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Influencing Factors of Chinese Consumers' Purchase Intention to Sustainable Apparel Products: Exploring Consumer "Attitude–Behavioral Intention" Gap

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Received: 14 January 2020; Accepted: 24 February 2020; Published: 27 February 2020



Abstract: As the rapid economic growth and over-consumption within the largest population worldwide has resulted in harmful environment deterioration, a shift to more sustainable consumption behaviors is required in China. Although public interests in sustainability have increased and consumers' attitudes are positive, their behavioral intentions are not consistent with attitudes. This study aims to uncover psychological drivers and barriers (consumption values, social norms, and attitudes to sustainable apparel products) of Chinese consumers' behavioral intentions toward sustainable apparel products (SAP) by exploring the attitude–behavioral intention gap. Online survey data were used to examine the moderating impacts of consumption values and social norms on relationship between Chinese consumers' attitudes and behavioral intentions toward SAP. Results from moderating regression analysis suggest that (1) Chinese consumers' SAP attitudes had a strong positive effect on the purchase intention toward SAP, (2) aesthetic values positively moderated the relationship between the SAP attitude and purchase intention, whereas conspicuous values negatively moderated the relationship, and (3) utility values and social norms did not show any significant moderating influences on the relationship between the SAP attitude and purchase intention. Our study validates the attitude–behavior gap model in sustainable consumer behavior and discusses how the current findings can assist researchers and practitioners in the Clothing and Textiles field alike to fine-tune sustainable programs and marketing strategies in China.

Keywords: sustainable apparel products; attitude–behavior gap; consumption values; social norms; China

1. Introduction

China, with one quarter of the world's population, the world's fastest rate of economic growth, and sixth highest rate of domestic production in the world [1] (McKinsey Global Institute, 2019), has become the industrial nation with the highest rate of consumption. Overconsumption of natural resources resulted in environmental problems and threatened both the ecological system and human life in China. Over the past three decades, the apparel industry has become one of driving forces in the rapid development of China's economy [2] (Chi, 2015). Although sustainable concepts in the industry have been the focus in past apparel research, the notion of eco-friendliness and sustainability have not received much attention in China [3] (Zheng and Chi, 2014). Huge scales of consumption and the developing apparel industry in China, in conjunction with the implementation and enforcement of government environmental protection regulations, may offer enormous market opportunities for sustainable apparel marketing exchanges. Concerns with sustainable and pro-environmental

issues of government, companies, and individuals have been growing in China [2] (Chi, 2015). Yet even consumers committed to sustainable apparel lack awareness of the sustainability in apparel consumption, with their interpretation of sustainable apparel limited to purchasing behavior [4] (Harris, Roby, and Dibb, 2016).

Sustainability is affected by complex and various situational factors such as apparel product design and brands, which might influence actual purchase decisions [5,6] (Chang and Watchravesringkan, 2018; Yang and Ha-Brookshire, 2019). Even though consumers are willing to make sustainable purchases, they often change their mind at the time of actual purchases. From this perspective, some studies have focused on the gaps between what attitudes consumers have and what they intend or buy [7–9] (Moraes et al., 2012; Shen et al., 2013; Carrington et al., 2014). This attitude–behavior gap framework suggests that some individual factors such as demographics, lifestyle, or other psychological factors [9] (Carrington et al., 2014) create attitude–behavioral intention discrepancies. According to Di Fabio and Rosen [10] (2018), when there is inconsistency in attitudes and behavioral intentions, individuals support their inaction by using social moral norms to the contrary. The attitude–behavior gap is associated with personal and psychological drivers or barriers that promote or constrain sustainable behaviors. These determinants are caused by individual and shared social opinions and values. The present study arouses a need to investigate Chinese consumers' key influencing factors (consumption values and social norms) of the attitude–behavioral intention gap in the buying decision making the process of sustainable apparel products.

Sustainable practices are growing in some areas of the clothing and textile industry [11] (Hong and Kang, 2019). However, there is little research addressing how we can prepare apparel practitioners for the challenges they will face in carrying out sustainable business in the apparel industry, especially in China. The main purpose of the study is to understand Chinese consumer behaviors in the market for sustainable apparel. Specifically, we focus on the gap between consumers' attitudes and purchase intentions toward sustainable apparel products. The impact of consumption values and social norms on consumers' attitudes and purchase intentions toward sustainable apparel products is explored. A psychological approach to sustainability represents a novel area of research [10] (Di Fabio and Rosen, 2018). It is hoped that the present study contributes to the following: (i) to augment the previous psychological literature on Chinese consumption values and social norms particularly regarding how these factors may affect the relationship between the attitudes and behavioral intention toward sustainable apparel products (SAP); (ii) elaborating marketing strategies for encouraging more sustainable consumer behavior in Chinese apparel purchase. The study draws on ideas applying marketing techniques to achieve consuming behavioral changes in contemporary China; and (iii) promoting sustainable apparel consumption in China and ultimately making Chinese consumers achieve well-being in their lives [12] (Di Fabio, 2017).

2. Literature Review

2.1. Sustainable Apparel Consumption in China

Sustainability is a concept that is being developed, not only in the production of products and services, but in consumption as well [13] (Norum, 2013). It has been suggested that sustainability in the apparel industry can be accomplished by employing local resources in design, manufacturing, and distribution, establishing transparent manufacturing systems, and creating products with a longer usable life [14,15] (Clark, 2008; Jung and Jin, 2014). Researchers have identified apparel mending and less frequent laundering of clothes as critical elements of the sustainable apparel consumption process [16] (Lapolla and Sanders, 2015). Sustainability in the apparel industry is a subject of increasing importance in China. The apparel industry can create many environmental problems, including large quantities of harmful wastes, which are generated at every stage of the apparel manufacturing process. Along with increasing global awareness of environmental problems, consumers' awareness of

sustainability has risen as well. Consumers are seeking environmentally friendly clothing, and apparel makers are exploring ways to meet these demands.

Sustainable consumption behavior refers to the extent to which individuals' choices and actions toward products and services lessen environmental impacts, lessen the change of available materials or energy in the environment, or alter the structure of ecosystems [17] (Thøgersen, 2005). Some behaviors, such as buying eco-friendly apparel or recycling clothing, can be sustainable behavior because those behaviors directly or indirectly affect the environment. Apparel consumption refers to purchasing, storing, and using apparel as well as, caring for, the apparel product life cycle, as every process from the manufacture of fibers to the disposal of garments impacts the environmental system [11] (Hong and Kang, 2019). Our study concentrates on apparel acquisition, which is an initial step in the process of environmental apparel consumption.

