

Examining the impacts of environmental, social and governance (ESG) on employee engagement: a study of Generation Z

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Abstract

Purpose – The literature currently offers only fragmentary insights into the research on the relationship between environmental, social and governance (ESG) and employee engagement from the perspective of Generation Z. Therefore, we aimed to bridge this knowledge gap by identifying the impact of ESG dimensions on the engagement of Generation Z employees.

Design/methodology/approach – Drawing on the literature review findings, we formulated a conceptual model to illustrate the relationship between ESG dimensions and employee engagement. We conducted a confirmatory analysis using structural equation modeling (SEM CFA) on a sample of 207 Generation Z employees to validate the proposed model. We collected the data in June 2024.

Findings – We designed a quantitative study to test a model depicting the relationship between ESG dimensions and employee engagement. The results indicated a strong influence of social and corporate governance-related ESG on the engagement of Generation Z employees. The study did not show a relationship between environment-related ESG and the engagement of Generation Z individuals.

Originality/value – The study bridges the gap in our understanding of the link between ESG and the engagement of Generation Z employees. It suggests the necessity to further investigate the specific impact of individual ESG practices on employee engagement. We recommend expanding the scope of future research to examine the components of the constructs studied as well as the mediators and moderators of the relationship between ESG and employee engagement for Generation Z employees.

Keywords ESG, Employee engagement, Generation Z

Paper type Research paper

Introduction

In recent years, the focus on environmental, social, and governance (ESG) criteria has intensified, which reflects a broad recognition of the importance of sustainable and ethical business practices. Environmental, social, and corporate governance encompasses a range of factors that influence an organization's long-term viability, including environmental stewardship, social responsibility, and robust governance structures. Increasingly, scholars see these elements as critical not only for regulatory compliance and risk management but also for driving competitive advantage and enhancing stakeholder value (Eccles, Ioannou & Serafeim, 2014).

As organizations navigate the complexities of integrating ESG principles into their operations, a key area of interest remains understanding how these practices impact employee engagement, particularly among Generation Z – a cohort known for its strong values and

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expectations regarding corporate responsibility and sustainability (Deloitte, 2020). Generation Z employees born between 1995 and 2012 are entering the workforce with a heightened awareness of social and environmental issues. Their engagement levels can significantly influence organizational performance and culture (Schroth, 2019).

Scholars define employee engagement as a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption. It is crucial for achieving high levels of productivity, innovation, and retention (Bakker & Albrecht, 2018). Engaged employees are more likely to exhibit discretionary effort, support organizational goals, and contribute to a positive workplace atmosphere (Mazzetti *et al.*, 2021). However, the literature does not extensively explore the relationship between ESG practices and employee engagement, particularly within the context of Generation Z.

Therefore, the article aims to analyze the relationship between ESG perception and employee engagement among Generation Z. We propose that the perception of ESG initiatives may significantly impact employee engagement. The findings from this study will assist companies in developing effective business strategies tailored to the specific needs and values of Generation Z employees.

The article consists of three parts. The first part provides a theoretical introduction covering the context of ESG and the essence of employee engagement, which serves as the basis for formulating research hypotheses. The second part covers the empirical research methodology, including the purpose, assumptions, research sample, and results of statistical analyses. The third part presents a discussion of the findings, followed by conclusions. Drawing on the findings of the literature review, we developed a conceptual model that examines the relationship between the dimensions of ESG and employee engagement. To test our model empirically, we conducted a confirmatory analysis using structural equation modeling (SEM CFA). We collected data through an empirical survey conducted in June 2024 using computer-assisted web interviewing (CAWI) with a sample of 207 respondents from Generation Z.

Literature review

ESG, employee engagement, and generation Z

The discourse on the concept now referred to as ESG [1] (Biały, 2024) dates back to at least the early twentieth century (Caplan, Griswold, & Jarvis, 2013) but the discussion intensified in the early 1970s (Mitkow, Antczak, & Roszkiewicz, 2022), when a small group of investors began to focus on the environmental and social practices of the companies in which they invested (Galbreath, 2013).

