

## Article

# Integrating Personal and Pro-Environmental Motives to Explain Italian Women's Purchase of Sustainable Clothing

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**Abstract:** Despite increased knowledge of the impact of clothing production on the environment, the general public still has a low intention to purchase sustainable clothing. The present study analyzed the psychosocial predictors of Italian women's intention to purchase sustainable clothing, proposing an integration of the Theory of Planned Behavior (TPB) and the Value-Belief-Norm (VBN) approaches. Participants (N = 286) filled in a self-report online questionnaire, measuring Italian women's intention to purchase sustainable clothing, as well as TPB variables, such as subjective norm, attitude, and perceived behavioral control, and VBN variables, such as egoistic and biospheric values, awareness of consequences, and personal norm. Results of structural equation modeling showed that the TPB + VBN integrated model predicted women's intention to purchase sustainable clothing. Personal norm and attitude were the strongest predictors of intention. Mediation analyses showed the indirect impact of the VBN chain (from values to moral norm) on intention. Discussion focusses on the psychosocial dimensions that public policy, non-governmental organizations, and clothing companies should consider when promoting the purchase of sustainable clothing.



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**Keywords:** sustainable fashion purchase; pro-environmental motives; personal motives; value-belief-norm theory; theory of planned behavior

## 1. Introduction

Human activity is crossing critical planetary boundaries, which can cause devastating consequences for all species on the planet. Among these consequences, the most dangerous is unstoppable climate change [1]. To mitigate this, governments need to mobilize both private companies and consumers to modify production and consumption patterns in a more sustainable direction [2]. Specifically, through reduced consumption and a switch to goods with less carbon emission during production and use, the European Union could reduce its carbon footprint by about 25% [3]. To reach this goal, most of the social science literature has focused on sustainable behaviors related to transport, building, and food [4], such as reduced energy consumption and sustainable food choices [5–8]. In this field of study, sustainable clothing purchase has been less investigated [9], even if fashion supply chains are similarly responsible for a negative environmental impact—due to significant carbon footprints through toxic dyes, excessive waste, chemical usage, and water contamination [9,10]. Furthermore, even if the consumers' attention to the sustainable principles in fashion has been recently increasing [11], the global market for sustainable clothing is still small, that is, only 1% of the total clothing market [12].

To increase public awareness of sustainability in the context of fashion, companies, institutions, and researchers have implemented some actions. Fashion companies have been developing a sustainable or eco-fashion movement [13,14], aimed at promoting higher sustainability in the fashion system. One of the barriers to this movement is the fact that the term “sustainable fashion” is still lacking a unique definition. In our paper, we defined

sustainable fashion as a series of corporate commitments aimed at redressing a variety of perceived fashion industry wrongdoings, among them animal cruelty, environmental damage, and worker exploitation [15].

Regarding the actions of the institutions in promoting sustainable production, an example is the United Nations 2030 Agenda on Sustainable Development Goals (SDGs), which is one of the most relevant global initiatives in sustainable development and environmental policy. Following the SDGs, sustainable attitudes among producers and consumers in the case of fashion production emerge as key points for preserving the environment for our well-being [16].

Researchers are also contributing to this issue, trying to understand the psychosocial motives public policies and fashion companies should leverage when promoting the purchase of sustainable clothing. Research focus has been especially on personal and moral motives [7,17–19].

Some scholars have considered the role of personal motivations in sustainable clothing purchase. According to them, this behavior is the result of an individual cost-benefit analysis [7,17,18], including positive beliefs towards sustainable clothing, a perception of a social approval of the sustainable clothing purchase, and a perception of control towards this behavior. For example, an Indonesian study [20] on the purchase of sustainable fashion products showed that social norms and attitudes explained this behavior. Likewise, Lee et al. [21] pointed out the presence of a gap between consumers' attitude toward sustainable consumption and their purchasing behavior. While consumers may have positive attitudes toward sustainability issues, they are not willing to accept inferior fashion performance of green fashion apparels. However, these studies did not consider the role of participants' perceived behavioral control, which is one of the most important variables in the case of purchasing behavior, e.g., [22,23]. Overall, studies that consider all the main personal motives related to sustainable clothing purchase are still scarce.

Other scholars have focused on the role of moral motivations in sustainable clothing purchase [7,18]. According to them, this behavior is based on ethical and moral concerns to protect the environment, such as environmental concerns and biospheric or hedonic values. For example, Geiger et al. [24] showed that biospheric values were the strongest predictor of Germany's endorsement of sustainable fashion criteria, while hedonic values were negatively related to sustainable fashion consumption. The other values (altruistic and egoistic values) were instead not significantly related to participants' endorsement. However, in Geiger et al.'s study, the impact of values was not verified by controlling the effect of other pro-environmental beliefs (such as the awareness of consequences of the environmental impact of unsustainable fashion production), which derive from these values but are more proxy to intention and actual behavior. Overall, to the best of our knowledge, so far a psychosocial model which considers all the main moral and pro-environmental motives has not been applied to the case of sustainable fashion purchase, even though many studies have shown that such a model might be extremely helpful in explaining consumers' intention and behavior in this area [25].

Although several scholars have considered some of the moral and personal reasons that guide the choice of sustainable behaviors, such as the purchase of sustainable clothing, many others have stressed the need for models that integrates both aspects, e.g., [26,27]. However, models integrating both motives have been little verified in the domain of studies on sustainability [15] and are absent in the context of the purchase of sustainable clothing. Reference to a psychosocial framework encompassing both personal and moral motives can help identifying key factors in promoting greater consumption of sustainable clothing. Consistently, in the present study we proposed the first test of a psychosocial framework integrating personal and moral motives in the purchase of sustainable clothing.

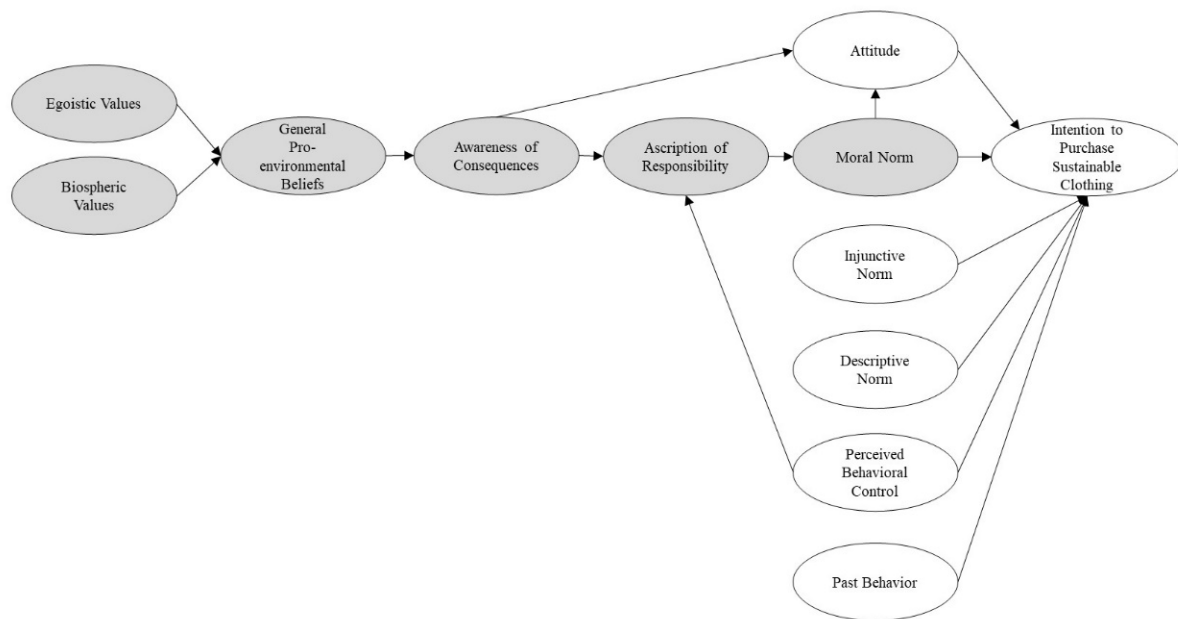
As claimed by several scholars, sustainability knowledge and consumer preferences differ across countries [28–31]. Thus, the investigation of motives behind the intention to purchase sustainable clothing should be done in different cross-cultural contexts, e.g., [15,28,29], because these motives might have different effects depending on the inves-

