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Perception of Brand Humanization by University Students: Development and Testing of the Measurement Scale

Titko Jeļena[1], Strazda Anna[1], Užule Kristīne[1], Šatrevičs Vladimirs[2] and Budanceva Jeļena[1]

[1]EKA University of Applied Sciences, Latvia
[2]Riga Technical University, Latvia

Email: jelena.titko@eka.edu.lv; anna.strazda@eka.edu.lv; kristine.uzule@eka.edu.lv; vladimirs.satrevics@rtu.lv; jelena.budanceva@eka.edu.lv

Abstract

This article explores how social and green values contribute to the humanization of university brands as perceived by students, addressing a gap in higher education branding research. As universities seek to build emotionally resonant and ethically grounded identities, the study focuses on operationalizing two key dimensions – social and environmental responsibility – within a brand humanization framework. The authors developed a measurement instrument grounded in the University Social Innovation Management (USIM) model. The instrument included 18 items assessing students' perceptions of socially and environmentally responsible practices across education, operations, and stakeholder engagement. A pilot study involving 42 Latvian university students was conducted to test the internal consistency and conceptual validity of the scale.

Findings indicate that social value indicators, like inclusive infrastructure, internal stakeholder engagement, and communication of social

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impact – are perceived as central to a humanized university brand. In contrast, green values, are seen as secondary and gain relevance only when visibly enacted through infrastructure or policies. The scales demonstrated strong internal reliability, and the moderate correlation between the two subscales supports their theoretical interconnection.

The study contributes a validated tool for assessing value-based brand humanization in higher education and offers insights for universities aiming to strengthen brand authenticity, student engagement, and stakeholder trust. These findings highlight the importance of making both social and environmental commitments visible and relatable to students and lay the groundwork for further cross-cultural studies in higher education branding.

10.1 Introduction

Brand humanization is increasingly positioned as a bridge between the branding and the need to preserve HE's non-commercial values. There is substantive evidence suggesting that when brands express human-like qualities and value orientations, they foster emotional connection, ethical identification, and trust. A university that acts consistently with human-centered values is more likely to be viewed as a human-oriented institution and positively evaluated by its stakeholders (Vernuccio et al., 2025; Mirzaei et al., 2024). Based on Li and Chu (2025) and Klingler-Vidra et al. (2025), a university that expresses social values tends to be seen as more human and relatable. A university that fosters fairness and a sense of belonging through images and text on its website in alignment with community concerns is perceived more positively (Hussain, 2025; Li & Chu, 2025; Pinochet et al. 2024; Vernuccio et al. 2025). The HEI is treated as a human-oriented one, if it adopts green values across all its activities (Vargas-Merino, 2025; Sehgal et al., 2023). Besides, university branding should be approached holistically by considering all the brand equity dimensions collectively (Dholakia & Acciardo, 2014; Gómez-Bayona et al., 2024; Hemsley-Brown & Oplatka, 2006; Pinar et al., 2014).

In the age of circular economy, the role of education becomes broader, and includes also shaping social values and improving sustainable citizenship competences. These competencies enable the promotion of responsible consumption and sustainable behaviour in general, as well as a focus on information transparency, including awareness and correct perception of "greenwashing". In this regard, the brand humanization is not only a marketing tool, but a way of assessing whether the HEI is perceived as a morally responsible actor within the circular eco-system.

The universities differ from other enterprises in both structure and societal function. While the humanization of institutional brands has been increasingly discussed, its application to higher education, especially in the context of university branding, remains underexplored. This is particularly true for the Baltic states, where regional histories, cultural norms, and socio-political legacies may shape how people interpret institutional values and brand signals. Therefore, there is a clear need for empirical research within the specific socio-cultural and educational landscape of the Baltics.

The overwhelming goal of the research is to investigate the role of social and green values of university perceived by students. The current chapter reflects the results of the first research stage and aims at testing a measurement instrument that consists of two groups of items: 1) social values of universities, and 2) green values of universities.

Measurement scales (B and C parts of the questionnaire) were tested for internal consistency, using Cronbach alpha McDonald's Omega coefficients. Data was processed by means of frequency analysis and correlation analysis. Such testing will not only validate or refine the proposed framework but also provide insights into whether and how value-based brand humanization strategies translate to universities in this unique regional context.

Preliminary findings indicate a high level of perceived importance of socially-oriented dimensions in the university activities. In particular, inclusiveness, stakeholder engagements, and integration of human values into learning. Environmental aspects are not prioritised. The future testing will be focused on the relationship between students' perception of university green values and their own environmental values. This, probably, will clarify the situation. Regarding the measurement instrument, testing results provide empirical support for internal consistency of the constructs.