The term ESG first appeared in the report “Who Cares Wins” by the International Finance Corporation of the World Bank (IFC) in 2004. The report emphasizes that “incorporating environmental, social, and corporate governance factors into investment decisions will lead to more stable and predictable markets, which benefits all market participants” (UN, 2004). Since the publication of the IFC report, the construction of the ESG concept has gained momentum (Yoon, Lee, & Byun, 2018), culminating in the enforcement of Directive 2013/34/EU in 2014 on annual financial statements, consolidated financial statements, and related reports of certain types of entities (Nonfinancial Disclosure Reporting Directive, or NFRD), followed by the European Parliament and Council Directive (EU) 2022/2464 of December 14, 2022, on corporate sustainability reporting (Corporate Sustainability Reporting Directive, or CSRD) (Europejska, 2022) along with the adoption on July 31, 2023, by the European Commission of the delegated regulation adopting European Sustainability Reporting Standards (ESRS) (Europejska, 2024). Furthermore, ESG refers to how corporations and investors integrate environmental, social, and corporate governance issues into their business models (Gillan, Koch, & Starks, 2021).

We may define ESG as a set of activities or processes related to an organization’s relationships with its ecological environment, its coexistence and interaction with human and other populations, and the corporate system of internal control and procedures (such as

processes, customs, policies, laws, rules, and regulations) to direct, administer, and manage all matters of the organization to serve the interests of shareholders and other stakeholders (Whitelock, 2015). The concept under analysis provides a framework that helps stakeholders understand how a corporation manages potential risks and opportunities related to sustainability issues (Broadstock, Chan, Cheng, & Wang, 2021).

Concurrently, scholars conceptualize engagement in various ways (Schaufeli, Taris, & Bakker, 2006; Shuck & Wollard, 2010; Chirkowska-Smolak, 2012; Lewicka, 2019). Broadly, the literature defines it as a type of attitude towards work. It requires knowledge about the organization, feelings towards it, and acceptance of its values, goals, leaders' actions, and the employee's actions towards the company. An engaged employee focuses on tasks, performs them with passion and enthusiasm, has a positive attitude towards the organization – or the job itself – and undertakes actions in the interest of the company (Juchnowicz, 2012).

Scholars define employee engagement as a state of mind positively associated with work characterized by a high level of energy, dedication, passion, and full concentration on work (Schaufeli, Salanova, González-romá, & Bakker, 2002). It comprises three components, i.e. vigor, dedication, and absorption. The first denotes a high level of energy, enthusiasm, persistence, and willingness to work even in the face of difficulties (Bakker & Schaufeli, 2008). The second relates to a strong identification with one's work, a sense of its significance, meaning, and pride. The third focuses on work and the difficulty of detaching from it. A positive work-related state of mind characterized by vigor, dedication, and absorption in one's role, to be recognized as engagement, cannot be a transient state. Employee engagement is enduring, not focused on any specific object, event, or behavior.

Generation Z, colloquially shortened to Gen Z and also known as Post-Millennials, Zoomers, Generation C, iGen (Marcos, 2019; Kingl, 2022), is the demographic cohort succeeding Millennials and preceding Generation Alpha. Generation Z encompasses individuals born from the mid-1990s to the early 2010s (Bohdziewicz, 2016; Kaczmarczyk, 2023; Collins, 2024).

This is the first generation to mature in a wholly digital environment, profoundly influencing their cognitive framework, communication modalities, and lifestyle choices. Generation Z displays an exceptional level of technological proficiency (Turner, 2018; Catek, 2021). This cohort is also remarkably diverse and inclusive, with a strong emphasis on values such as equality, diversity, and acceptance. They exhibit a heightened awareness of global social and environmental issues, manifesting in a keen interest in sustainability, climate change, and social justice (Hickman *et al.*, 2021). Generation Z places significant importance on environmental, social, and governance (ESG) criteria, which greatly influence their opinions and behaviors.

Generation Z demonstrates particular concern for environmental sustainability (Keegan, 2019). Growing up amid the visible impacts of climate change and environmental degradation, they prioritize eco-friendly practices and sustainable products. For this generation, environmental responsibility extends beyond preference; they expect it from both brands and employers. They favor brands that exhibit authenticity, transparency, and social responsibility (Salam, Singkeruang, Husni, Baharuddin, & Dhita Pratiwi, 2024). Ethical considerations and a desire for meaningful connections with brands heavily influence their purchasing decisions.

