recommended fit indices	$\chi^2 / df < 3$, GFI > 0.90, AGFI > 0.90, CFI > 0.90, NNFI > 0.90, NFI > 0.90, RMSEA < 0.08, SRMR < 0.08 [59,89,93]					

Discriminant validity of the constructs was supported as square root of the average variance extracted of each construct was above the highest among correlations it achieved with any other construct [94], as displayed in Table 3.

Table 3. Discriminant validity of the constructs.

	GCV	RGC	CC	ESRAC
GCV	0.878			
RGC	0.599	0.913		
CC	0.416	0.209	0.835	
ESRAC	0.644	0.469	0.427	0.829

Note: Elements on the diagonal represent square root of AVEs, whereas off-diagonal elements are correlations.

4.4. Structural Analysis

After supporting the measurement model, structural analysis was performed in the following stage to examine relationships among the constructs and their impact on environmentally and socially responsible apparel consumption. The analysis resulted in overall good fit of the model to the data, as indicated by fit indices ($\chi^2/df = 2.365$, GFI = 0.941, AGFI = 0.916, CFI = 0.979, NNFI = 0.974, NFI = 0.964, RMSEA = 0.056, SRMR = 0.035). Satisfactory fit of the model enabled us to move to the examination of the proposed hypotheses. The construct of green consumption values emerged as a significant direct predictor of receptivity to green communication ($\gamma = 0.599$, $t = 12.883$) and conscious consumption ($\gamma = 0.453$,

$t = 6.693$). Hence, support was provided to H1 and H2. Contrary to what was expected, the impact of receptivity to green communication on conscious consumption was not positive, but also the relationship was not statistically significant at $p < 0.05$ level. Therefore, support was not provided to H3. Results of the study indicated that environmentally and socially responsible apparel consumption was positively and significantly influenced by receptivity to green communication ($\beta = 0.142$, $t = 2.711$), conscious consumption ($\beta = 0.199$, $t = 4.192$), and green consumption values ($\gamma = 0.476$, $t = 7.707$), which provided support to H4, H5, and H6. Results of hypothesis testing are displayed in Table 4 and graphically presented in Figure 2.

Table 4. Results of structural analysis.

Hypotheses	St. Path Coefficients	t-Value	p-Value	Results of Hypothesis Testing
H1: GCV \rightarrow RGC	0.599	12.883	$p < 0.01$	supported
H2: GCV \rightarrow CC	0.453	6.693	$p < 0.01$	supported
H3: RGC \rightarrow CC	−0.063	−1.024	$p > 0.05$	Not supported
H4: RGC \rightarrow ESRAC	0.142	2.711	$p < 0.01$	supported
H5: CC \rightarrow ESRAC	0.199	4.192	$p < 0.01$	supported
H6: GCV \rightarrow ESRAC	0.476	7.707	$p < 0.01$	supported

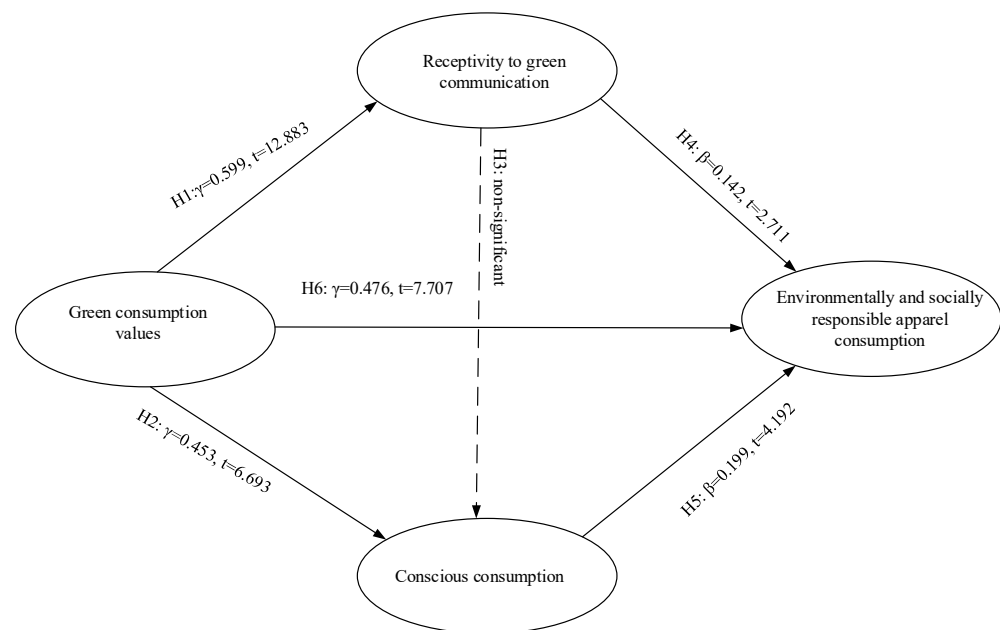


Figure 2. Results of hypothesis testing.