China is now the biggest CO₂ emitter in the world and demonstrates one of the highest levels of energy consumption. Sustainable consumption is green, moderate, civilized, and healthy and encompasses green consumption and moderate consumption. Sustainable consumption behavior has risen in China, especially in metropolitan cities and some obvious evidence of this can be seen in food purchasing behavior (Yin, Xu, and Chen, 2013). The latest studies have also indicated that considering full product information transparency, consumers are inclined to pay premium prices for goods [18] (Shao and Ünal, 2019). In 2001, the China Consumers Association summarized the concept of green consumption as having three aims: to encourage consumers to choose green products that are beneficial to health or non-pollutive; to reasonably dispose of waste in the process of consumption, and to guide the changing concept of consumption and encourage more attention to be paid to environmental protection, resource conservation, and sustainable consumption while pursuing comfort and health [19] (Shao, 2019).

China is currently facing severe environmental distress, which will require a shift in the consumer culture to allow for a fair sharing of resource access within the limits imposed by the environmental boundaries. However, most consumers are not inclined to reduce their level of consumption, although they may be ready to change its composition toward sustainable consumerism [2,19] (Chi, 2015; Shao, 2019). To overcome public reservation and avoid individualism-based materialism dominating the pursuit of good living standards and the concept of the public good, a new combination of public regulation, citizenship, education, and media information will be necessary. Sustainable consumption is formed by a decision-making process that takes the consumers' social responsibility into account with individual needs and wants [20] (Vermeir and Verbeke, 2006). Everyday consumption practices are still strongly constrained by convenience, habit, value for money, personal health concerns, hedonism, and individual responses to social and institutional norms [21] (Sawang et al., 2014), and, they are likely to be resistant to change. An important driver for change, particularly with respect to sustainability, is the tendency toward reflexivity within a post-modern society, whereby society and its individuals actively reflect upon existing cultural norms.

Tanner and Kast [22] (2003) emphasized the importance of variables such as attitudes, behavioral intention, and individual characteristics including demographics and psychographics to uncover the potential sustainable consumer. A recent study on purchase intentions toward sustainable foods also showed that psychosocial variables like attitudes, beliefs, and subjective norms, more than demographics, independently predict purchase intention for sustainable products [23] (Yamoah and Acquaye, 2019). Despite several studies reporting on barriers and consumer profiles, there is a gap in thorough understanding of consumer decision-making toward sustainable consumption, especially in terms of apparel. Hence, the objective of the present study was first, to investigate the attitude-behavioral intention gap that often arises, and second, to explore which factors influence the intention of purchasing sustainable apparel. We explored the role of individual characteristics, like consumption values and social norms, that could explain sustainable consumption patterns in general and the attitude-behavioral intention gap. Results of this study can assist in future attitude of the targeted groups effectively stimulating more sustainable apparel consumption. This study aims

to identify the possible influence of Chinese consumption values and social norms on sustainable buying behaviors; a review on how these values and norms may form Chinese consumers' views on sustainable behaviors is considered necessary. To fully understand Chinese consumers' sustainable decision-making process for apparel, the consumer attitude–behavior gap needs to be addressed.

2.2. Attitude and Behavior Gap in Sustainable Consumer Decision Making

Both researchers and practitioners have struggled with the lack of commensuration between industry growth and market share and sought out a solution via attitude–behavior research [23] (Yamoah and Acquaye, 2019). This study paid attention to the attitude–behavior gap model to investigate determinants of sustainable consumption in China. A relationship between attitudes towards sustainable consumption, and actual apparel purchase behavior has been found in one of the earliest research studies about socially responsible apparel consumption [24] (Stephens, 1985). Considering actual consumer purchases of sustainable products do not always relate to their sustainable attitude, it is important to understand both formation of purchase intentions and an attitude–behavioral intention gap [9] (Carrington et al., 2014). In the situation of everyday life, various situational factors such as product design or brands might influence actual purchase decisions. Even though consumers are sustainably minded, they often change their minds at the time of the real purchases. In this context, some studies have focused on the gaps between what consumer believe and what they actually intend or do [8] (Shen et al., 2013). This attitude–behavior gap model suggests that some individual factors such as demographics, lifestyle, or other factors [9,25] (Carrington et al., 2014, Hassan et al., 2014) contribute to attitude–behavior discrepancies.

Kollmuss and Agyeman [26] (2002) conceptualized the attitude–behavior gap model with a value system and knowledge of sustainable consumer behavior. Vermeir and Verbeke [20] (2006) proposed the attitude–behavior intention gap model for green food including personal values, involvement and social norms, and tested the model to understand sustainable consumer behavior for sustainable food products. Previous studies emphasized the important role of personal values and social norms on the gap between sustainable consumer attitude and behavioral intention. Recently, Chang and Watchravesringkan [5] (2018) found that actual sustainable apparel buying behavior was influenced by attitudes toward environmentally friendly apparels. In this study, the sustainable attitude–behavioral intention gap model indicates that individual consumption values and social norms have an important moderating role on discrepancies between attitudes and behavioral intentions (see Figure 1).

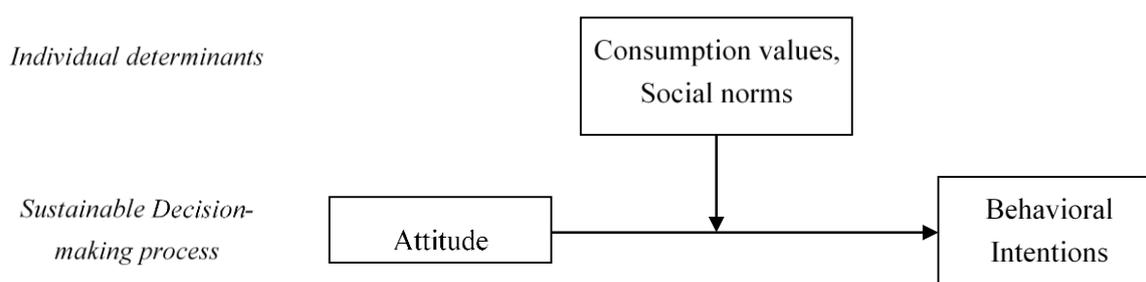


Figure 1. Research framework to explore consumer attitude–behavioral intention gap toward sustainable apparel products (SAP).

