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Consumer Perceptions of Corporate Social Responsibility: A Decision-Analytics Perspective on Gender and Target-Group Differences

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ARTICLE INFO	ABSTRACT
Article history: Received 8 June 2026 Received in revised form 5 July 2026 Accepted 13 September 2026 Available online 21 October 2026 Keywords: Corporate Social Responsibility; Consumer Behaviour; Generations; Trust; Segmentation	Corporate social responsibility (CSR) has evolved from a voluntary corporate activity into a strategic management tool that influences organizational competitiveness, corporate reputation, and long-term sustainability. At the same time, consumers increasingly expect companies to address social and environmental challenges through responsible business practices, making consumer responses to CSR an important consideration in corporate decision-making. Although previous studies have extensively investigated CSR-related consumer behavior, relatively little attention has been paid to the simultaneous examination of gender differences and consumer segmentation based on CSR preferences. Addressing this gap, this study investigates consumer preferences toward different CSR dimensions and examines how these preferences vary across demographic groups. From a decision-analytical perspective, identifying homogeneous consumer groups according to their CSR-related attitudes can provide valuable support for corporate decision-makers in designing sustainability strategies and stakeholder communication. Accordingly, the practical objective of the study is to identify the CSR dimensions that consumers consider most important and determine how these preferences differ across demographic groups, while the methodological objective is to apply K-means clustering to identify homogeneous consumer segments based on their CSR-related preferences.

1. Introduction

Corporate Social Responsibility (CSR) has become one of the most important strategic areas in the business sector over the past two decades. As a result of globalisation, digitalisation and sustainability challenges, companies no longer appear merely as economic actors, but also as social actors whose activities have a direct impact on the environment, communities and consumer habits. At the same time, the concept of CSR has undergone significant development in recent decades: moving away from earlier philanthropic approaches, it has now become an integral part of strategic corporate management, stakeholder relations and sustainability goals. According to the latest interpretations, CSR is not merely voluntary corporate engagement, but also a fundamental element of long-term corporate legitimacy and competitiveness [1].

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The issue of sustainability is now closely linked to a reinterpretation of corporate purpose and value creation. Modern companies are increasingly expected not to base their operations solely on profit maximisation, but also to fulfil a role in creating social and environmental value [2].

In the 2020s, the importance of CSR has grown further, as the COVID-19 pandemic, the energy crisis and climate change have made the development of ethical and sustainable business models a matter of urgency [3].

The COVID-19 pandemic has further reinforced consumer expectations regarding corporate social responsibility. During the pandemic, the demand for social sensitivity and ethical operation from companies has increased significantly, whilst CSR has become a central element of marketing philosophy and corporate strategy.

The importance of CSR is also underpinned by consumer expectations: an increasing number of shoppers make decisions not only on the basis of price and quality, but also take into account the company's social and environmental responsibility [4]. It has become crucial for trust and loyalty that companies engage in credible, transparent activities that create social value.

In Hungary, the discourse on CSR is gradually gaining momentum, particularly in the food industry, the banking sector and the service industry, where consumers are highly sensitive to sustainability and ethical issues [5, 6]. At the same time, a certain scepticism can still be observed among domestic consumers: many still view CSR more as a PR ploy than as a credible corporate strategy [7].

The aim of this study is to analyse the concept of CSR and its impact on consumer behaviour, with particular regard to how gender, generational and cultural differences influence attitudes towards CSR, and what role corporate trust, reputation and long-term sustainability play in this.

2. Review of the literature

2.1 The relationship between consumer behaviour and CSR

Integrative and meta-analytical research generally indicates a positive relationship between CSR and key consumer outcomes, including purchase intention, trust and brand-related evaluations [8–10]. Related research extends the discussion of CSR effects to emerging-market, Central and Eastern European, and corporate governance contexts [11–13].

However, the literature does not interpret the nature of the relationship between CSR and consumer responses entirely consistently. Some studies emphasise a relatively direct relationship between CSR perceptions and consumer responses [8, 9], whereas other findings highlight the role of mediating mechanisms such as perceived corporate credibility, reputation and brand value [10].

This suggests that the mere existence of CSR activities does not necessarily result in a uniform consumer response: the effect also depends on how consumers interpret the company's motivations, how credible they perceive its responsible behaviour to be, and what degree of fit they perceive between the CSR activity and the company or brand. One important development in the literature is therefore a shift from the general proposition that "CSR produces positive consumer outcomes" towards examining the mechanisms and boundary conditions underlying these relationships.

Previous research confirms that CSR can contribute to customer trust and loyalty. Empirical evidence indicates that CSR influences customer loyalty both directly and indirectly through co-creation and customer trust, highlighting trust as an important mechanism through which socially responsible corporate behaviour can generate favourable customer responses [14].

These findings suggest that the positive effects of CSR on customer loyalty should not be regarded as exclusively direct. CSR can foster co-creation and customer trust, which in turn strengthen customer loyalty, with the indirect effect through these mechanisms being particularly important

[14]. This perspective therefore adds nuance to simpler models that assume a direct relationship between CSR and favourable consumer responses.

Empirical research confirms that CSR can positively influence consumer purchase intentions and purchasing behaviour. Consumers show greater interest in and preference for the products and services of socially responsible companies [15].

These empirical findings also indicate that the strength of consumer responses to CSR may vary according to consumers' CSR orientation [15]. The consumer impact of CSR is therefore context-dependent not only from the corporate perspective, but also in terms of consumers' values and preferences. This makes consumer heterogeneity particularly important, as different consumer groups may assign different levels of significance to the same CSR activity.

Across various categories, CSR also operates through cognitive (e.g. credibility, perceived value) and affective (identification, pride, brand affection) pathways, which help to understand when responsible behaviour translates into actual purchasing behaviour [11]. In service and retail environments, where risk and uncertainty are higher, CSR may hold particular diagnostic value for consumers when comparing alternatives, making intermediaries based on trust particularly significant [16, 17]. Conversely, the absence of credible CSR – or the presence of opportunistic claims – can increase perceived risk and trigger scepticism, which reduces purchase intention [18].

Taken together, these findings suggest that the consumer impact of CSR is better understood as a complex, multi-stage process rather than as a simple direct relationship. The studies converge in identifying credibility and trust as important mechanisms but differ in the relative emphasis they place on cognitive evaluation, emotional identification or the reduction of perceived risk in shaping consumer responses [11, 16]. These differences may partly reflect the varying empirical contexts examined: for example, trust may play a stronger role in service and retail settings, whereas perceived value, emotional attachment to the brand or the relevance of the CSR issue may be more prominent in other product categories [16, 17]. Recent greenwashing research further suggests that the effects of CSR may also be asymmetric: credible responsibility may gradually build trust, whereas communication perceived as misleading or opportunistic can rapidly generate scepticism and undermine consumer trust [18].