tigated sample, e.g., [32,33]. For instance, a recent study reported different determinants of behavioral intention towards sustainable apparel products in terms of shopping values in populations across the UK, US, and China and proposed several insights about the differences in sustainable consumption that may exist among different countries. Importantly, this issue is related to the current scientific debate about the replicability of scientific findings [34], which emphasizes the importance of replication efforts of the scientific evidence in different socio-cultural contexts. In this vein, the present study contributes to the current literature by investigating a specific cultural context, that is, the one of Italian female consumers. We chose the Italian context for two reasons. First, major new fashion industries often originate in Italy [35]. Second, Italy is recognized worldwide as one of the leading fashion countries [36], which means that Italian consumers are considered a model of fashion for the rest of the world. Studying Italian consumers' motives towards sustainable fashion purchasing might help to identify the motives that sooner or later will be followed and internalized by other populations.

Moreover, some recent studies have confirmed the impact of gender on various environmental behaviors [37], also in the case of the purchase of sustainable clothing [38]. Accordingly, we decided to focus on women because, compared to men, they can be considered over-consumers of fashion [39]. They are more involved in clothing-related issues and disposed to buy clothes at higher rates [39–43]. So far, however, the motives behind women's consumption of sustainable fashion have not been investigated in depth. Understanding psychosocial motives guiding the choice of sustainable clothing could offer potential insight on how to design public or commercial campaigns aimed at motivating such behavior in women. Our research contributes to this aim by investigating the psychosocial predictors of Italian women's intention to buy sustainable clothing.

### *1.1. Theoretical Framework*

In psychosocial literature, two theoretical frameworks are widely employed to explain pro-environmental behaviors: the Theory of Planned Behavior (TPB) [44] and the Value-Belief-Norm (VBN) [45]. The major distinction between these theoretical frameworks is that the former is mostly focused on a personal-based explanation of the consumers' intention to perform a given behavior, whereas the latter is mostly focused on a pro-environmental explanation [25]. Some scholars have proposed both the extension and the integration of these models to predict sustainable behaviors, such as household energy efficiency, purchase of green skincare products, reduced meat consumption, and more generally environmental behavior in a private-sphere context [6,19,46]. To the best of our knowledge, however, so far no authors have investigated whether such integration can contribute to better explain consumers' purchasing intention towards sustainable clothing. In the present study, we tested to what extent the two models predict intention in the specific case of female consumers. Specifically, the general aim of the present study was to explain consumers' intention to purchase sustainable clothing by testing the predicting role of both personal and pro-environmental motives. To do so, we proposed the integration of TPB and VBN frameworks. The tested model is depicted in Figure 1, and the corresponding research hypotheses describing the expected links between dimensions in the model are described in detail below.



**Figure 1.** Integrated theoretical model.

#### 1.1.1. The Theory of Planned Behavior

Several studies have referred to TPB to predict consumers' purchasing intention [47–49]. The TPB [44] is a rational decision-making model, according to which behavior is predicted by behavioral intention, intended as the motivated and conscious plan to perform the behavior in question.

A strong intention is more likely to be transformed into a behavior. In turn, behavioral intention is predicted by attitude, subjective norm, and perceived behavioral control toward that behavior.

Attitude refers to an individual's overall perception of favorableness or un-favorableness towards a behavior and it includes both cognitive and affective dimensions (e.g., whether a specific behavior is good or bad, pleasant or unpleasant) [50]. In the case of sustainable clothing, one can, for example, measure if consumers believe that purchasing sustainable clothing is disadvantageous or advantageous, unsatisfactory or satisfactory, and so on. All the studies investigating the impact of positive attitude on intention related to purchasing sustainable clothing confirmed its predictive role [51–53].

**Hypothesis 1 (H1).** *Positive attitude towards sustainable clothing increases purchasing intention.*

Subjective norm refers to the belief that an important person or group of people will approve and support a particular behavior [44]. Subjective norm can be further differentiated into injunctive norm, based on how far individuals believe that significant others would expect that behavior from them, and descriptive norm, that is, how much others we know engage in the behavior in question. In the case of sustainable clothing, injunctive norm can be measured as the consumers' perception that significant others would approve their purchasing of sustainable clothing. In contrast, descriptive norm can be assessed by asking if significant others buy sustainable clothing. Previous research has found that injunctive and predictive norms have a significant predictive role in a few cases [48,54–56], but only a marginal predictive role in many other cases [48,50,55–57]. For instance, in a review on the effects of social norms, Farrow et al. (2017) [32] observed that social norm interventions lead either to shifting behavior in a desirable way or to a counterproductive effect [33]. Furthermore, social norm effects seem to be strictly related to the cultural context where the decisions are made [32]. In the specific case of sustainable clothing purchase, past studies have offered mixed results. Most of them have only

considered the role of injunctive norms. While some studies provided empirical evidence of the effect of injunctive norms on the intention to purchase sustainable clothing [51], others did not [52,57]. Regarding the studies that considered both injunctive and descriptive norms, some showed that both types of norms were the strongest predictors of purchasing intention [20,54], while others found that only injunctive norms predicted purchasing intention [58].

**Hypothesis 2 (H2).** *Injunctive norm influences the intention to purchase sustainable clothing.*

**Hypothesis 3 (H3).** *Descriptive norm influences the intention to purchase sustainable clothing.*

Perceived behavioral control is the extent to which an individual perceives a behavior as easy or difficult to perform, considering their personal resources (abilities, skills, and knowledge) and situational variables (obstacles and opportunities). Thus, it is related to the individual perception of being able to act on a specific behavior, in this case being able to purchase sustainable clothing. Most studies on the intention to purchase sustainable clothing confirmed the predictive role of perceived behavioral control [51,52,57].

**Hypothesis 4 (H4).** *Perceived behavioral control affects the intention to purchase sustainable clothing.*

Research applying the TPB to explain different behaviors, including pro-environmental behaviors [59–62], has also identified the importance of past behavior in the formation of intention, that is, the number of times in the past a particular behavior has been performed [2,47,61–64]. In the context of the purchase of sustainable products, some scholars have emphasized the fact that consumers' habits could be especially influential [65]. However, only one TPB study [66] confirmed the predictiveness of past behavior on sustainable fashion purchases. To expand support of this hypothesis, in the present study we included past behavior as an additional variable of our TPB model.