2.3. Key Determinants of Sustainable Decision Making

2.3.1. Consumption Values

Values convey the goals and needs that motivate people and appropriate behaviors to achieve these goals/needs. Values can play an important role in the consumer decision process, like product choice and brand choice [27] (Burgess, 1992). Values motivate action, giving it direction and emotional intensity [28] (Schwartz, 2012). For instance, Yin and Singhapakdi [29] (2018) found that people are

more guided by values or beliefs than by consequences when making moral decisions. Holbrook [30] (1999) defines consumer value as interactive between consumers and products or services. Consumer value is relativistic because it involves preferences among objects, it varies among people, and it is specific to the context. Consumption value plays a vital role in consumer behavior studies. Values are central to individual cognitive structure that offers a theoretic basis for attitude analysis [31] (Ajzen, 2001) and the goal-setting nature of a value largely influences rational behavior choices in a society [32] (Steenkamp and Jong, 2010). Wang and Lin [33] (2009) indicated that China has a unique culture and social context. Our study thus aims to elaborate the role of consumption values, which play a major role of sustainable attitudes and behaviors among Chinese consumers.

According to Wagner [34] (1999), aesthetics is considered as a complex concept that is, difficult to define, though it generates pleasure and personal enhancement to the consumer. Despite the substantial literature that has highlighted the importance of aesthetics in art and culture, little attention has been dedicated to the notion of aesthetics in the consumption value research [35] (Sánchez-Fernández et al., 2009). Conspicuous consumption associates with prestige or reputation based on individual effort such as wealth, social status, or power [36] (Podoshen et al., 2011). Conspicuous values involve the prestige and social status that people desire to communicate with other people [37] (Wong and Ahuvia, 1998). It is viewed as a key insight into many consumer behaviors, since reputation achieved from maturation in life is a central value because of its influence in interpersonal relationships in China [36,37] (Podoshen et al., 2011; Huang and Wang, 2018). Utilitarian value begins with a task and consumers' perceived benefits depend on whether the task is done successfully in the process or not [38] (Jones et al., 2006). The quality and utility involve a reactive appreciation of products or consumption's potential ability to perform some function [29] (Holbrook, 1999).

2.3.2. Social Norms

People are significantly influenced by normative effects in their daily lives. Chinese people are inclined to emphasize the goals of the group to which they belong, pay attention to fitting in with others, and appreciate commonalities with others [39] (Bagozzi, Wong, Abe, and Bergami, 2000). There has been a consensus that the social environment strongly affects people's intentions and behaviors [40–43] (Fishbein and Ajzen, 2011; Abrahamse and Steg, 2013; Joshi and Rahman, 2015; Kim and Seock, 2019). Therefore, the concept of social norms has been recognized as a key component of motives and as a critical factor to behavioral influence and change [44] (Reynolds et al., 2015). Social norms are still somewhat underused within the sustainable area (Schultz et al., 2016). The concept of a social norm is one of the important variables in the buying decision-making process [31] (Ajzen, 2001). Social norms play stronger behavioral roles in collectivistic societies. China is a primarily collectivistic society, with emphasis on the group. The important virtue in China is to maintain balance and harmony with the group [45] (Fan, 2000). While social norms can be experienced as social pressure on one's behavior, social norms in China, a collectivist nation, are to conform in the sense of being interrelated to other people [46] (Suh et al., 1998). We thus expect that with a low positive attitude toward a new consumption behavior, sustainable apparel consumption, high levels of social influence will enhance the relationship between that attitude and adoption intent. This study assumes that social norms play a critical role in determining attitudes to SAP, which in turn affect behavioral intentions. Therefore, this study proposes the following hypotheses.

3. Research Hypotheses

The attitude-behavioral intention gap model established by pervious researches [7,47–49] (Bray et al., 2010, Carrigan and Attalla, 2001; Papaoikonomou et al., 2011; Moraes et al., 2012) provides as the base for a conceptual framework to explore determinants of consumer behavioral intention toward sustainable apparel products. In this study, we examined consumption values and social norms on the attitude-behavioral intention gap, respectively. Previous studies have continuously reported the positive relationship between consumers' sustainable attitude and purchase intention.

Even though our focus is sustainable attitude–behavioral intention gap, the influence of consumers' attitude toward SAP on the SAP purchase intention needs to be confirmed as follows:

H1. *Consumers' attitude toward SAP is significantly different from the SAP purchase intentions.*

Consumption values are closely related to consumer attitude and behavior. The consumption value theory of Sheth et al. [50] (1991) suggests that functional, social, emotional, epistemic, and conditional value have a critical role in consumer choice of a brand or product. Based on the product utilities, Holbrook [51] (2005) classified the consumption values into economic, social, hedonic, and altruistic value. Subdimensions of consumption values used in previous studies are slightly different in terms of research contexts. Jung et al. [52] (2014) reported the positive influence of utility and hedonic values on consumers' belief of eco-friendly faux leather products. Yoo et al. [53] (2013) reported that economic and epistemic value positively influenced consumer purchase intentions of bamboo clothing, whereas utility and social value did not show any significant effect on them. Ecology value [54] (Wong and Taylor, 2001) and, economic value [55] (Xu et al., 2014) have been reported as important values in the relationship with consumer behavior toward sustainable clothing. Based on this logic, we explored the influence of consumption values on the relationship between SAP attitude and purchase intention, and we proposed the following:

H2. *Consumption values have a moderating role on the relationship between attitude and purchase intention toward SAP in China.*

The major sustainable consumption model has reported the important role of social norms in consumers' sustainable decisions. Social norms refer to main principles or guidelines for consumer choices as provided by reference groups [7] (Moraes et al., 2012). Welsch and Kühling [56] (2009) suggested that the influence from a reference group had an important role on German consumers' choices of sustainable products. Similarly, Chan [57] (1998) also found that social norms influenced pro-environmental behavior of Hong Kong consumers. Harris et al. [4] (2016) found that social norms were main hindrances for purchasing and disposing sustainable fashion products. Social norms are related to consumers' purchase intention of second-hand clothing (Xu et al., 2014) and avoidance intention of sweatshop clothing [25] (Hassan et al., 2014). Based on this relation, we propose the following:

H3. *Social norms have a moderating role on the relationship between attitude and purchase intention toward SAP in China.*

4. Methodology

4.1. Measures

To test the relationships proposed in the research model, existing instrument scales were adapted to fit the sustainable consumer decision-making framework. The utilitarian value perspectives in product consumption are consistent with the findings of prior studies [58–60] (Hirschman, 1986; Hirschman and Holbrook, 1982; Holbrook and Hirschman, 1982), whereas the aesthetic and conspicuous consumption value was distinctively mentioned by several interviewees in the clothing and textiles product context. Respondents revealed the view that their aesthetic criteria and conspicuous social status could be elevated when they purchased sustainable apparel products, and as a result, they tended to desire to possess well-designed sustainable apparel products and to show them off.