The latest research also highlights that CSR can strengthen consumer purchase intention through brand commitment. Particularly in the fashion industry, it can be observed that emotional identification with socially responsible brands increases consumer engagement, which has a positive effect on both willingness to purchase and brand loyalty [19–21].

Overall, the literature is relatively consistent in showing that CSR is associated with favourable consumer responses, but it is considerably less uniform regarding the mechanisms and conditions through which these effects emerge. Recent findings suggest that trust, credibility, perceived value and identification with the brand may all operate as mediating mechanisms, while industry context, the relevance of the CSR activity and consumers' value orientations may influence the strength of these relationships [18]. This also indicates that examining average consumer responses alone may not fully capture the heterogeneity of attitudes towards CSR. It is therefore important to investigate how different consumer groups assign significance to specific CSR dimensions and how these differences are reflected in distinct consumer responses.

2.2. CSR communication and the development of trust

The translation of CSR into behavioural outcomes depends critically on the quality of communication. Transparent, specific and two-way communication (e.g. on social media platforms)

enhances the credibility of the message, strengthens brand reputation and elicits supportive behaviour [22].

CSR is becoming an increasingly decisive factor in the formation of corporate reputation. Research indicates that corporate social responsibility can contribute positively to corporate reputation, particularly when positive CSR performance is consistent over time [23, 24].

Empirical evidence further indicates that different dimensions of CSR can foster different forms of consumer trust, which in turn contribute to more favourable perceptions of corporate reputation.

One of the most important factors in the effectiveness of CSR communication is how the communication itself is perceived by consumers. Empirical findings indicate that informative, relevant, transparent and factual CSR communication can contribute to consumer trust and favourable corporate reputation, whereas a self-promotional tone may negatively affect trust and reputation [25].

Experimental and survey evidence suggests that CSR information increases consumer trust, which acts as a mediator in the increase in purchase intention and loyalty; this is consistent with stakeholder and social identity perspectives [11]. It is important to note that the effectiveness of communication is not merely a matter of quantity or frequency, but of perceived credibility, alignment with corporate identity, and long-term consistency [8, 10]. Companies that present their motivations in a balanced way (acknowledging both social impact and business relevance) elicit less scepticism and are considered more credible than those that engage in excessive promotional 'virtue signalling' [18].

The reputation-building role of CSR is further reinforced by the fact that social responsibility not only shapes external consumer perceptions but also positively influences organisational culture and employee attitudes. Empirical research suggests that an organic, value-based organisational culture acts as a mediator between CSR and corporate reputation, whilst also supporting organisational commitment and voluntary cooperative behaviour.

CSR has a significant impact not only on consumer behaviour but also on internal organisational processes. Empirical research indicates that perceived CSR can contribute to employees' affective organisational commitment, with organisational trust and organisational identification playing important mediating roles in this relationship [26].

2.3. Credibility, authenticity and the problem of 'greenwashing'

Green marketing has developed into a broader strategic approach encompassing green product development, pricing, distribution and communication, while growing consumer interest in environmentally responsible products has increased its relevance for companies [27].

As green marketing and sustainability communication have become increasingly widespread, consumers have become more sensitive to companies' environmental claims. The success of green marketing largely depends on the extent to which consumers perceive corporate sustainability communication as credible and consistent. Exaggerated or insufficiently substantiated environmental claims can contribute to perceptions of greenwashing and undermine the credibility of corporate sustainability communication [18].

The literature therefore highlights the importance of consistency between corporate environmental communication and actual environmental performance, as discrepancies between communication and practice represent a central dimension of greenwashing [18]. This represents an important distinction from earlier approaches that primarily emphasised the favourable consumer effects of green marketing. Research also indicates that greenwashing can undermine trust and identification among organisational stakeholders, demonstrating that misleading CSR communication may have negative relational consequences. Credibility should therefore be

understood not merely as a favourable characteristic of CSR communication, but as a condition that fundamentally determines the direction of consumer responses.

An important concept in the evaluation of CSR activities is “CSR fit”, referring to the perceived congruence between an organisation and its CSR activities. Research indicates that CSR fit is a complex and multidimensional phenomenon, and that different types of fit can be distinguished depending on how CSR activities relate to the organisation’s core business [28]. Research on CSR fit complements this perspective by showing that the relationship between an organisation and its CSR activities can take different forms and that communication plays an important role in creating perceptions of fit among stakeholders [28]. The findings of these two research streams therefore reinforce each other: while green marketing research emphasises the substantiation and consistency of communication [29], the CSR-fit perspective highlights the importance of the perceived congruence between an organisation and its CSR activities [28]. Credibility thus emerges as a multidimensional construct related simultaneously to the content of communication, the company’s actual practices and the fit between CSR activities and the brand.

CSR credibility is at the centre of consumer responses. As consumers’ sustainability literacy increases, they scrutinise claims more carefully, and perceived “greenwashing” – even in its subtle forms – undermines trust, brand evaluations and purchasing behaviour [18].

Recent greenwashing research is, however, not entirely consistent from a methodological perspective. Systematic methodological reviews indicate that the operationalisation and measurement of greenwashing remain challenging, as studies conceptualise the phenomenon in different ways and a substantial proportion rely on perception-based measures or hypothetical scenarios [18]. By contrast, consumer studies focus more directly on the consequences of perceived greenwashing for trust, identification and consumer responses. The two approaches therefore provide different but complementary forms of evidence: while methodological reviews highlight limitations in measuring greenwashing and problems concerning the comparability of findings [18], empirical consumer research demonstrates the negative consequences that may arise when consumers perceive greenwashing. These methodological differences also call for caution when generalising individual research findings.

Systematic reviews document increasing methodological rigour in greenwashing research and identify indicators that consumers use to assess authenticity (e.g. independent verification, long-term commitment and high CSR–brand fit) [10, 18]. Research has also shown that perceived authenticity mediates the relationship between CSR and its outcomes: when stakeholders perceive initiatives as being “true to the brand”, the positive effects on loyalty and recommendations are significantly stronger [11, 17]. In contrast, low-fit or occasional CSR activities may trigger self-serving attributions, which reduce credibility and weaken behavioural effects [8].