On the viewpoint of consumer-centred sustainable development, the proposed measurement scale

10.2 Human-Value Orientation and Brand Humanization of Universities

Universities do not merely function as centres of knowledge production – they also serve as institutional embodiments of human values. These values are not peripheral to branding but instead emerge as defining elements in how universities construct a humanized and ethically grounded institutional identity. By embedding human values across a wide range of activities, universities can demonstrate their alignment with sustainable development goals and circular economy principles. This, in turn, fosters cognitive,

moral, and emotional attachment among stakeholders. One emerging strategy for cultivating such attachment is the humanization, also known as anthropomorphism, of the university brand. According to Vernuccio et al. (2025), brand anthropomorphism refers to the attribution of human-like features to non-human agents, including technologies (Rehman et al., 2025) and institutions.

Humanized or anthropomorphized brands enhance appeal by integrating human-like physical features (Hussain, 2025; Li & Chu, 2025; Vernuccio et al., 2025), behavioral traits (MacDorman, 2024), and moral integrity (Hussain, 2025). These qualities generate emotional attachment in people (Huang & Liu, 2021; Hussain, 2025; Rehman et al., 2025) through various mechanisms, including empathy (Sutil-Rodríguez et al., 2025), respect (Hussain, 2025) and interpersonal interactions (Huang & Liu, 2021), which appeal to the inherently social nature of human beings, who are neurologically driven to seek social connection (Kanterman & Shamay-Tsoory, 2025), build trust, and derive meaning through shared values and collective belonging. Supporting this, Pinochet et al. (2024) and MacDorman (2024) found that user satisfaction with digital experiences increases when chatbots are designed with human-like characteristics, while Vernuccio et al. (2025) reported similar findings in virtual reality contexts. Further evidence from generative AI research shows that perceived respect, trustworthiness, and ethical behaviour of non-human agents shape more positive attitudes among humans towards non-human systems (Hussain, 2025), underscoring the relational impact of human-like cues across mediated interactions. These results underscore the relational power of perceived human presence, even in mediated, non-human interactions. Overall, brand humanization operates on four interconnected layers: physical characteristics (e.g., human-like interfaces or design), moral integrity (e.g., ethical stance and fairness), emotional engagement (e.g., empathy, warmth, responsiveness), and cognitive experience (e.g., clarity, understanding, and meaningful interaction) (Hussain, 2025), which allows brands to tell customers a story (Chen et al., 2025), not merely make a statement.

Considering that universities do not resemble people physically and do not act as individuals, brand humanization of universities should be conveyed through other mechanisms. One such mechanism is the articulation and communication of human values, which function as symbolic expressions of human-like identity (Mirzaei et al., 2024). These values contribute to shaping a human-like institutional identity by reflecting principles that are emotionally and socially resonant with stakeholders. Because values are inherently

human constructs, they serve as both cognitive and emotional anchors helping individuals interpret social realities, evaluate institutional authenticity, and decide whether to engage or withdraw.

This interpretive function of values supports the development of perceived similarity, a key psychological mechanism underlying human social connection and trust. Based on Bortolini et al. (2024), humans are neurologically predisposed to form attachments not only with people, but also with inanimate objects and abstract entities. Therefore, people can develop attachment to university brands through values. However, values can be shared, if similar, or distant, if disapproved. Therefore, it is the perception of positive similarity that fosters deeper emotional, social and cognitive connection, leading to the formation of brand credibility and loyalty in human perception. As shown by Ballester et al. (2025), when audiences perceive that a social agent, such as an influencer, shares their values, they are more likely to trust, support, and advocate for it. Thus, in the university context, this value-based similarity enables stakeholders to develop emotional and even social attachment to institutions, which, while abstract and inanimate, come to embody shared human meaning and purpose.

Human values, much like in individuals, form the core of an institution's identity. When universities consistently articulate and embody human values, they cultivate a human-like identity that stakeholders can recognize, relate to, and trust. This humanized institutional identity is not merely a conceptual or academic construct; it has also tangible strategic implications. As Mirzaei et al. (2024) argue, when organizations infuse human values into their brand communication, they foster not only emotional connection but also competitive advantage. In the case of universities, such value-driven positioning contributes to building a distinct and authentic brand personality (Rutter et al., 2017; Struweg & Wait, 2022), increasing the institution's relevance and legitimacy in the eyes of stakeholders. In a crowded and increasingly value-sensitive educational landscape, this human-value orientation becomes a critical tool for reputation building, stakeholder engagement, and long-term institutional success.

Within the context of higher education, the dimensions of brand humanization function synergistically, each shaping how stakeholders perceive and relate to a university. If stakeholders perceive coherence across these dimensions, they do not merely observe values – they experience them. This lived experience enables them to interpret the university as a socially embedded and humanized institution, capable of fostering trust, connection, and shared belonging. Therefore, when integrated, these values form a higher-order

outcome: the social dimension, which reflects the institution's ability to act as a relational, inclusive, and community-centered entity – an identity grounded in shared social values. Similarly, Li and Chu (2025) emphasize the social dimension of brand humanization, noting that when brands interact with consumers simulating genuine interpersonal relationships, they foster social anthropomorphism – the perception of the brand as a social agent capable of forming authentic relational bonds.