Drawn from the interview findings in conjunction with literature review, a total of nine items were used to measure consumption values [35,50] (Sánchez-Fernández et al., 2009; Sheth et al., 1991). Three questions of social norms were included from previous studies about consumption values [61] (Finch, 2006). After background information of SAP products related to a sustainable consumption perspective had been acquired, three items of attitudes [62] (Ajzen and Fishbein, 1980) and three items of purchase intentions [62] (Ajzen and Fishbein, 1980) toward SAP were included, followed by

demographic questions. The information on SAP in the survey related to their biodegradability and to environmental problems involved in the production of sustainable outdoor wear. All variables were rated on a 7-point Likert-type scale anchored by 1 = strongly disagree and 7 = strongly agree.

4.2. Sample and Procedure

Participants were recruited through a global and professional online-survey company (<http://www.embrain.com/eng/>) and they were informed in writing that completing the questionnaire was anonymous and voluntary and that there were no rewards for completing the questionnaire. The sample for this study consisted of male and female respondents in China ($N = 240$) with ages ranging between 20 and 49 years old. The sample was collected purposefully from the residents of the metropolitan areas of Shanghai, Beijing, and Chengdu in China. Metropolitan residents experience higher levels of mass media exposure, education, and political messaging and may be taken as representative for purposes of both exploring a green product market and conducting an online survey [63] (Kim et al., 2016). An online sample may be unrepresentative of the general population, with a higher proportion of young, educated, wealthy, and urban individuals, particularly in a developing country. Despite limitations regarding generalizing the larger population, assessments of web-based, and crowd-sourced panels have discovered that participant pools are much more varied than other samples of convenience [64] (Chu, 2018). Even though participants were asked about their awareness and previous experiences of sustainable consumption (i.e., SAP consumption), this survey includes all respondents as potential sustainable consumers regardless of their previous knowledge of sustainable consumption.

The profile of survey respondents is summarized in Table 1. A total of 84.6% of the respondents in China were married, and most Chinese respondents (91.3%) had a higher education at the undergraduate and graduate level. The awareness level of SAP tended to be high: a total of 84.6% of the respondents in China were aware of them. Eighty-two percent of Chinese respondents had purchased SAP, indicating a high level of purchase experience of SAP.

Table 1. The profile of survey respondents.

Characteristic	Frequency	Percent (%)	Characteristic	Frequency	Percent (%)
Gender			Education level		
Male	121	50.4	Middle school	16	6.7
Female	119	49.6	High school	3	1.3
Age			Undergraduate	183	78.8
20s	79	32.9	Graduate	30	12.5
30s	80	33.3	Others	2	0.8
40s	81	33.8			
Residence			Marital status		
Shanghai	77	32.1	Married	203	84.6
Beijing	81	33.8	Single	37	15.4
Chengdu	81	33.8			
Awareness of SAP			Purchase experience of SAP		
Yes	203	84.6	Yes	196	81.7
No	37	15.4	No	44	18.3

5. Results

5.1. Construct Validity and Descriptive Statistics

The descriptive and reliability statistics of all items are shown in Table 2. In the confirmatory factor analysis (CFA), the overall fit indices, $\chi^2/df = 1.97$, CFI = 0.95, NFI = 0.91, GFI = 0.90, and RMSEA = 0.06, indicated an overall fitness of the model [65] (Schumacker and Lomax, 2004). As Hair et al. [66] (2010) suggested, the model's reliability and validity were tested. All standardized loading estimates were between 0.68 and 0.89, above the recommended minimum value of 0.5. The variance extracted of

each construct was over the recommended value of 0.5 and the convergent validity was confirmed. The construct reliability estimates were also all above the recommended value of 0.7 to indicate adequate internal consistency. Cronbach's alpha for each factor was higher than 0.7, and the reliability of the measurement was confirmed.

Table 2. Descriptive statistics and reliability test of all items.

Factors and Items	M	SD	Loadings	AVE	CR	Cronbach α
<i>Consumption Values</i>						
<i>Aesthetic Consumption</i>						
I tend to buy a product because its design or color is good even though its quality is low.	5.28	1.12	0.76	0.55	0.73	0.78
When deciding to buy products, I consider their design factors more important than the functional ones.	5.08	1.21	0.76			
I choose unique and differentiated products rather than general and simple ones.	5.39	1.16	0.69			
<i>Conspicuous consumption</i>						
I am envious of people who buy high-end brands.	4.38	1.63	0.75	0.69	0.71	0.87
People who buy high-end products seem to socially succeed.	4.56	1.68	0.89			
People can achieve recognition when they own high-end clothes and accessories.	4.75	1.66	0.85			
<i>Utilitarian consumption</i>						
I think the products' utility is important.	5.87	0.91	0.68	0.49	0.77	0.74
When I choose products, I consider products' value to price ratio important.	6.02	0.90	0.69			
I consider how strong and safe products are when I choose products.	5.89	0.99	0.73			
<i>Social Norms</i>						
I feel a sense of personal obligation to take action to stop the disposal of toxic substances in the air, water, and soil in my community.	6.20	0.93	0.79	0.72	0.87	0.85
We should reduce emissions to help prevent climate change for my family and others.	6.03	1.02	0.85			
We should exercise pressure to preserve the tropical forests for others.	6.28	0.92	0.78			
<i>SAP attitude</i>						
I have an interest in this product.	5.91	1.14	0.82	0.65	0.86	0.88
This product is favorable to me.	6.00	1.09	0.89			
I would like to know more about this product.	6.05	1.03	0.83			
<i>SAP behavioral intention</i>						
I have an intention to buy this product	5.50	1.13	0.86	0.73	0.87	0.89
I have an intention to use this product.	5.26	1.17	0.86			
I have an intention to recommend this product to others.	5.48	1.14	0.84			

5.2. Differences in Attitude and Purchase Intentions

We explored the differences in consumers' SAP attitude and purchase intentions depending on the level of consumption values and social norms (Table 3). Except for consumers with high conspicuous consumption value, the significant differences were identified between the attitude and purchase intention toward the SAP. Attitudes and purchase intentions are stronger among consumers with high consumption value and with stronger social norms. Attitudes and behavioral intentions are stronger among consumers with higher aesthetic and utilitarian consumption values and with stronger social norms. However, attitudes toward the SAP do not differ in consumers' level of conspicuous consumption value.