**Hypothesis 5 (H5).** *Past purchase of sustainable clothing affects the intention to purchase sustainable clothing.*

#### 1.1.2. The Value-Belief-Norm

Previous research has clearly shown that the moral and pro-environmental motives people endorse are significantly related to their pro-environmental intentions and behaviors [46,66]. Consistently, in the domain of sustainable fashion purchase, several scholars have found the determining role of pro-environmental-based drivers [15]. To better investigate the role played by moral and pro-environmental motives in the intention to purchase sustainable clothing, in this study we selected VBN as our second theoretical framework [55]. The VBN model has already been successfully applied to explain sustainable behaviors [66,67]. However, to the best of our knowledge, so far the VBN model has not been applied to the case of sustainable fashion purchase, even though many studies have shown that some of its dimensions predict consumers' intention and behavior in this area [48]. According to VBN, norm activation is triggered by a chain of five related factors, which are the following: values, general pro-environmental beliefs, awareness of consequences, ascription of responsibility, and moral norm.

Values are guiding principles in one's life, and in the area of consumption values express the most fundamental desires and purposes that guide consumer behavior [45,64]. In the area of sustainable consumption, a main distinction between biospheric and hedonic values should be made. Biospheric values are based on a high level of consideration toward the biosphere, and concern on costs or benefits of consumers' actions on the ecosystems. On the other hand, egoistic values refer to acting for maximizing individual outcomes to self-matter, such as social power, wealth, authority, and influence, focusing on personal

costs and benefits when making choices. Individuals who strongly endorse biospheric values are more likely to engage in pro-environmental behaviors compared to individuals who adhere to hedonic values [68,69]. For instance, Nguyen et al. (2016) [15] revealed that biospheric values positively affect individuals' engagement in pro-environmental consumption by improving attitudes towards environmental protection, subjective norm, and environmental self-identity. Bouman and Steg (2019) [70] claimed the importance of considering biospheric values in studying pro-environmental behaviors. Finally, McNeill and Moor [41] highlighted the importance to include egoistic values in explaining attitudes towards sustainable fashion consumption. Biospheric and egoistic values are the main predictors of general pro-environmental beliefs, that is, beliefs about the interdependence between nature conservation and human progress [71]. Accordingly, past studies have shown that individuals who endorse biospheric and altruistic values are more likely to also endorse sustainable purchase criteria [23,72].

**Hypothesis 6 (H6).** *Biospheric values influence general pro-environmental beliefs.*

**Hypothesis 7 (H7).** *Egoistic values influence general pro-environmental beliefs.*

In turn, general pro-environmental beliefs determine the so-called awareness of consequences, that is, the degree to which people are aware of the negative consequences of their behavior on the environment. The environmental consequences encompassed within this construct can be ongoing or anticipated [45]. Awareness of consequences differs from general pro-environmental beliefs in that its measure is more specific (i.e., awareness of consequences is assessed by referring to specific environmental impacts in specific domains). Thus, it occurs later in the causal chain than the more general pro-environmental beliefs [45]. As shown by past studies, general pro-environmental beliefs influence people's awareness of consequences related to different pro-environmental behaviors, such as improving household energy efficiency, accepting energy policy, and reducing car use [6,73–77].

**Hypothesis 8 (H8).** *General pro-environmental beliefs influence awareness of consequences.*

Awareness of consequences is considered as a cognitive precondition to moral norm activation, which is the feeling of being responsible for the negative impact of the non-implementation of pro-environmental behaviors. Accordingly, many scholars have confirmed that people's awareness of consequences influences the ascription of responsibility in several pro-environmental domains [6,8,78]. In the case of sustainable clothing, different scholars focused on the relationship between awareness of consequences and purchasing intention, showing that people's environmental awareness has a strong positive influence on purchase intention related to sustainable fashion [53,59,74]. However, few scholars have considered whether awareness of consequences primarily affects ascription of responsibility and then affects intention through it [77].

**Hypothesis 9 (H9).** *Awareness of consequences increases ascription of responsibility.*

Continuing the chain, ascription of responsibility activates moral norms, which are related to the feeling of moral obligation to perform or refrain from a specific behavior [57]. Moral norms are rooted in interiorized values [79] and concern the feeling of a pressure to choose the "right option" to protect self-esteem [80]. Consistently, past studies confirmed that a greater ascription of responsibility stimulates a greater sense of obligation to act pro-environmentally [81,82]. In the case of the purchase of sustainable clothings, few researchers analyzed the impact of ascription of responsibility on moral norms. For example, a study of Borusiak et al. found that moral norms are influenced by ascription of responsibility in consumers of second-hand products [70].

**Hypothesis 10 (H10).** *Ascription of responsibility influences moral norms.*

Finally, according to the VBN model moral norm is a major motive behind people's pro-environmental behavior. In the domain of the environmental research, a great amount of studies confirmed that the feeling of moral obligation to act pro-environmentally predicts peoples' intention to act consistently [6,59,61]. This evidence has been also confirmed in the case of the purchase eco-friendly clothing [83].

**Hypothesis 11 (H11).** *Moral norms influence purchasing intentions.*

### 1.1.3. Integrating TPB and VBN Models

In the present study, we also tested the predictiveness of the integration between the TPB and VBN models, formulating three specific hypotheses regarding the relationships among their respective variables. In the domain of the studies on sustainable behaviors, the VBN and TPB integration has already been successfully applied to explain behavioral intentions [6,8,47,84,85].

First of all, past studies showed that the awareness of the environmental impact of one's sustainable purchase behavior influences reasoning behind purchase [6,8,47]. Awareness of the consequences of an environmental issue, such as environmental pollution caused by fashion production, might lead to the development of attitudes about the consequences of human actions on the environment, and represent a route or a barrier to perform a given behavior [6,8]. Following this line, it might be expected that when consumers have more information about the environmental impact of the fashion production, they can develop a positive approach and attitude towards the purchase of sustainable clothing. This expectation has found support in a study showing that knowledge of environmental issues has a significant influence on consumer attitude toward green apparel brands [86]. For example, a recent study showed that attitude plays a mediating role between consumers' environmental knowledge and their intention to purchase slow fashion apparel [52].

**Hypothesis 12 (H12).** *Awareness of consequences (VBN) influences the consumers' attitude towards purchasing sustainable clothing (TPB), and in turn has an indirect effect on intention via attitude.*

Environmental research has widely shown that attitudes related to pro-environmental behaviors are related to different factors, among which personal norm plays an important role. Indeed, personal norm is a strong antecedent of environmental attitudes [6,8,27,87,88]. For instance, in a study of attitudes toward the environment and green products results revealed that consumers' awareness of consequences was an important predictor of attitude towards green energy brands [87,89]. Thus, our feeling of being morally obligated to protect the environment influences our positive attitude towards acting accordingly.

**Hypothesis 13 (H13).** *Moral norm (VBN) explains attitude toward buying sustainable clothing (TPB), and in turn has an indirect effect on intention via attitude.*

Several studies have claimed that voluntary control is a precondition of moral responsibility, e.g., [90,91]. However, to our knowledge only one study has tested such a relationship in the domain of pro-environmental behavior, specifically in the domain of food choices, showing that perceived behavioral control explained participants' ascription of responsibility related to reduced meat consumption [8]. Consistent with these findings, we tested whether this evidence might be generalized in the case of sustainable clothing.

