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The influence of cultural differences on consumers' willingness to pay more for sustainable fashion

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ABSTRACT

Sustainable fashion is imperative to address environmental and social issues associated with the fashion industry. Although it is argued that consumers' willingness to pay more (WTPM) for sustainable products, compared to the price of conventional products, can function as a catalyst to motivate companies to pursue sustainability principles. Yet whether consumers are willing to pay more for sustainable fashion remains a relatively unexplored topic. In this regard, we aimed to assess the role of culture using a diverse sample and partial least squares structural equation modeling (PLS-SEM). To do so, we compared Italy, an established fashion market, and Russia, an evolving fashion market. Our PLS-SEM analysis revealed that for Italian consumers, the main cultural dimension driving sustainable fashion purchasing is collectivism, while for Russian consumers, the cultural dimension driving sustainable fashion purchasing is long-term orientation. Furthermore, power distance belief, masculinity, and uncertainty avoidance negatively influence Italian consumers' WTPM, but these cultural dimensions do not influence Russian consumers' WTPM. This study contributes to the literature on sustainable consumer behavior and cross-cultural psychology by demonstrating the application of Hofstede's cultural dimensions theory at the individual level. Additionally, it provides insights into how managers may customize communication strategies for setting value-based pricing to increase consumers' willingness to pay for sustainable fashion.

1. Introduction

Fashion is a part of our daily lives, and people spend a lot of money on clothes and accessories each day, making the fashion industry a highly important segment of the global economy. The global fashion industry was estimated to be worth \$2.5 trillion before the coronavirus pandemic (McKinsey and Company, 2018). However, behind this impressive economic standing lies a concerning reality. The conventional economic model, characterized by resource extraction, production, and disposal, has been causing severe environmental impacts (Niinimäki et al., 2020). It is worth noting that globally 92 million tons of textile waste have been generated annually, mostly ending up in landfills. Specifically, the US generates around 16 million tons of textile waste annually, approximately 37 kg per capita (Mandal, 2022). Meanwhile, the EU generates around 12.6 million tons of textile waste annually: clothing and footwear alone account for 5.2 million tons of waste, approximately 12 kg per capita (European Commission, 2023). Hence, the shift from a conventional economic model to a sustainable (or circular) economic model is imperative (Busalim et al., 2022;

Grazzini et al., 2021; Jia et al., 2020).

Companies are being requested to transform their conventional business models and embrace sustainability principles throughout their value chains (Ellen MacArthur Foundation, 2017; European Commission, 2022). While commendable sustainable practices exist (Brydges, 2021; Moorhouse and Moorhouse, 2018), the market for sustainable fashion remains relatively underdeveloped. It is disconcerting to note that many corporate environmental commitments often serve as mere marketing tools, perpetuating a phenomenon known as greenwashing (Adamkiewicz et al., 2022; Moorhouse and Moorhouse, 2018). To genuinely embrace sustainability, companies are required to substantially invest in research and development (R&D), infrastructure, and workforce training (Abdelmeguid et al., 2022; Jia et al., 2020). However, on a global scale, most companies appear to exhibit reluctance in undertaking such investments deterring them from fully committing to this transformative journey (Abdelmeguid et al., 2022), and thereby missing potential competitive advantages (Ellen MacArthur Foundation, 2017; McKinsey and Company, 2018).

Amidst this context, one potential driving force that can motivate

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companies to adopt sustainability principles is consumers' willingness to pay more (WTPM) for sustainable products, compared to the price of conventional products. Put differently, most companies generally perceive that if they introduce a relatively more expensive product (i.e., a sustainable or circular product) in a market, then they would be at a "risk of losing some of the existing customers for potential future customers that would accept the price of circular products" (Abdelmeguid et al., 2022, p. 515). If consumers demonstrate their support for sustainable fashion through their purchasing choices, then companies would perceive a stronger business case to invest in sustainable practices (McNeill and Moore, 2015). Hence, understanding consumers' attitudes, preferences, and behaviors toward sustainable fashion is crucial to devise effective policies and strategies to promote sustainable production and consumption patterns (Busalim et al., 2022).

Several studies highlight that though consumers hold positive attitudes towards sustainability and show interest in purchasing green or sustainable products, they may still refuse to buy and pay a surcharge for such products (Auger et al., 2008; Borin et al., 2013; Gleim et al., 2013; Wiederhold and Martinez, 2018). This intention-behavior gap could also occur due to various factors besides the income of consumers (Barbarossa and Pastore, 2015; Cairns et al., 2022; Henninger et al., 2016). Tey et al. (2018) point out that consumers' desire for sustainable apparel is unlikely to be translated into actual purchasing unless esthetic is also appealing. Jacobs et al. (2018) remark that product sustainability, which is an important purchasing criterion for three-quarters of apparel consumers in Germany, does not affect consumers' choices, as the market for ethically produced clothes remains a niche segment. Other studies, in contrast, conclude that consumers are willing to pay more for such products and prefer brands with sustainability credentials (Baier et al., 2020; Lee, 2019; Pérez et al., 2022; Roozen et al., 2021; Spindler et al., 2023).

Previous studies on WTPM for sustainable fashion were conducted based on validation of the product-specific standpoint of value (Auger et al., 2008; Baier et al., 2020; Brand and Rausch, 2021; Hustvedt and Bernard, 2008) or to explore the influence of customer-specific personal characteristics, social or personal norms, or psychological attitudes, values, and beliefs (Colasante and D'Adamo, 2021; Fu and Kim, 2019; Kumar et al., 2021; Legere and Kang, 2020). However, the role of culture in determining WTPM seems to be not yet fully explored. There is little clarity on how differences in individual cultural values affect WTPM for sustainable fashion from a cross-cultural perspective. Rajagopal (2011) states that respondents' country of origin accounts for some variation in the obtained results in measuring WTPM for sustainable fashion. However, Ganglmair-Wooliscroft and Wooliscroft (2022) argue that the pattern of sustainable consumption behavior does not vary in relation to cultural differences and that the difficulty of undertaking a certain sustainable behavior is the same, regardless of country-specific characteristics.