Table 3. Mean SAP attitude and purchase intention for low versus high consumption values and social norm levels ($n = 240$).

		SAP Attitude Mean (SD)	SAP Purchase Intention Mean (SD)	<i>t</i> -Value
<i>Consumption Values</i>				
<i>Aesthetic Consumption</i>	Low ($n = 105$)	5.58 (1.17)	5.39 (1.11)	2.10 *
	High ($n = 135$)	6.30 (0.65)	6.13 (0.73)	3.06 **
	<i>F</i> -value	36.17 ***	38.64 ***	
<i>Conspicuous consumption</i>	Low ($n = 105$)	5.86 (1.17)	5.52 (1.18)	3.72 ***
	High ($n = 135$)	6.10 (0.78)	6.02 (0.74)	1.11ns
	<i>F</i> -value	3.28 ns	16.10 ***	
<i>Utilitarian consumption</i>	Low ($n = 101$)	5.51 (0.99)	5.37 (0.95)	2.03 *
	High ($n = 139$)	6.33 (0.82)	6.12 (0.89)	2.88 **
	<i>F</i> -value	49.37 ***	39.32 ***	
<i>Social Norms</i>	Low ($n = 101$)	5.42 (0.80)	5.28 (0.86)	2.00 *
	High ($n = 139$)	6.40 (0.89)	6.18 (0.89)	2.91 **
	<i>F</i> -value	77.32 ***	61.71 ***	

SD: Standard deviation. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

5.3. Regression Analysis

A moderated multiple regression (MMR) analysis was conducted to test the moderating role of personal values and social norms on the relationship between the SAP attitude and purchase intentions. All variables in the regression models used their factor scores. MMR was conducted by comparing three regression equations. The first model shows the main effects for predicting a dependent variable Y (i.e., purchase intention toward the SAP) from a predictor X (i.e., consumers' SAP attitude). In the second model, moderators Z (i.e., values and social norms) are added to the first model. In the third model, interaction terms, namely the product between a predictor and moderators ($X \times Z$), are added to the second model. If the F -value of ΔR^2 (R^2 for 3rd model – R^2 for 2nd model) is significant at the 0.05 level or 0.01 level, it indicates the presence of an $X \times Z$ interaction (Aguinis, 1995).

The results of the regressions are shown in Table 4. All regression models were significant ($p < 0.001$). Consumers' SAP purchase intention is the dependent variable. The independent variable was the SAP attitude. The moderating variables include aesthetic value, conspicuous value, utility value, and social norm. The interactions between the independent variable and each of the moderating variables are also added in the 3rd model. Tolerance values were between 0.26 and 0.69, above the recommended minimum value of 0.1 and each of the variance inflation factor (VIF) values was below the recommended maximum value of 10, indicating the generally accepted levels of multicollinearity [66] (Hair et al., 2010). The regression results of model 1 showed the strong positive effect of consumers' SAP attitude on the SAP purchase intention ($\beta = 0.67$, $p < 0.001$). Thus, Hypothesis 1 was supported.

5.4. Testing the Moderating Role of Consumption Values and Social Norms

The F -value of ΔR^2 was significant at the 0.01 level ($F(9.230) = 2.80$, $p < 0.01$). It indicates that the explanatory power of the 3rd model was significantly higher than that of the 2nd model with interaction terms. Interestingly, aesthetic values positively moderate the relationship between the SAP attitude and purchase intention ($\beta = 0.19$, $p < 0.01$), whereas conspicuous values negatively moderated the relationship ($\beta = -0.24$, $p < 0.001$). Utility values and social norms did not show any significant moderating influence on the relationship between the SAP attitude and purchase intention. Therefore, for consumption values, Hypothesis 2 was partly accepted, and Hypothesis 3 is rejected.

Table 4. Moderated multiple regression results for H2 and H3.

Variables	1st Model		2nd Model		3rd Model			
	β		<i>B</i>		β	Tolerance	VIF	
<i>Independent variables</i>								
SAP Attitude	0.67	***	0.42	***	0.40	***	0.37	2.69
<i>Moderating variables</i>								
Aesthetic Value			0.09	Ns	0.10	ns	0.59	1.71
Conspicuous Value			0.24	***	0.24	***	0.69	1.45
Utility Value			0.09	Ns	0.08	ns	0.51	1.95
Social Norm			0.23	***	0.23	***	0.39	2.58
<i>Interaction effect</i>								
SAP Attitude \times Aesthetic Value					0.19	**	0.45	2.21
SAP Attitude \times Conspicuous Value					-0.24	***	0.39	2.54
SAP Attitude \times Utility Value					0.05	ns	0.26	3.79
SAP Attitude \times Social Norm					-0.09	ns	0.27	3.73
R ²	0.45	***	0.58	***		0.60	***	
ΔR^2 (<i>F</i> -value) ^{a)}						0.02(2.80)	**	

a) If the *F*-value of Δ Adjusted R^2 (R^2 for 3rd model— R^2 for 2nd model) is significant at the 0.05 level or 0.01 level, it indicates the presence of an interaction. ** $p < 0.01$, *** $p < 0.001$.

This study contributes to the literature on the attitude behavior gap in the apparel industry, as it is one of few studies investigating the determinants inhibiting sustainable consumption in the apparel industry and explores the purchase criteria for sustainable apparel. The research is developed on previous literatures [20,47,48] (i.e., Carrigan and Attalla, 2001; Vermeir and Verbeke, 2006; Bray et al., 2010) that had a focus on the attitude–behavior gap in the purchase of sustainable or green products. Even though the findings of this study are primarily conforming to existing studies, new justifications also emerge explaining the sustainable apparel industry.

Aesthetic consumption values such as the importance of design, color, and uniqueness of sustainable apparel have found to be positive determinants of the attitude–behavioral intention gap in this study. The Chinese participants may have a predetermined attitude on sustainable apparel, considering it as old-fashioned and uninteresting. Hence, they do not even consider sustainable alternatives in their purchase decision. This result reflects the previous study [67] (Wiederhold and Martinez, 2018) and we verified that the sustainable apparel was not attractive to consumers, suggesting that style and trendy design dominated over sustainable consumption. On the other hand, conspicuous consumption values revealed to be the barrier to sustainable apparel consumption. This study found the negative effects of conspicuous values on sustainable apparel purchase decision. This implies marketing practitioners need to promote that sustainable apparel is not about showing off as consumers think, and to encourage consumers to perceive more value in SAP.