**Hypothesis 14 (H14).** *Perceived behavioral control over buying sustainable clothing (TPB) explains the ascription of responsibility regarding the purchase of sustainable clothing to protect the environment (VBN).*

## 2. Materials and Methods

### 2.1. Participants and Procedure

The study received ethical approval from the Ethical Committee of the Catholic University of Milan. In October 2020, about three hundred over 18-year-old female participants living in Italy were invited to participate in a web-based survey (Table A1) including closed-ended questions, and lasting approximately twenty minutes. Participants were identified and contacted by students of the Department of Psychology at the Catholic University of Milan. The final sample was composed of 286 participants who fully completed the survey. The sample size was enough to detect a Subject-to-variables (STV) ratio higher than 5, which is the recommended value to run a Structural Equation Model (SEM) [92,93]. Specifically, our STV ratio was equal to 8.17 (286 subjects and 35 variables included in the proposed model).

To obtain a sample balanced as to age, students were instructed to select only Italian women equally distributed across the following age groups: 18–27 years old, 28–37 years old, 38–47 years old, 48–57 years old, and 58–70 years old.

Participants' age varied between 19 and 70 years ( $M = 39.42$  years;  $SD = 14.06$ ). They were overall highly educated (62.6% had university education, 14.7% had secondary school education, and 17.1% had primary school education). Most of the participants lived in medium-sized to large municipalities (42% lived in towns with more than 500,000 inhabitants). Regarding marital status, 38.8% of participants were married, and 38.1% of participants were single. Most of the participants (62.2%) used to go shopping at a franchise store and declared they were open to try a new clothing brand (75.9%). Table 1 reports demographic information of the sample.

**Table 1.** Demographics of study sample.

Factor	Total Sample
Age	
<i>M</i>	39.37
<i>SD</i>	14.06
Educational Level	
% Elementary School Diploma	0.3
% Middle School Diploma	2.1
% High School (without Diploma)	3.1
% High School Diploma	17.1
% University Attendance (without Degree)	14.7
% Bachelor/Master's Degree	62.6
Marital Status	
% Single	38.1
% Married	38.8
% Cohabiting Couple	17.8
% Separated/Divorced	4.5
% Widow	0.7
Number of Residents in your Municipality	
% Less than 10,000	21.7
% Between 10,000 and 30,000	16.8
% Between 30,000 and 100,000	12.9
% Between 100,000 and 250,000	3.1
% Between 250,000 and 500,000	3.5
% More than 500,000	42.0

Note. *M* = Mean; *SD* = Standard Deviation.

At the beginning of the questionnaire, participants were provided with a definition of sustainable clothing: "Now we are going to ask you some questions about the topic of so-called sustainable clothing. The goals of sustainable clothing production include increasing



the value of local productions and products, extending the life cycle of materials, increasing the value of timeless clothing, reducing the amount of waste, and reducing the damage to the environment caused by clothing production and consumption." Everyone answered the questions by referring to the same definition of sustainable behavior. Participants were then asked to reply to some questions aimed at understanding shopping habits. Moreover, participants expressed their agreement on a Likert scale with statements measuring motivation to buy sustainable clothes, TPB constructs (attitude, subjective norm, perceived behavioral control), past behavior, and VBN constructs (egoistic and biospheric values, general pro-environmental beliefs, awareness of consequences, ascription of responsibility, moral norm). The last section of the questionnaire were related to sociodemographic information (gender, age, marital status, number of residents in your municipality).

## 2.2. Measures

**Attitude:** Participants' attitude towards purchasing sustainable clothing was assessed with four items, on a 7-point semantic differential scale (e.g., "Purchasing sustainable clothes is/would be: useless (1)—useful (7)"; adapted from Tantawi [93]). Higher scores indicated a greater positive attitude toward purchasing sustainable clothing ( $\alpha = 0.94$ ).

**Injunctive Norm:** Participants' subjective norm was measured with three items, using a 7-point scale (e.g., "Most people I know think that I should buy sustainable clothes . . . strongly disagree (1)—strongly agree (7)"; adapted from Kim et al. [94]). Higher scores indicated a greater perception of others' expectations regarding the purchase of sustainable clothes ( $\alpha = 0.80$ ).

**Descriptive Norm:** Participants' subjective norm was measured with three items, using a 7-point scale (e.g., "Most people I know buy sustainable clothes . . . strongly disagree (1)—strongly agree (7)"; adapted from Kim et al. [94]). Higher scores indicated a greater perception of others purchasing sustainable clothes ( $\alpha = 0.83$ ).

**Perceived Behavioral Control:** Participants' perception of control over purchasing sustainable clothing was measured with two items, again using a 7-point scale (e.g., "Sustainable clothing might be expensive . . . strongly disagree (1)—strongly agree (7)"; Shaw et al. [95]). Higher scores indicated a greater perception of control over purchasing sustainable clothing ( $r = 0.47$ ).

**Past Behavior:** Participants' past purchasing of sustainable clothing was measured with one item, using a 7-point scale ("Indicate how often you purchase the following sustainable clothing items . . . Never (1)—Always (7)"; adapted from Han et al. [96]). Higher scores indicated a higher frequency in purchasing of sustainable clothing ( $\alpha = 0.79$ ).

**Egoistic Values:** Participants' egoistic values were assessed with four items, using a 9-point scale (e.g., "Social power: control over others, dominance . . . opposed to my values (−1)—of supreme importance (9)"; adapted from Steg et al. [65]). Higher scores indicated a greater importance of the egoistic values as guiding principles for the person's life ( $\alpha = 0.78$ ).

**Biospheric Values:** Participants' biospheric values were assessed with four items, using a 9-point scale (e.g., "Respecting the earth: harmony with other species . . . opposed to my values (−1)—of supreme importance (9)"; adapted from Steg et al. [65]). Higher scores indicated a greater importance of the biospheric values as a guiding principle for the person's life ( $\alpha = 0.89$ ).

**General Pro-Environmental Beliefs:** General pro-environmental beliefs were measured with three items, using a 7-point scale (e.g., "Human progress can be achieved only by maintaining ecological balance . . . strongly disagree (1)—strongly agree (7)"; adapted from the NHIP scale; Corral-Verdugo et al. [71]). Higher scores indicated greater pro-environmental beliefs ( $\alpha = 0.78$ ).

**Awareness of Consequences:** Participants' awareness of consequences on the environment deriving from the excessive purchase of not sustainable clothes was measured with three items, on a 7-point scale (e.g., "The production of not sustainable clothing causes environmental pollution . . . strongly disagree (1)—strongly agree (7)"; adapted from Van

Der Werff and Steg [97]). Higher scores indicated a greater awareness of the environmental consequences ( $\alpha = 0.79$ ).

**Ascription of Responsibility:** The ascription of responsibility was assessed with three items, using a 7-point scale (e.g., “I think it is useful to purchase sustainable clothing to reduce environmental problems . . . strongly disagree (1)—strongly agree (7)”; adapted from Van Der Werff and Steg [97]). Higher scores indicated a greater ascription of responsibility ( $\alpha = 0.87$ ).

**Moral Norm:** Participants’ moral norm was measured with three items, using a 7-point scale (e.g., “Purchasing sustainable clothing means acting in line with my own principles . . . strongly disagree (1)—strongly agree (7)”; adapted from Van Der Werff and Steg [97]). Higher scores indicated stronger adherence to the moral norm ( $\alpha = 0.89$ ).

**Behavioral Intention to Purchase Sustainable Clothing:** To assess the intention to purchase sustainable clothing we employed three items, using a 7-point scale (e.g., “If I see sustainable clothing . . . strongly disagree (1)—strongly agree (7); Shaw et al. [95]). Higher scores indicated a stronger intention to purchase sustainable clothing ( $\alpha = 0.85$ ).

Table 2 shows all the items of each measured variable.