Culture can be considered as a "mental map which provides the knowledge and guidelines" about certain features of individual behavior within and across personal values, social foundations, and traditions (Pye, 1997, p. 245). The influence of culture on fashion and clothing purchasing behavior can never be ignored, as different cultures may shape varied consumer attitudes and responses toward identical stimuli (Iran et al., 2019). Hofstede's cultural dimensions theory is one of the most widely used frameworks in studies on sustainable consumption (Halder et al., 2020; Park et al., 2007; Soares et al., 2007), mainly focusing on dimensions such as individualism-collectivism (Lee, 2017; Nguyen et al., 2017), power distance belief (Yan et al., 2021), or both together, so-called horizontal/vertical individualism-collectivism (de Morais et al., 2021; Shavitt and Barnes, 2018; Ur Rahman et al., 2023).

Donthu and Yoo (1998) pointed out that some countries might be culturally more diverse than others, therefore, measuring cultural dimensions at the individual level is more meaningful. Overall, previous studies suggest that cultural dimensions represent an individual's psychological state of mind and they can be applied as individual difference

variables (Shavitt and Barnes, 2018; Soares et al., 2007; Yan et al., 2021; Zhang et al., 2010). Yet there is little research measuring the influence of cultural dimensions on sustainable fashion consumer behavior. A systematic review of previous studies highlights that "cross-cultural research is the most critical agenda that needs to be advanced in future SFC studies" (Dabas and Whang, 2022, p. 158).

To bridge this knowledge gap, our study assesses the role of culture in shaping consumers' WTPM for sustainable fashion. We contribute to both theory and practice in several ways. Firstly, our study expands the existing academic debate on consumers' WTPM for various sustainable products by empirically demonstrating the significance of cultural differences in shaping their WTPM. Put differently, our study elucidates why consumers, despite holding positive attitudes toward sustainability, often refuse to buy or pay a surcharge for sustainable products. The underlying explanation lies in the understanding that a one-size-fits-all approach is inadequate. Therefore, companies and policymakers should develop effective strategies that consider the specific cultural characteristics of the target market or region.

Secondly, previous studies have rarely investigated cross-country differences (Dabas and Whang, 2022). Furthermore, previous studies have primarily focused on only one or two cultural dimensions, such as individualism-collectivism or power distance (Halder et al., 2020; Lee, 2017; Nguyen et al., 2017; Shavitt and Barnes, 2018; Yan et al., 2021), overlooking the influence of other cultural dimensions such as masculinity-femininity, uncertainty avoidance, and long-term or short-term orientation. In contrast, our study employs a multi-country sample as well as comprehensively considers all cultural dimensions, thereby demonstrating the applicability of Hofstede's cultural dimensions theory at the individual level.

Lastly and more importantly, our study provides valuable guidance to companies, policymakers, and marketers in the development of strategies that align with consumers' cultural values, thereby promoting sustainable production and consumption.

2. Literature review

2.1. Cross-cultural consumer attitudes and sustainable fashion

Sustainable fashion is generally considered a part of the slow fashion movement and the term is often interchangeably used with green-, eco-, and ethical-fashion but an agreed definition of it is still elusive (Henninger et al., 2016; Mukendi et al., 2020). Nonetheless, sustainable fashion can be interpreted in simple words as "clothing which incorporates one or more aspects of social and environmental sustainability ... These aspects include fair trading principles, sweatshop-free principles, and using materials that bring no harm to the environment ..." (Busalim et al., 2022, p. 1804). Put differently, sustainable fashion primarily emphasizes empowering employees throughout the supply chain, utilizing upcycling, recycling, and traditional production techniques, and incorporating renewable and organic raw materials (Henninger et al., 2016).

Consumer attitudes towards sustainable fashion exhibit notable variations across different cultures (Carey and Cervellon, 2014; Iran et al., 2019). In collectivist cultures, consumers often view sustainable products through a communal lens. The emphasis on social harmony and collective well-being fosters a sense of responsibility towards the environment, leading consumers to exhibit more positive attitudes towards sustainable products (Halder et al., 2020; Nguyen et al., 2017). Conversely, in individualistic cultures, consumers may prioritize personal interests over societal concerns. However, a growing environmental consciousness has led to an increasing overlap, with individuals in individualistic cultures also showing a rising interest in sustainability (Hanson-Rasmussen and Lauver, 2018).

Understanding consumers' attitudes, perceptions, and cultural nuances is essential to foster sustainable fashion. Previous studies focusing on consumer attitudes have highlighted that most consumers though possess limited knowledge about sustainability but there is a significant

relationship between their attitudes and purchase intention (Bong Ko and Jin, 2017; Kong et al., 2016; Leclercq-Machado et al., 2022). Considering perceptions and behaviors, Song and Ko (2017) classified consumers into four types: doubtful egoists, single-minded bystanders, wavering intellectuals, and opinion leaders. Attitudes and behaviors are contingent on various factors but consumers are likely to follow sustainable consumption in cultures where social responsibility is highly valued (Halder et al., 2020).

2.2. Willingness to pay more for sustainable fashion

In making a purchase, consumers need to feel that a product's value exceeds what they pay for it (Hinterhuber and Liozu, 2012). The sustainable premium determines the highest price consumers are willing to pay for perceived green (Colasante and D'Adamo, 2021), social (Auger et al., 2008; McNeill and Venter, 2019), and economic (Baier et al., 2020; Gossen and Kropfeld, 2022) values they retain as a consumer surplus (Hinterhuber, 2004). However, some studies reported that a fashion customer with high intention to support sustainability often faces a dilemma between paying higher prices (Jacobs et al., 2018; Joergens, 2006; McNeill and Moore, 2015; Wiederhold and Martinez, 2018) and the perceived sustainable benefits, which are usually either future-oriented (Baier et al., 2020), not obvious, or not attractive (Jacobs et al., 2018), and are linked to the self-others trade-off (Auger et al., 2008).