Taken together, these findings suggest that authenticity and credibility are important mechanisms in shaping consumer responses to CSR. Research on the credibility of CSR communication highlights the importance of consistency, long-term commitment and the substantiation of corporate responsibility claims [10, 18]. Other studies emphasise the role of perceived authenticity in strengthening favourable consumer responses, including loyalty and willingness to recommend [11, 17]. Consumer responses may also depend on how CSR activities and corporate motives are perceived and interpreted [8].

The literature therefore suggests that the effects of CSR depend not simply on the existence of responsible corporate activities, but also on the extent to which consumers perceive these activities as authentic. At the same time, differences in the methods used to measure greenwashing and the considerable proportion of studies based on hypothetical situations may limit the direct

comparability and generalisability of findings [18]. This indicates a need for further empirical research, particularly to explore how different consumer groups assign importance to the various dimensions of credible and responsible corporate behaviour.

2.4. Generational differences

Younger consumers, particularly Generation Z, show sensitivity to corporate social responsibility, and CSR considerations can influence their purchase intentions and consumer choices [22]. Evidence from Central and Eastern Europe, including Hungary, shows similar patterns: younger cohorts assign greater importance to environmental and social responsibility in brand evaluation, while older generations tend to prioritise functional value and price [29, 30].

The findings therefore relatively consistently suggest that younger generations exhibit greater sensitivity to CSR; however, individual studies capture the manifestation of this sensitivity in different ways. While some studies emphasise younger consumers' sensitivity to CSR and its relevance to purchase intentions and consumer choices [22], other research focuses on specific consumer preferences and differences in the evaluation of CSR dimensions [25, 30]. The findings of these two approaches are largely complementary: younger generations may not only display more favourable attitudes towards CSR, but may also place greater emphasis on social and environmental responsibility when choosing between brands. At the same time, evidence from Central and Eastern Europe suggests that generational effects cannot be completely separated from the economic and cultural context, as price and functional value may continue to play a decisive role for certain consumer groups [25, 30].

Corporate social responsibility is particularly relevant in the context of Generation Z. Research indicates that CSR can influence Generation Z consumers' purchase intentions, although the effects may vary across different dimensions of corporate responsibility [22].

A strong relationship between CSR perceptions and purchase intention can also be observed among millennials. Younger consumers are more likely to support companies that actively and credibly communicate their social and environmental responsibility [8].

There is therefore considerable overlap between findings concerning Generation Z and millennials, although the emphasis of the outcomes examined differs. Research focusing on Generation Z primarily highlights value congruence and sensitivity to sustainability [26], whereas findings concerning millennial consumers more directly link CSR perceptions to purchase intention and willingness to support companies [8]. Importantly, research on millennial consumers also points to the role of the market environment: support for CSR may differ between developed and emerging markets [8]. This suggests that generational affiliation alone may not fully explain the variation in consumer responses to CSR; the socio-economic and market environment should also be taken into account when interpreting generational effects.

Gender regularly interacts with age: women, on average, respond more strongly to CSR signals and report greater trust gains from credible initiatives, although this difference appears to narrow among younger consumers [17, 27].

This finding further nuances approaches based exclusively on generational categories. The interaction between gender and age suggests that the effects of individual demographic factors do not necessarily operate independently of one another [17, 27]. Although women may, on average, respond more strongly to credible CSR initiatives, gender differences may become less pronounced among younger consumers. This indicates that the higher CSR sensitivity of Generations Y and Z may partly reduce differences that are more pronounced among older age groups. Examining consumer

heterogeneity therefore requires the joint interpretation of generational and other demographic characteristics rather than treating individual factors as isolated explanatory variables.

However, demographic differences in CSR perceptions are not always consistent across studies. Research examining the moderating role of gender, age and educational level found no significant differences in the way customers construct CSR images, suggesting that demographic characteristics alone may have limited explanatory power.

From a consumer perspective, attitudes towards CSR may differ considerably according to demographic characteristics and value orientations. Younger consumers are generally more sensitive to social and environmental issues and are more likely to support companies that actively communicate their CSR activities [31].

Overall, the studies reviewed are relatively consistent in showing that younger consumer cohorts are more sensitive to companies' social and environmental responsibility [22, 25, 30]. It is less clear, however, whether these differences can be attributed exclusively to generational affiliation. Differences in national and market contexts [8], the interaction between gender and age [17], and the role of value orientations [31] all suggest that consumer heterogeneity in relation to CSR is more complex than can be explained by age or generation alone. One limitation of the existing literature is therefore the tendency to examine individual demographic characteristics separately, while less attention has been devoted to how different demographic and value-related factors jointly contribute to the emergence of consumer groups with distinct CSR orientations. This provides a rationale for a more complex examination of consumer segments that simultaneously considers multiple dimensions of CSR.

2.5. CSR in the context of Central and Eastern Europe (Hungary)

In emerging markets, the development of CSR takes place within a specific institutional and economic environment, where companies must simultaneously meet global sustainability expectations and address local social challenges. CSR is becoming increasingly strategic in these countries, particularly in terms of legitimacy, reputation building and strengthening stakeholder relationships [3].

In the Central and Eastern European region, the development of CSR is significantly influenced by institutional and economic characteristics. Research from Central and Eastern Europe indicates that CSR is considered in consumer purchasing decisions, although evidence from Hungary suggests that its actual role in purchase behaviour remains more limited than consumers' expressed interest in CSR might imply [12, 32].

In Central and Eastern European markets, CSR has shifted from peripheral philanthropy towards strategic integration, driven by EU regulation, stakeholder pressure and growing consumer awareness. Research in Hungary reports that authentic CSR – particularly environmental responsibility and fair labour practices – strengthens brand trust and increasingly influences purchasing decisions, especially among Generation Z and Millennials [31]. Nevertheless, in certain segments, a lack of institutional trust and price sensitivity set limits; therefore, localisation (tangible community engagement, transparent reporting) is essential for maintaining credibility [10, 25, 30].

Empirical research also confirms a positive relationship between corporate social responsibility and consumer trust. Evidence from the organic food sector indicates that corporate social performance can contribute to the development of consumer trust, which in turn influences subsequent consumer responses [33, 34].

The strategic integration of CSR is also evident in the Hungarian banking sector. Research examining major Hungarian banks shows that CSR has increasingly been integrated into banking

operations, with responsible, green and ethical banking approaches becoming relevant elements of banks' responses to changing stakeholder expectations and competitive pressures [35].

The integration of CSR and a sustainability approach is also playing an increasingly prominent role in the Hungarian banking sector. Among domestic financial institutions, corporate social responsibility has become strategically significant, particularly in terms of building trust, strengthening customer relationships and reputation management.