Among the direct antecedents to environmentally and socially responsible apparel consumption, green consumption values emerged as its most influential predictor, followed by conscious consumption and receptivity to green communication. As indicated by the bootstrapping procedure, the impact of green consumption values on environmentally and socially responsible apparel consumption was also mediated via conscious consumption and receptivity to green communication. Therefore, taking into account its direct and mediated impact, green consumption values emerged as the most influential determinant of environmentally and socially responsible apparel consumption in terms of total effect. Standardized indirect and total effect on environmentally and socially responsible apparel consumption are displayed in Table 5. As 95% confidence interval related to the indirect effect of receptivity to green communication on environmentally and socially responsible apparel consumption contained the value of zero, this relationship was not significant.

Table 5. Standardized indirect and total effects on environmentally and socially responsible apparel consumption.

Indirect Effects				Total Effects			
Path	St. Estimate	95%CI	p-Value	Path	St. Estimate	95%CI	p-Value
GCV → ESRAC	0.168	[0.090, 0.240]	$p < 0.01$	GCV → ESRAC	0.644	[0.581, 0.706]	$p < 0.01$
RGC → ESRAC	−0.012	[−0.046, 0.012]	$p > 0.05$	RGC → ESRAC	0.142	[0.018, 0.235]	$p < 0.05$
				CC → ESRAC	0.199	[0.102, 0.283]	$p < 0.01$

In terms of R^2 , the proposed model explained 45.8% of variance in environmentally and socially responsible apparel consumption; whereas 35.9% and 17.5% of variance was explained in receptivity to green communication and conscious consumption, respectively. This finding implies that, though satisfactory from the perspective of explanatory power, proposed model can be enhanced in future research to include other potentially relevant determinants of young adult consumers' environmentally and socially responsible clothing choices.

4.5. Discussion

Findings of this study indicate positive and significant effect of green consumption values on receptivity to green communication, which implies that with the increase in customers' concern for the environment and at a higher level of self-perception as an eco-responsible consumer, customers' receptivity to green communication increases. This result is consistent with the findings of Bailey et al. [95], according to which green consumption values positively affected customers' attitudes towards green advertising. Green consumption values also emerged as a significant direct predictor of conscious consumption. This finding is in compliance with do Paco et al.'s [18] claim that consumers who nurture stronger green consumption values are more inclined towards preserving resources and consuming in a responsible manner. Similarly, Haws et al.'s [17] study indicated that consumers with stronger green consumptions values were more frugal, had higher level of self-control over spending their financial resources and tended to use their physical possessions without wastage. Relatedness between green consumption values and environmentally responsible consumption, which includes conscious consumption, has been also supported by Gupta and Agrawal [59]. Contrary to what was expected, receptivity to green communication did not have a significant impact on conscious consumption. This means that attentiveness to companies' and brands' green marketing communication will not invoke customers' intentions to be more rational and efficient in their consumption. Taking into account explained variance in conscious consumption (17.5%), factors other than brands' green advertising would be more successful in motivating customers to avoid wasteful consumption. Perhaps governmental and non-governmental bodies should take more active role in curbing over-consumption by educating customers how to behave rationally and efficiently in the usage of resources.

Results of the study indicate receptivity to green communication as a significant direct predictor of environmentally and socially responsible apparel consumption. In a similar vein, a recent study of Tewari et al. [96] provided support to the impact of receptivity to green communication on young Indian customers' intentions to purchase green apparel. Significant impact of receptivity to green communication on customer green buying behavior was also supported by Do Paco et al. [18]. In compliance with the aforementioned study, receptivity to green communication emerged as the least influential among the direct determinants of responsible apparel consumption. This implies that a society in whose best interests is to promote sustainability in consumption, including young people's apparel consumption, should not leave that role only to brands' and companies' green advertising. Conscious consumption emerged as a more influential direct determinant of young consumers' responsible apparel consumption in comparison with receptivity

to green communication. This finding suggests that with the rise of young customers' awareness of the impact of their consumption choices, they will become more willing to behave in environmentally and socially responsible manner when it comes to their clothing consumption, which again emphasizes the relevance of awareness campaigns directed towards young consumers. Taking into account its direct and indirect effect on environmentally and socially responsible apparel consumption, mediated via receptivity to green communication and conscious consumption, green consumption values emerged as the most influential determinant of environmentally and socially responsible apparel consumption. This finding corroborates recent research according to which green consumption values are the main determinant of consumers' eco-responsible purchase and consumption decisions [18]. Indirect contribution of green consumption values to customer purchase intentions in a context of a developing economy was also supported by an earlier study [95]. Another recent study has also provided evidence in support of direct and indirect contribution of environmental values—altruistic and biospheric—to green apparel consumption [30]. The most influential contribution of green consumption values on responsible apparel consumption implies that instilling green consumption values into young adult customers should be prioritized, to motivate them to favor sustainable garments over conventional garments in making purchase decisions.