Determining the consumer's purchase behavior in the context of sustainable fashion has drawn much scholarly attention recently (Grazzini et al., 2021; Lundblad and Davies, 2016). Several studies prove that environmental attitude and concerns are necessary (Chekima et al., 2016b; Kopplin and Rösch, 2021; Kumar et al., 2021) and reliable (Cesarina Mason et al., 2022; Jacobs et al., 2018) conditions for purchase intention, and that WTPM acts as an example of sustainable behavior (Fu and Kim, 2019). Moreover, national levels of wealth (Pisano and Lubell, 2017) and education (Chekima et al., 2016b) positively affect pro-environmental behavior. At the same time, it is documented that environmental concerns have their roots in different causes across cultures (Eom et al., 2016) and that sustainable fashion consumer purchase behavior differs across countries (Rajagopal, 2011).

For example, in Germany, for outdoor apparel with a base price of €180, the maximum surplus for sustainability constitutes 66.17% and 32.22% among highly green and low-green consumers, respectively (Brand and Rausch, 2021), while for sustainable sports apparel consumers are willing to pay up to €31.50 premium (Spindler et al., 2023). For sustainable sneakers, consumers are willing to pay an average 15.32% premium compared to the price of conventional sneakers (Baier et al., 2020). In Australia, for sneakers with a base price of \$130, the highest likelihood was to pay a 25% premium for sustainability, whereas the option to pay a 50% premium drove purchase intention down significantly, to 8% (Auger et al., 2008). In the US, for socks with a base price of \$10, the highest likelihood was to pay a sustainability surplus of 18.7% (Hustvedt and Bernard, 2008). Although named countries belong to developed economies with high standards of living and strong environmental movements, it seems that sustainable fashion consumption values vary. Thus, cultural features could serve as a proxy for the extent to which consumers are willing to pay more for sustainable fashion.

2.3. Power distance belief and willingness to pay more

An influential and growing stream of literature has argued that power distance belief (PDB) is an important antecedent of willingness to pay (Lee et al., 2020b; Tu et al., 2022). The PDB construct captures the extent to which less powerful individuals accept inequality in the distribution of power, wealth, capabilities, and social status (de Mooij and Hofstede, 2011). It influences hierarchy and dependence relationships within society (Soares et al., 2007). People with a high PDB consider that everybody should have a rightful place which must be clear to others

within the social order (Yan et al., 2021). De Mooij and Hofstede (2011) state that for high PDB individuals, maintaining status is very important because it is a way to demonstrate power. However, Legere and Kang (2020) argue that in the eyes of many consumers, slow fashion usually fails to express their self-image because of its limited options and that consumers avoid such brands. Furthermore, power distance is positively related to conformity (Daniels and Greguras, 2014). Therefore, it is assumed that people with a high PDB will prefer to buy conventional fashion over niche sustainable fashion, as the former is characterized by a greater variety of designs and brands in order to emphasize their status and express themselves (McNeill and Moore, 2015), and it allows them to conform to the choice of the majority.

Husted (2005) stated that in a society with a high level of PDB, individuals on a private level usually have a weaker response to social issues, including environmental problems, as they perceive that they cannot change the situation. On the country level, Park et al. (2007) show that the Power Distance Index is negatively correlated with the Environmental Sustainability Index. On the business-unit level, van Everdingen and Waarts (2003) reported that in countries with a high Power Distance Index score as evaluated by Hofstede, local companies are slow to adapt to innovation. Because sustainable fashion is often considered an innovative product or business approach, one can suppose that PDB is negatively correlated with WTPM for sustainable fashion. Therefore, we posit the following:

H1. Power distance belief negatively influences willingness to pay more for sustainable fashion.

2.4. Collectivism and willingness to pay more

The dimension of collectivism (individualism indicates the opposite side of the scale) represents the most commonly used cultural classification in consumer research (Shavitt and Barnes, 2018). The individualism (IND) and collectivism (COL) orientation continuum refers to the extent to which life decisions are determined by the people or by the influence of their circle (Husted, 2005). COL is a characteristic of culture whereby individuals cherish in-group priorities, harmony, and loyalty from other members of society (van Ittersum and Wong, 2010). Sharma (2011) states that collectivist-oriented people generally have a strong sense of responsibility toward their social groups. Prior research highlights that social justice and the importance of human rights are drivers of sustainable fashion consumption (Lundblad and Davies, 2016), where socially oriented actions such as the sharing of apparel (between friends, family, secondhand) are among the features of sustainable fashion (Bly et al., 2015; Gossen and Kropfeld, 2022; McNeill and Venter, 2019). Consequently, one might propose that more collectivist-oriented consumers have greater WTPM for sustainable fashion.

IND as the antithesis of COL is an aspect of culture whereby people seek variety and value hedonistic shopping experiences (van Ittersum and Wong, 2010). Meanwhile, according to the most circulated view, sustainable fashion has characteristics of sufficiency (Gossen and Kropfeld, 2022), long-lasting designs (Niinimäki, 2010), and durability (Jacobs et al., 2018). Consequently, one might propose that more individualistic-oriented (i.e., low collectivistic) consumers will prefer conventional methods of apparel consumption over sustainable methods in order to meet their hedonistic needs. In individualistic cultures, self-actualization holds paramount importance, whereas in collectivistic cultures, values and attitudes are rooted in the social system, and preserving face is a crucial aspect to be upheld. Therefore, we posit the following:

H2. Collectivism orientation positively influences willingness to pay more for sustainable fashion.

2.5. Masculinity and willingness to pay more

Masculinity represents a preference for achievement, assertiveness,

and material success; femininity, being the opposite side of the scale, represents a preference for caring for others and for quality of life (de Mooij and Hofstede, 2002). Whereas feminine cultures can be characterized by personal characteristics such as modesty and relationships, in masculine cultures, self-esteem is achieved through self-enhancement (de Mooij and Hofstede, 2011). Along this line, Lundblad and Davies (2016) argue that fashion consumption is driven by the need to express one's social standing and to gain social acceptance and self-esteem. Given that sustainable fashion is characterized by low product availability in retail stores (Jacobs et al., 2018) and that sustainable clothes are frequently perceived by consumers as unaesthetic (Joergens, 2006; White et al., 2019), one can assume that masculine-oriented consumers prefer conventional fashion with low search costs and a wide choice of colors, styles, and silhouettes to fulfill their need for self-expression and success because sustainable fashion products cannot offer the same variety (Legere and Kang, 2020).

