Mohamed BOULESNAM[1]
Abdelghani KAHELA[2]
Ouissam HOCINI[3]

EXPLORING THE CORRELATION BETWEEN CORPORATE SOCIAL RESPONSIBILITY INDICATORS AND CORPORATE REPUTATION: CASE STUDY OF LEGO GROUP 2012–2023

This study examines the correlation between Corporate Social Responsibility (CSR) indicators and LEGO Group's corporate reputation from 2012 to 2023. Using quantitative analysis, the research investigates the relationship between key CSR metrics, such as environmental, employee, and customer-focused initiatives, and their impact on LEGO's reputation ranking as measured by the RepTrak platform. The findings reveal a strong positive correlation between waste management efforts, particularly waste to landfill, and corporate reputation, while water consumption and injury rates show strong negative and positive correlations, respectively. Other indicators, including carbon emissions, community engagement, and employee satisfaction, show weaker correlations. The study underscores the importance of environmental management and workplace safety in enhancing corporate reputation while highlighting areas where CSR practices contribute less significantly to reputation. These insights contribute to understanding how CSR practices shape public perception and business success over time.

Keywords: corporate social responsibility, corporate social responsibility indicators, corporate reputation, LEGO Group.

1. INTRODUCTION

In the modern corporate world, Corporate Social Responsibility (CSR) has evolved from a supplementary concern to a central tenet of corporate strategy. This shift reflects the changing expectations of stakeholders, including customers, investors, employees, and government who increasingly demand that companies balance profit-making with positive societal impact. As organizations navigate this complex environment, the relationship

---

[1] Mohamed Boulesnam, Yahia Fares University of Medea, Algeria; e-mail: Boulesnam. mohamed@univ-medea.dz (corresponding author). ORCID: 0009-0003-9677-7788.
[2] Abdelghani Kahela, Yahia Fares University of Medea, Algeria; e-mail: Kahela. Abdelghani@univ-medea.dz. ORCID: 0009-0001-0221-0939.
[3] Ouissam Hocini, Yahia Fares University of Medea, Algeria; e-mail: Hocini.ouissam@univ-medea.dz. ORCID: 0009-0009-9658-5595.

between CSR practices and corporate reputation has become a subject of significant interest for both professionals and academics.

The concept of CSR includes a wide range of activities through which companies integrate social, environmental, and economic concerns into their business operations and interactions with stakeholders. These activities can cover sustainable environmental practices, ethical labor policies, community engagement, and transparent governance structures. As companies invest more resources into CSR, there is a rising need to understand how these efforts translate into reputational gains and, by extension, long-term business success.

This study centers on the LEGO Group, a company renowned for its commitment to CSR and reputation, as a case study to explore the relationship between CSR indicators and corporate reputation. LEGO's long-standing emphasis on sustainability, ethical practices, and social responsibility makes it an ideal subject for examining how CSR initiatives can shape public perception and brand value over time.

Study Objectives

The main objective of this study is to examine the correlation between quantitative CSR indicators and corporate reputation, using the LEGO Group as a case study over the period from 2012 to 2023. Specifically, this research aims to:

- Identify and analyze key quantitative CSR indicators relevant to the LEGO Group's operations using sustainability reports.
- Examine the relationship between these CSR indicators and LEGO's reputation as measured by the RepTrak platform.
- Assess the potential impact of specific CSR practices on LEGO's reputational scores over time.

Study Methodology

This study investigates the correlation between Corporate Social Responsibility (CSR) indicators and corporate reputation, using the LEGO Group as a case study from 2012 to 2023. It examines how LEGO's CSR initiatives, such as sustainability, ethical labor practices, and community engagement, influence its reputation, measured through the RepTrak platform. Employing quantitative methods, the research collects CSR data from LEGO's sustainability reports and correlates it with reputational score and ranking to identify key drivers of public perception. Using Pearson Correlation model, the study assesses the interrelation between CSR indicators and Corporate Reputation at LEGO Group, providing insights into the strategic importance of CSR in shaping corporate reputation.

2. LITERATURE REVIEW OF CORPORATE SOCIAL RESPONSIBILITY AND REPUTATION

Corporate social responsibility (CSR) has developed over the years, forming how corporations interact with community and manage their responsibilities beyond profit generation. Corporations, as key economic players, are increasingly expected to integrate their operations with ethical, social, and environmental concerns. Understanding the dynamic relationship between CSR and corporations is necessary to exploring their broader impact on stakeholders and sustainability.

