Article

Causes of Consumer Materialistic and Green Value Conflict: A Systematic Literature Review

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Abstract: In societies where considerable sectors of the population are materialistic consumers, there is a noticeable phenomenon of the conflict between the consumers' materialistic and green values. The unsustainable consumption behavior of consumers is still a major issue in consumer behavior and environmental science. The topic of value conflict has caused great interest among psychology researchers. However, the research investigating the causes of the consumers' materialistic and green value conflict is sparse. Therefore, the aim of this semi-systematic literature study ($n = 25$) is to identify the causes of the materialistic and green value conflict from the perspective of consumer behavior. Content analysis reveals seven possible causes which may influence the green and materialistic value conflict: dissonant information, environmental beliefs, environmental concern, impulsive buying, consumer confusion, anti-consumption, and decision evaluation. The analysis shows a probable relation between environmental beliefs and environmental concern, as well as a relationship between environmental beliefs and anti-consumption. The current research yields insights into the phenomenon of consumers' materialistic and green value conflict, with attention being paid to the under-researched causes of the conflict. In the light of materialistic inclinations and sustainable consumption, new forms of sustainability campaigns, such as showing the benefits of anti-consumption and simpler lifestyles for materialistic consumers, are presented for marketers and policymakers.

Keywords: materialistic values; green values; value conflict; sustainability; cognitive dissonance; green marketing; consumer behavior

1. Introduction

The scientific consensus on mitigating climate change through human activities is unanimous. According to the Intergovernmental Panel on Climate Change (IPCC) report (2019), human activities are causing anthropogenic climate change. To a large extent, climate change has become a problem due to materialistic behavior, and unsustainable consumer choices are leading to the depletion of resources on the planet. Although the environmental impact of each person is low, the overall impact is enormous, with approximately one-third of all food produced each year being thrown away (cumulatively) by the consumers and the retailers. The COVID-19 pandemic has highlighted the links between the people and nature and revealed the fundamental trade-offs we face all the time: people have unlimited needs, but the planet's capacity to meet them is limited [1]. The consumers' resource-intensive lifestyle is identified as the primary driver of environmental degradation necessitating a shift toward more sustainable consumption behavior [2]. Warning messages and requests for behavioral adjustments and consumption reduction are becoming ever more prevalent in the mainstream and social media. Consumers are confronted with an increasing amount of diverse and frequent anxiety-inducing information which must be absorbed into their attitudinal system [3]. Mass media also enhances both materialist and post-materialist values, rather than one or the other [4,5], creating confusion among consumers. Furthermore, businesses encourage both materialistic values and environmental consumption [6,7].

Persuading customers to care more about the environment and lower their consumption levels has evolved into a popular strategy in social marketing [8–10]. There are two different consumption paths to achieve environmental improvements. One consumption path is to consume products that are environmentally friendly. The other is the anti-consumption path which requires consumers to decrease the frequency of consumption of food [10].

However, there are a lot of consumers with materialistic values and attitudes, and despite being in the possession of many material objects, consumers still spend a lot of time and money on buying new items [11]. Materialism is a value that is directly related to overconsumption [12] and exerts a negative impact on the environment [13]. Materialism and consumerism jointly pose a severe threat to the environment and humanity as a result of overconsumption. These may be best dealt with by adopting one of the alternative sustainable behaviors, namely, anti-consumption, which has been garnering a lot of attention [2]. Materialism is compatible with green purchasing rather than with anti-consumption [14]. Green purchasing does not yet necessitate major lifestyle adjustments or changes in the consumption patterns [5]. Sustainability-based anti-consumption practices may have a greater impact on the value conflict negative consequences than purchasing green products. Increasing the efforts to persuade materialistic consumers as well as to embrace green values and anti-consumption practices may cause materialistic consumers to experience internal value conflict. For some customers, this might lead to negative psychological consequences [15]. Some empirical studies have established that value conflict can be a barrier to developing socially responsible consumption because it causes difficulty in the decision-making process and inconsistency of behavior [16].

Furchheim, Martin, and Morhart confirm a conflict between materialism and green value orientation [15]. This conflict arises when a consumer holds materialistic and green values. Green values are opposed to materialistic values. Consumers denoted by green values tend to minimize, avoid, or reject consumption [15]. Another value orientation-materialism-may be the barrier to the transition to a simpler lifestyle [15]. Materialists are frequently focused on acquisition and consumption, thereby directing their attention and resources into obtaining goods in the hope that the two types of action would lead to life satisfaction, happiness, and overall well-being [17]. Materialistic consumers believe that increased consumption enhances their happiness and well-being in life [18]. Materialistic consumers are more self-centered and less likely to be engaged in environmental activities [19].

The body of research on sustainability movements and social marketing strategies promoting sustainability is fairly large. Overall, it still remains unclear what effect the sustainability movements and social marketing strategies have on materialistic consumer behavior. However, the possible consequences of consumer well-being remain understudied in the literature on sustainable consumption. In addition, the causes of conflict have not been investigated from the perspective of consumer behavior, and anti-consumption is only mentioned as one of the possible causes of the conflict of values [15]. The topic of value conflict has caused great interest among psychology researchers who have discovered that counter attitudinal behaviors and dissonant information can be identified as the causes of this phenomenon [20]. Counterattitudinal behaviors can cause a value conflict when consumer behavior is in conflict with their values [21]. Based on the theory of cognitive dissonance, anti-consumption is a counter attitudinal behavior to materialistic values, and impulsive buying is a counter attitudinal behavior to green values. Dissonant information can cause value conflict when consumers are exposed to information contradicting their values [22]. Cognitive dissonance may be observed in many aspects of human activity, including judgment and decision-making [20]. However, none of the research has adopted the systematic approach and/or revealed the causes of value conflict from the perspective of consumer materialism and green consumption. Thus we are addressing the above outlined research gap by exploring the causes affecting the conflict between the consumers' materialistic and green values. This study specifically addresses the following research

question by using the systematic approach: what are the causes of the conflict between the consumers' materialistic and green values?