By contrast, a feminine-oriented mindset prioritizes caring for society and people, shares the idea that “*small is beautiful*” (de Mooij and Hofstede, 2002, p. 64), does not have a strong need to consume products to express status (Sharma, 2011); accordingly, individuals scoring high on femininity (i.e., low on masculinity) will express higher willingness to purchase sustainable fashion products. Moreover, masculine-orientated mindsets are typically more results-oriented (van Ittersum and Wong, 2010). Because sustainable fashion is usually more expensive than conventional fashion, presumably people with a higher masculine orientation will express lower WTPM for sustainable fashion. Therefore, we posit the following:

H3. Masculinity negatively influences willingness to pay more for sustainable fashion.

2.6. Uncertainty avoidance and willingness to pay more

Uncertainty avoidance (UA) is defined by de Mooij and Hofstede (2011, p. 183) as the “*extent to which people feel threatened by uncertainty and ambiguity and try to avoid these situations*”. This dimension also addresses the need for established rules, a structured life, knowledge, and competence (Soares et al., 2007). Sharma (2011) states that people scoring high on UA are more conservative and prefer to maintain clarity and the status quo, whereas people scoring low on UA are more likely to change their beliefs in response to innovative ideas. A purchase decision often brings risk when its consequences are uncertain (Chen and Chang, 2013). A previous study documented that a consumer's environmental awareness and knowledge are viewed as a pre-condition for green consumption (Kim and Chung, 2011).

Consumer confusion has been positively related to information overload and misleading information (Chen and Chang, 2013), and consumers mostly resist extensive information collection when shopping (Gleim et al., 2013). For the majority of customers, sustainable product attributes are not obvious; thus, the need to gain new information would stop consumers in cultures high in UA from undertaking environmental purchasing decisions. Moreover, people higher in UA may prefer to have current rather than future benefits, whereas sustainability is future-oriented (White et al., 2019). Furthermore, people may adopt fashionable clothing to satisfy their experiential needs, as sustainable actions are often linked to out-of-the-box thinking (Fu and Kim, 2019). Hence, we assume that consumers who are more tolerant of uncertainty will express a higher willingness to purchase sustainable fashion products. Accordingly, we posit the following:

H4. Uncertainty avoidance negatively influences willingness to pay more for sustainable fashion.

2.7. Long-term orientation and willingness to pay more

Long-term orientation (LTO) is considered one of the crucial determinants in cultural marketing studies, but research on its impact

seems lacking (Bearden, 2006). This is one of the dimensions of cultural orientation that addresses the time span: past, present, and future (Chekima et al., 2016a). Long-versus short-term orientation refers to the extent to which people adopt a pragmatic, forward-looking approach instead of a conventional or short-term perspective (Sharma, 2011). Values included in the LTO are thrift, peace of mind, financial responsibility, and patience for future rewards, whereas short-term-oriented consumers seek personal steadiness and stability, respect for traditions, the pursuit of happiness, and immediate benefits (de Mooij and Hofstede, 2011; Soares et al., 2007).

Sustainability represents a long-term-oriented mindset for societal benefits. According to White et al. (2019), sustainable fashion consumers consider future environmental and economic payoffs. Chekima et al. (2016a), for example, show with a Malaysian sample that green purchase intention is positively influenced by LTO. Some studies further show that cultures with high LTO scores such as China and South Korea appear to be more engaged in sustainable consumption behaviors compared to cultures with relatively low LTO scores such as Finland and Norway (Diallo et al., 2021; Vittersø and Tangeland, 2015). Accordingly, we posit the following:

H5. Long-term orientation positively influences willingness to pay more for sustainable fashion.

The research model of our study, proposed relationships between cultural dimensions and WTPM for sustainable fashion, is depicted in Fig. 1.

3. Methodology

3.1. Context and survey questionnaire

We considered Italy and Russia for two reasons. First, according to Hofstede Insights, these two countries hold significant differences in cultural dimensions. Russia shows very high PDB, UA, and LTO; high COL (i.e., low IND); and low MAS (i.e., a feminine country), whereas Italy is high in MAS and UA and moderate in PDB and LTO. The sense of collectivism varies, from quite high scores in southern Italy to quite low scores in northern Italy. Second, both Italian and Russian citizens are generally recognized as fashion- and luxury-conscious people. Italy represents an established luxury market while Russia represents an evolving fashion landscape. When it comes to sustainable fashion consumption, Italian consumers rate themselves as conscious and sensitive

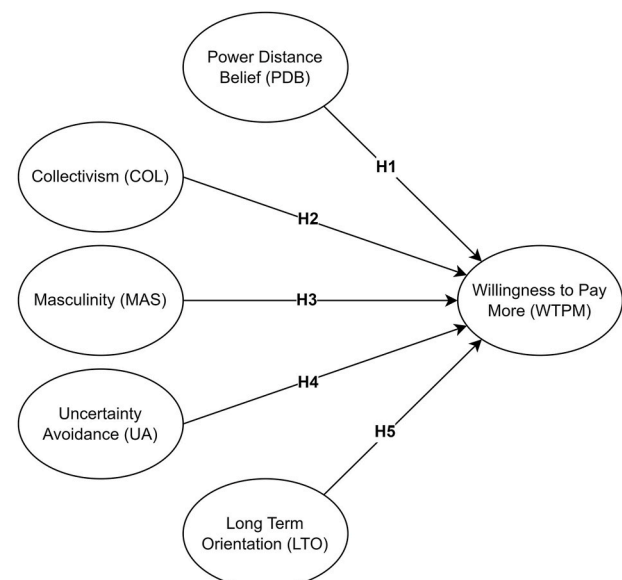


Fig. 1. Research model.

to its goals; however, they express little knowledge and understanding of sustainable practices in this field (Colasante and D'Adamo, 2021). Concerning Russian consumers, the literature on ethical or sustainable fashion consumption is very scarce.