5. Conclusions

The objective of this study was to propose a model of the determinants of young adult consumers' environmentally and socially responsible apparel consumption in an under-researched context of a developing European economy and examine their relative contribution to consumers' choices. Findings of the study point to green consumption values as the most influential determinant of environmentally and socially responsible apparel choices, followed by conscious consumption and receptivity to green communication. The study contributes to the literature by enhancing our knowledge of the determinants of environmentally and socially responsible apparel consumption, which thus far has been a significantly less examined topic in comparison with other domains of sustainable consumption, especially in the context of emerging European economies [96,97].

Results of the study provide relevant insights for policymakers, environmentalists, and apparel businesses. Findings can contribute to the development of empirically based policies and projects aimed at achieving progress towards greater sustainability, and prevention of reckless consumption of natural resources and the consequent damage to the environment [98]. According to the present study, instilling green consumption values should be prioritized by policymakers and activists to promote environmentally and socially responsible apparel consumption among young adult customers. This can be achieved by educating young consumers about environmental footprint of clothing production, consumption and disposal and the impact of unsustainable clothing choices on the depletion of resources of our planet and endangering of the well-being of future generations. At a higher level of green consumption values, young customers will be also more attentive to green communication of pro-environmental clothing retailers and brands. Adoption of green consumption values makes young customers also more prone to moderate consumption and wastage avoidance, which will positively influence their environmentally and socially responsible apparel choices. As young consumers are active users of social media [30], this instrument can be used by various stakeholders of sustainable consumption to promote the notion of personal responsibility for environmental preservation among the youth. If applied by clothing retailers, displaying opportunities for upcycling of used clothing with the aim of extending its useful life, and motivating customers to engage and share their experiences with peers, could not only promote conscious consumption among the youth, but this practice could also contribute to a higher level of brand involvement among young consumers, increase their trust and commitment towards an apparel brand, and lead to increased performances of the brand in the future. Receptivity to green communication may also serve as a segmentation variable and enable environmentally conscious apparel retailers and brands

to target those customers who are more inclined towards green communication, provided that the segment is substantial. This notion is supported by Bailey et al.'s [43] findings, according to which customers who are highly receptive to green communication hold more favorable attitudes towards the advertiser and its messages, and have higher purchase intentions. The adoption of green consumption values by young customers enhances their receptivity to green marketing communication and contributes to their responsible clothing choices. This also provides an opportunity for emerging micro and small businesses in the area of collaborative clothing consumption to reach young customers, who are heavy users of fashion and who may be more interested into collaborative consumption, taking into account their limited purchasing power. However, young customers' predisposition towards collaborative apparel consumption should be more thoroughly addressed by future studies. An interesting finding of this research, stemming from EFA, is that respondents of this study do not perceive buying second-hand garments as a mode of environmentally and socially responsible clothing. How customers from developing economies perceive second-hand clothing consumption, in comparison with customers from developed economies, would be an avenue worthy of future examinations. Emerging economies are destination markets for used clothing stemming from developed countries and lower quality goods are being sent to developing markets. A recent study indicates high social risk as a barrier towards second-hand clothing among Chinese customers [99].

Some limitations of the present research should be noted. The main limitation of the study is the scope of its sample and sampling procedure applied for this research. As young adult customers who participated in this research were mainly university students and their acquaintances, the study was biased towards more educated young adults residing in the capital city. Future research would benefit from a more probabilistic sampling. Furthermore, it is highly possible that research findings—which are related solely to young consumers—would not necessarily apply to general population. Therefore, future research could be conducted on a more demographically diverse sample. The cross-sectional nature of this study—due to which causal relationships revealed by this research should be regarded with caution, and precludes generalization of research findings to the population of young adult clothing customers in general—is also among its limitations. Hence, future research would benefit from a longitudinal design of a study. To a limited generalizability of this research findings also contributes to the fact that a sample of young clothing customers was drawn from only one country. Future research would benefit from replicating this study in other cultural and economic settings and expanding research to more than one country. An avenue worthy of future examination would be a comparison of consumers' clothing choices among different generational cohorts. It could be expected that the prevalence of fast fashion orientation, which is typically associated with clothing consumption of younger generations [100], would negatively moderate the relationship between conscious consumption and sustainable clothing. Hence, another promising area for future research would be an examination of the moderating role of customer personal characteristics on the relationship between green consumption values, conscious consumption, and sustainable clothing consumption.