6. Conclusions and Implication

In this study we successfully applied the attitude–behavioral gap framework to explain consumers' sustainable apparel consumption behavior. The findings are as follows: First, consumption values (e.g., aesthetic values, utilitarian values, and social norms) influenced sustainable apparel attitudes and buying intentions [9] (Carrington et al., 2010). Sustainable apparel buying intention was also influenced by attitudes. Even though previous literature often found a gap between attitudes and the behavioral intentions [9] (Carrington et al., 2010), this study found that the Chinese respondents of this study translated thought into action.

We found that consumers who adhere to higher social norms, have more positive attitudes and intentions toward sustainable apparel products. Our results also confirmed that consumers who scored high in the aesthetic category had more positive attitudes toward sustainable products. Results from the regression analysis suggest that Chinese consumers' SAP attitudes had a strong positive effect on the purchase intention toward SAP. This study found the positive influence of attitudes on behavioral

intentions toward SAP. Thus, how consumers feel affects their intentions to buy sustainable apparel [5] (Chang and Watchravesringkan, 2018). Aesthetic values positively moderated the relationship between the SAP attitude and purchase intention, whereas conspicuous values negatively moderated the relationship. Utility values and social norms did not show any significant moderating influences on the relationship between the SAP attitude and purchase intention.

This study provides insights into the decision-making of consumers and contributes to a better understanding of the attitude–behavior gap within the sustainable apparel industry in China. The presented findings might be of potential interest to sustainable apparel brands, manufacturers, and retailers who are willing to convert consumers’ sustainable attitudes to behavioral intention. Understanding the consumers’ attitude toward sustainable apparel as well as their barriers may assist the industry to consider the product attributes as more important, including creating aesthetic benefits and adopting an adequate communication strategy. As the respondents of this study considered conspicuous consumption more negative in sustainable apparel consumption, the industry needs to face the issues of ostentatiousness. Offering attractive and authentic sustainable apparel would probably encourage the sustainable apparel industry to close the exhibited attitude–behavior gap. This research contributes to enlarge the disciplines related psychological perspectives of sustainable apparel consumption and to driving advances in sustainability in contemporary and future China.

7. Limitation and Future Research

This study sought to identify the drivers and barriers that affect the attitude–behavior gap, referring to the sustainable apparel industry. The results of this study reach a consensus with those of other existing studies related to the consumption of sustainable apparel, but also suggest additional insights and could be a useful step forward in the understanding of sustainable consumption behavior. Overall, this study presented implications for the apparel industry, generating helpful approaches for developing future strategies regarding the sustainable apparel industry. Although this research contributes to both academic and business perspectives on the attitude–behavior gap in sustainable apparel, this study has several limitations that should be underlined and addressed in further research.

The sample size and the specific target population restrict the generalization of results. For future research, a larger sample size can lead to more rigorous findings of hypotheses testing. As consumer decision-making in the apparel industry could be different in gender, age, region, and purchase items, each of the influential factor in the target group present an important future research method. It would be interesting to extend the research to a younger or older generation or specific cohorts such as Gen Z and Millennials to see if the findings would be similar. Qualitative research may allow the researcher to achieve a deeper understanding of the respondents’ sustainable consumption behavior. For the future research, an approach combining quantitative and qualitative research methodology would help to comprehend consumers’ sustainable behaviors in more detail.

Finally, this research focused on the buying behavior of sustainable apparel. We also acknowledge that in real life buying situations, many other factors can influence the decision-making process of sustainable apparel products. For instance, psychological characteristics such as harmonious values in China and a collectivist society will play an important role in sustainable development [68] (Di Fabio and Tsuda, 2018). Situational and product-related factors require attention in future sustainable consumption research. This limitation encourages a development of this research by including other psychological factors that may have impacts on sustainable consumption and conducting further investigations on post-consumer sustainable behavior such as recycling or disposal behavior regarding apparel products in China.

Author Contributions: Conceptualization, K.W.O. and H.J.J.; methodology, K.W.O., Y.J.C. and H.J.J.; validation, Y.J.C. and H.J.J.; formal analysis, Y.J.C.; data curation, Y.J.C. and H.J.J.; writing—original draft preparation, Y.J.C. and H.J.J.; writing—review and editing, K.W.O.; supervision, K.W.O.; funding acquisition, K.W.O. All authors have read and agreed to the published version of the manuscript.

Funding: This research was supported by the Basic Science Research Program through the National Research Foundation (NRF) of Korea funded by the Ministry of Science, ICT & Future Planning (Grant No. NRF-2017R1A2B4005315). This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF 2019S1A5A2A03054508).

Conflicts of Interest: The authors declare no conflicts of interest.