2.1. Corporate Social Responsibility Concept Evolution

Corporate Social Responsibility (CSR) has been a concept of evolving significance in the business world, marked by various interpretations and definitions that mirror the changing expectations of society over time. One of the earliest discussions of CSR can be traced back to Bowen (1953), who suggested that corporations should stick to specific principles to fulfill their social responsibilities, emphasizing that the decisions and actions of business leaders affect stakeholders, employees, and customers, and thus directly impact society's quality of life. Building on this foundation, Johnson (1957), president of New York's Institute of Life Insurance, further emphasized that corporations were increasingly recognizing their "new role of corporate citizenship", where they acknowledged their social and economic responsibilities to the whole community. Together, these early perspectives highlight the evolving view that businesses must go beyond profit-making and actively contribute to the well-being of society as a whole.

As the mid-20th century progressed, scholars began to explore CSR in detail. Eells (1956) critiqued the corporate behavior of the time, emphasizing that large corporations were not fulfilling their responsibilities, especially in the context of generalized inflation. Selekman (1959) further examined the moral responsibilities of corporations, particularly in response to the labor expectations of the era. These early contributions highlighted the growing concern over corporate accountability and the ethical obligations of businesses to society.

During the 1960s, the concept of CSR continued to gain traction as scholars like Davis (1960) recognized the pressures on business leaders to re-examine their role in society. Davis argued that notable social, economic, and political changes necessitated a reassessment of social responsibility, linking it to economic returns for firms. He claimed that the social responsibilities of business leaders should be consistent with their social power, warning that neglecting these responsibilities could lead to a loss of social influence.

Frederick (1960) also contributed to the discourse by proposing a theory of business responsibility that emphasized the need for deliberate and conscious efforts to achieve responsible corporate behavior. McGuire (1963) expanded on this by suggesting that a firm's responsibilities extend beyond legal and economic obligations, including concerns for politics, social welfare, and employee well-being. Walton (1967) suggested that corporations should be viewed as potential contributors to improving societal and economic conditions, reinforcing the idea that CSR involves a relationship between corporations and society.

By the 1970s, the concept of CSR had further evolved, with Davis (1970) emphasizing that firms should consider and respond to issues beyond economic, technical, and legal requirements to achieve social benefits alongside traditional economic gains. Steiner (1971) reflected this view, stating that businesses have social responsibilities to help society achieve its basic goals, thus reinforcing the role of CSR in aligning corporate actions with societal needs.

Carroll (1979) provided a comprehensive framework by defining CSR as integrated economic, legal, ethical, and discretionary expectations that society has of organizations at a given time. This broader view highlighted the multifaceted nature of CSR, integrating various dimensions of responsibility that businesses must consider in their operations.

In more recent years, Montiel (2008) discussed the ethical obligation of businesses to evaluate the effects of their decisions on the entire social system, linking CSR to corporate

sustainability. Sheehy (2014) conceptualized CSR as a set of strategic initiatives undertaken by businesses to evaluate and assume responsibility for their environmental and social impact. This contemporary view underscores the relevance of CSR in today's corporate world, emphasizing its role in enhancing both theoretical discussions and practical applications.

Adding to this discourse, Licandro et al. (2023) proposed a modern definition of CSR as a management philosophy focused on the responsible management of a company's externalities, benefiting stakeholders, society, and the environment. A recent study by Fatima and Elbanna (2023) defines CSR as a business approach that contributes to sustainable development by integrating economic, social, and environmental benefits for all stakeholders into corporate strategies. This integration not only enhances corporate reputation but also attracts and retains talent, fostering long-term business sustainability by addressing necessary social and environmental challenges. Similarly, Goyal and Routroy (2021) emphasize the importance of sustainable practices in achieving broader corporate and societal goals, while Fellag (2016) conceptualized CSR as the deliberate contributions of business organizations toward fulfilling the requirements of strategic partnership responsibility in integrated socio-economic development, grounded in their relationship with society.

During its development, CSR has been recognized as a critical aspect of corporate behavior, progressing from a set of ethical principles to a comprehensive management philosophy that balances economic performance with societal and environmental responsibilities. This chronological exploration of CSR highlights the growing importance of corporate accountability and the ongoing integration of social and environmental considerations into business practices.