In summary, based on the latest literature, three integrative findings can be highlighted. Firstly, CSR influences consumer behaviour through identifiable cognitive-affective mechanisms – credibility, value, identification – the relative weight of which varies by category and segment [11]. Secondly, authenticity is not optional: perceived greenwashing reliably undermines trust and neutralises gains, making alignment, transparency and independent verification central design considerations [10, 18].

Thirdly, cohort and context matter. Research indicates that younger consumers, particularly Generation Z, show distinctive patterns of environmental and social responsibility and conscious consumption [25, 30]. Environmental awareness also needs to be interpreted in relation to the broader consequences of human activity. These findings support the relevance of segment-specific approaches when examining consumer responses to CSR. These conclusions frame and motivate the primary research presented below.

2.6. CSR–ESG convergence and the interpretation of consumer 'signalling'

CSR has now been expanded to include a new strategic dimension, in which companies must simultaneously meet social, environmental and economic expectations. The 'new CSR agenda' no longer views CSR merely as a reputational or communication tool, but regards it as a fundamental element of corporate operations and long-term sustainability [27].

The concept of CSR has continued to evolve over time, alongside related frameworks such as sustainability, stakeholder management, business ethics and corporate citizenship. Carroll [1] argues that despite the emergence of these complementary concepts, CSR is likely to remain a central framework for understanding the responsibilities of business towards society.

The link between CSR and corporate governance is becoming increasingly prominent in parallel with the development of sustainability and ESG perspectives. The integration of corporate governance mechanisms and CSR can contribute to increasing transparency, strengthening stakeholder trust and supporting long-term corporate value creation [13].

In recent years, the practical and communicative scope of CSR has converged significantly with ESG logic, which, from a consumer perspective, means that corporate responsibility increasingly functions as a signal: consumers draw conclusions about a company's integrity, competence and risk management from ESG/CSR information, which ultimately translates into changes in trust and willingness to purchase. Based on empirical findings, consumers do not perceive a uniform 'CSR package', but may react differently to the E–S–G dimensions: according to some studies, perceived ethical character and authenticity are the mediators that transform ESG perception into purchase intention. Similarly, multivariate models indicate that perceived ESG impact strengthens the relationship with the brand (attitude, identification, trust), which is associated with lower 'perceived risk' and a more positive willingness to make a purchase [36]. These supplementary findings fit particularly well with the article's starting point that CSR can have behavioural consequences by reducing consumer uncertainty and building trust.

In domestic corporate practice, too, an increasingly close link can be observed between CSR and the ESG approach. According to analyses in Hungary, companies are gradually integrating

sustainability and ESG considerations into their strategic operations, whilst CSR is increasingly becoming a measurable and reportable area of performance [6].

The spread of ESG-based investment approaches further reinforces the strategic importance of CSR. The integration of sustainability considerations is now no longer merely a matter of consumer or reputational concerns, but has become a decisive factor in terms of financial performance and investor perception. The interconnection between ESG and CSR thus forms one of the foundations of companies' long-term competitiveness [36, 37].

2.7. The reporting shift (CSRD/ESRS, IFRS S1/S2) and the consumer information environment

Understanding CSR impact mechanisms now also involves considering the information environment in which consumers encounter CSR claims. In the EU, the Corporate Sustainability Reporting Directive (CSRD) makes sustainability reporting more mandatory, structured and comparable, which in principle may reduce the scope for 'cherry-picked communication' and empty CSR promises [38]. Research on mandatory sustainability reporting in the EU highlights the increasing importance of standardized sustainability metrics and comparable corporate disclosures [39]. In parallel, the European ESRS standards (EFRAG) and the global ISSB/IFRS sustainability standards (IFRS S1, IFRS S2) will, from 2020 onwards, provide a new normative framework for how companies can make their sustainability claims measurable and auditable [40–42]. From a consumer perspective, this may have a dual effect: (1) verifiability (credibility) may increase, whilst (2) due to the complexity of disclosure, consumers often use summarised indicators rather than the full report. This line of reasoning complements the article's findings on CSR communication by noting that CSR is not merely content, but information structured by standards, the accessibility and processing of which can act as an independent moderator.

Experimental research on investor decision-making indicates that sustainability reporting can influence investors' evaluations and decisions, although these effects depend on characteristics of the disclosed sustainability information and its presentation [43].

The significance of sustainability and CSR reports is growing not only among consumers but also among investors. Research indicates that transparent CSR disclosure positively influences investor decisions, as it reduces information asymmetry and strengthens the perception of a company's reliability.

In Hungary, non-financial and sustainability reporting has become an increasingly important component of corporate disclosure. Research on Hungarian listed public interest entities indicates that regulatory requirements have contributed to the development of non-financial reporting practices and to improvements in the quality of sustainability-related disclosure [44].

2.8. The context-dependence of CSR's impact: stakeholder proximity and country factors

Meta-analyses conducted since 2020 have increasingly sought to answer the question of when and which type of CSR elicits a stronger consumer response. According to large-scale meta-analytical evidence, 'stakeholder-proximate' (core) CSR (e.g. treatment of employees, product responsibility, supplier integrity) often has a stronger impact on consumer outcomes than more distant (extended) CSR (e.g. general social issues), whilst country characteristics and cultural factors significantly modify the magnitude of these effects [44]. This approach is directly linked to the dimensions discussed in the article (e.g. working conditions, health, environment): consumers may assign different weights to individual areas of responsibility, and reactions may also 'spill over' across gender or generational lines.

Recent meta-analytic findings therefore provide a more nuanced understanding of the general proposition that CSR positively influences consumer responses. The 940 effect sizes analysed in [45] were drawn from 202 studies across 43 countries, enabling the joint examination of the effects of different CSR types and cross-country differences. The results indicate that core CSR generally generates stronger positive consumer responses than extended CSR [44]. This suggests that not all areas of corporate responsibility are equally important to consumers: CSR activities that are more directly related to a company's core operations and primary stakeholders may have greater diagnostic value when consumers evaluate corporate responsibility.

At the same time, the meta-analysis shows that this difference cannot be regarded as universal, as country characteristics significantly moderate the relative effects of core and extended CSR [45]. The cultural, economic, social and connectivity-related factors examined indicate that the same CSR activity may generate different consumer responses across national contexts. From a methodological perspective, this represents an important advancement over earlier studies based on a single country or narrower consumer samples, as the joint analysis of a large number of studies and countries allows contextual moderators to be identified systematically [44]. However, meta-analytic findings, by their nature, reveal aggregated relationships and are therefore less suited to showing how different consumer groups within a particular country evaluate specific dimensions of CSR.