We developed the survey questionnaire in English. However, this survey questionnaire was translated into Italian and Russian languages because potential respondents of our study were from two different non-English-speaking countries. The translated survey questionnaires were identical except for the income ranges, given in euros and rubles based on OECD data for Italy and the state statistical agency RosStat for Russia.

3.2. Constructs and measures

We used all constructs and measures from the literature.

Previous studies measuring cultural frameworks with individuals noted little success using Hofstede's original twenty items Value Survey Module, which was developed to measure the cultural orientation of groups and, according to Hofstede, should not be used at the individual level (Donthu and Yoo, 1998; Sharma, 2011). Therefore, the Cultural Values Scale (CVSCALE) by Donthu and Yoo (1998), has been found to be an alternative and quite a reliable instrument to measure cultural orientation for general consumer situations (Chekima et al., 2016a; Sharma, 2011; Soares et al., 2007). In this regard, measuring cultural orientation at the individual level is more meaningful than assigning an overall score to all members of a given culture (Donthu and Yoo, 1998). The CVSCALE includes twenty-six items measuring five cultural dimensions (Yoo et al., 2011); however, we used only items relevant to COL, MAS, UA, and LTO. We used a 5-point Likert-type scale anchored at 1 (*very unimportant*) and 5 (*very important*) to measure LTO and at 1 (*strongly disagree*) and 5 (*strongly agree*) to measure other cultural dimensions (COL, MAS, and UA).

Regarding PDB, Zhang et al. (2010) recommend measuring the level of power disparity using eight items scale that is distinct from the individualism-collectivism scale and that indicates a person's attitude toward power disparity (PDF) rather than their power or the power inequality of culture by itself. One item related to PDB, "*as citizens we should put high value on conformity*", was eliminated to exclude political biases in light of existing authority tension in Russia. We used a 7-point Likert-type scale anchored at 1 (*strongly disagree*) and 7 (*strongly agree*) to measure PDB.

We used three items adapted from Legere and Kang (2020) to measure WTPM for sustainable fashion. We used a 7-point Likert-type scale anchored at 1 (*strongly disagree*) and 7 (*strongly agree*). This scale indicates the usual dilemma that sustainable customers face when choosing between sustainable and non-sustainable options. We used different scale anchors to measure different constructs. According to Podsakoff et al. (2003, p. 888) and Chang et al. (2010, p. 180), this strategy can reduce biases "*caused by the commonalities in scale endpoints and anchoring effects*" and therefore reduce the likelihood of common method variance. The statements of items measuring the said constructs are provided in the Appendix.

3.3. Data collection and analysis

We collected the data through Qualtrics in June 2022. The weblinks of translated survey questionnaires were distributed through social media platforms in respective countries. As we were constrained to ask questions about both independent and dependent variables at the same time, which may lead to common method variance (Podsakoff et al., 2003). To prevent this potential issue, we used two procedural remedies: all respondents were reassured that their answers were confidential and anonymous, and the survey was web-based, reducing the likelihood that they would respond in a socially desirable way.

We received 171 responses in Italy and 175 responses in Russia. However, responses from speeders and respondents who failed an attention-check question related to re-affirming their age group and

responses with missing values were excluded to ensure higher-quality data (Hair et al., 2017). Moreover, responses from respondents under 18 years of age and respondents whose primary nationality was other than Italian and Russian were eliminated. This screening yielded 147 and 148 valid responses in Italy and Russia. According to Cohen's statistical power analysis, the sample sizes of both Italy and Russia were sufficient to test our proposed hypotheses (Hair et al., 2017, p. 26). The characteristics of the samples are described in Table 1.

We used PLS-SEM with SmartPLS 4 software to analyze the collected data (Ringle et al., 2022). Despite taking said procedural remedies, we conducted a full collinearity test to check potential common method bias (Kock, 2015). This test confirmed that there was no common method bias. A PLS-SEM model operates as two conjoint parts: measurement model and structural model. Accordingly, in the first step, the measurement model was examined by using the PLS algorithm with the default settings of the software. In the second step, the structural model was examined using the function in the software called bootstrapping with 10,000 subsamples. These two steps were repeated for each sample or group (Italy and Russia). We acted upon the given guidelines in performing the data analysis and presenting the results of our study (Hair et al., 2019).

4. Results

4.1. Measurement model

We followed the recommended rules and procedures to evaluate the measurement model (Hair et al., 2017). Accordingly, first, items not fulfilling the conditions, that is, items having relatively lower loading values were deleted one by one to achieve satisfactory values for average variance extracted (AVE) and composite reliability (CR). In particular, the AVE values for each construct involved in the model must be above 0.500, and for that purpose, the items having loading values between 0.400 and 0.708 can be retained if required (Hair et al., 2011). The loading values of all items, excluding deleted items, were in the range from 0.450 to 0.952 for Italy and from 0.575 to 0.941 for Russia. The AVE values of all constructs were in the range from 0.513 to 0.900 for Italy and from 0.524 to 0.861 for Russia. While the CR values of all constructs were in the range from 0.754 to 0.964 for Italy and from 0.765 to 0.949 for Russia. The psychometric properties of the measurement model are presented in Table 2.

Second, discriminant validity was checked as per the Fornell-Larcker criterion and the Heterotrait Monotrait Ratio (HTMT) criterion. It was thereby confirmed that statistical diversity exists in both samples and that the construct measures discriminated well empirically and were suitable for testing the structural model. For brevity, we show only the HTMT criterion, which is advised to be reported preferably (Hair et al., 2019). The HTMT values for both Italy and Russia are presented in Table 3.

4.2. Structural model

We followed the recommended rules and procedures to evaluate the structural model (Hair et al., 2017). The VIF values of all constructs were below 3.000 thus there is no multicollinearity issue in our study (Hair et al., 2019). The R^2 values of WTPM, which represent the predictive power of the model, were respectively 0.178 and 0.096 for Italy and Russia. The R^2 values are acceptable knowing the exploratory nature of our study and the fact that the proposed research model represents an emerging but underexplored topic (Hair et al., 2019). The SRMR values of the model were respectively 0.077 and 0.078 for Italy and Russia, that is, below the threshold limit thus confirming the model fit (Hair et al., 2017).