The results of this literature review shall contribute to systematizing the knowledge about the value conflict in this specific green vs. materialistic value orientation context and have practical implications for understanding the causes of the consumers' green vs. materialistic value conflict. The structure of the paper is as follows. First, methodology describes how the materials were obtained, selected, and analyzed. The segment on findings presents the general results of the analysis, and the causes of consumers' green vs. materialistic value conflict emerge from the literature review. The discussion compares its findings with the findings of other studies and describes this study's theoretical contribution. Policy implications present practical suggestions. Conclusions present the general findings and suggest directions for future research. Limitations present this study's limitations.

2. Materials and Methods

The systematic literature review approach was used in the context of value conflict and sustainability with the objective to examine diverse study subjects, such as consumer confusion [23], anti-consumption [24], cognitive dissonance [21], and sustainable consumption [25]. The literature review involved the following steps [26]: (1) specific and clear research question formulation and definition (as described in Section 1); (2) a search strategy and inclusion and exclusion criteria development to construct a sample of relevant articles (Section 2.1); (3) analysis and synthesis, which involved selected article evaluation and comparison (Section 2.2).

2.1. Study Design

To target the specific research question of the study which aims to identify the causes of the consumer green vs. materialistic value conflict, the semi-systematic literature review method was chosen. The semi-systematic literature review method can be useful in identifying the theoretical perspectives, components of theoretical concepts, detecting themes, or identifying the main issues within a particular research discipline or methodology [27]. The contribution of a semi-systematic literature review could be synthesizing the state of knowledge, developing an agenda for future research, and presenting a historical overview or a timeline of a specific topic. The semi-systematic literature review method was chosen for identifying the state of knowledge and detecting the causes of the materialistic vs. green value conflict. A literature review involved a process of searching for and selecting articles, and they were subsequently assessed by using the qualitative approach [28]. The use of the semi-systematic literature review method to search for articles is a strictly defined process. Almost all first literature searches generate numerous articles, and a strategy for determining which are the genuinely relevant ones is consequently required. The inclusion criteria regarding the sourced articles should be driven by the selected research question. The year of publication, the type of the article, and that of the journal are some of the criteria that can be considered [28]. The inclusion criteria were as follows:

a.   The document type selected in the search is articles published in the English language;
b.   The period of publication between 2011 and 2021. This publication period was chosen because the topic of the conflict between materialist and green values is new and unexplored. Since 2011, the number of articles published on this topic has been increasing.

The databases Web of Science, Science Direct, Emerald, and Scopus were chosen because they cover many different areas. When searching for relevant articles, various broader and narrower strings were used in relation to the research question. The search strings showed that the number of articles varies across the different databases. The Science Direct and Emerald databases showed the highest numbers of articles by the search strings (Table 1).

Table 1. Quantitative results of articles in databases from 2011 to 2021.

	Databases			
Search String	**Web of Science**	**Science Direct**	**Emerald**	**Scopus**
Consumer value conflict	687	52,839	16,480	360
Causes of consumer value conflict	60	36,696	11,144	24
Materialism and green values	69	524	570	22
Conflicting values in green consumption	48	32,178	3702	21
Consumer materialistic values and green values	17	423	237	8
Dissonant cognitions in consumption	1	65	34	2
Consumer conflicting values in green consumption	15	9882	2592	5
Consumer materialistic and green value conflict	3	203	130	2
Causes of consumer materialistic and green value conflict	0	151	100	0

First, a search string corresponding to the research question "Causes of consumer materialistic and green value conflict" was entered, and only two databases (Science Direct and Emerald) generated relevant articles based on this search string. More abstract search strings were then developed, and other databases (Web of Science and Scopus) also generated articles. "Causes of consumer materialistic and green value conflict" and "Consumer materialistic values and green values" search strings were chosen because of the specific research question. The "Dissonant cognitions in consumption" search string was chosen because the value conflict is related to the cognitive dissonant theory, and materialism and green values are dissonant cognitions.

The following search strings were used in this review:

- The Web of Science database search strings "Dissonant cognitions in consumption" and "Consumer materialistic values and green values";
- The ScienceDirect database search strings "Dissonant cognitions in consumption" and "Causes of consumer materialistic and green value conflict";
- The Emerald database search strings "Dissonant cognitions in consumption" and "Causes of consumer materialistic and green value conflict";
- The Scopus database search string "Dissonant cognitions in consumption" and "Consumer materialistic values and green values".

For this study, in the Web of Science database, 17 articles were selected from various subject areas. In the Scopus database, 10 articles were selected from various subject areas. In the ScienceDirect database, 216 articles were selected from various subject areas, whereas, in the Emerald database, 134 articles were selected from various subject areas (Table 2).

Table 2. Search databases and results.