Social issues are central to Generation Z's perspective. This generation places high value on diversity, inclusion, and equality. They are outspoken advocates for social justice causes, including gender equality, racial justice, LGBTQ + rights, and mental health awareness (Deloitte, 2023). Generation Z expects companies to take definitive stances on these issues and embody these values within their corporate culture and practices. They are inclined to support brands that engage in fair labor practices, contribute to community well-being, and promote social equity.

For Generation Z, governance entails transparency, accountability, and ethical conduct. They demand that businesses operate with integrity and provide clear, honest information

about their operations and impacts (Deloitte, 2023). They prefer organizations with robust governance structures that ensure responsible decision-making and adhere to ethical standards.

Environment-related ESG, society-related ESG, corporate-governance-related ESG, and generation Z’s employee engagement

To explore the relationship between ESG dimensions, employee engagement, and Generation Z, we conducted a content analysis of articles with keywords like “E–generation Z,” “S–generation Z,” “G–generation Z,” as well as phrases defining these relationships, i.e. “environmental influence of generation Z engagement,” “society influence of generation Z engagement,” “governance influence of generation Z engagement,” “impact of ESG on employee engagement of generation Z.”

For the purpose of this article, we searched for the topic under study in databases such as Web of Science (WoS), ProQuest, and Google Scholar. Table 1 summarizes the frequency and relevance of articles retrieved from various academic databases concerning the relationship between ESG dimensions and Generation Z engagement.

In the Web of Science database, we found 12 articles explicitly referring to the environmental influence of Generation Z engagement, e.g. Confetto, Covucci, Addeo, and Normando (2023), Ross and Rouse (2022), Wang, Mo, and Wang, (2022), Wijaya and Kokchang (2023). The aforementioned researchers found a clear pro-environmental dependence and the occurrence of collective motivators such as social optimism/pessimism and Confucianism expressing consumers’ concern for the environment and making environmental risk assessments.

We found the phrase “society influence of Generation Z engagement” in nine publications that dealt with purchasing decisions of consumers from Generation Z. The articles investigated

Table 1. Frequency of occurrence of the researched issues in the literature

Database No.	Database name	Keywords entered	Total number of articles	Number of articles relevant to the topic	Number of articles analyzed
1	Web of Science	1. Environmental influence of Generation Z engagement	12	12	12
		2. Societal influence of Generation Z engagement	9	9	9
		3. Governance influence of Generation Z engagement	4	4	4
		4. Impact of ESG on employee engagement of Generation Z	10	10	10
2	ProQuest	1. Environmental influence of Generation Z engagement	24,151	30	4
		2. Societal influence of Generation Z engagement	25,887	30	30
		3. Governance influence of Generation Z engagement	10,976	30	5
3	Google Scholar	1. Environmental influence of Generation Z engagement	144,000	30	30
		2. Societal influence of Generation Z engagement	205,000	0	0
		3. Governance influence of Generation Z engagement	51,500	30	30
4	Total		461,549	185	134

Source(s): Authors’ own elaboration

the causal relationships between the knowledge, skills, and engagement of the study population of students on their decision satisfaction (Hrđy *et al.*, 2024; Murillo-Zamorado, López Sánchez, & Godoy-Caballero, 2019; Ramírez-García, Gutiérrez-Arenas, & Gómez-Moreno, 2022; Seyfi, Hall, Vo-Thanh, & Zaman, 2023). The findings show the impact of digitalization and digital media on the preferences of Generation Z consumers. The research found that the impact of corporate governance-related ESG on the engagement of Generation Z employees is remote and insignificant.

We found the keyword combination “impact of ESG on employee engagement of generation Z” in 10 publications of the Web of Science database, which confirmed the interest of representatives of the literature in the studied research subject.