References

- McKinsey Global Institute. *China and the World Inside the Dynamics of a Changing Relationship*; McKinsey Global Institute: 2019. Available online: <https://www.mckinsey.com/~{}~/media/mckinsey/featured%20insights/china/china%20and%20the%20world%20inside%20the%20dynamics%20of%20a%20changing%20relationship/mgi-china-and-the-world-full-report-june-2019-vf.ashx> (accessed on 13 January 2020).
- Chi, T. Consumer perceived value of environmentally friendly apparel: An empirical study of Chinese consumers. *J. Text. Inst.* **2015**, *106*, 1038–1050. [[CrossRef](#)]
- Zheng, Y.; Chi, T. Factors influencing purchase intention towards environmentally friendly apparel: An empirical study of US consumers. *Int. J. Fash. Des. Technol. Educ.* **2014**, *8*, 68–77. [[CrossRef](#)]
- Harris, F.; Roby, H.; Dibb, S. Sustainable clothing: Challenges, barriers and interventions for encouraging more sustainable consumer behaviour. *Int. J. Consum. Stud.* **2015**, *40*, 309–318. [[CrossRef](#)]
- Chang, H.J.; Watchravesringkan, K. Who are sustainably minded apparel shoppers? An investigation to the influencing factors of sustainable apparel consumption. *Int. J. Retail Distrib. Manag.* **2018**, *46*, 148–162. [[CrossRef](#)]
- Yang, N.; Ha-Brookshire, J.E. Truly sustainable or not? An exploratory assessment of sustainability capability of textile and apparel corporations in China from the moral responsibility perspective. *Fash. Text.* **2019**, *6*, 15. [[CrossRef](#)]
- Moraes, C.; Carrigan, M.; Szmigin, I. The coherence of inconsistencies: Attitude–behaviour gaps and new consumption communities. *J. Mark. Manag.* **2012**, *28*, 103–128. [[CrossRef](#)]
- Shen, D.; Richards, J.; Liu, F. Consumer awareness of sustainable fashion. *Mark. Manag. J.* **2013**, *23*, 134–147.
- Carrington, M.; Neville, B.; Whitwell, G. Lost in translation: Exploring the ethical consumer intention—Behavior gap. *J. Bus. Res.* **2014**, *67*, 2759–2767. [[CrossRef](#)]
- Di Fabio, A.; Rosen, M.A. Opening the Black Box of Psychological Processes in the Science of Sustainable Development: A New Frontier. *Eur. J. Sustain. Dev. Res.* **2018**, *2*, 47. [[CrossRef](#)]
- Hong, H.; Kang, J.H. The impact of moral philosophy and moral intensity on purchase behavior toward sustainable textile and apparel products. *Fash. Text.* **2019**, *6*, 16. [[CrossRef](#)]
- Di Fabio, A. The Psychology of Sustainability and Sustainable Development for Well-Being in Organizations. *Front. Psychol.* **2017**, *8*, 1534. [[CrossRef](#)] [[PubMed](#)]
- Norum, P. Examination of Apparel Maintenance Skills and Practices: Implications for Sustainable Clothing Consumption. *Fam. Consum. Sci. Res. J.* **2013**, *42*, 124–137. [[CrossRef](#)]
- Clark, H. SLOW + FASHION—An Oxymoron—Or a Promise for the Future ... ? *Fash. Theory* **2008**, *12*, 427–446. [[CrossRef](#)]
- Jung, S.; Jin, B.E. A theoretical investigation of slow fashion: Sustainable future of the apparel industry. *Int. J. Consum. Stud.* **2014**, *38*, 510–519. [[CrossRef](#)]
- Lapolla, K.; Sanders, E.B.-N. Using Cocreation to Engage Everyday Creativity in Reusing and Repairing Apparel. *Cloth. Text. Res. J.* **2015**, *33*, 183–198. [[CrossRef](#)]
- Thøgersen, J. How May Consumer Policy Empower Consumers for Sustainable Lifestyles? *J. Consum. Policy* **2005**, *28*, 143–177. [[CrossRef](#)]
- 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](#)]
- Shao, J. Sustainable consumption in China: New trends and research interests. *Bus. Strat. Environ.* **2019**, *28*, 1507–1517. [[CrossRef](#)]
- Vermeir, I.; Verbeke, W. Sustainable Food Consumption: Exploring the Consumer “Attitude–Behavioral Intention” Gap. *J. Agric. Environ. Ethics* **2006**, *19*, 169–194. [[CrossRef](#)]
- Sawang, S.; Sun, Y.; Salim, S.A. It’s not only what I think but what they think! The moderating effect of social norms. *Comput. Educ.* **2014**, *76*, 182–189. [[CrossRef](#)]

22. Tanner, C.; Kast, S.W. Promoting sustainable consumption: Determinants of green purchases by Swiss consumers. *Psychol. Mark.* **2003**, *20*, 883–902. [[CrossRef](#)]
23. Yamoah, F.A.; Acquaye, A. Unravelling the attitude-behaviour gap paradox for sustainable food consumption: Insight from the UK apple market. *J. Clean. Prod.* **2019**, *217*, 172–184. [[CrossRef](#)]
24. Stephens, S.H. Attitudes toward Socially Responsible Consumption: Development and Validation of a Scale and Investigation of Relationships to Clothing Acquisition and Discard Behaviors. Ph.D. Thesis, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA, 1985.
25. Hassan, L.; Shiu, E.; Shaw, D. Who Says There is an Intention–Behaviour Gap? Assessing the Empirical Evidence of an Intention–Behaviour Gap in Ethical Consumption. *J. Bus. Ethics* **2014**, *136*, 219–236. [[CrossRef](#)]
26. Kollmuss, A.; Agyeman, J. Mind the Gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environ. Educ. Res.* **2002**, *8*, 239–260. [[CrossRef](#)]
27. Burgess, S.M. Personal values and consumer research: An historical perspective. *Res. Mark.* **1992**, *11*, 35–79.
28. Schwartz, S.H. An Overview of the Schwartz Theory of Basic Values. *Online Read. Psychol. Cult.* **2012**, *2*, 11–30. [[CrossRef](#)]
29. Yin, J.; Qian, L.; Singhapakdi, A. Sharing sustainability: How values and ethics matter in consumers' adoption of public bicycle-sharing scheme. *J. Bus. Ethics* **2018**, *149*, 313–332. [[CrossRef](#)]
30. Holbrook, M.B. *Consumer Value: A Framework for Analysis and Research*; Psychology Press: Abingdon, UK, 1999.
31. Ajzen, I. Nature and Operation of Attitudes. *Annu. Rev. Psychol.* **2001**, *52*, 27–58. [[CrossRef](#)]
32. Steenkamp, J.-B.E.; De Jong, M.G. A Global Investigation into the Constellation of Consumer Attitudes toward Global and Local Products. *J. Mark.* **2010**, *74*, 18–40. [[CrossRef](#)]
33. Wang, C.L.; Lin, X. Migration of Chinese Consumption Values: Traditions, Modernization, and Cultural Renaissance. *J. Bus. Ethics* **2009**, *88*, 399–409. [[CrossRef](#)]
34. Wagner, J. Beauty in art and fashion. In *Consumer Value: A Framework for Analysis and Research*; Psychology Press: London, UK, 1999; p. 126.
35. Sánchez-Fernández, R.; Iniesta-Bonillo, M.Á.; Holbrook, M.B. The Conceptualisation and Measurement of Consumer Value in Services. *Int. J. Mark. Res.* **2009**, *51*, 1–17. [[CrossRef](#)]
36. Podoshen, J.S.; Li, L.; Zhang, J. Materialism and conspicuous consumption in China: A cross-cultural examination. *Int. J. Consum. Stud.* **2010**, *35*, 17–25. [[CrossRef](#)]
37. Huang, Z.; Wang, C.L. Conspicuous consumption in emerging market: The case of Chinese migrant workers. *J. Bus. Res.* **2018**, *86*, 366–373. [[CrossRef](#)]
38. Jones, M.; Reynolds, K.E.; Arnold, M.J. Hedonic and utilitarian shopping value: Investigating differential effects on retail outcomes. *J. Bus. Res.* **2006**, *59*, 974–981. [[CrossRef](#)]
39. Bagozzi, R.P.; Wong, N.; Abe, S.; Bergami, M. Cultural and situational contingencies and the theory of reasoned action: Application to fast food restaurant consumption. *J. Consum. Psychol.* **2000**, *9*, 97–106. [[CrossRef](#)]
40. Fishbein, M.; Ajzen, I. *Predicting and Changing Behavior: The Reasoned Action Approach*; Psychology Press: London, UK, 2011.
41. Abrahamse, W.; Steg, L. Social influence approaches to encourage resource conservation: A meta-analysis. *Glob. Environ. Chang.* **2013**, *23*, 1773–1785. [[CrossRef](#)]
42. Joshi, Y.; Rahman, Z. Factors Affecting Green Purchase Behaviour and Future Research Directions. *Int. Strateg. Manag. Rev.* **2015**, *3*, 128–143. [[CrossRef](#)]
43. Kim, S.H.; Seock, Y.-K. The roles of values and social norm on personal norms and pro-environmentally friendly apparel product purchasing behavior: The mediating role of personal norms. *J. Retail. Consum. Serv.* **2019**, *51*, 83–90. [[CrossRef](#)]
44. Reynolds, K.; Subasic, E.; Tindall, K. The Problem of Behaviour Change: From Social Norms to an Ingroup Focus. *Soc. Pers. Psychol. Compass* **2015**, *9*, 45–56. [[CrossRef](#)]
45. Fan, Y. A classification of Chinese culture. *Cross Cult. Manag. Int. J.* **2000**, *7*, 3–10. [[CrossRef](#)]
46. Suh, E.; Diener, E.; Oishi, S.; Triandis, H.C. The shifting basis of life satisfaction judgments across cultures: Emotions versus norms. *J. Personal. Soc. Psychol.* **1998**, *74*, 482. [[CrossRef](#)]
47. Bray, J.; Johns, N.; Kilburn, D. An Exploratory Study into the Factors Impeding Ethical Consumption. *J. Bus. Ethics* **2010**, *98*, 597–608. [[CrossRef](#)]
48. Carrigan, M.; Attalla, A. The myth of the ethical consumer—Do ethics matter in purchase behaviour? *J. Consum. Mark.* **2001**, *18*, 560–578. [[CrossRef](#)]