String	Databases	Number of Articles	Article Type Review	Subject Areas
Consumer materialistic values and green values	Web of Science	17	Articles (17)	Business (12) Psychology Applied (4) Environmental Studies (3) Environmental Sciences (1) Forestry (1) Green Sustainable Science (1) Technology (1) Management (1) Medicine General Internal (1) Plant Sciences (1) Urban Studies (1)
Consumer materialistic values and green values	Scopus	8	Articles (8)	Business, Management and Accounting (5) Economics, Econometrics, and Finance (3) Social Sciences (3) Psychology (2)
Causes of consumer materialistic and green value conflict	Science Direct	151	Research articles (151)	Social Sciences (74) Environmental Science (50) Economics, Econometrics, and Finance (39) Business, Management and Accounting (38) Agricultural and Biological Sciences (26) Psychology (21) Energy (18) Arts and Humanities (8) Decision Sciences (5) Medicine and Dentistry (5)
Causes of consumer materialistic and green value conflict	Emerald	100	Articles (100)	-
Dissonant cognitions in consumption	Web of Science	1	Articles (1)	Business (1)
Dissonant cognitions in consumption	Scopus	2	Articles (2)	Business, Management and Accounting (1) Multidisciplinary (1)
Dissonant cognitions in consumption	Science Direct	65	Research articles (65)	Business, Management and Accounting (26) Psychology (24) Social Sciences (23) Neuroscience (12) Agricultural and Biological Sciences (11) Computer Science (7) Arts and Humanities (6) Economics, Econometrics, and Finance (6) Environmental Science (6) Medicine and Dentistry (6)
Dissonant cognitions in consumption	Emerald	34	Articles (34)	-

2.2. Analysis and Synthesis

For conducting the systematic review, the present study used the "Preferred reporting items for systematic reviews and meta-analyses (PRISMA)" approach [29]. In this systematic literature review, the process information flowed through four stages: identification, screening, eligibility, and inclusion. A total of 378 articles were identified through database searching. For this study, the Mendeley program was used to identify and remove duplicates from the analysis. A total of 34 duplicate articles were found and removed. After removing duplicates, the articles were screened by reading through the titles, abstracts, and keywords. A total of 287 articles were excluded from further analysis because they were not related to consumer materialism and green consumption or consumer materialistic and green values or consumer materialistic and green value conflict or cognitive dissonance in consumption. A total of 57 articles were further analyzed and read at the full-paper level,

and those that were not relevant were not included in the analysis. In total, 25 articles were selected as the final inclusion set for data analysis (Figure 1).
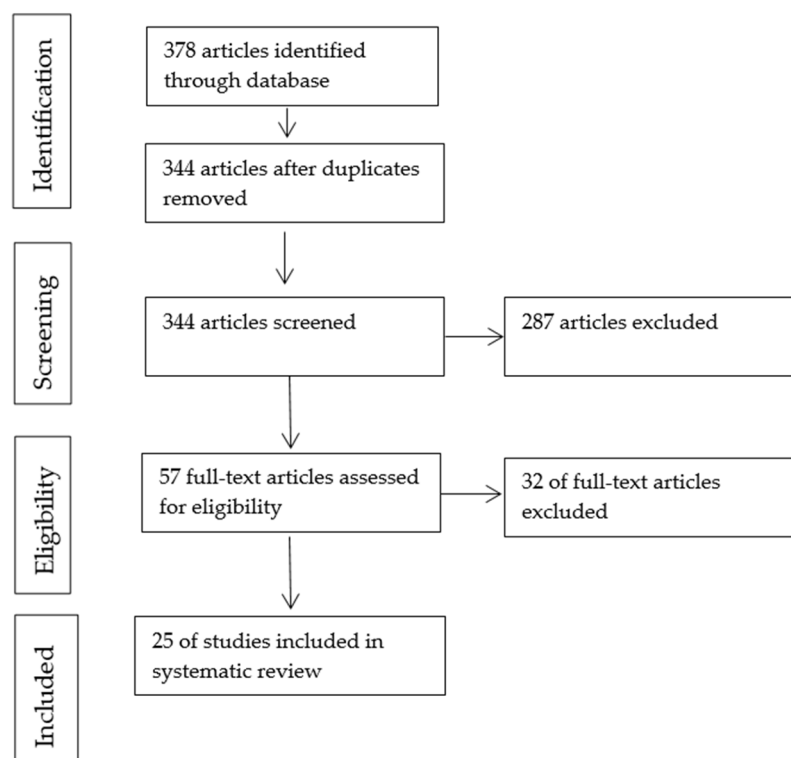

Figure 1. Article screening and inclusion procedure.

After determining which articles shall be included, the final step was to analyze the content of the articles. Qualitative content analysis systematically examined the content of the documents. The aim of content analysis was to identify the connections between the meanings, the characteristics, or the general topics in the chosen field of research. This method interprets data by systematically classifying it. The data were independently coded with the MAXQDA software for qualitative data analysis. The data were organized and coded into distinct categories or factors based on their nature by using the content analysis process.

3. Results

The Results section is divided into two sub-sections: Section 3.1—distribution and evolution of the topic, and Section 3.2—content analysis.