The ProQuest database found 24,151 positive results, 30 of which indicated a significant association with the keywords mentioned. Among other topics, there were articles on the purchasing decisions of Generation Z consumers in the fashion (clothing) industry. One related to environmentally friendly products in the electrical machinery industry, and one – to financial and psychological technologies in terms of the behavior of the students surveyed (generation Z), such as altruism and concern for the environment, which have a significant impact not only on purchase intentions but especially on the final purchase decisions of generation Z consumers, while the social aspect does not have such a significant impact (Rinaldi, Ciptaningsih, & Andersean, 2024). Regarding purchasing decisions relating to environmentally friendly products (equipment) of the electrical machinery industry, the declarative factors of Generation Z consumers influencing quality and pro-quality justifying the price of the product play a significant role. Previous personal experience with the product, expected product life (durability), and individual customer needs are also important for Gen Z consumers (Bełch *et al.*, 2024). The aim of the exploratory study in the area of rapidly developing financial technology was to categorize the behavior of the surveyed students (generation Z) according to the type of investments they undertake, with priority given to green investments. Generation Z, characterized by high levels of digital literacy, curiosity, and openness to innovation, tends to make decisions very quickly (Pašiušienė *et al.*, 2024).

With regard to the keywords “society influence of Generation Z engagement,” we found 25,887 results. Of those, we examined 30 articles. Their analysis provided the following conclusions: digitization has unequivocally left its mark on the behavior of Generation Z. Young people manifest entrepreneurial intentions and, above all, perceive and treat entrepreneurship both as a means through which they manifest their desire and as a contributor to their social integration, which constitutes an important factor for Generation Z (Burlea-Schiopoiu & Popovici, 2024). Furthermore, research in this area shows that digital connectivity does not negatively impact social skills but does negatively affect emotional intelligence among Generation Z students both at an operational level and in terms of supporting the ability to regulate one’s own and others’ emotional states. Nonetheless, scholars found social skills to significantly increase emotional intelligence and provided important insights into the nuanced impact of digital connectivity on the social and emotional development of Generation Z students (Imjai, Aujirapongpan, Jutidharabongse, & Usman, 2024).

The ProQuest database found 10,976 results. Among those, we checked 30 publications, which most closely related to the keywords “Governance influence of Generation Z engagement.” We analyzed five publications in detail, and the results are as follows:

- (1) Some research, e.g. by Nugroho, Hsu, Hartauer, and Hartauer (2024), aimed to investigate the impact of ESG practices and CSR initiatives on customer attitudes and purchase intentions. The results indicated that the integration of environmental practices had a positive impact on CSR initiatives, but the impact of social and management practices showed variability. The study highlights the importance of effective communication of environmental policies and suggests that organizations should prioritize environmental activities to strengthen their brand and gain customer

trust. The results also highlight the need to educate consumers about ESG. The study recommends that organizations adopt a comprehensive strategy for ESG and CSR policies to improve company performance and ensure long-term sustainability.

- (2) [Lee, Luppi, Simmons, Tran, and Zhang \(2023\)](#) aimed to investigate the impact of employees' perceptions of ESG on their intention to stay with the organization during the COVID-19 pandemic. They also found that generational differences moderate the relationship between the three ESG factors and employee retention, and the results show that environment-related ESG (E-ESG) and society-related ESG (S-ESG) positively and significantly influence employee retention. However, the impact of corporate governance-related ESG (G-ESG) on employee retention was not significant.
- (3) As the role of human capital in enhancing firm value becomes more prominent in the new economic era, employee satisfaction has received widespread attention in organizational behavior theory and business practices. However, constrained by the traditional management model of "shareholder primacy," which tends to view employees in an instrumental way, it shows its adverse effects on employee satisfaction and organizational identification. The research by [Siwei and Chalermkiat \(2023\)](#) concerns an analysis answering the question of what relationship exists between environmental, social responsibility, and corporate governance (ESG) disclosure and firm value. It also investigates how the cost of debt is a mediating variable between ESG and firm value. The results show that ESG significantly and positively relates to firm value. However, the debt cost negatively and significantly relates to ESG. Furthermore, they found that when the sample is split between state-owned and non-state-owned firms, a significant positive association between ESG and firm value is only evident in the latter, supporting the view that non-state-owned firms are more sensitive.
- (4) [Bahadır and Akarsu \(2024\)](#) investigated the relationship between ESG and financial performance and how the information environment of firms influences this relationship. Their study revealed non-linearity in the relationship between ESG and financial performance, which can help firms set better targets and implement better ESG practices, as well as the moderating effect of the information environment on more effective ESG policies.