**Table 2.** Results of the measurement model.

Construct	Items	$\Lambda$	AVE	CR	M	SD
Attitude	Purchasing sustainable clothes is/would be: unpleasant—pleasant	0.88 *	0.69	0.90	5.68	1.23
	boring—funny	0.85 *				
	unsatisfactory—satisfactory	0.86 *				
	fool—wise	0.73 *				
Injunctive Norm	Most of the people who are important to me . . . . . . think that I should buy sustainable clothing	0.74 *	0.60	0.81	3.90	1.25
	. . . would approve if I bought sustainable clothing	0.71 *				
	. . . would prefer that I buy sustainable clothing	0.86 *				
Descriptive Norm	Most of the people who are important to me . . . . . . buy sustainable clothing	0.71 *	0.63	0.83	3.29	1.21
	. . . believe it is right to buy sustainable clothing	0.77 *				
	. . . would like to buy sustainable clothing	0.89 *				
Perceived Behavioral Control	The retail stores of sustainable clothing might be located far away from where I live	0.86 *	0.53	0.68	4.87	1.23
	It might be difficult to obtain information regarding the sustainability of the clothing	0.55 *				
Egoistic Value	Social power: control over others, dominance	0.75 *	0.56	0.83	3.91	1.56
	Wealth: material possessions, money	0.74 *				
	Authority: the right to lead or command	0.84 *				
	Influential: having an impact on people and events	0.65 *				
Biospheric Value	Respecting the earth: harmony with other species	0.82 *	0.70	0.90	7.97	1.13
	Unity with nature: fitting into nature	0.79 *				
	Protecting the environment: protecting natural resources	0.90 *				
	Preventing pollution: protecting natural resources	0.83 *				
General Pro-environmental Beliefs	Human progress can be achieved only by maintaining ecological balance	0.80 *	0.56	0.79	6.13	0.95
	Preserving nature now means ensuring the future for human beings	0.60 *				
	Human beings can progress only by conserving nature’s resources	0.82 *				
Awareness of Consequences	The production of sustainable clothing causes environmental pollution	0.78 *	0.73	0.89	5.69	0.97
	A reduced purchase of sustainable clothing would contribute to environmental protection	0.92 *				
	The production of sustainable clothing causes climate change	0.85 *				

Table 2. Cont.

Construct	Items	$\Lambda$	AVE	CR	M	SD
Ascription of Responsibility	I think it is useful to purchase sustainable clothing to reduce environmental problems	0.90 *	0.80	0.92	5.50	1.01
	I can take on responsibility for my purchase of sustainable clothes to protect the environment	0.93 *				
	I think I can contribute to reducing the environmental problems by purchasing sustainable clothing	0.86 *				
Moral Norm	Purchasing sustainable clothing means . . .	0.74	0.89	5.44	1.11	
	. . . acting in line with my own principles					0.89 *
	. . . the right thing to do					0.83 *
Intention to Purchase Sustainable Clothing	. . . acting in line what I find important	0.86 *	0.67	0.86	4.93	1.19
	If I see sustainable clothing, I intend or consider purchasing it	0.83 *				
	If I see a retail store of sustainable clothing, I intend to visit the store to purchase a product	0.83 *				
	When I find a cloth that fits my needs, the possibility of purchasing it will increase if it is sustainable	0.80 *				

Note.  $\Lambda$  = Standardized Factor Loading; CR = Composite Reliability; AVE = Average Variance Extracted; \*  $p < 0.001$ . All the items were measured on a 7-point scale, except for the items measuring egoistic and biospheric values, which were assessed on a 9-point scale.

### 2.3. Data Analyses

Statistical analyses were conducted with R software [98,99], using the Lavaan package [100]. To test our hypotheses we performed Structural Equation Modeling (SEM) analyses, using maximum likelihood with robust standard errors estimation techniques in order to test the goodness-of-fit of our models. To assess the goodness of fit for SEM models we considered values of root mean square error of approximation (RMSEA) less than or equal to 0.06, as well as values of standardized root mean-square residuals (SRMR) less than 0.10, and comparative fit index (CFI) and Tucker level index (TLI) values above 0.90 as indicative of good fit [101].

We wanted to test whether the fit of the integrated model would be higher than the fit of the TPB and the VBN models considered separately. Therefore, we first ran a model including all TPB variables, including the paths from attitude, subjective norm, perceived behavioral control, and past behavior to intention as free parameters. Second, we ran a model including the VBN path sequence as free parameters (i.e., egoistic and biospheric values, then general pro-environmental beliefs, then awareness of consequences, then ascription of responsibility, and then moral norm). Third, we ran an integrated model where we included the following paths among TPB and VBN variables as free parameters: from awareness of consequences through attitude to intention; from moral norm to attitude, and from perceived behavioral control to ascription of responsibility.

Finally, to compare Models 1, 2, and 3 we used the Chi-squared difference test ( $\Delta\chi^2$ ; [102]), given the nested nature of the models. A significant  $\Delta\chi^2$  value for the reduced degrees of freedom and an overall goodness of fit index of Model 3 higher than the overall goodness of fit indexes of the other two models would allow us to conclude that Model 3 had a better fit than the others.

## 3. Results

### 3.1. Preliminary Results

All the composite reliability values were above the cut-off of 0.60 [103], and the AVE values were above or equal to the suggested threshold of 0.50 [103]. Additionally, according to the Fornell-Lacker criterion [104] the square root of AVE for each latent variable was larger than the other correlation values among the latent variables, confirming the discriminant validity of each measurement. Table 2 shows the results of the measurement model for Model 3. Table 3 reports the square root of AVE for each latent variable and the correlations among all variables in Model 3.

**Table 3.** Correlations among study variables.

Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	10.
1. Attitude	<b>0.69</b>	0.23 *	0.20 *	−0.01	0.23 *	−0.11	0.30 *	0.23 *	0.32 *	0.42 *	0.49 *	0.56 *
2. Injunct. Norm		<b>0.60</b>	0.47 *	0.08	0.16 *	−0.02	0.10 *	0.15 *	0.25 *	0.34 *	0.30 *	0.35 *
3. Descrip. Norm			<b>0.63</b>	−0.05	0.26 *	0.02	0.09	0.16 *	0.28 *	0.39 *	0.34 *	0.29 *
4. Perc. Beh. Con.				<b>0.53</b>	−0.12 *	−0.03	0.07	0.08 *	0.16 *	0.23 *	0.20 *	0.29 *
5. Past Behavior					-	0.04	0.12 *	0.05	0.20 *	0.20 *	0.27 *	0.31 *
6. Egoistic Value						<b>0.56</b>	−0.03	−0.13 *	−0.01	−0.00	−0.10	0.04
7. Biosph. Value							<b>0.70</b>	0.34 *	0.27 *	0.37 *	0.44 *	0.40 *
8. Pro-env. Belifs								<b>0.56</b>	0.36 *	0.41 *	0.40 *	0.31 *
9. Awar. of Cons.									<b>0.73</b>	0.70 *	0.64 *	0.39 *
10. Ascr. of Resp.										<b>0.80</b>	0.73 *	0.59 *
11. Moral Norm											<b>0.74</b>	0.65 *
12. Intention												<b>0.67</b>

Note. \*  $p < 0.001$ ; values of Fornell-Larcker criterion are reported in bold. The AVE for past behavior was not reported because it corresponds to its factor loading.