3.1. Distribution and Evolution of the Topic

The 25 selected articles published between 2011 and 2021 were included in the semi-systematic literature review, with the highest number of studies being from 2020 (six studies), 2019 (five studies), and 2021 (four studies). In the previous years, the frequency of articles was as follows: two studies in 2011, one study in 2013, three studies in 2014, two studies in 2017, and two studies in 2018. The selected articles focused on such subjects as environment, marketing, consumer behavior, psychology, sustainable development, and environmental psychology. To be more specific, Ecological Economics (three studies), Appetite (three studies), International Journal of Retail and Distribution Management (two studies), Internet Research (two studies), Journal of Business Research (two studies), Journal of Psychology Marketing (two studies), Journal of Consumer Marketing (two studies), Journal of Academy of Marketing Science (one study), International Journal of Research in Marketing (1 study), Journal of Environmental Psychology (one study), Benchmarking: An International Journal (one study), Annals of Tourism Research (one study), Young Consumers (one study), European Journal

of Marketing (one study), Journal of Global Marketing (one study), Procedia Social and Behavioral Sciences (one study) were covered. Table 3 shows the classification of papers by author/s, year of publication, country of study, research object, research method, and research area.

Table 3. Classification of 25 selected articles.

Article	Author, Year	Country of Study	Research Object	Research Method	Research Area
1	Furchheim, Martin, and Morhart (2020)	Switzerland and Ireland	Value conflict, self-concept clarity, stress, satisfaction with life, preference for consistency	Survey	Psychology; Business and Economics;
2	Tang and Hinsch (2018)	USA	Environmental attitude, environmental knowledge, indirect environmental behavior, materialistic values, self-consciousness	Survey, secondary data analysis	Psychology; Business and Economics
3	Sreen, Purbey and Sadarangani (2020)	India	Materialism facets, environmental beliefs, subjective norms, attitude towards green products, perceived behavioral control	Survey	Business and Economics
4	Séré de Lanauze and Siadou-Martin (2020)	France	Past behavior, affective attitude toward meat consumption, resistance attitude toward global consumption, attitude toward meat production, psychological discomfort, motivation to change behavior, external information, reduction strategies (trivialization and decredibilization).	Survey	Business and Economics
5	Yassin and Soares (2020)	Egypt	Impulsive buying, cognitive dissonance, and expiration date-based pricing	Survey	Business and Economics
6	Chauhan and Sagar (2021)	-	Consumer confusion	Systematic literature review	Business and Economics
7	Telci, Maden and Kantur (2011)	-	Cognitive dissonance	Systematic literature review	Business and Economics
8	Alzubaidi, Slade, Dwivedi (2021)	Saudi Arabia	Environmental concern, materialism, innovativeness, social influence, perceived consumer effectiveness, behavioral intentions, indirect and direct pro-environmental behavior	Survey	Business and Economics
9	Dhandra (2019)	India	Dispositional mindfulness, green purchase intention, social conscious purchasing, frugal purchasing, materialism, life satisfaction	Survey	Environmental Sciences and Ecology, Business and Economics
10	Dowsett, Semmler, Bray, Ankeny and Chur-Hansen (2018)	Australia	Cognitive dissonance, attitude toward meat consumption	Experimental study	Behavioral Sciences
11	Ericson, Kjonstad and Barstad (2014)	-	Mindfulness, well-being, values, empathy, compassion, and sustainable behavior	Literature review	Environmental Sciences and Ecology, Business and Economics
12	Polonsky, Kilbourne and Vocino (2013)	China, Hong Kong, Taiwan, and Singapore	Dominant Social Paradigm, materialistic values, concern, intentions, indirect and direct behavior	Survey	Business and Economics
13	Helm, Serido, Ahn, Ligon and Shim (2019)	USA	Materialistic values, savings behavior, pro-environmental behavior, well-being	Survey	Business and Economics
14	Juvan and Dolnicar (2014)	Australia	Sustainable tourism	Interviews	Sociology

Table 3. *Cont.*

Article	Author, Year	Country of Study	Research Object	Research Method	Research Area
15	Lu, McComas and Besley (2016)	USA	Message conditions, anger, message evaluations, time spent reading the message, message processing fluency, attitudes toward genetic modification crops, behavioral intentions to consume genetic modification foods	Experimental study	Behavioral Sciences
16	Kulshreshtha, Bajpai, Tripathi and Sharma (2019)	India	Cause-related marketing, hedo-utilitarian products, cognitive and affective responses.	Survey	Business and Economics
17	Rothgerber (2014)	USA	Cognitive dissonance, dissonance-reducing strategies	Survey	Behavioral Sciences
18	Ryoo, Sung and Chechelnytska (2020)	-	Materialism, ad appeals, protective motivation, enhancement motivation attitude toward ads, willingness to purchase products, willingness to support campaigns	Experimental study	Business and Economics
19	Thiermann and Sheate (2020)	-	Pro-environmental behavior	Literature review	Business and Economics
20	Vaghefi, Qahri-Saremi and Turel (2020)	USA	Social networking site addiction, self-accountability, cognitive dissonance, guilt, perceived self-efficacy, decision to discontinue	Survey	Business and Economics
21	Axon (2017)	United Kingdom	Enablers and barriers to sustainable consumption	Focus groups	Environmental Sciences and Ecology; Psychology
22	Johnson, Seifert and Lee (2021)	USA	Clothing subscription, cognitive dissonance, attitude toward clothing subscription, clothing subscription purchase intention	Experimental study	Business and Economics
23	Lasarov, Mai, Garcia de Frutos, Egea and Hoffmann (2019)	-	Climate change knowledge, perceived seriousness, counter-arguments	Secondary data analysis	Business and Economics
24	Huang and Rust (2011)	-	Sustainable consumption	Literature review	Business and Economics
25	Chakrabort, Upadhyay and Dwivedi (2020)	India	Loneliness, Social distancing attitude, cognitive dissonance, social networking site intensity	Survey	Business and Economics

3.2. Content Analysis

The inductive coding approach was used in the coding. In the coding of the articles, it was defined that the cause of the materialistic and green value conflict is an external or internal factor that contradicts materialistic values and supports green values or contradicts green values and supports materialistic values.