We finally assessed our hypotheses. In the case of Italy, our PLS-SEM analysis revealed that PDB, COL, MAS, UA, and LTO respectively influence WTPM for sustainable fashion by correlation values of -0.195

Table 1
Sample description.

Characteristics	Description	Italy (n = 147)		Russia (n = 148)	
		Frequency	Percentage	Frequency	Percentage
Gender	Male	77	52.38	29	19.59
	Female	70	47.62	119	80.41
Age	18–25	50	34.01	33	22.30
	26–34	24	16.33	34	22.97
	35–42	8	5.44	57	38.51
	>42	65	44.22	24	16.22
Education	Middle school graduate	4	2.72	3	2.03
	High school graduate	51	34.69	6	4.05
	University graduate (bachelor's degree)	26	17.69	56	37.84
	University graduate (master's degree)	62	42.18	80	54.05
	Other	4	2.72	3	2.03
Occupation	Student	42	28.57	18	12.16
	Unemployed	5	3.40	9	6.08
	Part-time worker	4	2.72	9	6.08
	Full-time worker	42	28.57	84	56.76
	Entrepreneur	13	8.84	17	11.49
	Other	41	27.89	11	7.43
Monthly Household Income	<2000 Euro/<100,000 Ruble	34	23.13	38	25.68
	2001–4000 Euro/101–200,000 Ruble	46	31.29	44	29.73
	4001–6000 Euro/201–250,000 Ruble	14	9.52	18	12.16
	>6001 Euro/>251,000 Ruble	16	10.88	19	12.84
	Prefer not to answer	37	25.17	29	19.59
Household Size	1 member	41	27.89	42	28.38
	2 members	33	22.45	48	32.43
	3 members	30	20.41	32	21.62
	4 members	32	21.77	21	14.19
	>4 members	11	7.48	5	3.38
Awareness of Sustainable Fashion	Little aware	30	20.41	52	35.14
	Moderately aware	81	55.10	41	27.70
	Well aware	36	24.49	55	37.16

($p < 0.01$), 0.206 ($p < 0.01$), -0.194 ($p < 0.05$), -0.207 ($p < 0.1$), and 0.109 ($p > 0.1$). While in the case of Russia, our PLS-SEM analysis revealed that PDB, COL, MAS, UA, and LTO respectively influence WTPM for sustainable fashion by correlation values of -0.090 ($p > 0.1$), -0.145 ($p > 0.1$), 0.100 ($p > 0.1$), 0.110 ($p > 0.1$), and 0.211 ($p < 0.05$). Therefore, H1, H2, H3, and H4 are accepted but H5 is rejected in the case of Italy, while H1, H2, H3, and H4 are rejected but H5 is accepted in the case of Russia. A comparative evaluation of the proposed hypotheses is presented in Table 4.

To increase the external validity of the WTPM measure, an extra question was included in the survey questionnaire, asking respondents how much % more they would be willing to pay for sustainable fashion on a 7-point scale anchored from 0% to 30%. We noticed that the price premiums indicated by respondents were significantly correlated ($\beta = 0.677$ for Italy and $\beta = 0.680$ for Russia, $p < 0.001$ for each) with their responses to the WTPM measure which affirms a high construct validity. To that question in simple words, the Italian and Russian respondents respectively indicated that on average they are willing to pay 14.19% and 12.48% more for sustainable fashion products than the price of conventional fashion products.

5. Discussion and implications

Sustainable consumption has become a prominent topic, especially in the fashion industry. Scholars and businesses are increasingly interested in understanding the seemingly contradictory relationship between sustainability and fashion (Bly et al., 2015). Unraveling the complexities of consumer behavior in this context is paramount in the realm of green marketing (Adamkiewicz et al., 2022; Busalim et al., 2022). Our PLS-SEM analysis supports the notion that culture has a significant impact on WTPM, and this influence varies across different cultural backgrounds. Therefore, when it comes to price setting,

acknowledging the full set of cultural diversity is essential, as sustainable behavior is not uniform among consumers worldwide.

The main cultural force driving Italian consumers to act sustainably and purchase sustainable fashion products is collectivism value, whereas Russian consumers are motivated by long-term orientation value when it comes to purchasing sustainable fashion products. These findings of our study are consistent with the views that the personal cultural values of collectivism have a positive impact on green purchase intention (Nguyen et al., 2017). Italian consumers seem to perceive fashion consumption through the lens of social norms, collective judgments, and shared responsibilities, aligning with the global trend of emphasizing sustainable fashion as a collective societal obligation (Lundblad and Davies, 2016; McNeill and Venter, 2019; Sung and Woo, 2019).

Although the relationship between collectivism and WTPM was not significant in the Russian sample. However, this finding corresponds to a previous study that indicates no correlation between collectivism (individualism) and the Environment Sustainability Index score at the country level (Park et al., 2007). Considering long-term orientation as the solo cultural driver for Russian sustainable fashion consumers, our findings seem consistent with the knowledge that sustainable consumers, in general, are individuals who consider future environmental and economic payoffs (White et al., 2019) and that the long-term orientation facilitates green purchase behavior toward various sustainable products (Nguyen et al., 2017). As Chimenson et al. (2022) state, the long-term orientation of Russians is one of the key features of a national mentality formed during the long history of tsars and the Soviet planning system and, therefore, has a huge impact on behavior. Our findings reflect that long-term orientation is a salient feature, not only for chief executives and entrepreneurs but also for consumers, which can foster sustainable production and consumption patterns, encompassing practices such as circular plastics (Khan, 2023), circular tourism (Khan et al., 2022), and sustainable fashion (Busalim et al., 2022), among

Table 2
Reliability and validity of measurement model.