2.2. Corporate Reputation Background

Corporate reputation is a complex and multifaceted concept that has been interpreted and defined in various ways across academic literature. Fombrun and Shanley (1990) describe it as the comprehensive estimation in which a company is held by its stakeholders, emphasizing the significance of external perceptions from customers, investors, and the general public. The same view is reinforced by Barnett, Jermier, and Lafferty (2006), who expand on this definition by considering corporate reputation as a collective representation of a company's past actions and outcomes, which can evoke either favorable or unfavorable responses from stakeholders. Both perspectives highlight the significant role of stakeholders' perceptions in shaping corporate reputation.

Adding to this, Walker (2010) provides a more comprehensive definition by incorporating elements of perception, valuation, and comparison. He defines corporate reputation as a collective judgment of a company's ability to create value based on its characteristics, such as identity and actions, in comparison to its competitors. This broader view includes both tangible and intangible assets, emphasizing their contribution to a company's reputation. The dynamic nature of corporate reputation is further underscored by Wartick (2002), who views it as an evolving process influenced by ongoing corporate behavior and interactions with stakeholders, aligning with the idea that reputation reflects not only past actions but also future performance.

Moreover, consistency in corporate actions is considered fundamental for building and maintaining a positive reputation. Gotsi and Wilson (2001) argue that corporate reputation is the outcome of consistent behavior over time, which stakeholders perceive as reliable and trustworthy. Deephouse and Carter (2005) add that corporate reputation serves as an

intangible asset that provides a competitive advantage by differentiating a company from its peers, leading to enhanced financial performance and market share. These perspectives collectively suggest that corporate reputation is not only about past behavior but also serves as a predictor of future performance.

The diversity of concepts related to corporate reputation indicates a lack of a universally accepted definition, which presents challenges in measuring the construct. Pires and Trez (2018) highlight this challenge, noting that the intangible nature of corporate reputation makes it difficult to measure, yet it remains a crucial element of a company's competitive strategy. In this context, reputation is viewed as a valuable asset that influences a company's appeal to stakeholders (Fombrun, Van Riel, 1996; Fombrun, Rindova, 2001; Walker, 2010).

Furthermore, corporate reputation is seen as an intangible asset with financial value, as discussed in accountancy, economics, marketing, organizational behavior, sociology, and strategy. Each discipline views reputation through its unique lens, whether as a financial asset, a trait or signal, or an aggregate assessment of a firm's performance relative to expectations and norms (Fombrun, van Riel, 1996). Chun (2005) provides a comprehensive view by defining corporate reputation as the perceptions held by all relevant stakeholders about an organization, including customers, employees, suppliers, and communities. This summary perspective suggests that reputation includes both perception and reality, with perception relating to stakeholders' views and reality to the organization's policies, practices, and performance (Deephouse, Carter, 2005; Bromley, 2000).

In conclusion, while definitions of corporate reputation vary, there is a consensus that it is a perception-based construct that reflects stakeholders' evaluations of a company's actions and their outcomes over time. The literature underscores the importance of corporate reputation as a key intangible asset that can significantly impact a company's competitive position in the market. Thus, the ongoing interest in corporate reputation from both academic and practical perspectives continues to form its role in corporate strategy and performance.

2.3. Relationship between CSR and Corporate Reputation

The relationship between Corporate Social Responsibility (CSR) and corporate reputation has been a significant focus in academic literature, with various theoretical perspectives offering insights into how CSR activities influence a company's reputation. To begin with, Stakeholder Theory suggests that companies are accountable not only to shareholders but also to a broad range of stakeholders, and by engaging in CSR, they can improve their reputation by addressing the concerns of these groups (Freeman, 1984; Clarkson, 1995). Moreover, the Resource-Based View (RBV) frames CSR as a strategic resource that contributes to a company's competitive advantage, mainly by viewing corporate reputation as an intangible asset that differentiates a company in the marketplace (Barney, 1991; Fombrun, Shanley, 1990). Similarly, Legitimacy Theory posits that CSR is a means for companies to align their actions with societal norms and expectations, thereby achieving and maintaining legitimacy (Suchman, 1995). In addition, Institutional Theory emphasizes that CSR practices are often a response to institutional pressures, and by conforming to these norms, companies can enhance their reputation (DiMaggio, Powell, 1983). Lastly, Signaling Theory explains that CSR activities serve as signals to stakeholders, thereby reducing information imbalance and building trust, which in turn strengthens corporate reputation (Spence, 1973).