We found the following numbers of records for individual key phrases in the Google Scholar database:

- (1) With regard to the environmental influence of Generation Z engagement, we found about 144,000 results and checked 30 publications, finding loose links.
- (2) In relation to society's influence on Generation Z engagement, we found about 205,000 records with no close links to the cited phrase.
- (3) With regard to the governance influence of Generation Z engagement, we found about 51,500 results. Looking at 30 publications, we found that all articles indirectly but very distantly touch on governance spaces in ESG.

Regarding the phrase "impact of ESG on employee engagement of Generation Z," we must mention that Generation Z representatives are digital natives, and mobile devices have always been part of their experience ([Gale, 2015](#)). They value being appreciated for their work and contributing to their company. "Helping others" is one of their top priorities, along with "career." Moreover, they are sensitive to "society" and therefore value working for companies that care about society ([Agarwal & Vaghela, 2018](#)). Having a meaningful job is also a motivating factor for Generation Z ([Kirchmayer & Fratričová, 2018](#)). Understanding

Generation Z is important for an organization and its corporate culture to gain an advantage in attracting the most talented employees from Generation Z. Moreover, understanding these characteristics helps the employer to manage the organization and human resources effectively. On the contrary, if an employer tries to force Generation Z to work in a traditional work environment, it may result in a lack of employee engagement (Bascha, 2011).

This is even more important when considering employee retention. A study by Deloitte (2021) found that Generation Z loyalty is low compared to Generation Y. Gale (2015) also shared that unlike Generation Y, who entered the labor market in the middle of a recession, Generation Z enters the labor market during periods in the midst of increased demand for services and technical knowledge. Therefore, Generation Z will not be the same as Generation Y because they are less likely to change jobs.

Based on an analysis of literature describing the relationship between environment-related ESG, society-related ESG, corporate governance-related ESG, and Generation Z's employee engagement, we hypothesized:

- H1. Environment-related ESG positively relates to employee engagement.
- H2. Society-related ESG positively relates to employee engagement.
- H3. Corporate governance-related ESG positively relates to employee engagement.

Figure 1 shows the hypothesized relations between the study constructs.

Research method

Research design and data collection

In June 2024, we conducted a quantitative study aimed at diagnosing the impact of ESG on the engagement of Generation Z employees. We surveyed a sample of 207 Generation Z employees ($N = 207$) using the CAWI method. We made the questionnaire available to undergraduate and graduate students, both full-time and part-time, from several universities, including the SGH Warsaw School of Economics, Bialystok University of Technology, Poznan University of Economics, University of Gdańsk, Gdańsk University of Technology, University of Szczecin, Wrocław University of Economics, Warsaw University of Technology, Kraków University of Economics, University of Rzeszów, and Jan Kochanowski University in Kielce. Most respondents worked in the private sector (78%), with the largest group working in very large organizations (31%). The sample was balanced in terms of gender (45% were women, 47% men, and 8% indicated another gender), working hours (54% worked full-time and 46% part-time), and type of employment (47% were on

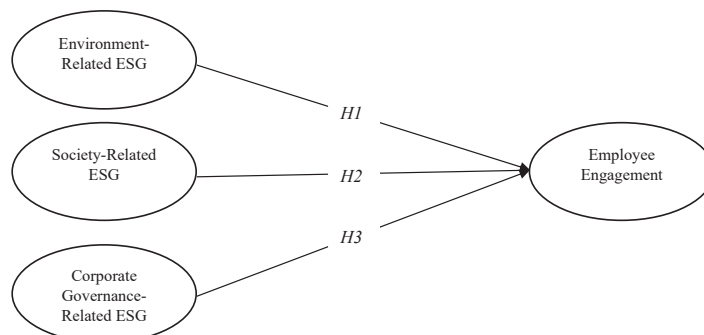


Figure 1. The effect of ESG dimensions on employee engagement: a research model. Source: Authors' own elaboration

employment contracts, 44% on civil contracts, and 8% ran their own businesses). [Table 2](#) presents the detailed structure of the sample.