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References

1. Diddi, S.; Yan, R.-N.; Bloodhart, B.; Bajtelsmit, V.; McShane, K. Exploring young adult consumers' sustainable clothing consumption intention-behavior gap: A Behavioral Reasoning Theory perspective. *Sustain. Prod. Consump.* **2019**, *18*, 200–209. [CrossRef]
2. Armstrong, C.M.; Niinimäki, K.; Lang, C.; Kujala, S. A use-oriented clothing economy? Preliminary affirmation for sustainable clothing consumption alternatives. *Sustain. Dev.* **2016**, *24*, 18–31. [CrossRef]
3. Roos, S.; Sandin, G.; Zamani, B.; Peters, G.; Svanström, M. Will Clothing be Sustainable? Clarifying Sustainable Fashion. In *Textiles and Clothing Sustainability, Textile Science and Clothing Technology*; Muthu, S.S., Ed.; Springer: Singapore, 2017; pp. 1–45. ISBN 978-981-10-2182-4. [CrossRef]
4. European Commission. Questions and Answers on EU Strategy for Sustainable and Circular Textiles. Available online: https://ec.europa.eu/commission/presscorner/detail/en/QANDA_22_2015 (accessed on 5 July 2022).
5. Connell, K.Y.H.; Kozar, J.M. Environmentally Sustainable Clothing Consumption: Knowledge, Attitudes, and Behavior. In *Roadmap to Sustainable Textiles and Clothing*; Muthu, S.S., Ed.; Springer: Singapore, 2014; pp. 41–61. ISBN 978-981-287-110-7. [CrossRef]
6. Park, H.J.; Lin, L.M. Exploring Attitude–Behavior Gap in Sustainable Consumption: Comparison of Recycled and Upcycled Fashion Products. *J. Bus. Res.* **2020**, *117*, 623–628. [CrossRef]
7. Mammadli, M. Environmentally responsible business approaches in Azerbaijan. *Sustainability* **2022**, *14*, 6227. [CrossRef]
8. Tran, K.; Nguyen, T.; Tran, Y.; Nguyen, A.; Luu, K.; Nguyen, Y. Eco-friendly fashion among generation Z: Mixed-methods study on price value image, customer fulfillment, and pro-environmental behavior. *PLoS ONE* **2022**, *17*, e0272789. [CrossRef]
9. Statista. Sustainable Clothing Sales Share Worldwide 2013–2026. Available online: <https://www.statista.com/forecasts/1307848/worldwide-sales-of-sustainable-clothing-items> (accessed on 15 September 2022).
10. Leclercq-Machado, L.; Alvarez-Risco, A.; Gómez-Prado, R.; Cuya-Velásquez, B.B.; Esquerre-Botton, S.; Morales-Ríos, F.; Almanza-Cruz, C.; Castillo-Benancio, S.; de las Anderson-Seminario, M.M.; Del-Aguila-Arcenales, S.; et al. Sustainable Fashion and Consumption Patterns in Peru: An Environmental Attitude-Intention-Behavior Analysis. *Sustainability* **2022**, *14*, 9965. [CrossRef]
11. Kulakova, O.; Kostiuchenko, O.; Tymoshenko, O. Fashion Industry in the Context of Sustainable Development: Eco-Products, Conscious Consumption and Management. *Socio Cult. Manag. J.* **2021**, *4*, 126–142. [CrossRef]
12. Harris, F.; Roby, H.; Dibb, S. Sustainable clothing: Challenges, barriers and interventions for encouraging more sustainable consumer behaviour. *Int. J. Consum. Stud.* **2016**, *40*, 309–318. [CrossRef]
13. Englis, B.G.; Phillips, D.M. Does innovativeness drive environmentally conscious consumer behavior? *Psychol. Mark.* **2013**, *30*, 160–172. [CrossRef]
14. Dursun, I. Psychological Barriers to Environmentally Responsible Consumption. In *Ethics, Social Responsibility and Sustainability in Marketing, Accounting, Finance, Sustainability, Governance & Fraud: Theory and Application*; Altinbasak-Farina, I., Burnaz, S., Eds.; Springer: Singapore, 2019; pp. 103–128. ISBN 978-981-13-7924-6. [CrossRef]
15. Hill, J.; Lee, H.H. Young generation Y consumers' perceptions of sustainability in the apparel industry. *J. Fash. Mark. Manag.* **2012**, *16*, 477–491. [CrossRef]
16. Su, J.; Watchravesringkan, K.T.; Zhou, J.; Gil, M. Sustainable clothing: Perspectives from US and Chinese young Millennials. *Int. J. Retail Distrib.* **2019**, *47*, 1141–1162. [CrossRef]
17. Haws, K.L.; Winterich, K.P.; Naylor, R.W. Seeing the world through GREEN-tinted glasses: Green consumption values and responses to environmentally friendly products. *J. Consum. Psychol.* **2014**, *24*, 336–354. [CrossRef]
18. Do Paço, A.; Shiel, C.; Alves, H. A new model for testing green consumer behaviour. *J. Clean. Prod.* **2019**, *207*, 998–1006. [CrossRef]
19. Koenig-Lewis, N.; Palmer, A.; Dermody, J.; Urbye, A. Consumers' evaluations of ecological packaging—Rational and emotional approaches. *J. Environ. Psychol.* **2014**, *37*, 94–105. [CrossRef]
20. Maichum, K.; Parichatnon, S.; Peng, K.-C. Application of the extended theory of planned behavior model to investigate purchase intention of green products among Thai consumers. *Sustainability* **2016**, *8*, 1077. [CrossRef]
21. Kopplin, C.S.; Rösch, S.F. Equifinal causes of sustainable clothing purchase behavior: An fsQCA analysis among generation Y. *J. Retail. Consum. Serv.* **2021**, *63*, 102692. [CrossRef]
22. Prakash, G.; Pathak, P. Intention to buy eco-friendly packaged products among young consumers of India: A study on developing nation. *J. Clean. Prod.* **2017**, *141*, 385–393. [CrossRef]
23. Bailey, A.A.; Mishra, A.S.; Tiamiyu, M.F. Application of GREEN scale to understanding US consumer response to green marketing communications. *Psychol. Mark.* **2018**, *35*, 863–875. [CrossRef]
24. Gupta, S.; Agrawal, R. Do Consumers Having Different Levels of Green Consumption Value and Frugality Have Same or Different Levels of Participation in Environmentally Responsible Consumption Behaviors? An Extended Abstract. In *Creating Marketing Magic and Innovative Future Marketing Trends. Developments in Marketing Science: Proceedings of the 2016 Academy of Marketing Science*; Stieler, M., Ed.; Springer: Cham, Switzerland, 2017; pp. 821–827. ISBN 978-3-319-45596-9. [CrossRef]
25. Chatterjee, S.; Sreen, N.; Sadarangani, P.H.; Gogoi, B.J. Impact of green consumption value, and context-specific reasons on green purchase intentions: A behavioral reasoning theory perspective. *J. Glob. Mark.* **2022**, *35*, 285–305. [CrossRef]