These findings are important for the present study in two respects. First, they support the need for a multidimensional examination of CSR, as consumers may respond differently to different areas of corporate responsibility. Second, the moderating role of country factors suggests that international findings cannot automatically be applied to every national consumer context [44]. This provides a rationale for country-specific empirical studies and for examining whether consumer segments with distinct CSR orientations can be identified within a particular national context.

2.9. CSR scepticism and perceptions of hypocrisy: the conditional nature of positive effects

In the literature from 2020 onwards, the effects of CSR on consumer behaviour are increasingly presented as conditional: CSR only translates into trust and purchasing preferences if the consumer does not adopt a sceptical interpretation. According to reviews summarising CSR scepticism, typical precursors to scepticism include excessive self-promotion, past inconsistencies, and the impression that the company is 'just doing PR'; the consequences are a loss of trust, negative word-of-mouth, and a willingness to switch brands [45]. Social media also provides an important context for CSR communication. Consumers' engagement with CSR communication on social media is influenced by their attitudes towards CSR in social media, peer communication about CSR activities, and opinion leadership characteristics [46]. These findings highlight that consumer responses to CSR communication in digital environments depend not only on the message itself but also on the social context in which consumers encounter and discuss CSR-related information.

2.10. CSR communication on social media: source, framing and credibility

With the rise of digital platforms and social media, CSR communication is increasingly taking place in an online environment. CSR messages appearing on social media can reach consumers more quickly, whilst the role of credibility and interactivity is also becoming more important. Online CSR communication can positively influence brand reputation and consumer engagement, provided the communication is consistent and authentic [47].

Since 2020, CSR communication has shifted predominantly towards digital channels; consequently, the latest research examines who communicates (company vs. opinion leader/influencer) and how (value-based vs. performance/outcome-based framing). Experimental

results suggest that the combination of source and framing can significantly influence message credibility, reputation and word-of-mouth intent: in certain patterns, value-based framing proves more favourable, whilst in other situations, an overly promotional tone increases suspicion [48]. The topic is also relevant in the Hungarian context: studies focusing on the domestic market highlight that influencer-mediated content and corporate posts build credibility in different ways, and that 'attribution of intent' can play a key role in consumer reactions [49]. A conclusion that can be drawn from the article is that the 'quality' of CSR communication is not merely a matter of content, but also a decision regarding channel and source selection, which may represent a distinct mechanism in trust-building.

Social media platforms play a particularly important role in the reputation-building impact of CSR. Twitter-based empirical studies have shown that online discourse regarding companies' CSR activities directly influences the development of corporate reputation, and that digital consumer reactions can rapidly strengthen or weaken the company's social standing [50].

2.11. Corporate–NGO partnerships, cause fit and reducing scepticism

One practical means of establishing CSR credibility is the company–NGO partnership; however, consumers may view this with scepticism if the collaboration does not align with the brand. The latest evidence suggests that the 'fit' (how logical the cause-brand connection is) and the communicated motivations (altruistic vs. commercial) determine whether the partnership enhances credibility or, conversely, arouses suspicion [51]. This line of argument reinforces the article's focus on 'authenticity': for the consumer, CSR is credible only if it is consistent with the brand's identity and the company's operations.

2.12. Brand activism and 'woke washing': a new risk area surrounding CSR

Since 2020, CSR has frequently touched upon issues of social justice, identity and values, which some consumers interpret as activism. Research published in connection with the #StopHateForProfit boycott has highlighted that corporate social responsibility (CSR) and irresponsibility (CSI) can coexist in consumer assessments: consumers weigh up a company's CSR initiatives against the negative impacts of the relevant industry or platform, and this influences their willingness to boycott or support. The concept of 'woke washing' describes a situation where a brand communicates a value-based stance but fails to back this up with consistent action; empirical findings suggest that this explicitly undermines brand credibility, particularly in the context of higher issue involvement and consumer scepticism. Furthermore, reactions to brand activism are ambivalent: according to some models, consumer behaviour can be shaped in parallel by admiration and anger, and a prior CSR reputation can mitigate the attribution of egoistic motivation and reinforce advocacy behaviour [52]. At the same time, 'moral contradictions' can trigger a stronger backlash for activist brands: if the consumer perceives a moral transgression, the reputational damage may be greater because the brand has set a high standard for itself. Literature reviews on brand activism describe the phenomenon as a natural but risky extension of CSR, where authenticity, polarisation and contextual fit are key [52, 53]. For this article, this addition provides the additional insight that, in certain areas of CSR (particularly social issues), differences between consumer segments (ideological, value-oriented) may be amplified; the effects can therefore be explained not only by gender/generational moderators, but also by value- and identity-based moderators [54, 55].

2.13. Loyalty and repeat purchasing: recent meta-analytic confirmation

Finally, post-2020 meta-analytic findings confirm that the relationship between CSR and loyalty is stable but operates mostly through indirect mechanisms. According to meta-analyses, in addition to service quality and perceived value, trust is a key mediator in the pathways determining loyalty; in many cases, CSR is integrated into consumer evaluations as a “signal of quality and care” [56]. This is particularly relevant in service and trust-based contexts (banking, healthcare, food, retail), where the attitude–trust–preference chain discussed in this study may operate strongly.

A comparison of the meta-analytic findings therefore indicates that the literature is relatively consistent regarding the positive relationship between CSR and consumer loyalty, while the mechanisms underlying this relationship appear to be more complex. Some studies identify both direct and indirect relationships between CSR and consumer loyalty, with brand awareness, brand attitude and customer satisfaction contributing to the mechanisms through which CSR can strengthen brand loyalty [57]. From this perspective, corporate social responsibility alone may not necessarily be sufficient to generate loyalty; its effect depends partly on whether consumers interpret CSR as a signal of corporate trustworthiness, service quality, value creation and care.

The findings of [56] also indicate that the CSR–loyalty relationship does not operate in isolation but in conjunction with other factors that are important in consumer evaluations. Identifying the roles of service quality, perceived value and trust is particularly important because these factors may partly explain why individual empirical studies report different strengths of the direct relationship between CSR and loyalty [56]. From a methodological perspective, the advantage of the meta-analytic approach is that the joint evaluation of a large number of previous empirical findings allows more robust conclusions to be drawn regarding the general direction of the relationship and the importance of mediating mechanisms. However, aggregated findings are less able to reveal whether these mechanisms operate with the same strength across different CSR dimensions or among different consumer groups.