Analytical strategy

We aimed to evaluate the quality of the conceptual model assuming relationships between ESG dimensions and employee engagement. In the model, we used latent variables, which are those that one can detect through other observable variables. Using confirmatory factor analysis (CFA), we verified the ESG dimensions. We assessed the relationships between the identified latent variables by applying path analysis. This approach allowed for the estimation of both measurement and structural models, ensuring that the constructs (“environment-related ESG,” “society and corporate governance-related ESG,” and “employee engagement”) were valid and reliable before testing their interrelations. A three-step approach was used. Initially, we conducted confirmatory factor analyses (CFA) to confirm the structure of ESG and to assess the fit indices of the measurement model (χ^2 test, RMSEA, CFI, TLI, SRMR) and path loadings. Subsequently, we evaluated the reliability and convergent and discriminant validity of the measurement scales. Finally, we verified the hypotheses using a structural model.

We conducted the analyses using IBM SPSS AMOS software (version 29).

Variables

In the conducted CAWI study, the survey questionnaire included a total of 14 statements, of which we drew 11 items from a tool designed to measure the three dimensions of ESG ([Woo & Jin, 2015a, b](#)). We asked respondents to rate each item on a seven-point Likert scale, where “1 = strongly disagree,” “7 = strongly agree,” and “4 = neutral” as the midpoint. To measure employee engagement, we used three items from the UWES questionnaire, encompassing vigor, dedication, and absorption at work ([Schaufeli, Shimazu, Hakanen, Salanova, & De Witte, 2019](#)). We employed a six-point Likert scale response system, where 1 indicates “never” and 6 “always.” [Table 3](#) presents the statements used in the research tool.

Initially, we verified the ESG dimensions using confirmatory factor analysis (CFA). The initial model for analysis was three-dimensional, assuming the existence of three distinct ESG dimensions: environment-related, society-related, and corporate governance-related. In the first stage, we estimated standardized regression coefficients for this model to determine the

Table 2. Structure of the survey sample

Criterion	Specification	%
Gender	Female	45%
	Male	47%
	Other	8%
Working time	Full time	54%
	Part-time	46%
Employment mode	Contract of employment	47%
	Civil-law contract	44%
	Proprietorship	8%
Company size	Micro (up to 9 employees)	21%
	Small (from 10 to 49 employees)	20%
	Medium (from 50 to 249 employees)	18%
	Large (from 250 to 500 employees)	10%
	Very large (over 500 employees)	31%
Sector	Public	13%
	Private	78%
	Foundations, associations, and others	9%

Source(s): Authors’ own elaboration

Table 3. Variables in the model

Variable	Item	Loading factor
Employee engagement	At work, I feel that I am bursting with energy	0.810
	I am dedicated to my work	0.808
	I do my job with passion	0.875
Environment-related ESG	Taking care of the appropriate use of water, energy, and materials	0.875
	Minimizing environmental pollution when producing products/services	0.895
	Investing in environmental protection	0.771
Society and corporate governance-related ESG	Providing adequate health benefits for employees	0.729
	Labeling/explaining their products/services clearly to customers	0.788
	Dealing effectively with customer complaints and grievances	0.775
	Making company financial information publicly available	0.524
	Allowing freedom of organization for employees (e.g. in trade unions) and prohibiting discrimination	0.644

Source(s): Authors' own elaboration

linkages and configuration of indicators and ESG dimensions. The results indicated the need to reject it due to a lack of fit to the data ($RMSEA > 0.1$). The correlation analysis between dimensions justified testing a measurement model distinguishing two dimensions: environment-related and society and corporate governance-related. Moreover, we removed three statements with high loadings for both distinguished dimensions from further analyses.

The final model consisted of three variables, i.e. "employee engagement," "environment-related ESG," and "society and corporate governance-related ESG."

"Employee engagement" was the dependent variable in the model. To measure it, we used items assessing the declaration of feeling vigorous, committed, and passionate at work. The dependent variable exhibited a Cronbach's alpha reliability coefficient of 0.869.