### 3.2. Main Analyses

Results revealed that Model 1 and Model 2 did not fit the data satisfactorily [Model 1:  $\chi^2(576) = 1657.43$ ,  $p < 0.001$ ; RMSEA = 0.08, CFI = 0.79, TLI = 0.77, SRMR = 0.21; Model 2:  $\chi^2(574) = 1169.96$ ,  $p < 0.001$ ; RMSEA = 0.06, CFI = 0.88, TLI = 0.87, SRMR = 0.15]. In contrast, Model 3 fitted the data adequately [Model 3:  $\chi^2(532) = 894.55$ ,  $p < 0.001$ ; RMSEA = 0.05, CFI = 0.93, TLI = 0.92, SRMR = 0.05]. The comparison between the goodness of fit of Model 1 and Model 2 showed a significant difference between the models [ $\Delta\chi^2(2) = 474.47$ ,  $p = 0.001$ ], indicating that the VBN Model was significantly better than the TPB Model. The comparison between Model 1 and Model 3 [ $\Delta\chi^2(44) = 762.88$ ,  $p < 0.001$ ], as well as between Model 2 and Model 3 [ $\Delta\chi^2(42) = 275.41$ ,  $p < 0.001$ ], revealed that the integrated Model 3 had the highest goodness of fit indices and the best explanatory power. Table 4 shows the fits for each model.

**Table 4.** Comparison among models.

Indicators	Model 1 (TPB)	Model 2 (VBN)	Model 3 (Integrated Model: TPB and VBN)
$\chi^2$ (df)	1657.43 (576)	1169.96 (574)	894.55 (532)
	$p = 0.001$	$p = 0.001$	$p = 0.001$
RMSEA	0.08	0.06	0.05
CFI	0.79	0.88	0.93
TLI	0.77	0.87	0.92
SRMR	0.21	0.15	0.05

Note. TPB = Theory of Planned Behavior; VBN = Value Belief Norm.

In Model 3, attitude ( $R^2 = 0.30$ ), general pro-environmental beliefs ( $R^2 = 0.18$ ), awareness of consequences ( $R^2 = 0.20$ ), ascription of responsibility ( $R^2 = 0.67$ ), and moral norm ( $R^2 = 0.85$ ) had significant levels of explained variance. Furthermore, in Model 3 intention had the highest level of explained variance (Intention  $R^2$ : Model 1 = 0.45; Model 2 = 0.52; Model 3 = 0.56). All the above reasons made us infer that the integrated Model 3 was the best model to explain participants' intention to purchase sustainable clothing.

Regarding the contribution of the TPB variables in explaining the intention to purchase sustainable clothing, the results of Model 3 showed that participants' attitude had the highest effect ( $\beta = 0.29$ ;  $p = 0.001$ ), confirming our H1. In contrast, injunctive norm ( $\beta = 0.02$ ;  $p = 0.78$ ) did not significantly explain intention, disconfirming our H2. Moreover, purchasing intention was positively explained by descriptive norm ( $\beta = 0.13$ ;  $p = 0.05$ ), supporting our H3. Perceived behavioral control did not explain consumers' intention ( $\beta = 0.04$ ;  $p = 0.53$ ), not supporting our H4. Finally, past behavior explained consumers' intentions ( $\beta = 0.07$ ;  $p = 0.05$ ), corroborating our H5.

Regarding the contribution of VBN variables, the results of Model 3 revealed that participants' egoistic values had a negative effect on general pro-environmental beliefs

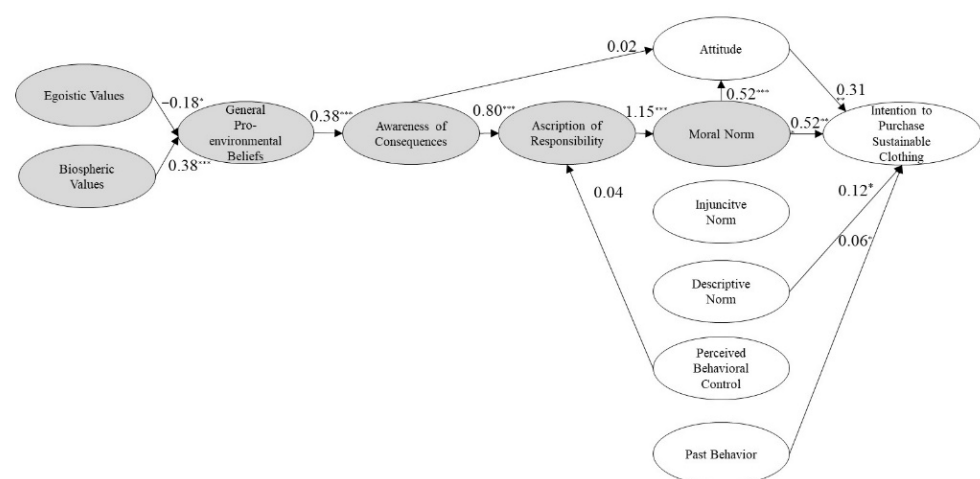
( $\beta = -0.18$ ;  $p = 0.02$ ), whereas biospheric values had a positive effect on beliefs ( $\beta = 0.38$ ;  $p = 0.001$ ). These findings confirmed both H6 and H7. General pro-environmental beliefs positively explained participants' awareness of consequences ( $\beta = 0.38$ ;  $p = 0.001$ ), which in turn explained ascription of responsibility ( $\beta = 0.80$ ;  $p = 0.001$ ). Hence, H8 and H9 were also supported. Additionally, participants' ascription of responsibility explained moral norm ( $\beta = 1.15$ ;  $p = 0.001$ ), and moral norm explained participants' intention to purchase sustainable products ( $\beta = 0.52$ ;  $p = 0.001$ ). Thus, H10 and H11 were fully corroborated. Moreover, results showed a significant mediation chain from egoistic values to intention via general pro-environmental beliefs, then awareness of consequences, ascription of responsibility, and moral norm (*Ind. Effect* =  $-0.03$ ;  $p = 0.05$ ). The same mediation chain from biospheric values to intention was also confirmed (*Ind. Effect* =  $0.07$ ;  $p = 0.01$ ) (Table 5).

**Table 5.** Mediating paths of the proposed model.

Mediating Paths	Indirect Effect	<i>p</i>
AC → ATT → INT	<b>0.02</b>	<b>0.78</b>
MN → ATT → INT	<b>0.13</b>	<b>0.05</b>
PBC → AR → INT	<b>0.01</b>	<b>0.49</b>
EV → GPB → AC → AR → MN → INT	−0.03	0.04
BV → GPB → AC → AR → MN → INT	0.08	0.01

*Note.* AC = Awareness of Consequences; ATT = Attitude toward sustainable clothing; INT = Intention to purchase sustainable clothing; MN = Moral Norm; PBC = Perceived Behavioral Control; AR = Ascription of Responsibility; EV = Egoistic Value; GPB = General Pro-environmental Beliefs; BV = Biospheric Value.

Finally, we investigated the relationships among TPB and VBN variables (from H12 to H14). First, participants' awareness of consequences did not explain their positive evaluation of buying sustainable clothing, thus our H12 was not supported ( $\beta = 0.01$ ;  $p = 0.93$ ). H13 was fully confirmed, as moral norm positively explained attitude ( $\beta = 0.52$ ;  $p = 0.05$ ) and indirectly explained intention via attitude (*Ind. Effect* =  $0.13$ ;  $p = 0.05$ ). Finally, H14 was not supported because perceived behavioral control did not explain either ascription of responsibility ( $\beta = 0.01$ ;  $p = 0.85$ ) or intention to purchase sustainable clothing via ascription of responsibility (*Ind. Effect* =  $0.01$ ;  $p = 0.49$ ) and then via moral norms (*Ind. Effect* =  $0.01$ ;  $p = 0.95$ ). All direct and indirect effects are shown in Figure 2, which reported the tested model, and Table 5, respectively.