The semi-systematic literature review identified seven possible causes of the value conflict: dissonant information, environmental beliefs, environmental concern, impulsive buying, consumer confusion, anti-consumption, and decision evaluation (Table 4).

Table 4. Data results (1).

	Frequency of Codes	**Percentage**
Value conflict causes/Dissonant information	36	6.65
Value conflict causes/Environmental beliefs	33	6.10
Value conflict causes/Environmental concern	23	4.25
Value conflict causes/Impulsive buying	12	2.22
Value conflict causes/Consumer confusion	10	1.85
Value conflict causes/Anti-consumption	10	1.85
Value conflict causes/Decision evaluation	8	1.48

Environmental concern as a possible cause of materialistic and green value conflict was identified in 10 selected articles. Environmental beliefs as a possible cause of materialistic and green value conflict were mentioned in nine selected articles. Dissonant information as a cause was mentioned in seven articles. Anti-consumption and decision evaluation as causes were identified in six articles. Consumer confusion as a cause of value conflict was mentioned in four articles and impulsive buying was mentioned in two articles (Table 5).

Table 5. Data results (2).

Causes of Materialistic and Green Value Conflict	**Number of Articles**	**Areas of Articles**
Environmental concern	10	Psychology; Business and Economics; Environmental Sciences and Ecology; Sociology
Environmental beliefs	9	Psychology; Business and Economics; Environmental Sciences and Ecology;
Dissonant information	7	Psychology; Business and Economics; Behavioral Sciences; Sociology
Anti-consumption	6	Psychology; Business and Economics; Behavioral Sciences;
Decision evaluation	6	Business and Economics; Psychology; Behavioral Sciences;
Consumer confusion	4	Business and Economics
Impulsive buying	2	Business and Economics

Dissonant information: the general level of consumption is being criticized because it creates new global challenges and possible risks to the environment, social well-being, and human health. Warning messages and requests for behavioral adjustments and reduced consumption are becoming more prevalent in the mainstream and social media. Consumers are being confronted with an increasing amount of diverse and frequently anxiety-inducing information. Consumers are becoming more sensitive to the consequences of their consumption as they are getting more and better informed and educated, and they are feeling challenged to embrace new consuming practices [3]. When compared to the normal persuasive impacts of advertising communications regarding the product in issue, reading negative information communicated through the media, social media, or consumer associations may have a sensitizing effect on the consumers and a reversal influence. Consumers may change their behaviors and adapt their consumption practices as a result of negative product messages [30]. Even negative information, however, must be trustworthy and authentic in order to be compelling. Individuals analyze information and will only examine it to the extent that they believe in and trust it [3].

Dissonant information is negative and anxiety-inducing information; it contradicts cognitions [3]. According to the theory of cognitive dissonance, additional information tends to increase the attitude-behavior conflict, and, consequently, the level of psychological discomfort [3] information that is inconsistent with beliefs increases dissonance. Dissonance can be understood as a psychological discomfort resulting from a conflict of values. Dissonance can lead to the misunderstanding or misinterpretation of information, rejection of information, seeking support from people who agree with one's opinion and attempting to persuade others to accept one's belief if it is not decreased by modifying one's belief [22]. When consumers are being faced with new dissonant information, they are using informational methods (such as decredibilization and trivialization) to reduce their psychological discomfort [3].

Materialistic customers can experience a value conflict as a result of being faced with condemning statements about materialism, regardless of whoever would make them [15]. Dissonant information increases psychological discomfort, but this impact fades with time and is under the influence of the consumer's information processing strategies [3]. Consumers actively avoid information that would likely increase dissonance [20]. Consumers reject information about the negative environmental effect of their tourism-related activities to avoid or reduce dissonance [31]. Dowsett et al. determined that informing consumers of the consequences of their actions may cause dissonance [32].

Individuals use motivated reasoning to avoid feelings of guilt for harmful activities by obtaining supporting information selectively and downplaying contradictory information [33]. When confronted with ideologically conflicting messages, psychological reactance can develop as a sort of motivated thinking, which would lead to counteractive responses [34] or counter-arguments [35]. On the basis of the literature review, it may be argued that dissonant information may be a cause of and reinforce the conflict between the consumers' materialistic and green values. Dissonant information contradicting materialistic values may increase psychological discomfort for materialistic consumers. In order to reduce psychological discomfort, consumers can use coping strategies, such as the rejection or avoidance of information.

Environmental beliefs: many policymakers and non-governmental organizations are seeking to promote consumer awareness of the negative consequences of excessive consumption and to encourage consumers to adopt a more sustainable lifestyle [10]. Consumers are becoming aware of the harmful consequences of their consumption levels in a variety of product categories, and these new views are causing them to reconsider their usual purchasing habits [3]. Consumers' awareness of environmental issues as a result of human behavior is referred to as environmental beliefs [36].

Environmental beliefs exhibit a negative relationship with materialism. Consumers are experiencing cognitive dissonance as a result of a conflict between different values. They are trying to retain their self-image by modifying their materialistic ambitions or their understanding of the environmental impact of their purchases [19]. The research of Tang and Hinsch showed that those consumers who were environmentally aware and materialistic were more likely to exhibit indirect environmentally relevant behavior than the other consumers [37]. Consumers are becoming more conscious of the environmental impact of their materialistic behavior and are attempting to compensate for it. Despite being aware of the environmental effects, some customers are using neutralizing strategies to prevent changing their behavior, such as developing counter-arguments [38].