26. Varshneya, G.; Pandey, S.K.; Das, G. Impact of social influence and green consumption values on purchase intention of organic clothing: A study on collectivist developing economy. *Glob. Bus. Rev.* **2017**, *18*, 478–492. [\[CrossRef\]](#)
27. Wang, J.; Wang, J.; Gao, J. Effect of Green Consumption Value on Consumption Intention in a Pro-Environmental Setting: The Mediating Role of Approach and Avoidance Motivation. *SAGE Open* **2020**, *10*, 2158244020902074. [\[CrossRef\]](#)
28. Ramayah, T.; Lee, J.W.C.; Mohamad, O. Green product purchase intention: Some insights from a developing country. *Resour. Conserv. Recycl.* **2010**, *54*, 1419–1427. [\[CrossRef\]](#)
29. Cheung, M.F.Y.; To, W.M. An extended model of value-attitude-behavior to explain Chinese consumers' green purchase behavior. *J. Retail. Consum. Serv.* **2019**, *50*, 145–153. [\[CrossRef\]](#)
30. Liang, J.; Li, J.; Lei, Q. Exploring the influence of environmental values on green consumption behavior of apparel: A chain multiple mediation model among Chinese Generation Z. *Sustainability* **2022**, *14*, 12850. [\[CrossRef\]](#)
31. de Groot, J.I.M.; Steg, L. Mean or green: Which values can promote stable pro-environmental behavior? *Conserv. Lett.* **2009**, *2*, 61–66. [\[CrossRef\]](#)
32. Jacobs, K.; Petersen, L.; Hörisch, J.; Battenfeld, D. Green thinking but thoughtless buying? An empirical extension of the value-attitude-behaviour hierarchy in sustainable clothing. *J. Clean. Prod.* **2018**, *203*, 1155–1169. [\[CrossRef\]](#)
33. Sangroya, D.; Nayak, J.K. Factors influencing buying behaviour of green energy consumer. *J. Clean. Prod.* **2017**, *151*, 393–405. [\[CrossRef\]](#)
34. Shao, J.; Ünal, E. What do consumers value more in green purchasing? Assessing the sustainability practices from demand side of business. *J. Clean. Prod.* **2019**, *209*, 1473–1483. [\[CrossRef\]](#)
35. Davari, A.; Strutton, D. Marketing mix strategies for closing the gap between green consumers' pro-environmental beliefs and behaviors. *J. Strat. Mark.* **2014**, *22*, 563–586. [\[CrossRef\]](#)
36. Bickart, B.A.; Ruth, J.A. Green eco-seals and advertising persuasion. *J. Advert.* **2012**, *41*, 51–67. [\[CrossRef\]](#)
37. Fowler, A.R.; Close, A.G. It ain't easy being green: Macro, meso, and micro green advertising agendas. *J. Advert.* **2012**, *41*, 119–132. [\[CrossRef\]](#)
38. Green, T.; Peloza, J. Finding the right shade of green: The effect of advertising appeal type on environmentally friendly consumption. *J. Advert.* **2014**, *43*, 128–141. [\[CrossRef\]](#)
39. Reich, B.J.; Soule, C.A.A. Green demarketing in advertisements: Comparing "Buy green" and "Buy less" appeals in product and institutional advertising contexts. *J. Advert.* **2012**, *41*, 441–458. [\[CrossRef\]](#)
40. Sahin, S.; Baloglu, S.; Topcuoglu, E. The influence of green message types on advertising effectiveness for luxury and budget hotel segments. *Cornell Hosp. Q.* **2020**, *61*, 443–460. [\[CrossRef\]](#)
41. Alamsyah, D.P.; Othman, N.A.; Mohammed, H.A.A. The awareness of environmentally friendly products: The impact of green advertising and green brand image. *Manag. Sci. Lett.* **2020**, *10*, 1961–1968. [\[CrossRef\]](#)
42. Pagiaslis, A.; Krontalis, A.K. Green Consumption Behavior Antecedents: Environmental Concern, Knowledge, and Beliefs. *Psychol. Mark.* **2014**, *31*, 335–348. [\[CrossRef\]](#)
43. Rochikashvili, M.; Bongaerts, J.C. How Eco-Labeling Influences Environmentally Conscious Consumption of Construction Products. *Sustainability* **2018**, *10*, 351. [\[CrossRef\]](#)
44. Cho, Y.-N.; Soster, R.L.; Burton, S. Enhancing Environmentally Conscious Consumption through Standardized Sustainability Information. *J. Consum. Aff.* **2017**, *52*, 393–414. [\[CrossRef\]](#)
45. Bailey, A.A.; Mishra, A.; Tamiyu, M.F. Green advertising receptivity: An initial scale development process. *J. Mark. Com.* **2016**, *22*, 327–345. [\[CrossRef\]](#)
46. Chang, H.; Zhang, L.; Xie, G.-X. Message framing in green advertising: The effect of construal level and consumer environmental concern. *Int. J. Advert.* **2015**, *34*, 158176. [\[CrossRef\]](#)
47. Chen, M.-Y.; Chiu, C.-I. Go green: How to influence the perceived effectiveness of a green product? *Int. J. Adv.* **2016**, *35*, 622–641. [\[CrossRef\]](#)
48. Cerri, J.; Testa, F.; Rizzi, F. The more I care, the less I will listen to you: How information, environmental concern and ethical production influence consumers' attitudes and the purchasing of sustainable products. *J. Clean. Prod.* **2018**, *175*, 343–353. [\[CrossRef\]](#)
49. Tucker, E.M.; Rifon, N.J.; Lee, E.M.; Reece, B.B. Consumer receptivity to green ads: A test of green claim types and the role of individual consumer characteristics for green ad response. *J. Advert.* **2012**, *41*, 9–23. [\[CrossRef\]](#)
50. Ku, H.-H.; Kuo, C.-C.; Wu, C.-L.; Wu, C.-Y. Communicating green marketing appeals effectively: The role of consumers' motivational orientation to promotion versus prevention. *J. Advert.* **2012**, *41*, 41–50. [\[CrossRef\]](#)
51. Parguel, B.; Benoit-Moreau, F.; Russell, C.A. Can evoking nature in advertising mislead consumers? The power of 'Executorial Greenwashing'. *Int. J. Advert.* **2015**, *34*, 107–134. [\[CrossRef\]](#)
52. Fernandes, J.; Segev, S.; Leopold, J.K. When consumers learn to spot deception in advertising: Testing a literacy intervention to combat greenwashing. *Int. J. Advert.* **2020**, *39*, 1115–1149. [\[CrossRef\]](#)
53. Szabo, S.; Webster, J. Perceived greenwashing: The effects of green marketing on environmental and product perceptions. *J. Bus. Ethics* **2021**, *171*, 719–739. [\[CrossRef\]](#)
54. Zhang, L.; Li, D.; Cao, C.; Huang, S. The influence of greenwashing perception on green purchasing intentions: The mediating role of green word-of-mouth and moderating role of green concern. *J. Clean. Prod.* **2018**, *187*, 740–750. [\[CrossRef\]](#)