10.3 Social Values of Universities

Furthermore, as institutions deeply embedded within broader social ecosystems, universities are expected to act as ethical and socially responsive actors that actively contribute to the public good (Abrahao et al., 2024; Shoukat et al., 2024). In response to these growing expectations, many universities have adopted the concept of University Social Responsibility (USR), which evolved from the concept of Corporate Social Responsibility, through which they institutionalize commitments to equity, community engagement, transparency, and stakeholder well-being. USR provides a structured mechanism through which universities articulate and operationalize social values such as equity, justice, inclusivity, and civic engagement. This involves addressing the needs of diverse stakeholder groups, including students, local communities, and civic partners, through practices like knowledge sharing, community outreach, and problem-oriented education (Abrahao et al., 2024; Shoukat et al., 2024). USR initiatives reflect the university's moral and relational commitments, positioning it as an actor accountable to its social ecosystem. Importantly, empirical studies show that USR policies not only enhance the university's ethical standing but also lead to tangible outcomes such as increased student satisfaction, stakeholder trust, and stronger relational bonds (Nazneen et al., 2023). In this sense, USR functions as a visible and measurable institutional expression of the social values that underlie a humanized university brand.

While USR has become a widely accepted framework for embedding ethical and social commitments within higher education institutions, its effectiveness in increasingly competitive and performance-driven environments depends on its ability to generate measurable and innovation-driven outcomes. In this regard, the concept of University Social Innovation Management (USIM), as developed by Vargas-Merino (2025), offers a strategic extension of USR. USIM emphasizes the operationalization of social values as tools for organizational innovation, competitive differentiation, and stakeholder value creation. Rather than viewing social engagement as

an end in itself, USIM positions it as a platform for developing dynamic capabilities within the university's relational ecosystem. Vargas-Merino's (2025) empirical work identifies core dimensions of this approach: institutional focus on solving social problems, promoting civic and democratic values; enhancing the quality of life; tailoring education to community needs; adapting to social change; and fostering multi-stakeholder engagement. These practices illustrate how socially embedded values can serve as catalysts for strategic innovation and reputational advantage and can be used as measurable values, enabling stakeholders to assess whether a university acts as a morally grounded, socially responsive, and relationally engaged actor.

Importantly, non-human entities can act as perceived social agents when endowed with human-like characteristics (Golossenko et al., 2020). Drawing on prior research, Golossenko et al. (2020) argued that socially anthropomorphised entities can satisfy individuals' social needs, particularly in contexts marked by emotional detachment or limited interpersonal interaction. In such cases, people respond to these entities as if they possess social presence and emotional responsiveness. Similarly, Rehman et al. (2025) found that users frequently interpret interactions with AI-driven virtual influencers as encounters with human-like social agents. Rangel et al. (2024) found that when Espíritu Santo University Technology in Ecuador added social activities within university brand humanization strategy, positive reactions to universities increased. Such findings underscore the broader principle that perceptions of sociality and value alignment are not limited to human actors, but can emerge in mediated, institutional, or digital contexts. In the university setting, this suggests that when social values are visibly embedded in institutional strategies, discourse, and practices, they shape how the university is emotionally and ethically evaluated by stakeholders. Regardless of form, such values contribute to perceptions of trustworthiness, warmth, and relational authenticity, which form key dimensions of a humanized institutional identity.

Thus, while human values offer a broad conceptual foundation for institutional identity, there remains a need to examine which specific categories of values most effectively shape stakeholder perceptions. Social values are important because they form the basis for social identity and foster emotional and social attachment with an institution. These values are expected to signal a university's commitment to the public good, which can enhance perceptions of humanization. However, the extent to which expressing and embedding social values contributes to a university's humanized image remains underexplored.

10.4 Green Values of Universities

Human values are not limited to social dimensions; they also encompass broader ethical responsibilities that transcend generational and geographic boundaries. Among these responsibilities is a deep concern for the collective wellbeing of future generations and the sustainability of life on the planet. As such, the scope of human values extends to include ecological consciousness and environmental ethics, which form the foundation of green values. Notably, this expansion has led to the emergence of environmental values as a distinct category within ethical norms guiding environmentally responsible practices (Roy, 2023). These values signal a university's moral and strategic orientation toward climate responsibility, ecosystem preservation, and long-term planetary health, reinforcing its identity as an ethically grounded and future-oriented institution. Aftab et al. (2022) emphasize that environmental ethics are essential to sustainable organizational performance, directly linking ecological responsibility with institutional credibility. In a similar vein, Pavesi et al. (2025) argue that green values are integral to an organization's strategic identity, shaping how it is perceived externally and how it maintains legitimacy internally.