Constructs	Item Code	Italy				Russia			
		Item Loadings	Construct AVE	Construct CR	Construct VIF	Item Loadings	Construct AVE	Construct CR	Construct VIF
Power Distance Belief (PDB)	PDB1	0.851	0.513	0.754	1.147	–	0.524	0.767	1.038
	PDB2	0.719				0.691			
	PDB3	–				–			
	PDB4	–				–			
	PDB5	–				–			
	PDB6	0.546				0.794			
	PDB7	–				0.681			
Collectivism (COL)	COL1	0.798	0.588	0.895	1.058	0.881	0.694	0.819	1.057
	COL2	0.709				–			
	COL3	0.831				–			
	COL4	0.752				–			
	COL5	0.749				0.782			
	COL6	0.756				–			
Masculinity (MAS)	MAS1	0.786	0.578	0.845	1.056	0.625	0.657	0.849	1.082
	MAS2	0.650				0.873			
	MAS3	0.793				0.905			
	MAS4	0.800				–			
Uncertainty Avoidance (UA)	UA1	0.793	0.549	0.773	1.132	–	0.533	0.765	1.093
	UA2	0.903				0.575			
	UA3	–				–			
	UA4	–				0.941			
	UA5	0.450				0.618			
Long Term Orientation (LTO)	LTO1	–	0.656	0.792	1.165	0.640	0.531	0.770	1.075
	LTO2	–				0.827			
	LTO3	–				–			
	LTO4	0.774				0.706			
	LTO5	–				–			
	LTO6	0.845				–			
Willingness to Pay More (WTPM)	WTPM1	0.950	0.900	0.964	–	0.938	0.861	0.949	–
	WTPM2	0.943				0.921			
	WTPM3	0.952				0.926			

- These items were deleted to achieve AVE > 0.500.

Table 3
HTMT criterion.

Dataset	Construct	COL	LTO	MAS	PDB	UA	WTPM
Italy	COL						
	LTO	0.164					
	MAS	0.113	0.277				
	PDB	0.258	0.511	0.350			
	UA	0.233	0.551	0.094	0.254		
	WTP	0.224	0.203	0.271	0.337	0.107	
Russia	COL						
	LTO	0.156					
	MAS	0.295	0.100				
	PDB	0.246	0.197	0.336			
	UA	0.262	0.482	0.169	0.150		
	WTP	0.138	0.311	0.074	0.136	0.166	

HTMT < 0.850 is a threshold limit.

others.

Our study reveals that Italian consumers' WTPM is negatively influenced by masculinity. This finding is in line with Hofstede's characteristic of the masculine orientation and the philosophy of sustainable fashion which emphasizes sufficiency, long-lasting silhouettes, and durability (Gossen and Kropfeld, 2022; Jacobs et al., 2018; Niinimäki, 2010; Rausch et al., 2021). Moreover, relying on van Ittersum and Wong (2010), this finding can be explained by the fact that masculine-oriented consumers focus more on economic consequences and, therefore, may view a price premium for sustainability in fashion as a barrier. Park et al. (2007) reported a negative correlation between masculinity and the Environmental Sustainability Index (ESI) score at the country level.

As for the influence of power distance belief, we found that this

variable negatively affects WTPM for sustainable fashion. This finding is also in line with a previous finding that the interaction between power distance and the Environmental Sustainability Index is negative (Park et al., 2007). We further found that Italian consumers' WTPM for sustainable fashion is negatively influenced by uncertainty avoidance. This finding in the field of sustainable fashion extends prior research findings that high uncertainty avoidance orientation individuals have stronger purchase intentions for low-involvement products, whereas consumers with low uncertainty avoidance orientation have a stronger purchase intention for high-involvement products (Sharma, 2011).

For the majority of consumers, sustainable product attributes are not obvious, and unclear information can force specifically high uncertainty avoidance consumers to avoid undertaking environmental purchasing decisions and negatively impact their WTPM for sustainable fashion. Moreover, earlier research notes that due to a lack of industry standards, the concept of sustainable fashion is not clearly defined (Grazzini et al., 2021; Moorhouse and Moorhouse, 2018). Therefore, many environmental commitments are in reality just marketing tools and greenwashing (Chen and Chang, 2013; Niinimäki, 2015), leading to purchase avoidance. Interestingly, in the case of Russia, uncertainty avoidance did not show a significant effect on WTPM, partly corresponding to Ratner et al. (2021), according to whom a lack of interest in and insufficient demand for eco-labeled products from customers explain why greenwashing and other marketing tools are mostly absent in the Russian market.

The findings of our study offer important managerial implications, especially for global companies. "The problem with sustainability as a fashion marketing message is that consumers do not perceive green messages as relevant to their needs and desires" (Lee et al., 2020a, p. 645). Companies operating in international markets should design their brand

Table 4
Hypotheses testing.

Dataset	Hypotheses	Relationships	Std Beta	Std Error	t-Values	p-Values	95% CI LL	95% CI UL	Decision
Italy	H1	PDB → WTPM	-0.195	0.075	2.599***	0.009	-0.319	-0.081	Accepted
	H2	COL → WTPM	0.206	0.078	2.633***	0.008	0.097	0.330	Accepted
	H3	MAS → WTPM	-0.194	0.079	2.462**	0.014	-0.328	-0.086	Accepted
	H4	UA → WTPM	-0.207	0.125	1.657*	0.098	-0.309	0.108	Accepted
	H5	LTO → WTPM	0.109	0.094	1.163	0.245	-0.060	0.248	Rejected
Russia	H1	PDB → WTPM	-0.090	0.116	0.779	0.436	-0.261	0.140	Rejected
	H2	COL → WTPM	-0.145	0.095	1.535	0.125	-0.283	0.042	Rejected
	H3	MAS → WTPM	0.100	0.126	0.795	0.427	-0.139	0.264	Rejected
	H4	UA → WTPM	0.110	0.115	0.955	0.339	-0.155	0.265	Rejected
	H5	LTO → WTPM	0.211	0.085	2.491**	0.013	0.090	0.361	Accepted

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

strategies to address the corresponding cultural divergence. A better understanding of the impact of cultural differences on sustainable fashion purchase behavior would help companies in better position their products, communicate values, and set prices.