55. Bulut, C.; Nazli, M.; Aydin, E.; Haque, A.U. The effect of environmental concern on conscious green consumption of post-millennials: The moderating role of greenwashing perceptions. *Young Consum.* **2021**, *22*, 306–319. [\[CrossRef\]](#)
56. Matthes, J.; Wonneberger, A. The skeptical green consumer revisited: Testing the relationship between green consumerism and skepticism toward advertising. *J. Advert.* **2014**, *43*, 115–127. [\[CrossRef\]](#)
57. Tee, P.-K.; Lim, K.-Y.; Ng, C.-P.; Wong, L.-C. Trust in green advertising: Mediating role of environmental involvement. *Int. J. Acad. Res. Bus. Soc. Sci.* **2022**, *12*, 1771–1786. [\[CrossRef\]](#) [\[PubMed\]](#)
58. Musova, Z.; Musa, H.; Matiova, V. Environmentally responsible behaviour of consumers: Evidence from Slovakia. *Econ. Sociol.* **2021**, *14*, 178–198. [\[CrossRef\]](#)
59. Gupta, S.; Agrawal, R. Environmentally responsible consumption: Construct definition, scale development, and validation. *Corp. Soc. Responsib. Environ. Manag.* **2018**, *25*, 523–536. [\[CrossRef\]](#)
60. Agrawal, R.; Gupta, S. Consuming responsibly: Exploring environmentally responsible consumption behaviors. *J. Glob. Mark.* **2018**, *31*, 231–245. [\[CrossRef\]](#)
61. Thøgersen, J. The Motivational Roots of Norms for Environmentally Responsible Behavior. *Basic Appl. Soc. Psych.* **2009**, *31*, 348–362. [\[CrossRef\]](#)
62. Pinto, D.C.; Nique, W.M.; da Silva Añaña, E.; Herter, M.M. Green consumer values: How do personal values influence environmentally responsible water consumption? *Int. J. Consum. Stud.* **2011**, *35*, 122–131. [\[CrossRef\]](#)
63. Kilbourne, W.; Pickett, G. How materialism affects environmental beliefs, concern, and environmentally responsible behavior. *J. Bus. Res.* **2008**, *61*, 885–893. [\[CrossRef\]](#)
64. Patwary, A.K. Examining environmentally responsible behaviour, environmental beliefs and conservation commitment of tourists: A path towards responsible consumption and production in tourism. *Environ. Sci. Pollut. Res. Int.* **2022**. [\[CrossRef\]](#)
65. Urien, B.; Kilbourne, W. Generativity and self-enhancement values in ecofriendly behavioral intentions and environmentally responsible consumption behavior. *Psychol. Mark.* **2022**, *28*, 69–90. [\[CrossRef\]](#)
66. Gahlot Sarkar, J.; Sarkar, A.; Yadav, R. Brand it green: Young consumers' brand attitudes and purchase intentions toward green brand advertising appeals. *Young Consum.* **2019**, *20*, 190–207. [\[CrossRef\]](#)
67. Lascity, M.; Cairns, M. Complicated green advertising: Understanding the promotion of clothing recycling efforts. *Westminst. Pap. Commun. Cult.* **2020**, *15*, 44–62. [\[CrossRef\]](#)
68. Yoon, H.J.; Kim, Y.J. Understanding green advertising attitude and behavioral intention: An application of the health belief model. *J. Promot. Manag.* **2016**, *22*, 49–70. [\[CrossRef\]](#)