As environmental concerns become increasingly urgent, universities are under growing pressure to lead by example in demonstrating ecological responsibility. Beyond their roles in education and research, institutions are expected to embody environmental values through tangible actions that reflect societal expectations and ethical imperatives. Initiatives such as carbon neutrality, renewable energy integration, and sustainable campus infrastructure now serve as visible signals of an institution's alignment with climate ethics and its responsiveness to stakeholder demands. These are no longer viewed as operational choices but as expressions of moral accountability linked to social justice, health equity, and public trust. Therefore, embedding environmental priorities in university policies is no longer optional but essential (Shoukat et al., 2024). Vargas-Merino (2025) identifies sustainability efforts, such as waste reduction and climate responsiveness, as core to institutional innovation and legitimacy.

When such environmental commitments are perceived as authentic, they foster what Han et al. (2025) term green loyalty, a form of emotional alignment and trust that deepens stakeholder attachment. Green initiatives, particularly the presence of green spaces, contribute not only to physical and psychological wellbeing but also shape perceptions of institutional empathy, care, and inclusiveness (Rigolon et al., 2024; Xu et al., 2024). Sun et al. (2025) adds that transparent internal communication of green values

promotes environmentally responsible behaviours among staff, further reinforcing the university's external brand perception. In parallel, De Oliveira et al. (2023) highlight that effective visual communication of environmental efforts enhances institutional transparency and integrity, strengthening stakeholder trust.

From the perspective of brand humanization, green values transcend their operational role and emerge as ethical signifiers of human concern, collective responsibility, and long-term care for the planet. When institutions visibly prioritize ecological well-being, they align with deeply human ideals, such as fairness, planetary justice, and intergenerational responsibility, while fostering perceptions of empathy, care, and socioemotional attachment. In this way, green values function not only as practical commitments but also as symbolic and ethical expressions of institutional humanity, reinforcing the university's identity as a morally grounded and human-centred organization. The growing importance of this alignment is evident in the emergence of green brand anthropomorphism – a concept rooted in emotional attachment—where environmental responsibility strengthens brand identity and relational meaning (Sehgal et al., 2023).

Despite increasing attention to sustainability in higher education, the role of green values in shaping stakeholder perceptions through brand humanization remains underexplored. Most studies focus on institutional sustainability performance, while less is known about whether environmental commitments contribute to the perception of universities as human-like institutions. This creates a conceptual gap between ecological responsibility and the mechanisms of brand humanization. To address this, it is necessary to examine whether green values function not only as operational goals but also as relational signals that foster humanized perceptions of universities.

10.5 Methodology

To achieve the research goal, Latvian students were surveyed, using the authors' developed research instrument. This chapter reflects the results of analysis of the perception of social and green values only. Inclusivity and Diversity aspect will be analysed separately.

The statements included into the questionnaire cover three dimensions of the scale from the University Social Innovation Management Model (USIM), created by Vargas-Merino (2025): (1) education, (2) operations, and (3) stakeholder engagement. The authors excluded Research dimension from the scale.

The questionnaire contains 3 main blocks: A – respondent profile questions (gender, age, education level, education field); B – nine statements on Social values; C – nine statements on Green values.

The statements, related dimensions and labels are presented in Table 10.1 (Social values) and Table 10.2 (Green values).

A pilot survey was conducted among Latvian students. Participants were offered to evaluated the statements, using 5-point measurement scale on the perceived importance in evaluation of HEI: 1 – this is not important to me at all; 5 – this is very important.

10.5.1 Respondent profile

The pilot study involved 42 students from Latvian higher education institutions. Participants were recruited from business, management, IT, and cultural management programmes at Latvian higher education institutions via voluntary participation.

The sample consisted of 64% females (n=27) and 36% males (n=15). Respondents' ages ranged from 19 to 44 years, with the majority (70%) between 20 and 25 years, indicating a typical university student age profile. All participants were residents and citizens of Latvia.

In terms of study field, the largest share of participants represented Management and Marketing (57%), followed by Cultural Management (19%) and Information Technologies (14%). A smaller proportion (10%) of respondents studied Arts, Game Design, or other programmes.

10.5.2 Reliability analysis

To assess the internal consistency of the instrument, both Cronbach's Alpha (α) and McDonald's Omega (ω) coefficients were calculated for the two subscales. Both subscales demonstrate satisfactory reliability, supporting their suitability for further analysis in this pilot study (Table 10.3).

The Social Values Scale (9 items) demonstrated good reliability (α = 0.838; ω = 0.849), indicating stable inter-item consistency. Item-deletion analysis showed that reliability would not improve substantially if any item were removed (α = 0.799–0.852; ω = 0.816–0.857).

The Green Values Scale (9 items) revealed excellent internal consistency (α = 0.939; ω = 0.942), confirming that the items consistently measure a coherent construct. The "if-item-dropped" range (α = 0.929-0.936; ω = 0.931-0.939) suggests that each item contributes meaningfully to the scale.