Environmental knowledge can lead materialist consumers towards more indirect environmental behaviors [37]. Environmental beliefs activate environmentalism and self-transcendence values which are in contradiction with materialistic values [39]. Materialistic values may have a negative relation to environmental beliefs. "If a consumer is highly aware of the negative consequences of consumption in general and has developed a propensity to resist excess consumption as a personal value, this should directly conflict with past consumption behavior and increase his/her psychological discomfort" [3] (p. 568). Those consumers who are aware of the consequences of consumption tend to be more concerned

about the environment. This analysis also showed a relationship between environmental beliefs and environmental concerns. Those consumers who are aware of environmental problems are also more concerned about the environment and have stronger beliefs about sustainable behavior [19]. Materialistic values eliminate environmental concerns by developing a negative relation with environmental beliefs.

The analysis also shows a relationship between environmental beliefs and anti-consumption [39]. When materialists learn how consumption impacts the environment, they become more aware of the negative consequences of their consumption behavior. To repair their individual self-image, consumers may choose a reduction in consumption, which is in conflict with materialistic values [37]. Those consumers who are denoted by materialistic values and also possess knowledge about the environment tend to choose more environmental behaviors as well [37].

Environmental concern: environmental concern can be defined as "a general attitude toward specific pro-environmental behavior" [40] (p. 3798) or "an affective attribute that can represent a person's worries, compassion, likes and dislikes about the environment" [41] (p. 88). Materialistic values tend to decrease environmental concerns [39]. Materialistic values tend to diminish the consumers' capacity to consider macro-level concerns, such as environmental issues [5]. Consumers denoted by materialistic values are more likely not to be concerned about the environment and environmental issues [42].

Consumers experience internal cognitive dissonance because environmental concerns do not always impact all types of behavior [43]. Consumers may experience conflict between a desire to solve environmental issues and the understanding that their consumption leads to environmental problems. Consumers with an increased knowledge level about the link between consumption and global warming may experience internal conflict [42]. Those consumers who are concerned about the environment and still travel while being in the knowing that tourism-related activities have a negative impact on the environment are also experiencing emotional dissonance [31]. Materialistic consumers do not care about the environment, and if they do actually care about the environment, they inherently experience an internal conflict [42]. When a materialistic consumer considers overconsuming, this leads to a stage of cognitive dissonance. Overconsumption satisfies psychological demands; on the other hand, it may result in biodiversity loss [39].

Impulsive buying: impulsive buying can be defined as "an immediate purchase with no pre-shopping intentions either to buy the specific product category or to fulfill a specific buying task" [44] (p. 170). It is usually carried out through a sudden, energizing, and overpowering desire to acquire without any prior purpose of buying [45], such as purchasing a product with no prior preparation in response to a powerful need. This phenomenon may be explained by the fact that emotions or advertising may be the dominating trigger [46]. Impulsive buying can exert negative consequences on consumers. Cognitive dissonance is one of the recognized negative consequences, and its impact on consumer behavior has been the subject of notably extensive research [47]. When consumers are directly involved in the shopping process, they spend more time thinking about their purchase and they learn more about the product before making a purchase, they feel less dissonance. Those consumers who are denoted by low involvement in the purchase process usually do not evaluate product information, but those with high involvement in the purchase process tend to look at product information before making purchases [48].

Cognitive impulse buying yields a significant influence on cognitive dissonance, but cognitive dissonance is not influenced by affective impulse buying [49]. Impulsive buying positively influences post-purchase negative emotional responses and causes such cognitive reactions as guilt [50,51]. Similarly, Sweeney et al. found, that once a customer has purchased a product, s/he may believe that the product is unnecessary, and that s/he might have avoided purchasing it [52]. Impulsive buying is complicated and it can lead to emotional conflict and cognitive dissonance [53,54]. When consumers are making an impulsive purchase as a result of a lack of preparation, they may experience cognitive dissonance as a result of the cognitive component, which refers to a lack of thinking and

understanding, and they may come to regret their decision [55]. Impulsive buying increases the cognitive conflict between the beliefs about pleasure-seeking and the beliefs about self-control, which results in contradictory affective reactions [56]. Materialistic values are related to reduced control over the consumption process, whereas green values—as the opposite—are related to the control of the consumption process. As a result, impulsive buying may increase the conflict between the materialistic and the green value.

Consumer confusion: consumer confusion can be defined as "uncomfortable cognitive state of mind in the decision-making process that affects the choice behavior through its affective (emotional) and behavioral consequences" [23] (p. 446). "It is a state of mind which affects information processing and decision making. The consumer may, therefore, be aware or unaware of confusion" [57] (p. 327). Confusion not only causes cognitive dissonance but also impacts the quality of customers' decisions, which results in choice paralysis [57]. According to Lake, dissonance can occur when customers are presented with two equally appealing alternatives [58]. According to Mitchell and Papavassiliou, as the quantity of available products and services is growing, so is the amount of the connected information available to customers which can be difficult to analyze and comprehend, and which results in consumer confusion, stress, anxiety, and poor decision-making [57].

The cognitive component argues that, throughout the confusion process, the cognitive load exceeds the human mind's ability to handle information, which leads the consumer to feel upset and inefficient [23]. Consumer confusion occurs in the pre-purchase stage and can cause a conflict between materialistic and green values. Consumers are aware of the environmental impact of their purchasing, they recognize the need to modify their behavior, but are still confused about how to do so. As a result, they do not accomplish anything. These are conflicting messages, and one of them encourages people to spend more, while the other prompts them to consume less [42].