Specifically, owing to the significant influence of collectivism and long-term orientation on WTPM in Italy and Russia, respectively, brand managers could customize communication strategies that bring the corresponding values that are most salient to consumers in each country to set a value-based price and increase WTPM for sustainable fashion and “justify” a price premium for sustainability. Hence, in Italy, sustainable fashion brands could emphasize the key collectivism values of interdependency by communicating to consumers about social norms, judgments, and expectations to consume fashion more responsibly. In Russia, in turn, it could be effective to implement information strategies that emphasize the key values of long-term orientation in sustainable fashion: future pay-offs from durability; high-quality, long-lasting designs and functionality; and eco-friendly, cost-efficient benefits. Owing to the negative influence of masculinity on WTPM in Italy, marketing managers could develop communication highlighting the features of sustainable fashion like stand-out designs and high-tech materials to acquire new customers who prioritize self-enhancement, success, and status.

6. Conclusion

We assessed whether cultural differences influence consumers' WTPM for sustainable fashion. Our PLS-SEM analysis shows an apparent difference across the two samples, implying that the cultural factors driving, or hindering, consumers' WTPM are not the same for Italy and Russia. We may therefore conclude that sustainable fashion cannot be largely fostered without considering the specific cultural characteristics of the region.

We suggest some measures for fostering sustainable fashion. Governments should provide financial incentives to companies and consumers that promote sustainable fashion. Grants or subsidies to those companies would help alleviate the cost burden, making sustainable fashion more affordable for consumers. Similarly, tax deductions or rebates for consumers may encourage the purchase of sustainable products. Governments should implement educational initiatives to raise awareness about the long-term environmental and social impacts of the fashion industry. Furthermore, companies should consider adopting environmental certifications (Khan et al., 2021), as this would enhance trust and enable consumers to align their purchasing decisions with their values (Tey et al., 2018).

Companies should recognize and respect cultural values, traditions, and esthetics when promoting sustainable fashion. They should adapt their marketing messages and strategies to align with local cultural

norms and sensibilities, thereby enhancing relatability and appeal for consumers. Engaging local influencers and celebrities can also be an effective strategy for promoting sustainable fashion within their communities and effectively communicating the value of sustainability to their followers. Lastly, companies must have a comprehensive understanding of the economic context of different cultures and price their sustainable fashion products accordingly. This approach can enhance accessibility and increase consumers' WTPM for sustainable fashion.

Our study has some limitations that future studies may address. First, we strived to avoid social desirability bias through procedural remedies, but it can never be completely ruled out. Second, our sample size seems decent, but a large sample size could have yielded better item loadings and increased the generalizability of the findings. Third, while the findings proved the validity of the CVSCALE developed by Donthu and Yoo (1998) as a tool for measuring a cultural orientation based on Hofstede's cultural dimensions theory on an individual level, some scholars argue that individualism and feminism should not be assumed to be opposite sides of collectivism and masculinity scales, respectively, and should be measured separately (Oyserman et al., 2002; Shavitt and Barnes, 2018; Ur Rahman et al., 2023; Zheng and Zheng, 2011). In this respect, future research could expand our proposed research model by adding two additional cultural determinants. Several studies point out that the positive attitude of consumers toward sustainability is not always transformed into their actual purchasing behavior (Tey et al., 2018). Future research may investigate the intention-behavior gap by extending our proposed research model with other potential factors. Exploring intangible cultural elements such as customs, traditions, and social norms could also be interesting. Lastly, future research may compare the perceptions of younger and older generations regarding sustainable fashion across the different cultural regions.

CRedit authorship contribution statement

Owais Khan: Data curation, Formal analysis, Methodology, Writing – original draft. **Nina Varaksina:** Conceptualization, Methodology, Writing – original draft. **Andreas Hinterhuber:** Conceptualization, Methodology, Resources, Supervision.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

Appendix

Constructs	Item Code	Item Statements
Power Distance Belief	PDB1	I would like to work with a manager who gives subordinates reasons for his decisions and answers all their questions (R)
	PDB2	Employees should be encouraged to disagree with their management (R)
	PDB3	I would like to work with a manager who expects subordinates to execute his decisions fairly and without raising questions
	PDB4	In labor matters, managers have the right to expect obedience from their subordinates
	PDB5	Employees should respect their supervisors extremely
	PDB6	I would like to work with a manager who usually consults with employees before making decisions (R)
	PDB7	Disagreement with our bosses will promote productivity (R)
Collectivism	COL1	Individuals would have to sacrifice self-interest for the group (whether in college or at work)
	COL2	Individuals should stick with the group even in difficulties
	COL3	Group welfare is more important than individual benefits
	COL4	Group success is more important than individual success
	COL5	Individuals should only pursue their goals after considering the welfare of the group
	COL6	Loyalty to the group should be prioritized even if individual goals suffer
Masculinity	MAS1	It is more important for men to have a professional career than for women
	MAS2	Men usually solve problems with logical analysis; women usually solve problems with intuition
	MAS3	Solving difficult problems usually requires an active and forceful approach, typical of men
	MAS4	There are some jobs that a man can always do better than a woman
Uncertainty Avoidance	UA1	It is important that the instructions are spelled out in detail so that I always know what to do
	UA2	It is important to follow the instructions and procedures precisely
	UA3	Rules and regulations are important because they inform me of what is expected of me
	UA4	Standardized working procedures are helpful
	UA5	Operation instructions are important
Long-Term Orientation	LTO1	Careful money management (savings)
	LTO2	Resolutely moving forward despite opposition (Persistence)
	LTO3	Personal stability
	LTO4	Long-term planning
	LTO5	Forgo the fun of today for success in the future
	LTO6	Work hard for success in future
Willingness to Pay More	WTPM1	I am willing to pay more for sustainable clothing than buying cheaper but unsustainable options
	WTPM2	I would like to continue buying sustainable clothing, even if the unsustainable (conventional) brands will reduce the price
	WTPM3	For the advantages that I receive by purchasing sustainable fashion, I would be willing to pay a higher price

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