We measured the explanatory variables in the following way:

- (1) "Environment-related ESG." We assessed this variable with three items evaluating the employer's actions in terms of environmental protection, including minimizing water and energy consumption, reducing environmental pollution, and investing in activities aimed at protecting the natural environment. The reliability coefficient was Cronbach's alpha = 0.883.
- (2) "Society and corporate governance-related ESG." We analyzed this variable using five items describing the provision of health benefits for employees, clear labeling of products/services, effective handling of customer complaints, transparency in financial information, ensuring freedom of organization, and non-discrimination for employees. The reliability coefficient was Cronbach's alpha = 0.821.

We constructed all the variables in a reflexive manner. The standardized estimates for the path loads between statements and each construct were significant, and all exceeded a value of 0.5 (Table 3).

Findings

Measurements validation

At the initial stage of the analyses, we checked the scales' relevance and reliability. The described scales showed convergent and differential validity (Pleśniak, 2009), which confirmed their theoretical relevance (Table 4).

Table 4. The assessment of psychometric properties of scales

Variable	Correlations/root of AVE*				
	CR	AVE	Employee engagement	Environment-related ESG	Society and corporate governance-related ESG
Employee engagement	0.870	0.676	<i>0.822</i>		
Environment-related ESG	0.885	0.720	0.327	<i>0.849</i>	
Society and corporate governance-related ESG	0.824	0.488	0.526	0.563	<i>0.699</i>

Note(s): CR – composite reliability, AVE – average variance extracted; * on the diagonal, we show the root of AVE in italic

Source(s): Authors' own elaboration

Structural model estimation

We estimated the model of relationships between constructs using the SEM CFA approach. We may consider matching the measurement model as satisfactory. The Chi-square value was 80.082 (41 df), $p < 0.001$. Measures of absolute match like GFI = 0.933 and AGFI = 0.893 were at the appropriate level (above and close to 0.9). Measures of the relative match were above 0.9. RMSEA had a value of 0.068 and did not exceed the value of 0.08, which is considered the threshold for accepted models. Moreover, the confidence interval for RMSEA did not contain the value of 0.1, disqualifying the model.

To test the relationships between “environment-related ESG,” “society and corporate governance-related ESG,” and “employee engagement,” we estimated path coefficients (Table 5).

The variables in the analyzed model explained more than 27.8% ($R^2 = 0.278$) of the variance in “employee engagement.” This underscores the multifaceted nature of employee engagement and highlights the need for future research to identify additional factors influencing this outcome.

The study confirmed the hypotheses (H2 and H3) of a positive effect of “society and corporate governance-related ESG” on “employee engagement” ($\beta = 0.5$, $p < 0.001$).

However, we did not find empirical support for the hypothesis on the relationship between “environment-related ESG” and “employee engagement” (H1). The association between these variables was not statistically significant.

Table 5. Path coefficients for studied relationships between variables

Structural paths	Path coefficients
Environment-related ESG → Employee engagement	0.046
Society and corporate governance-related ESG → Employee engagement	0.500*
Chi-square and df	80.082, df = 41
GFI	0.933
AGFI	0.893
NFI	0.932
CFI	0.965
SRMR	0.045
RMSEA	0.068

Note(s): * $p < 0.001$

Source(s): Authors' own elaboration

Discussion

The results of this study provide significant insights into the relationship between ESG practices and employee engagement among Generation Z employees. This study adds to the existing body of knowledge by empirically validating a model that links ESG practices with employee engagement. Unlike prior studies that often focus on isolated dimensions of ESG or different generational cohorts, our research provides a view of the impact of ESG practices on employee engagement, specifically tailored to Generation Z. Based on our empirical analysis, it is evident that the dimensions of ESG related to social and corporate governance have a significant positive impact on employee engagement. This finding aligns with the broader literature that emphasizes the importance of social and governance practices in fostering a committed and motivated workforce.

Our findings are consistent with the results of several previous studies that have highlighted the critical role of social and governance factors in enhancing employee engagement. For instance, *Lee et al. (2023)* and *Nugroho et al. (2024)* have demonstrated that social aspects of ESG, such as fair labor practices and inclusive work environments, significantly boost employee retention and engagement. Furthermore, the literature extensively documents the importance of corporate governance, including transparency and ethical business practices as key drivers of employee satisfaction and loyalty.