Table 10.1 Statements of B part "Social Values" (Source: developed by Authors)

Dimension	Statement	Label	Reference supporting the statement
Education	The university integrates human values and ethical principles into its curriculum.	(S1) Human values in curricula	Dichter (2015); Horng et al. (2019)
Education	The university promotes socially responsible behaviour among students through educational activities.	(S2) Social responsibility education	Lee et al. (2025)
Education	The university uses socially meaningful visuals in study materials to show its commitment to social and ethical values.	(S3) Social values in learning materials	Klingler-Vidra et al. (2025)
Operations	The university openly shares its social goals and reports on progress toward achieving them.	(S4) Institutional transparency	McKenzie et al. (2023)
Operations	The university visually presents its social responsibility actions (e.g., on its website or other platforms).	(S5) Visible social responsibility	Gorska et al. (2023)
Operations	The university provides accessible and inclusive campus facilities and services (e.g., barrier-free infrastructure, inclusive common areas) that support all members of the university community	(S6) Inclusive campus infrastructure	Morina & Morgado (2018)
Stakeholder engagement	The university cooperates with external stakeholders to enhance their well-being and contribute to broader socioeconomic development.	(S7) External stakeholder engagement	Bayuo et al. (2020); Jong and Balaban (2022)
Stakeholder engagement	The university regularly uses feedback from students and employees to improve study and employment practices.	(S8) Internal stakeholder engagement	Galvao et al. (2019); Rodríguez-Gomez et al. (2022)
Stakeholder engagement	The university shares stories (e.g., videos, social media posts) showing how it has supported the goals or potential of students, staff, community members, or partners.	(S9) Communicating social impact	Carl and Menter (2021); Ibáñez-Forés et al. (2023)

Table 10.2 Statements of C part "Green Values" (Source: developed by the Authors)

Dimension	Statement	Label	Reference supporting the statement
Education	A university integrates environmental concerns into its teaching and curriculum design (there are specific study courses or study programmes on environmental sustainability; there are green issues-related topics or assignments within other courses)	(G1) Green curricula	Aftab et al. (2022); Han et al. (2025)
Education	The university offers opportunities for students to participate in sustainability-related research projects or community-based environmental initiatives	(G2) Sustainability participation	Roy (2023)
Education	Classrooms and learning materials at a university display visible reminders of environmental responsibility (green messages, waste-sorting guides, energy-saving instructions, etc.)	(G3) Green learning environment	Xu et al. (2024)
Operations	A university embeds environmental sustainability into its policy documents /strategies (energy use, waste management, etc.)	(G4) Sustainability policy	Putri et al. (2025); Pavesi et al. (2025)
Operations	The design and layout of university buildings and operational spaces incorporates eco-friendly construction materials, solar panels, rainwater harvesting, led lighting and etc.	(G5) Eco-friendly infrastructure	Rigolon et al. (2024)
Operations	The university implements sustainable waste management practices, including waste reduction, reuse, and recycling programs across campus	(G6) Sustainable waste management	Ebrahimi, & North (2017)
Stakeholder engagement	A university encourages environmentally responsible behaviour of its stakeholders (students, staff, others)	(G7) Responsible behaviour promotion	Shahzad et al. (2024)
Stakeholder engagement	A university's promotes green values through its outreach programs to communities	(G8) Promotion of green values	Xie et al. (2024)
Stakeholder engagement	A university visibly incorporates environmental values into the outcomes of its stakeholder collaborations (joint reports, digital platforms, and shared resources)	(G9) Green collaboration outcomes	De Oliveira et al. (2023)

Table 10.3 Reliability Statistics

Reliability Statistics	Cronbach's α	McDonald's ω	Interpretation
Social Values Scale (9 items)	0.838	0.849	Good
If Item dropped	0.799-0.852	0.816-0.857	Good
Green Values Scale (9 items)	0.939	0.942	Excellent
If Item dropped	0.929-0.936	0.931-0.939	Excellent

10.6 Results

The results of this pilot study provide an initial empirical assessment of the proposed instrument measuring the social and green value dimensions of university brand humanization.

Descriptive statistics and frequency analyses were conducted to capture the relative importance of each item, followed by correlation analyses to examine relationships between the two subscales. This two-stage approach allows for both a general overview of students' value orientations and a preliminary evaluation of the instrument's construct validity, highlighting how social and green values jointly contribute to the perception of a humanized university brand.

10.6.1 Frequency analysis

Descriptive statistics for the nine items of the **Social Values Scale** (Table 10.4) indicate that respondents generally assigned **high importance** (Mdn=4, Mode=4) to social responsibility-related aspects of university activity.