In the service sector, a particularly strong relationship can be observed between CSR and consumer loyalty. Consumers perceive socially responsible service companies as more trustworthy, credible and capable of creating value in the long term, which directly contributes to increased repeat purchase intentions and willingness to recommend [56].

Overall, recent meta-analytic findings not only confirm the positive effect of CSR on loyalty but also provide a more precise understanding of how this effect operates: the influence of CSR is largely transmitted through evaluative processes related to trust, perceived value and service quality [56]. However, it remains less clear in the literature to what extent these mechanisms differ across CSR dimensions, consumer segments and demographic groups. This limitation makes the examination of consumer heterogeneity in relation to CSR particularly important, as responsible corporate behaviour may be associated with trust, preference and, ultimately, loyalty to different degrees among consumer groups with distinct CSR orientations [58].

3. Materials and Methods

In our primary research, we sought to examine two research gaps and the hypotheses based on them. Although there are studies in the literature that examine the relationship between gender and CSR, the results are not always consistent, and most studies analyze general perceptions of CSR, treat gender as a control variable, and do not examine perceptions of specific CSR areas separately.

The identifiable research gap (1):

Few empirical studies examine gender-based perceptions of the various dimensions of CSR using a large sample. In our primary research, we therefore sought to analyze, using a large sample, the gender-specific differences in perceptions of individual dimensions of CSR. (Research Objective 1)

In our view, a significant portion of the literature treats consumers as a homogeneous group.

In corporate practice, however, it is important for the development of CSR strategies to know which consumer groups can be characterized, how these groups can be distinguished in terms of their differentiated perceptions of CSR areas, and, in light of this, how different CSR strategies can be assigned to different groups.

The identifiable research gap (2):

In CSR-related research, relatively few studies use cluster analysis to segment consumers based on their CSR preferences. In light of this, another key objective of our primary research was to segment the sample according to consumer perceptions of the CSR dimensions we examined. (Research Objective 2)

Research Objective 1: To analyze, using a large sample, gender differences in the perception of specific dimensions of CSR

Research hypotheses related to the first research objective:

H1/a: The areas and types of corporate social responsibility show a statistically significant relationship with the respondent's gender.

H1/b: Consumer decisions regarding corporate social responsibility show a statistically significant relationship with the respondent's gender.

Research Objective 2: We will segment the sample based on consumer perceptions of the CSR dimensions examined in this study

Research hypothesis related to the second research objective:

H2: The evaluation of the examined CSR dimensions can be used as a segmentation criterion, based on which clearly distinguishable consumer segments emerge.

As part of our primary research, we conducted a quantitative, standardized online survey among Hungarian consumers. In the study, we used a non-probability sampling method, specifically stratified random sampling. The selection of respondents for the sample was not random, and the study did not aim to provide a statistical representation of any specific population. However, when recruiting respondents, we sought to ensure that the sample included individuals of different ages, genders, and places of residence.

The stratification used in the sampling process was based on generational affiliation. The goal was to be able to include an adequate number of respondents from each of the generational groups under study in a simple and cost-effective manner. Stratification, therefore, did not constitute a probability-based selection but served to deliberately ensure the representation of different generations within the sample. Due to the specific characteristics of the selected sampling method, the resulting sample—despite its large size—cannot be considered representative of either the entire population of Hungarian consumers or any other specific population. Accordingly, the results and conclusions presented in this study apply exclusively to the sample examined; it is not possible to generalize them to the population in a statistical sense.

As a result of the online survey, we received 2,198 valid questionnaires. The majority of the sample (49%) live in towns, 33% are residents of the capital, and only 13% live in villages or small towns. In terms of highest level of education, the largest group (65%) had a secondary school qualification, followed by 30% with a primary school qualification, and finally 5% with a higher education qualification. In terms of gender, 47% of the sample were men and 53% were women. In terms of the regional distribution of place of residence, the largest proportion of the sample (60%)

were residents of Central Hungary, followed by residents of Northern Hungary and Central Transdanubia, each accounting for 10%.

The research tool was a pre-tested, standardised questionnaire covering the topics of social responsibility and its impact on consumption, food purchasing, and the analysis of ethnocentric behaviour. In developing the standardised questionnaire, we drew upon the findings of the literature as well as the results of a qualitative study. As part of this, we conducted individual interviews using a semi-structured interview guide, selecting five participants at random from each generation.

To process the quantitative results and test the hypotheses, we applied descriptive statistics, bivariate and multivariate analyses using SPSS 26.0 software. To examine the relationships between results measured on a metric scale, we used the method of analysis of variance (ANOVA), specifically the one-way ANOVA method suitable for comparing multiple sample means. We used one-way ANOVA to examine differences between groups. Although the variables under investigation were measured on a Likert-type scale, we treated the data as interval-level during the analysis, as the use of parametric statistical procedures is widely accepted for Likert scales [59–61].

We compared the mean of a metric dependent variable across more than two groups. We used a post-hoc test to determine which pairs of groups showed a significant difference. In doing so, we used significance levels to determine the presence of associations ($\text{sig} \leq 0.05$). We analysed the internal relationships by comparing group means using the F-statistic, i.e. by considering the ratio of the variance of the means within the samples to the total variance. In the correlation analyses described in the study, where the significance value according to the ANOVA table was below 0.05, a statistical relationship between the two variables was confirmed.

We used correlation analysis to examine the direction and strength of the relationship between variables, while the purpose of ANOVA was to statistically test the differences between the mean values of the groups under study. Accordingly, we interpret the results of the two methods separately in the manuscript.

For the primary data, the normality assumption was tested for each group using the Shapiro–Wilk test, which did not indicate any significant deviation from normal distribution in any group ($p > .05$ in all cases). No severe deviation was observed in any group.

Although the Levene's test indicated a violation of the assumption of homogeneity of variances for several variables, the robustness of the ANOVA, the large sample size and the highly significant F-values mean that the interpretation of the results can be considered justified. Thus, in our view, the results are unambiguous and methodologically sound, a view confirmed by the peer reviews received for the article.

4. Results

First, we asked respondents in which areas they considered social responsibility to be important (Table 1). According to the results, environmental protection, sustainable development, health promotion and disease prevention were the most important areas, followed by working conditions.