However, we did not find a statistically significant relationship between environment-related ESG practices and employee engagement. This is somewhat surprising given the high environmental consciousness attributed to Generation Z. This discrepancy suggests that while Generation Z values environmental sustainability, these values may not directly translate into higher engagement levels in the workplace. Possibly, the impact of environmental practices on engagement is mediated by other factors not captured in this study, such as the perceived authenticity of the company's environmental efforts or the integration of these practices into the core business strategy. This gap suggests that broader educational efforts by institutions, government agencies, and NGOs may be needed to enhance awareness and understanding of the importance of environmental practices in professional contexts.

The findings highlight the need for organizations to prioritize the social and governance aspects of ESG to engage Generation Z employees effectively. Companies should prioritize creating inclusive, transparent, and ethically governed workplaces. Initiatives such as clear communication of corporate policies, fair treatment of employees, and robust health and safety standards are likely to resonate well with this demographic, thereby enhancing their engagement and productivity.

On the other hand, organizations should not overlook environmental practices but find ways to make them more visible and impactful. Involving employees in environmental initiatives, like sustainability projects or green certifications, could help connect environmental values with employee engagement.

Summary

We explored the relationship between environmental, social, and corporate governance (ESG) practices and employee engagement among Generation Z employees. The findings revealed a significant positive relationship between social and corporate governance-related ESG practices and employee engagement, suggesting that Generation Z employees respond well to efforts in these areas. However, we found no significant link between environmental ESG practices and employee engagement in this group.

These results highlight the importance of addressing social and governance issues in corporate strategies to effectively engage Generation Z employees. The lack of a significant relationship with environment-related ESG practices suggests that the topic requires further research to understand the nuances of how different ESG dimensions impact engagement.

The study adds to existing research by exploring the link between ESG and employee engagement from Generation Z's perspective. It also offers practical insights for organizations looking to attract, retain, and motivate young talent with focused ESG initiatives.

Limitations and future research directions

Given the growing importance of ESG practices in shaping organizational outcomes, it is crucial to acknowledge the limitations of the current study and identify future research avenues to deepen our understanding of this relationship.

We conducted the study on a sample of 207 Generation Z employees from Polish universities. While this sample provides valuable insights, its relatively small size and specific demographic may limit the findings' generalizability. Future research should aim to include a larger and more diverse sample to enhance the results' robustness and applicability. Moreover, this research was limited to Polish universities, which may introduce cultural and regional biases. Expanding the geographic scope to include multiple countries and regions would provide a more comprehensive understanding of how ESG dimensions impact employee engagement globally.

We employed a cross-sectional design, capturing data at a single point in time. This design did not allow us to assess changes over time or establish causal relationships. Thus, longitudinal studies are necessary to track changes in employee engagement and ESG perceptions over time and to better understand causality.

We relied on self-reported data, which may have introduced response biases, such as social desirability bias. Future research could benefit from incorporating objective measures of engagement and ESG practices, such as performance metrics or third-party evaluations, to validate self-reported data.

We focused on three main dimensions of ESG, i.e. environment-related, society-related, and corporate governance-related. However, there may be other relevant ESG aspects not covered in this research that could influence employee engagement. Expanding the scope to include additional ESG dimensions or more granular sub-dimensions could provide a fuller picture.

The absence of a strong link between environment-related ESG practices and employee engagement highlights the need for more research in this area. Future research could explore mediating factors such as the perceived authenticity of environmental efforts.

The moderate R^2 in our research value suggests that other variables, not included in the current model may mediate or moderate the relationship between ESG dimensions and employee engagement. Future studies should explore potential mediators and moderators in the relationship between ESG dimensions and employee engagement. Factors such as organizational culture, leadership styles, or individual differences in values and attitudes may play significant roles and require examination to better understand the mechanisms behind this relationship.

Comparative studies across different industries, organizational sizes, and cultural contexts may help identify specific conditions under which ESG practices are most effective in enhancing employee engagement. Such comparisons can reveal industry-specific or regional nuances.

Notes

1. The ESG concept evolved from CSR. The foundations of both concepts are the same, i.e., the aim to maximize the positive impact of business on the environment. While CSR involves an organization's activities as part of their responsibility towards the environment, ESG, being a set of factors that allow for the monitoring of all effects of an organization's activities and also criteria for assessing the organization's credibility, helps measure, quantify, and evaluate such actions.

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