69. Ngo, A.-T.; West, G.E.; Calkins, P.H. Determinants of environmentally responsible behaviours for greenhouse gas reduction. *Int. J. Consum. Stud.* **2009**, *33*, 151–161. [\[CrossRef\]](#)
70. Su, L.; Hsu, M.K.; Boostrom, R.E., Jr. From recreation to responsibility: Increasing environmentally responsible behavior in tourism. *J. Bus. Res.* **2020**, *109*, 557–573. [\[CrossRef\]](#)
71. Hu, J.; Xiong, L.; Lv, X.; Pu, B. Sustainable rural tourism: Linking residents' environmentally responsible behaviour to tourists' green consumption. *Asia Pac. J. Tour. Res.* **2021**, *26*, 879–893. [\[CrossRef\]](#)
72. Liobikienė, G.; Grincevičienė, Š.; Bernatoniene, J. Environmentally friendly behaviour and green purchase in Austria and Lithuania. *J. Clean. Prod.* **2017**, *142*, 3789–3797. [\[CrossRef\]](#)
73. Hosta, M.; Zabkar, V. Antecedents of environmentally and socially responsible sustainable consumer behavior. *J. Bus. Ethics* **2021**, *171*, 273–293. [\[CrossRef\]](#)
74. Kang, J.; Liu, C.; Kim, S.-H. Environmentally sustainable textile and apparel consumption: The role of consumer knowledge, perceived consumer effectiveness and perceived personal relevance. *Int. J. Consum. Stud.* **2013**, *37*, 442–452. [\[CrossRef\]](#)
75. Sadachar, A.; Feng, F.; Karpova, E.E.; Manchiraju, S. Predicting environmentally responsible apparel consumption behavior of future apparel industry professionals: The role of environmental apparel knowledge, environmentalism and materialism. *J. Glob. Fash. Mark.* **2016**, *7*, 76–88. [\[CrossRef\]](#)
76. Connell, K.Y. Exploring consumers' perceptions of eco-conscious apparel acquisition behaviors. *Soc. Responsib. J.* **2011**, *7*, 61–73. [\[CrossRef\]](#)
77. Kim, H.-S.; Damhorst, M.L. Environmental Concern and Apparel Consumption. *Cloth. Text. Res. J.* **1998**, *16*, 126–133. [\[CrossRef\]](#)
78. Phau, I.; Ong, D. An investigation of the effects of environmental claims in promotional messages for clothing brands. *Mark. Intell. Plan.* **2007**, *25*, 772–788. [\[CrossRef\]](#)
79. Lim, D.J.J.; Youn, N.; Eom, H.J. Green advertising for the sustainable luxury market. *Australas. Mark. J.* **2021**, *29*, 288–296. [\[CrossRef\]](#)
80. Shen, B.; Kim, Y. Green with Fear: Fear Appeals and Temporal Framing in Eco-Friendly Clothing Advertising. *Cloth. Text. Res. J.* **2022**, *40*, 154–168. [\[CrossRef\]](#)
81. de Lira, J.S.; de Costa, M.F. Theory of planned behavior, ethics and intention of conscious consumption in Slow Fashion Consumption. *J. Fash. Mark. Manag. Int. J.* **2022**, *26*, 905–925. [\[CrossRef\]](#)
82. Vesterinen, E.; Syrjäälä, H. Sustainable anti-consumption of clothing: A systematic literature review. *Clean. Responsible Consum.* **2022**, *5*, 100061. [\[CrossRef\]](#)
83. Kautish, P.; Sharma, R. Consumer values, fashion consciousness and behavioural intentions in the online fashion retail sector. *Int. J. Retail. Distrib. Manag.* **2018**, *46*, 894–914. [\[CrossRef\]](#)