Anti-consumption: anti-consumption can be defined as practices aimed at lowering consumption [59]. According to the theory of cognitive dissonance, a cognition conflict is aroused when a person acts in a way that contradicts a prior belief, value, or attitude [22]. Helm et al. revealed that materialistic values were shown to be negatively related to a number of aspects, such as environmental strategies, green buying, and reduced consumption, but a higher and statistically significant influence on reduced consumption was observed [5]. Many consumers exhibiting pro-environmental attitudes view consumption reduction as a sacrifice that they do not want to make [60]. Consumers use cognitive strategies such as neutralization to resolve dissonance [61]. The increasing efforts to persuade consumers, particularly the materialistic ones, to embrace an anti-consumption behavior may cause materialistic consumers to develop internal value conflicts [15].

When consumers leading a materialistic lifestyle learn about how their consumption affects the environment, they become aware of the negative implications of their lifestyle, which can damage the individual's self-image. These consumers, in pursuit to improve their self-image, may decide to participate in some ecologically/environmentally beneficial activities. Direct environmental activities often require a reduction in consumption, and they create conflicts with materialistic values [37]. Environmentally-based anti-consumption behavior may exert a greater impact on the value of conflict-related negative consequences than the purchasing of green products [15]. Green purchasing is more compatible with materialism than reduced consumption [14]. Green purchasing does not necessitate major lifestyle adjustments or changes in consumption patterns [5]. Anti-consumption may be frightening to a materialist who perceives goods as a fundamental source of happiness, even if s/he also wants to protect the environment [15].

Decision evaluation: according to the cognitive dissonance theory, an aversive state of psychological discomfort (dissonance) in a consumer's mind is caused by contradicting cognitive aspects when decisions are being made [20]. Consumer awareness about their environment, as well as their attitudes, values, and prior behavior, are examples of these cognitive aspects. Dissonance stems from the uncertainty of choice which drives consumers to doubt their decisions [62]. Cognitive dissonance is the effect of acquiring unknown

things and then doubting the purchasing choice [52]. The evaluation of the purchase choice outcome in the post-purchase stage of purchasing behavior refers to customers experiencing either satisfaction or dissatisfaction, or cognitive dissonance, as they are questioning whether they have made the right decision [49].

4. Discussion

This literature review indicates a growing interest in the materialistic vs. green value conflict from the consumer behavior perspective only since 2020. Nevertheless, the findings from the marketing and psychology research suggest that dissonant information, environmental beliefs, environmental concern, impulsive buying, consumer confusion, anti-consumption, and decision evaluation can cause and seem to reinforce the materialistic-versus-green value conflict. Research on the causes of the green vs. materialistic conflict has not yet been studied from the consumer materialism and green consumer behavior perspective, and anti-consumption is only mentioned as one of the possible causes of the conflict involving the green and materialistic values [15].

On the basis of the literature review, it may be claimed that dissonant information may be a cause and reinforce the consumers' materialistic and green value conflict. Any dissonant information that contradicts values or beliefs may increase psychological discomfort for materialistic consumers [3,31]. Similarly, condemning information about materialism can create a value conflict for materialistic consumers [15]. Research results explaining how consumers reduce tension are inconsistent, and some research suggests that consumers avoid or reject dissonant information [3] or create counter-arguments [35].

Literature analysis shows that environmental beliefs may be a cause of and reinforce the consumers' materialistic and green value conflict. Some research suggests that those materialistic consumers who are highly aware of the negative consequences of consumption can experience a value conflict when choosing to reduce consumption [37]. Other research shows that consumers are experiencing a conflict regarding the conflict between their environmental beliefs with their own past consumption behavior. This study also shows that environmental beliefs can relate to environmental concerns. According to Polonsky et al., consumers experience an internal conflict if they care about the environment and understand that their consumption leads to environmental problems [42]. Furthermore, other studies found that those consumers who are concerned about the environment and still travel while knowing that tourism-related activities exert a negative impact on the environment are simultaneously experiencing emotional dissonance [31]. From the analysis, it can be argued that those materialistic consumers who are environmentally concerned can feel a conflict between their internal green and materialistic values.

Impulsive buying as a counter attitudinal behavior can cause a conflict between their internal green and materialistic values when their behavior conflicts with values. Counter attitudinal behaviors can cause value conflict(s) when consumer behavior conflicts with values [21]. When consumers are controlling their shopping process, they are consequently feeling less dissonance [48]. Impulsive buying increases the cognitive conflict between the beliefs about pleasure-seeking and beliefs about self-control [56]; as a result, impulsive buying may increase the value conflict. Consumer confusion occurs in the pre-purchase stage and can cause the materialistic vs. green value conflict.

Consumer confusion causes cognitive dissonance and also impacts the quality of the customers' decisions, which results in choice paralysis [57]. Consumers may feel cognitive dissonance, and then they are confused about the conflicting messages and information [42] in the light of being presented with two equally appealing alternatives [58].

On top of that, anti-consumption as a counter attitudinal behavior can cause and reinforce the internal materialistic and green value conflict. Anti-consumption contradicts materialistic values because materialistic consumers consider possessions as a source of happiness. The increasing efforts to persuade consumers, particularly materialistic consumers, to embrace the anti-consumption behavior may cause materialistic consumers to undergo the internal value conflict [15]. The consumption reduction of materialistic

consumers can create a conflict with their own materialistic values. This study shows a possible relationship between environmental beliefs and anti-consumption. When materialists become more aware of the negative consequences of their consumption behavior, they may choose a reduction in consumption, which is in conflict with materialistic values [37].