**Figure 2.** SEM with standardized regression coefficients. *Note.* \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

#### 4. Discussion

The purpose of the present study was to test the plausibility of a model explaining women's intention to purchase sustainable clothing and integrating personal and moral motives. We integrated TPB variables, which are based on rational and personal motives, with VBN variables, which are based on moral and pro-environmental motives. Our results supported our hypotheses regarding the superior explanatory power of the integrated model compared to the two separate TPB and VBN models.

The superiority of the combined TPB + VBN model as compared to the TPB or VBN models *per se* is likely due to the fact that TPB and VBN are designed to capture different aspects of a person's intention. The TPB model is meant to capture motives related to personal benefit, and its inclusion in our psychosocial framework showed that a positive attitude towards sustainable clothing is the strongest explanatory variable of the intention to purchase it. This finding is in line with previous research on the purchase of sustainable clothing [49,54], which shows that attitude is the key antecedent of consumers' decision.

In our research, another TPB factor that was found to play an important role in influencing women's intention to purchase sustainable clothing was descriptive norm. Past studies have offered mixed results on the role of injunctive and descriptive norms in explaining pro-environmental behavior [55,56,104]. Our study adds to the debate, offering new insights on the explanatory power of subjective norms, showing that Italian women's perception of others' expectations regarding them does influence their intention to purchase sustainable clothing. This finding suggests that the behaviors of other persons act as an important reference point and lead Italian female consumers to make sustainable decisions. This might especially be the case for Italian women who tend to identify themselves in social groups that attach great importance to clothing choices [105].

Unlike descriptive norms, perceived behavioral control did not have a significant influence on Italian women's intention to purchase sustainable clothing. Therefore, the perception of the easiness of the purchasing behavior in question does not seem to have much impact on Italian women's purchasing intention. Possibly, price, retailers' accessibility, and clear information regarding sustainability did not act as barriers to the intention to purchase this type of fashion product. This result adds a new contribution to the current sustainability literature. If the perception of control is the most important factor in the case of many sustainable choices [19], this does not seem to be the case in the context of sustainable fashion. Even if our results suggest that consumers' perceived behavioral control does not have a role in the pre-purchasing phase (i.e., when a consumer is recognizing a need), it might have a fundamental role in the purchasing phase (i.e., when intentions are translated in purchasing behaviors), when the accessibility and price of the product, as well as the clarity of the information, can be very influential. Finally, our results confirmed the role of past behavior in explaining future intention to purchase sustainable clothing [86,106]. Evidently, in the post-purchasing evaluation, Italian women judged their sustainable choice positively and experienced consumer satisfaction, which in turn elicited the decision to maintain that habit over time.

Overall, our study contributes to the sustainability literature by demonstrating that the choice of sustainable clothing is not explained by the same personal motives that explain other types of sustainable behavior. Along with personal motives, moral motives, namely, motives connected with the belief that sustainable purchasing has beneficial outcomes for the environment, turned out to be strong drivers of women's sustainable clothing purchase. As a matter of fact, in the present study moral norm, that is, the sense of obligation to act in line with moral principles, was the strongest explanatory variable of women's intention. This outcome extended to the Italian context past results on US young adults, which showed that moral obligation influenced purchase intentions of sustainable apparel [107]. As several previous studies had shown that personal norms played an important but not primary role in consumer choices (for a meta-analysis see [108]), these results highlight again the peculiarity of the antecedents of the sustainable choices in the case of clothing purchase.

The indirect effect of biospheric values on purchasing intention via the VBN chain (i.e., awareness of consequences, ascription of responsibility, and moral norm) confirmed that pro-environmental motives play a key role in sustainable clothing purchase. In past studies, biospheric values seemed to increase women's intention towards purchasing sustainable clothing, while egoistic values seemed to diminish it, suggesting that consumers tend to choose clothing compatibly with their value priorities [53]. The present study offers the first evidence of the indirect processes through which values influence sustainable clothing choices. Specifically, our data showed that women's biospheric values impact purchasing intention because they stimulate the awareness of the consequences of the related behavior, the connected ascription of responsibility, and the related moral norm. In other words, biospheric values drive consumers to investigate the environmental impact of fashion products, and in turn stimulate a sense of moral responsibility and obligation to choose sustainable products.

The integration of the TPB and VBN models offers a novel contribution to the sustainability literature. In this regard, our finding that moral norm had a direct effect on attitude and an indirect effect on intention through attitude offers support to the existence of a close connection between the sense of a moral obligation to act pro-environmentally and its consequent pros-and-cons evaluation. Particularly, this result suggests that moral motives may guide intention to purchase sustainable fashion only if the consequences of this choice are positively considered in individualistic terms. This result, therefore, supports the new human interdependence paradigm [71]: people may have also a utilitarian drive to behave pro-environmentally. Thus, moral motives seem to guide sustainable behavioral intention given that they are the antecedents of a rational positive evaluation towards it.

#### *4.1. Limitations and Future Directions*

Even if the findings of this study are statistically robust, they are not free of limitations. First, our sample involved only Italian women, thus our findings cannot be generalized to the entire clothing market. Moreover, as far as previous research has reached mixed results regarding the influence of cultural values on sustainability, e.g., [15,26,73], it would be worth considering if cultural values may differently impact the purchase of sustainable clothing in different cultural and local contexts [109]. It would therefore be important to consider to what extent the results of this Italian study differ from those obtainable in other countries. Moreover, future studies might integrate in the present theoretical model consumers' values related to the attributes of sustainable fashion, such as functional, social, and emotional values [110].

Second, our results may be subject to error due to the self-reported nature of all answers recorded, especially for the measurement of past behavior. We cannot exclude that a social desirability bias occurred, leading to over-reporting of socially desired responses.

Third, the present study used a cross-sectional design, which did not allow measuring to what extent current intentions would transform into actual buying behavior. Future studies could therefore usefully test if the proposed psychosocial model can also be employed to explain the relationship between consumers' positive intention to buy sustainable clothing and their actual buying behavior.

Finally, researchers could evaluate if other variables, which are still little investigated in the field of sustainable fashion, might be included in the proposed integrated model. For example, future studies could verify whether other psychosocial factors, such as ingroup identification, collective efficacy, and pro-environmental self-identity [19,27] might be relevant additional factors to explain intention to purchase sustainable clothing. In addition, future research could control for the moderating role of other values that can affect the purchasing of sustainable clothing, such as social justice and equality [15]. Importantly, future studies could verify what psychosocial variables might play a moderating role among the considered paths from personal and pro-environmental motives to intention.

#### 4.2. Practical Implications

Our results have several practical implications for marketing, policy-making, and non-governmental action aimed at stimulating sustainable clothing purchases.

First, policymakers might provide educational programs and actions to strengthen a positive attitude towards sustainable clothing. Additionally, apparel companies are recommended to communicate the positive environmental consequences of purchasing sustainable clothing. More and more brands offer sustainable clothing collections, but very often they do not explain what they mean by this definition (i.e., recycled materials, organic materials, reduced environmental impact of production...). To offer more information on their production, for instance, they could create digital labels with a QR code that links to an app to offer consumers a digital experience, which provides details on how the cloth was produced. An explanation of the production processes of clothing would increase the value that the consumer attaches to it. Likewise, giving detailed instructions on how clothes should be looked after would increase their resistance over time. This information could be also helpful for recyclers and resellers as it allows them to easily identify product information, as well as increase the likelihood that the product will remain in the circular economy.