In the following, we analysed the impact of companies' socially responsible behaviour on respondents. Respondents primarily react with active consumer behaviour: when making a purchase, they give preference to the products/brands/services of companies which they believe to be socially responsible. Based on the results, CSR can also be a means of increasing trust. We also found that a large proportion of respondents confirmed that not only had their trust increased and their preferences changed as a result of the company's corporate responsibility, but they had also purchased its products or used its services. The results therefore clearly show that appropriate CSR activities and strategies influence consumer preferences and purchasing behaviour (Table 2).

Table 1

Consumer perceptions of areas of corporate social responsibility

How important do you consider corporate social responsibility to be in the following areas?	N	Mean	Std. Deviation
economic growth	2198	2.83	0.967
environmental protection, sustainable development	2198	3.52	0.745
human rights	2198	3.39	0.828
fight against poverty	2198	3.10	0.917
promoting gender equality	2198	3.03	1.014
child protection	2198	3.34	0.875
animal welfare	2198	3.18	0.896
education	2198	3.19	0.890
freedom from corruption	2198	3.27	0.904
working conditions	2198	3.45	0.778
health promotion, disease prevention	2198	3.52	0.767

Source: Author's own research. N= 2198

Table 2

The impact of companies' socially responsible behaviour on consumer decisions

How does corporate social responsibility affect you?	N	Mean	Standard Deviation
My confidence in the company/brand has increased	2198	2.94	0.921
I purchased their product / used their service	2198	2.84	0.898
I prefer their product / brand / service when shopping	2198	2.95	0.903
I have told my friends and family about the company / brand	2198	2.66	1.009
I myself have donated to a cause supported by the company / brand	2198	2.22	1.009
I gave positive feedback to the company / brand (e.g. Facebook, Instagram likes)	2198	2.47	1.097

Source: Author's own research. N= 2,198

We also analysed these two questions in relation to gender (Tables 3 and 4), as previous research has highlighted that perceptions of CSR activities differ by gender [59].

Our results also confirmed that both the areas and types of corporate social responsibility, as well as consumer decisions regarding corporate social responsibility, show a statistically significant correlation with the respondent's gender. In both cases, we consistently found that female respondents were characterised by a higher degree of engagement, particularly regarding the areas of corporate social responsibility, where women considered every single topic and area to be more important. This was also the case with regard to responses to CSR activities, where we similarly found that all positive responses – such as increased trust, preference and changes in consumer behaviour – were more characteristic of female respondents.

Due to a violation of the assumption of homogeneity of variances, we also verified the results using a nonparametric test. We applied the Mann–Whitney U test to compare different areas of CSR by gender. The results confirmed our earlier conclusions: in 10 of the 11 areas examined, there was a significant difference between men's and women's perceptions, while we found no significant difference in the case of economic growth ($p = 0.351$). The nonparametric analysis thus supported the original conclusions, which therefore remained essentially unchanged.

Table 3
Areas of corporate social responsibility in relation to gender

Areas of corporate social responsibility in relation to gender		N	Mean	Std. Deviation	Sig
Economic growth	Male	1031	2.81	0.972	0.341
	female	1167	2.85	0.963	
	Total	2198	2.83	0.967	
Environmental protection, sustainable development	men	1031	3.41	0.795	0.000
	female	1167	3.62	0.683	
	Total	2198	3.52	0.745	
Human rights	men	1031	3.26	0.882	0.000
	female	1167	3.51	0.758	
	Total	2198	3.39	0.828	
Combating poverty	men	1031	2.94	0.941	0.000
	female	1167	3.24	0.871	
	Total	2198	3.10	0.917	
Promoting gender equality	men	1031	2.77	1.067	0.000
	female	1,167	3.26	0.904	
	Total	2198	3.03	1.014	
Child protection	men	1031	3.19	0.924	0.000
	female	1167	3.48	0.805	
	Total	2198	3.34	0.875	
Animal welfare	men	1031	3.01	0.913	0.000
	female	1167	3.33	0.853	
	Total	2198	3.18	0.896	
Education	men	1031	3.08	0.907	0.000
	female	1167	3.29	0.862	
	Total	2198	3.19	0.890	
Freedom from corruption	male	1031	3.17	0.960	0.000
	female	1167	3.36	0.842	
	Total	2198	3.27	0.904	
Working conditions	men	1031	3.37	0.810	0.000
	female	1167	3.53	0.741	
	Total	2198	3.45	0.778	
Health maintenance, disease prevention	men	1031	3.43	0.800	0.000
	female	1167	3.60	0.728	
	Total	2198	3.52	0.767	

Source: Author's own research. N= 2198, analysis of variance, One-Way ANOVA

We then segmented the sample based on the factors of social responsibility we examined. First, we examined how the factors of social responsibility we examined are interrelated according to consumers' value judgements (Table 5).

To analyse this, we performed a factor analysis using the varimax method. The structure most appropriate from both a statistical and a professional point of view turned out to be the following:

Based on the results of the factor analysis, two factors, each consisting of multiple variables, can be identified. The "Public Good and Equal Opportunity" factor includes child protection, the fight against poverty, the promotion of women's equality, animal welfare, and education. A common characteristic of these variables is that they are primarily linked to social responsibility, the promotion of equal opportunity, and, in a broader sense, the protection of the common good.

Table 4
Correlation between consumer decisions and corporate social responsibility

Consumer decisions regarding corporate social responsibility: no correlation		N	Mean	Std. Deviation	sig
My trust in the company/brand has increased	Male	1031	2.79	0.942	0.000
	female	1167	3.07	0.880	
	Total	2198	2.94	0.921	
I purchased their product / used their service	Male	1031	2.70	0.919	0.000
	female	1167	2.97	0.860	
	Total	2198	2.84	0.898	
I prefer that company's product / brand / service when shopping	Male	1031	2.81	0.945	0.000
	female	1167	3.08	0.843	
	Total	2198	2.95	0.903	
I have told my friends and family about the company/brand	male	1031	2.56	1.035	0.000
	female	1167	2.75	0.978	
	Total	2198	2.66	1.009	
I myself have donated to a cause supported by the company/brand	Men	1031	2.16	1.025	0.000
	female	1167	2.27	0.992	
	Total	2198	2.22	1.009	
I gave positive feedback to the company/brand (e.g. Facebook, Instagram likes)	male	1031	2.43	1.102	0.118
	female	1167	2.50	1.092	
	Total	2198	2.47	1.097	

Source Author's own research. N= 2198, analysis of variance, One-Way ANOVA

Table 5
Factors of social responsibility's dimensions

Factors	Factors of social responsibility		
	Public good and equal opportunities	Social ethics and organisational responsibility	Economic responsibility
Child protection	0.773	0.335	0.090
Combating poverty	0.768	0.283	0.070
promoting gender equality	0.762	0.220	0.074
animal welfare	0.707	0.319	0.038
education	0.683	0.325	0.208
working conditions	0.270	0.806	0.183
health maintenance, disease prevention	0.308	0.803	0.090
environmental protection, sustainable development	0.262	0.786	0.100
human rights	0.478	0.651	0.077
freedom from corruption	0.385	0.623	0.196
economic growth	0.133	0.214	0.958

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalisation. Total variance 69.6% KMO 0.940

The "Social Ethics and Organizational Responsibility" factor encompasses the variables of working conditions, health promotion and disease prevention, environmental protection and sustainable development, human rights, and freedom from corruption. The factors belonging to this factor

represent various aspects of ethical organizational operation, sustainability, and responsible behavior toward employees and society.