49. Papaioikonomou, E.; Ryan, G.; Ginieis, M. Towards a holistic approach of the attitude behaviour gap in ethical consumer behaviours: Empirical evidence from Spain. *Int. Adv. Econ. Res.* **2011**, *17*, 77–88. [[CrossRef](#)]
50. Sheth, J.N.; Newman, B.L.; Gross, B.L. Why we buy what we buy: A theory of consumption values. *J. Bus. Res.* **1991**, *22*, 159–170. [[CrossRef](#)]
51. Holbrook, M.B. Customer value and autoethnography: subjective personal introspection and the meanings of a photograph collection. *J. Bus. Res.* **2005**, *58*, 45–61. [[CrossRef](#)]
52. Jung, H.J.; Kim, H.; Oh, K.W. Green Leather for Ethical Consumers in China and Korea: Facilitating Ethical Consumption with Value–Belief–Attitude Logic. *J. Bus. Ethics* **2014**, *135*, 483–502. [[CrossRef](#)]
53. Yoo, J.J.; Divita, L.; Kim, H.Y. Environmental awareness on bamboo product purchase intentions: do consumption values impact green consumption? *Int. J. Fash. Des. Technol. Educ.* **2013**, *6*, 27–34. [[CrossRef](#)]
54. Wong, J.; Taylor, G. The market potential of environmental clothing products in the Hong Kong retail industry. *J. Text. Inst.* **2001**, *92*, 1–18. [[CrossRef](#)]
55. Xu, Y.; Chen, Y.; Burman, R.; Zhao, H. Second-hand clothing consumption: a cross-cultural comparison between American and Chinese young consumers. *Int. J. Consum. Stud.* **2014**, *38*, 670–677. [[CrossRef](#)]
56. Welsch, H.; Kühling, J. Determinants of pro-environmental consumption: The role of reference groups and routine behavior. *Ecol. Econ.* **2009**, *69*, 166–176. [[CrossRef](#)]
57. Chan, K. Mass communication and pro-environmental behaviour: waste recycling in Hong Kong. *J. Environ. Manag.* **1998**, *52*, 317–325. [[CrossRef](#)]
58. Hirschman, E.C. The effect of verbal and pictorial advertising stimuli on aesthetic, utilitarian and familiarity perceptions. *J. Advert.* **1986**, *15*, 27–34. [[CrossRef](#)]
59. Hirschman, E.C.; Holbrook, M.B. Hedonic consumption: emerging concepts, methods and propositions. *J. Mark.* **1982**, *46*, 92–101. [[CrossRef](#)]
60. Holbrook, M.B.; Hirschman, E.C. The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *J. Consum. Res.* **1982**, *9*, 132–140. [[CrossRef](#)]
61. Finch, J.E. The impact of personal consumption values and beliefs on organic food purchase behavior. *J. Food Prod. Mark.* **2006**, *11*, 63–76. [[CrossRef](#)]
62. Ajzen, I.; Fishbein, M. *Understanding Attitudes and Predicting Social Behavior*; Prentice-Hall: Englewood Cliffs, NJ, USA, 1980.
63. Kim, H.; Kim, J.; Oh, K.W.; Jung, H.J. Adoption of Eco-Friendly Faux Leather. *Cloth. Text. Res. J.* **2016**, *34*, 239–256. [[CrossRef](#)]
64. Chu, K.M. Mediating Influences of Attitude on Internal and External Factors Influencing Consumers' Intention to Purchase Organic Foods in China. *Sustainability* **2018**, *10*, 4690. [[CrossRef](#)]
65. Schumacker, R.E.; Lomax, R.G. *A Beginner's Guide to Structural Equation Modeling*; Psychology Press: Abingdon, UK, 2004.
66. Hair, J.F.; Black, W.C.; Babin, B.J.; Anderson, R.E.; Tatham, R.L. *Multivariate Data Analysis*; Prentice Hall: Upper Saddle River, NJ, USA, 2010.
67. Wiederhold, M.; Martinez, L.F. Ethical consumer behaviour in Germany: The attitude-behaviour gap in the green apparel industry. *Int. J. Consum. Stud.* **2018**, *42*, 419–429. [[CrossRef](#)]
68. Di Fabio, A.; Tsuda, A. The Psychology of Harmony and Harmonization: Advancing the Perspectives for the Psychology of Sustainability and Sustainable Development. *Sustainability* **2018**, *10*, 4726. [[CrossRef](#)]