It is important to consider that sustainability information must be conveyed in a way that is as convincing as possible. In this regard, the framing theory must be mentioned. Framing is the use of different ways of delivering persuasive messages on a given issue by selecting and emphasizing different pieces of information (for some reviews, see [79,80]). According to the results of the few studies carried out so far on the promotion of sustainable fashion by using message framing [111], information with positive valence (i.e., looking at the benefits of sustainable fashion) should increase future purchase intentions more than information with a negative valence (i.e., stressing the harmful effects of unsustainable fashion).

Another framing strategy to enhance a positive attitude towards sustainable clothing might be formulating messages in a prefactual (“If . . . then”) style, i.e., framing the consequences of sustainable behavior on the environment not as a direct and inescapable cause-effect link, but rather as the hypothetical future outcome of the adoption (or non-adoption) of a proposed behavior (e.g., “If you do purchase sustainable clothing, you will protect the environment”; [8,112,113]). This prefactual formulation may stimulate participants’ anticipated evaluation of the positive environmental consequences of purchasing sustainable clothing and thus increase willingness to behave accordingly.

Second, our results suggest that other people’s preferences towards sustainable clothing may play a relevant role in activating individuals’ desire to adhere to such societal standards. In this regard, policymakers might stimulate critical thinking about the reasons behind the increasing tendency to purchase sustainable clothing and about the importance of each consumer’s sustainable choice for environmental protection. In doing this, they might also leverage dynamic norms [114], i.e., emphasize that more and more people are purchasing sustainable clothing. Providing such information may act as a “social proof” that a given behavior is the right way to act, thus stimulating a desire for social approval. To ensure that the purchase of sustainable products becomes a social standard, fashion companies could also leverage the role of social media. Instagram, TikTok, Facebook, and YouTube—just to name a few—have a significant effect on how consumers act online, before and during the actual purchasing decision. Specifically, influencers, bloggers, and brand ambassadors have brought online shopping to another—often unsustainable—level. Policymakers and sustainable apparel industry might take advantage of their very efficient ways of advertising to explain the greater value of their sustainable products.

Third, our results regarding the VBN chain (biospheric values, awareness of consequences, ascription of responsibility, and moral norm) point to the central role of education in promoting responsible environmental awareness. The more consumers are aware of environmental issues, the more they are concerned about it, and are more likely to opt for pro-environmental choices. Given that the motivation to act pro-environmentally derives



from one's values, beliefs, and moral norms, one way to promote motivation may be enhancing communication regarding those values, principles, and personal norms. As the intention to buy sustainable clothing is rooted in moral considerations regarding the importance of environmental sustainability, one way to strengthen people's intention to buy sustainable clothing may be providing information that purchasing sustainable clothing means to act in line with moral motives.

## 5. Conclusions

All in all, our findings contribute to a better understanding of the psychosocial aspects of people's intention to purchase sustainable clothing. Our study highlighted that one of the strongest reasons to buy sustainable clothing is consumers' awareness of the negative effects of its production. Furthermore, our findings suggested that female consumers' intention is also driven by personal norms, attitude, subjective norms, and past behavior, which appeared as important drivers in increasing the intention to purchase sustainable clothing. Along with these motives, biospheric values also play an important indirect role in explaining women's intention to purchase sustainable clothing. Interestingly, our results pointed out not only the weight of all these factors, but also their interconnections in affecting consumers' intention to purchase sustainable clothing. Both individualistic and pro-social factors shape pro-environmental behavior in the domain of fashion clothing, and this evidence offers new insights to develop effective communication to promote the purchase of sustainable clothing. To increase this purchase, market actors should work to increase consumers' education and awareness of fashion consumption behaviors. In designing advertising for sustainable fashion products, they should strengthen the consumers' perception of this behavior as useful and pleasant. They should also consider the importance of consumers' moral beliefs and biospheric values. This could help translating the rising public attention on sustainability into higher levels of demand for sustainable clothing.

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**Institutional Review Board Statement:** The study was conducted according to the guidelines of the Declaration of Helsinki, and approved by the Institutional Review Board (or Ethics Committee) of Università Cattolica del Sacro Cuore, Milano (protocol code 0618 and date of approval 4/04/2019).

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

**Data Availability Statement:** The data presented in this study are available on request from the corresponding author.

**Conflicts of Interest:** The authors declare no conflict of interest.

## Appendix A

**Table A1.** Survey Questionnaire.

Questions	Response Scales
Where do you usually buy clothing items?	1. Franchising (e.g., Zara, H&M) 2. Online 3. Shopping malls 4. Outlet 5. Vintage stores
Do you typically try new brands?	1. Yes 2. No
Do you read the label on clothing before you buy it?	1. Yes 2. No
Purchasing sustainable clothes is/would be?	Disadvantageous (1)—Advantageous (7) Unpleasant (1)—Pleasant (7) Boring (1)—Funny (7) Unsatisfactory (1)—Satisfactory (7) Fool (1)—Wise (7)
Most people think that I should buy sustainable clothing Most people would approve if I bought sustainable clothing Most people would prefer that I buy sustainable clothing Most people I know buy sustainable clothing Most people I know believe it is right to buy sustainable clothing Most people I know would like to buy sustainable clothing Sustainable clothing might be expensive The retail outlets of sustainable clothing might be located far away from where I live It might be difficult to obtain information regarding the sustainability of the clothing	Strongly disagree (1) Disagree (2) Slightly disagree (3) Neither agree or disagree (4) Slightly agree (5) Agree (6) Strongly agree (7)
Please, indicate how often you purchase the following sustainable clothing: jackets, windbreakers, overcoats, t-shirts, sweaters, pants, skirts, dresses	Never (1)—Sometimes (4)—Always (7)
Social power: control over others, dominance Wealth: material possessions, money Authority: the right to lead or command Influential: having an impact on people and events Respecting the earth: harmony with other species Unity with nature: fitting into nature Protecting the environment: protecting natural resources Preventing pollution: protecting natural resources	Opposed to my Values (−1) Not important at all (0) (1) (2) Important (3) (4) (5) Very Important (6) Of super importance (7)
Human progress can be achieved only by maintaining the ecological balance Preserving nature now means ensuring the future for human beings Human beings can progress only by conserving nature's resources The production of sustainable clothing causes environmental pollution A reduced purchase of sustainable clothing would contribute to environmental protection The production of sustainable clothing causes climate change I think it is useful to purchase sustainable clothing to reduce environmental problems I can take on responsibility for my purchase of sustainable clothes to protect the environment I think I can contribute to reducing the environmental problems by purchasing sustainable clothing Purchasing sustainable clothing is the right thing to do Purchasing sustainable clothing means acting in line with what I find important If I see sustainable clothing, I intend to or consider purchasing it If I see a retail store of sustainable clothing, I intend to visit the store to purchase a product When I find a cloth that fits my needs, the possibility of purchasing it will increase if it is sustainable When I find a cloth that fits my needs, the possibility of purchasing it will increase if it is sustainable	Strongly disagree (1) Disagree (2) Slightly disagree (3) Neither agree or disagree (4) Slightly agree (5) Agree (6) Strongly agree (7)

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