84. Gam, H.J. Are fashion-conscious consumers more likely to adopt eco-friendly clothing? *J. Fash. Mark. Manag.* **2011**, *15*, 178–193. [\[CrossRef\]](#)
85. Kozar, J.M.; Connell, K.Y.H. Socially and environmentally responsible apparel consumption: Knowledge, attitudes, and behaviors. *Soc. Responsib. J.* **2013**, *9*, 315–324. [\[CrossRef\]](#)
86. Anderson, J.C.; Gerbing, D.W. Structural equation modeling in practice: A review and recommended two-step approach. *Psychol. Bull.* **1988**, *103*, 411–423. [\[CrossRef\]](#)
87. Cheung, G.W.; Lau, R.S. Testing Mediation and Suppression Effects of Latent Variables. *Organ. Res. Methods* **2008**, *11*, 296–325. [\[CrossRef\]](#)
88. Podsakoff, P.M.; MacKenzie, S.B.; Lee, J.Y.; Podsakoff, N.P. Common method biases in behavioural research: A critical review of the literature and recommended remedies. *J. Appl. Psychol.* **2003**, *88*, 879–903. [\[CrossRef\]](#) [\[PubMed\]](#)
89. Hair, J.F., Jr.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis*, 7th ed.; Pearson Education Limited: London, UK, 2014; ISBN 10: 1-292-02190-X.
90. Matsunaga, M. Item Parceling in Structural Equation Modeling: A Primer. *Commun. Methods Meas.* **2008**, *2*, 260–293. [\[CrossRef\]](#)
91. Dabholkar, P.A.; Thorpe, D.I.; Rentz, J.O. A measure of service quality for retail stores: Scale development and validation. *J. Acad. Mark. Sci.* **1996**, *24*, 3–16. [\[CrossRef\]](#)
92. Fornell, C.; Larcker, D.F. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *J. Mark. Res.* **1981**, *18*, 39–50. [\[CrossRef\]](#)
93. Kuo, Y.-F.; Wu, C.-M.; Deng, W.-J. The relationships among service quality, perceived value, customer satisfaction, and post-purchase intention in mobile value-added services. *Comput. Hum. Behav.* **2009**, *25*, 887–896. [\[CrossRef\]](#)
94. Mihalache, O.A.; Dumitraşcu, L.; Nicolau, A.I.; Borda, D. Food safety knowledge, food shopping attitude and safety kitchen practices among Romanian consumers: A structural modelling approach. *Food Control* **2021**, *120*, 107545. [\[CrossRef\]](#)
95. Bailey, A.A.; Mishra, A.; Tiarniyu, M.F. GREEN consumption values and Indian consumers' response to marketing communications. *J. Consum. Mark.* **2016**, *33*, 562–573. [\[CrossRef\]](#)
96. Tewari, A.; Mathur, S.; Srivastava, S.; Gangwar, D. Examining the role of receptivity to green communication, altruism and openness to change on young consumers' intention to purchase green apparel: A multi-analytical approach. *J. Retail. Consum. Serv.* **2022**, *66*, 102938. [\[CrossRef\]](#)
97. Kumar, A.; Prakash, G.; Kumar, G. Does environmentally responsible purchase intention matter for consumers? A predictive sustainable model developed through an empirical study. *J. Retail. Consum. Serv.* **2021**, *58*, 102270. [\[CrossRef\]](#)
98. Thompson, K.; Williams, N. 2021 is international year of responsible project management. *Eur. Proj. Manag. J.* **2021**, *11*, 50–52. [\[CrossRef\]](#)
99. Arrigo, E. Collaborative consumption in the fashion industry: A systematic literature review and conceptual framework. *J. Clean. Prod.* **2021**, *325*, 129261. [\[CrossRef\]](#)
100. De Wagenaar, D.; Galama, J.; Sijtsema, S.J. Exploring Worldwide Wardrobes to Support Reuse in Consumers' Clothing Systems. *Sustainability* **2022**, *14*, 487. [\[CrossRef\]](#)

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