The economic growth variable is distinct from the two dimensions mentioned above in the factor structure. However, since this dimension is represented by only a single observed variable, it is not methodologically justified to interpret it as an independent latent factor or as an “Economic Responsibility” factor. Accordingly, in the subsequent analysis, we treat economic growth as an independent variable and do not consider it a separate factor identified in the factor analysis. Its distinct position, however, suggests that, in the respondents’ assessment, economic growth does not fit closely with the two multi-item dimensions related to social, ethical, and organizational responsibility. Therefore, in interpreting the results, economic growth is presented as a separate aspect alongside the two identified factors.

We assessed the suitability of factor analysis using the Kaiser–Meyer–Olkin (KMO) statistic and Bartlett’s sphericity test. The KMO statistic was 0.940, indicating excellent sampling adequacy. Bartlett’s sphericity test yielded a significant result [$\chi^2(55) = 12,384.9$; $p < 0.001$], confirming that the correlation structure among the variables is suitable for conducting factor analysis. We examined the internal consistency of the constructed multi-item factors using Cronbach’s alpha. For the “Public Good and Equal Opportunity” factor, $\alpha = 0.861$, while for the “Social Ethics and Organizational Responsibility” factor, $\alpha = 0.877$. Both values indicate good internal consistency, meaning that the items comprising the factors demonstrate adequate internal coherence.

We then segmented the sample based on these factors and were able to distinguish the following consumer groups (Table 6).

Those indifferent to social responsibility, who rated all dimensions low; they constitute a segment with low sensitivity to responsibility, who are either unaffected by the issue of social responsibility or lack sufficient knowledge of it. Although they are the smallest of the four segments, we nevertheless consider them a relevant segment, one that could be steered towards a positive attitude towards social responsibility through the right strategy

Ethical business rationalists, who, alongside social, ethical and organisational responsibility, also considered the factor of economic responsibility to be important. They value social ethics, organisational responsibility and economic responsibility equally.

Moral altruists, who, alongside the common good and equal opportunities, also regard social, ethical and organisational responsibility as significant, and who reflect a strongly ethical, community- and justice-oriented value system.

A fully CSR-value-oriented segment, who rated all the CSR dimensions examined highly. Such consumers are conscious not only from a moral and social perspective, but also from an economic one: it is important to them that the company acts correctly, operates fairly, and contributes to society for the common good. This segment represented the largest consumer base in the research, which we consider a most welcome result; in matters of social responsibility, it is certainly worth building on them as a reference group.

Prior to determining the number of clusters, we performed a hierarchical cluster analysis using Ward’s agglomeration method and squared Euclidean distance. We then performed a K-means cluster analysis, during which we also examined solutions with alternative numbers of clusters (2, 3, 4, and 5). In determining the final number of clusters, we took into account not only the results of the hierarchical cluster analysis but also the number of elements in each cluster, their distinctiveness, and the interpretability of their content. Based on a comprehensive evaluation of these factors, we selected the three-cluster solution.

Table 6
Consumer clusters based on the factors of the CSR dimensions

Factors	Consumer groups			
	Indifferent to social Responsibility N=340	Ethical business rationalists N=425	Moral altruists N=501	Total CSR-value-oriented segment N=932
Public good and equal opportunities	-0.52134	-1.16383	0.11961	0.65661
Social ethics and organisational accountability	-1.77951	0.59455	0.54078	0.08736
Financial liability	-0.35071	0.66129	-1.32398	0.53810

5. Conclusions

CSR activities are not merely communication tools, but have a real impact on consumer behaviour. Corporate social responsibility (CSR) is playing an increasingly important role in the system of consumer expectations today, particularly in areas aligned with current global challenges.

The strategic integration of CSR can not only provide social or reputational benefits, but can also act as a direct driver of corporate value creation. Strategic CSR can contribute to the improvement of corporate performance and the strengthening of stakeholder relationships [62,63].

Conclusions and Practical Implications

The results of the study show that the various dimensions of corporate social responsibility (CSR) carry different levels of importance among the consumers who participated in the survey. Based on the findings, CSR areas related to environmental sustainability, health promotion, and social well-being proved to be of particular importance to the sample participants [64].

It is important to emphasize that the research was not based on a representative sample; therefore, the results cannot be generalized to the entire consumer population. At the same time, the study highlights that perceptions of CSR dimensions can vary significantly, which justifies a more detailed analysis of consumer preferences.

The results of the gender comparison showed that, for most of the CSR dimensions examined, there was a statistically significant difference between the responses of men and women. Nonparametric tests confirmed these results. At the same time, the relatively low effect sizes suggest that the practical significance of these differences should be interpreted with caution.

One of the most important findings of the research was the segmentation of consumers based on their CSR preferences. The combined use of hierarchical clustering and the K-means algorithm made it possible to identify four clearly distinguishable consumer segments:

- consumers indifferent to social responsibility;
- ethical business rationalists;
- moral altruists;
- consumers fully oriented toward CSR values.

The results suggest that consumers cannot be regarded as a homogeneous group in terms of their attitudes toward CSR. The segments identified by the cluster analysis have different value systems and preference systems, which supports the applicability of data-driven segmentation.

From a decision-analytical perspective, the study demonstrates that clustering methods may be suitable for supporting the development of CSR strategies. The identified consumer segments can be used to differentiate companies' CSR communications, define target groups more precisely, and better understand the expectations of various stakeholder groups.

A limitation of this study is the non-representative sample; therefore, the results should be considered primarily exploratory in nature. Future research should examine the relationship between CSR preferences and consumer segmentation using a representative sample and incorporating additional demographic and behavioral variables.

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Conflicts of Interest

The authors declare no conflicts of interest.

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