Frequency analysis shows that 81% of respondents rated *Inclusive campus infrastructure* and *Internal stakeholder engagement* as important or very important (4-5), while 71-67% did so for *Social responsibility education*, *Communicating social impact*, and *Human values in curricula*. Lower levels were observed for *Visible social responsibility* (60%), *Social values in learning materials* and *Institutional transparency* (55%), and *External stakeholder engagement* (38%). Variability across items was generally low (IQR=1.00), indicating consistent evaluations, with slightly higher dispersion for *Communicating social impact* (IQR=2.00).

Overall, these results indicate that students strongly value socially responsible and inclusive dimensions of university life, emphasizing openness, engagement, and communication as core elements of institutional social responsibility.

Table 10.4 Descriptives Statistics and Frequency Analysis for Social Values Scale (9 items)

Social Values Scale					**Importance level***		
Item (label)	**N**	**Median**	**Mode**	**IQR**	**1–2**	**3**	**4–5**
(S6) Inclusive campus infrastructure	42	5.00	5.00	1.00	7%	12%	81%
(S8) Internal stakeholder engagement	42	4.00	4.00[a]	1.00	0%	19%	81%
(S2) Social responsibility education	42	4.00	4.00	1.00	5%	24%	71%
(S9) Communicating social impact	42	4.00	5.00	2.00	7%	26%	67%
(S1) Human values in curricula	42	4.00	4.00	1.00	5%	29%	67%
(S5) Visible social responsibility	42	4.00	4.00	1.00	17%	24%	60%
(S3) Social values in learning materials	42	4.00	3.00	1.00	5%	41%	55%
(S4) Institutional transparency	42	4.00	3.00[a]	1.00	10%	36%	55%
(S7) External stakeholder engagement	42	3.00	3.00	1.00	24%	38%	38%

Note. Median, Mode, and IQR (Q3–Q1) reported for ordinal Likert-type data. Evaluated on a five-point Likert scale, where 1=not important for me at all; and 5=very important for me.

[a]More than one mode exists; only the first is reported.

Descriptive statistics and frequency analysis for the **Green Values Scale** (Table 10.5) indicate that respondents generally attributed **moderate importance** to environmentally oriented university practices, with median scores clustering around 3.00.

The highest rated item was *Responsible behaviour promotion* (Mdn=3.5, Mode=4), followed by *Eco-friendly infrastructure* and *Sustainable waste management* (Mdn=3.0). About 48–50% of respondents rated these items as important or very important (4-5). The lowest perceived importance was attributed to *Sustainability policy* (24%, rating 4-5). Variability across items ranged from low to moderate (IQR=1.00-2.00). Broader dispersion was observed for *Green learning environment*, *Promotion of green values*, and *Green curricula* (IQR=2.00), suggesting that perceptions toward these educational and promotional dimensions of sustainability were more diverse among respondents.

Table 10.5 Descriptive Statistics and Frequency Analysis for Green Values Scale (9 items)

Green Values Scale Items (label)	N	Median	Mode	IQR	Importance level* 1-2	3	4-5
(G7) Responsible behaviour promotion	42	3.50	4.00	1.00	21%	29%	50%
(G5) Eco-friendly infrastructure	42	3.00	3.00	1.00	21%	31%	48%
(G6) Sustainable waste management	42	3.00	3.00	1.75	26%	31%	43%
(G3) Green learning environment	42	3.00	3.00	2.00	31%	33%	36%
(G9) Green collaboration outcomes	42	3.00	3.00	1.00	24%	41%	36%
(G8) Promotion of green values	42	3.00	3.00	2.00	29%	38%	33%
(G2) Sustainability participation	42	3.00	3.00	1.00	21%	48%	31%
(G1) Green curricula	42	3.00	3.00	2.00	29%	43%	29%
(G4) Sustainability policy	42	3.00	3.00	1.00	33%	43%	24%

Note. Median, Mode, and IQR (Q3–Q1) reported for ordinal Likert-type data. Evaluated on a five-point Likert scale, where 1 = not important for me at all; and 5 = very important for me.

Overall, the results suggest that students recognise the relevance of green-related values but view them as moderately important rather than central to university identity.

10.6.2 Correlation analysis

To further examine the construct validity of the instrument, a non-parametric correlation analysis on sub-scale and item-level was performed. This two-step approach enables a more nuanced understanding of how students perceive the interconnection between social and green value constructs within the broader framework of university brand humanization.

First, a Spearman's rank correlation was calculated between the *composite scores of the Social Values and Green Values* scales to assess the overall association between these two value dimensions. As each variable was measured on a five-point Likert scale, included multiple items representing the same construct, and demonstrated satisfactory internal consistency (α, $\omega \geq 0.70$), the items were treated as quasi-continuous measures. This allowed

Table 10.6 Correlation between Social Values and Green Values

		Composite Score for Social Values
Composite Score for Green Values	Spearman's rho	0.593
	df	40
	p-value	<.001

the use of averaged composite scores to represent respondents' overall orientation toward social and green values (Carifio & Perla, 2008; Norman, 2010). The results are presented in Table 10.6.