The evaluation of the purchase choice outcome in the post-purchase stage can cause dissatisfaction or cognitive dissonance [47], or a conflict between the materialistic and green values. Consumers can experience this value conflict whenever doubting on purchasing decisions [62] and questioning whether they have made the right decision [49]. This study supports the cognitive dissonance theory developed in [20] suggesting whenever consumers are encountered with information that is contrary to their beliefs or values or whenever they are doing something that is inconsistent with a prior belief or value, they are also experiencing cognitive dissonance.

From the theoretical perspective, this literature review contributes to the understanding of the consumers' green and materialistic value conflict in the still under-researched field by identifying the possible causes: dissonant information, environmental beliefs, environmental concern, impulsive buying, consumer confusion, anti-consumption, decision evaluation, and the impact of the value conflict from the customer's perception. The results of the review contribute to the development of the value conflict theory from the systematic review perspective and provide insights into the factors which could influence the value conflict.

5. Policy Implications

The findings of this review suggest several practical implications for marketers and policymakers. Companies should also consider the transition to a more sustainable consumption lifestyle. For companies developing sustainable products, activation of the consumers' self-consciousness while promoting the brand as an environmentally responsible one might help to become more appealing to materialistic customers. Companies should also take into account other sustainable ways of providing products or services, which would decrease the requirement for additional manufacturing resources: such as sharing services, and fixing or upgrading services.

For policymakers, a consumer should be educated that material goods do not compensate for the lack of well-being and self-esteem. Instead, initiatives and messages should promote anti-consumption by emphasizing the benefits of reduced consumption on human well-being. The objective is to demonstrate that anti-consumption does not inherently imply deprivation or reduction in the quality of life, but, instead, it offers an increase in happiness [5]. As practical contributions, the findings support that promoting sustainability from the negative view of materialistic consumers may cause internal value conflict. Paper [63] argues that attempts to replace materialistic values with other values are not a wise solution because materialistic consumers can feel guilt and fear, which would highlight the negative aspects of materialism, and it might not necessarily boost their change in behavior. Any negative information about materialistic consumers and their negative effect on the environment or condemning statements about materialism can cause an internal value conflict [15].

Furthermore, an individual's value system tends to filter out any information that contradicts it. Research results suggest that taking into account the new forms of sustainability campaigns, such as showing the benefits of anti-consumption and a simpler lifestyle for materialistic consumers, may have different effects on the value conflict and can be more effective for the consumer behavior change. Likewise, it should be taken into consideration to show that materialism does not lead to long-term happiness and life satisfaction [64].

6. Conclusions and Directions for Further Research

In particular, this study has systematically reviewed the collection of literature about the causes of the conflict between the green and materialistic values from the consumer's perspective. Furthermore, this literature review contributes to the understanding of the

consumers' green and materialistic value conflict and the development of the value conflict theory by investigating the causes which could influence the value conflict. While most studies about sustainability focus on the positive impact on the environment and the consumers, this study shows a different perspective, providing insights that dissonant information, environmental beliefs, environmental concern, impulsive buying, consumer confusion, anti-consumption, and decision evaluation can cause a value conflict.

The results provide useful insights and practical implications that might assist marketers in developing sustainability campaigns. Sustainability campaigns should consider, that showing the benefits of reduced consumption and a simpler lifestyle for consumers, may have different effects on the value conflict and can be more effective for the consumer behavior change. Marketers should also consider that consumers experience materialistic and green value conflict and that this value conflict can be caused by negative dissonant information. Companies should operate more sustainably and inform consumers about their contribution to sustainability.

Prospective studies could also analyze the in-depth causes of the conflict between green and materialistic values while using various and different qualitative or quantitative (survey) methods. From the results, it is possible to establish directions for future research seeking to improve the understanding of the causes of the consumer green and materialistic value conflict. The findings concerning the causes could be used to develop a variety of sustainability communication campaigns and test their effectiveness for sustainable lifestyle adoption while using the causal research design. Future research could also use qualitative methods to empirically test dissonant information, environmental beliefs, environmental concerns, impulsive buying, consumer confusion, anti-consumption, and decision evaluation as the causes impacting the consumer-experienced green and materialistic value conflict. Furthermore, future studies could analyze the relationship between the causes triggering the materialistic and green values conflict. Research also could analyze the consequences stemming from the green and materialistic value conflict for the consumer's well-being and behavior and investigate whether a conflict of values inherently leads to a change in behavior. Future research could analyze how demographic characteristics impact materialistic and green value conflict.

7. Limitations

Some limitations should be highlighted. First, the data were collected only from peer-reviewed articles based on search strings in Scopus, Emerald, Web of Science, and ScienceDirect databases. Even though these databases include a wide range of academic literature, future research might expand the data collection by using other keywords and databases so that to include recent conference contributions. Articles were not selected on the basis of methodology, as the topic is new, some selected articles were based on a qualitative approach. The inductive approach was used in the coding, specifically, from subcodes to codes. In the coding of the articles, we were searching for causes of the conflict between the materialistic and green values, for external or internal factors that contradict materialistic values and support green values or contradict green values and support materialistic values. While a thorough study was conducted to eliminate subjectivity in the identification of green and materialistic value conflict causes, future research might focus on discovering further value conflict causes.

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