The observed correlation (Table 10.6) provides preliminary evidence that the instrument functions as intended in this pilot study. The **moderate, positive association** between the Social and Green Values subscales ($\rho = 0.59$, $p < 0.001$) suggests that participants who highly value socially responsible university practices also tend to emphasise environmental and sustainability-related dimensions. This pattern is consistent with theoretical expectations and indicates that the instrument captures two related yet conceptually distinct facets of value-based university perception – an encouraging sign of its construct validity in the current context. As highlighted by Vargas-Merino (2025), universities often integrate social and environmental commitments through coherent social innovation and sustainability strategies, while Vernuccio et al. (2025) and Mirzaei et al. (2024) note that humanized institutional brands derive their authenticity from the consistent alignment of moral, social, and ecological values. Furthermore, Aftab et al. (2022) and Roy (2023) provide empirical evidence that social and green ethics jointly underpin sustainable institutional performance and stakeholder trust, reinforcing the conceptual unity between these two value domains.

Second, an *item-level correlation matrix* was explored to identify relationships among specific indicators and to evaluate the internal coherence and conceptual overlap between items representing social and environmental responsibility.

Authors summarised and presented in Table 10.7 only the correlations with highest statistical significance ($p < 0.01$ and $p < 0.001$) between Social and Green value indicators, highlighting the most meaningful relationships[1].

Most correlations (Table 10.6) ranged from **weak-to-moderate** ($\rho = 0.397$-0.485) to **moderate-to-strong** ($\rho = 0.501$-0.648), suggesting

[1] Full correlation matrix, is available from the authors upon request.

Table 10.7 Item-Level Correlation Matrix Between Social and Green Value Scales (Spearman's ρ, *df*=40)

Social Values Items → Green Values Items ↓	**(S2) Social responsibility education**	**(S3) Social values in learning materials**	**(S4) Institutional transparency**	**(S5) Visible social responsibility**	**(S7) External stakeholder engagement**	**(S9) Communicating social impact**
(G3) Green learning environment	**0.529*** **		0.421**	**0.648*** **	**0.558*** **	0.402**
(G9) Green collaboration outcomes	0.466**	0.496**		**0.555*** **	**0.501*** **	0.480**
(G7) Responsible behaviour promotion	0.435**	0.424**		**0.506*** **	0.456**	
(G2) Sustainability participation	**0.512*** **			0.485**	0.399**	
(G8) Promotion of green values				0.430**	0.409**	0.401**
(G1) Green curricula	**0.578*** **	0.434**				
(G4) Sustainability policy				**0.568*** **	0.465**	
(G6) Sustainable waste management				0.441**	0.397**	

Note. ** p<0.01, *** p<0.001; Only statistically significant correlations are reported (p<0.01, p<0.001).

meaningful yet differentiated links between social and environmental value orientations within the university context.

The strongest relationships emerged between *Green learning environment* and *Visible social responsibility* ($\rho = 0.648$, $p<0.001$), and between *Sustainability policy* and *Visible social responsibility* ($\rho = 0.568$, $p < 0.001$), indicating that visible institutional practices of responsibility align closely with sustainability-related perceptions. Similarly, educational components such as *Green curricula* and *Social responsibility education* ($\rho = 0.578$, $p < 0.001$) highlight the intersection between pedagogical and sustainability-driven values.

The correlation patterns suggest that students perceive social and environmental responsibility as interconnected elements of a university's moral identity. Strong links between visible social responsibility and sustainability-related practices indicate that ecological engagement is associated with tangible institutional behaviour rather than abstract commitments. This pattern supports earlier findings that authentic, humanised university brands integrate moral, social, and ecological values into a coherent system (Vernuccio et al., 2025; Mirzaei et al., 2024; Vargas-Merino, 2025).

Overall, the results confirm that social and green dimensions are interconnected but distinct constructs – supporting the theoretical coherence and preliminary construct validity of the instrument within this pilot study.

10.7 Discussion and Conclusion

This study addressed a research gap in understanding how university brand humanisation manifests through social and green values, particularly within the Baltic higher education context. The pilot phase focused on testing a newly developed instrument designed to capture students' perceptions of these two value dimensions. The results provide preliminary evidence on how students interpret moral and ecological responsibility within university identity, while confirming the instrument's reliability.

The proposed measurement scale offers an empirically-substantiated ground for understanding how education institutions can contribute to consumer-centred circular economy transitions through fairness, transparency, and responsible behaviours.

The following discussion connects these findings to existing theories of brand humanisation and University Social Responsibility (USR) and outlines key methodological insights and directions for future research.

10.7.1 Student perceptions of brand humanisation through social and green values

The results of this pilot study align with the theoretical perspectives outlined by Vernuccio et al. (2025), Mirzaei et al. (2024), and Hussain (2025), who concluded, that authentic, humanised brands are perceived as more trustworthy and relatable when they demonstrate moral and social integrity. In line with these arguments, students in this study attributed the highest importance to *inclusive infrastructure*, *stakeholder engagement*, and *social responsibility education* – dimensions reflecting relational authenticity and ethical engagement.

This supports the concept of University Social Responsibility (USR) as an expression of institutional human values (Abrahao et al., 2024; Shoukat et al., 2024; Nazneen et al., 2023), demonstrating that universities are not merely educational entities, but moral and social actors. Students perceived as important the visibility and communication (*Communicating social impact*, *Visible social responsibility*), that is in line with Gorska et al. (2024) and Ibáñez-Forés et al. (2023), who found that transparent and accessible communication of social actions enhances institutional legitimacy and perceived warmth.

In contrast, the more moderate ratings for green values suggest that environmental engagement, while recognised, is not yet a dominant part of how students define a "humanised" university brand. This finding supports Vargas-Merino's (2025) observation that universities typically approach sustainability as an operational rather than a relational or emotional component of their identity. The correlations between *Visible social responsibility* and *Sustainability policy* or *Green learning environment* indicate that ecological awareness strengthens the perception of responsibility primarily when it is visibly enacted – a pattern consistent with findings by De Oliveira et al. (2023) and Rigolon et al. (2024) on the symbolic power of visible environmental practices.

Overall, the findings suggest that students' sense of university humanisation is strongly grounded in social connectedness and moral authenticity, whereas ecological responsibility contributes additively by reinforcing perceptions of integrity and care. These results extend Li and Chu's (2025) and Klingler-Vidra et al.'s (2025) perspectives, showing that social and environmental values coexist in universities but differ in importance depending on how visible and personally relevant they are to students.

10.7.2 Pilot testing of the instrument

From a methodological standpoint, this pilot study provides encouraging evidence for the reliability and construct validity of the developed instrument. Both the Social and Green Values subscales achieved high internal consistency ($\alpha \geq 0.80$; $\omega \geq 0.80$), comparable to benchmarks used in other recent validation studies (Golossenko et al., 2020; Vargas-Merino, 2025). The moderate correlation between the subscales ($\rho = 0.59$, $p<0.001$) confirms their theoretical relatedness while preserving conceptual distinctiveness.

The strongest item-level correlations – such as between *Social responsibility education* and *Green curricula* – support the integrated framework proposed by Aftab et al. (2022) and Roy (2023), where ethical and ecological orientations jointly underpin sustainable institutional reputation. These empirical patterns suggest that students perceive both domains as components of a broader moral ecosystem, which strengthens the case for extending the University Social Innovation Management (USIM) model (Vargas-Merino, 2025) toward a multidimensional brand humanisation framework.

Hence, the pilot results confirm the conceptual coherence of the instrument and its potential for future application in comparative or cross-cultural studies assessing the moral and environmental dimensions of university branding.

10.7.3 Practical implications

Considering that citizens with sustainable mind-sets and behavior play a key role in the transition towards circular economy (Kruger & Molas, 2021), the universities become important communication channels and enablers in the process of citizens' capacity-building. Based on research findings, the "green values" had less priority for students comparing with "social values". This could be an indicator of the issue that circular-economy-related governance aspects (e.g., sustainability policy, sustainable waste management, and etc.) are not sufficiently concrete and visible. This, in turn, means that HEIs willingness to support responsible consumption and circular practices should not rely only on strategies, plan and statements in the documents. Circular actions should be oriented on changes in behavioural patterns (implementation of waste recycling systems in campus, reuse/repair initiatives, and clear procedures, and etc.). The developed instrument could be used on a regular basis by HEI administration with application of "performance" evaluation scale. This will allow not only to assess the perceived importance of certain initiatives, but to assess the *status quo* and to plan future actions.

10.7.4 Limitations and further research

As this study represents a pilot stage of instrument development, certain limitations should be acknowledged.

Although small samples are acceptable in early validation studies aimed at assessing internal consistency, item functioning, and conceptual clarity, the limited sample size (n = 42) in this study remains a constraint for broader statistical generalization.

Another contextual limitation arises from the focus on Latvian students only, excluding other stakeholder perspectives such as academic or administrative staff and external partners. This provides a valuable but partial insight into university brand humanization within a specific national and cultural setting.

Future research should therefore pursue broader validation, including a larger and more diverse respondent base and representation from multiple stakeholder groups. Once scale stability is confirmed, complementary qualitative approaches (e.g., interviews or focus groups) could deepen understanding of how different university actors interpret social and green values.

Moreover, future work should test the full model of university brand humanization, reintegrating the *Inclusivity and Diversity* dimension and exploring potential mediating factors such as institutional trust (Aftab et al., 2022), sense of belonging (Mirzaei et al., 2024), or perceived authenticity (Vernuccio et al., 2025), which have been identified in prior research as key mechanisms linking social and environmental responsibility to perceived organizational humanization and authenticity (Hussain, 2025).

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