Emerging perspectives further deepen the understanding of the CSR-corporate reputation relationship. For instance, Shared Value Creation redefines the connection between CSR and reputation by integrating social and economic goals, suggesting that companies that align their business models with social value creation can achieve sustainable competitive advantages (Porter, Kramer, 2011). Additionally, Dynamic Capabilities Theory highlights that CSR enhances a company's adaptability and innovation, thereby contributing to a resilient organizational identity and a stronger reputation (Teece, 2007). Moreover, the increasing demand for Authenticity and Transparency in CSR activities underscores that real and transparent initiatives are more likely to provide positive reputational benefits (Molleda, Jain, 2013). In this context, Social Identity Theory introduces a psychological perspective, suggesting that CSR activities aligned with stakeholders' values foster strong identification with the company, which in turn leads to an enhanced reputation (Bhattacharya, Sen, 2004). Furthermore, the role of Digital Media in CSR communication is also crucial, as it facilitates interactive engagement and widespread dissemination of CSR efforts, thereby significantly impacting corporate reputation (Etter, 2014).

Recent empirical studies have consistently supported these theoretical perspectives by demonstrating the positive influence of CSR on corporate reputation across different contexts. For instance, Zhang et al. (2023) found that various CSR factors significantly impact corporate reputation, which, in turn, influences financial performance. Similarly, Juniarti (2023) emphasized the mediating role of corporate reputation in the relationship between CSR and firm performance. Moreover, Ali et al. (2023) explored the mediating role of organic organizational cultures in the CSR-reputation relationship, discovering that these cultures fully mediate this relationship and positively influence employees' organizational citizenship behavior (OCB). Furthermore, in the context of emerging economies, Pradhan (2016) demonstrated that CSR intensity and social initiatives significantly enhance corporate reputation, a finding that aligns with Melero-Polo and López-Pérez (2017), who highlighted the impact of CSR on brand value and financial performance globally. Additionally, Berber et al. (2022) confirmed the positive relationship between CSR and reputation in the Serbian context, while Zhao et al. (2021) showed that consumer trust mediates the relationship between CSR, corporate reputation, and brand equity. Lastly, Božić et al. (2021) and Yan et al. (2022) further validated the positive impact of CSR on corporate reputation, particularly emphasizing the importance of internal factors such as employee trust and organizational justice.

Collectively, these studies emphasize the multifaceted role of CSR in shaping corporate reputation and highlight the importance of considering both internal and external factors when evaluating CSR's impact on business success.

3. CORPORATE SOCIAL RESPONSIBILITY INDICATORS AT LEGO GROUP 2012–2023

The LEGO Group, established in 1932 by Ole Kirk Kristiansen in Denmark, is a leading global manufacturer of toys, renowned for its iconic interlocking plastic bricks. Initially focused on producing wooden toys, the company introduced the first plastic LEGO bricks in 1949, which became the foundation for the brand's worldwide success. Over the ensuing decades, LEGO has expanded its product portfolio to encompass not only physical toys, but also digital experiences, theme parks, educational tools, and licensed collaborations with major entertainment franchises (LEGO_Group, 2024). Consistently committed to fostering creativity, learning, and innovation, the company has remained a family-owned

business, guided by its philosophy to inspire and develop the builders of tomorrow. LEGO's steadfast dedication to sustainability and responsible business practices has also played a pivotal role in maintaining its global reputation and status as a market leader in the toy industry.

Key indicators of corporate social responsibility (CSR) cover various areas that can be quantitatively measured. Environmentally, these include energy consumption, water usage, greenhouse gas emissions, and waste management. For employees, key indicators are satisfaction, training hours, diversity, and safety. Customer-related measures include satisfaction, complaint resolution, product quality, and responsible marketing. In the community, metrics such as charitable contributions, volunteer hours, and stakeholder engagement are tracked. These quantifiable CSR metrics allow organizations to demonstrate their social responsibility and communicate their performance transparently.

3.1. Employee Indicators

Employee indicators in CSR evaluation assess a company's commitment to fair labor practices, including equitable compensation, diversity, training, professional development, and workplace safety. These metrics reflect the organization's ethical treatment of employees and its role in fostering a positive work environment.

3.1.1. Employees Motivation and Satisfaction

Measuring employee motivation and satisfaction as part of CSR commitment involves assessing factors such as job fulfillment, engagement, work-life balance, and organizational support. These metrics provide insights into how well a company meets employee expectations and contributes to a positive workplace culture. Table 1 provides the chronological progress of this metric in LEGO Group.

Table 1. Rate of Employees Satisfaction at LEGO Group (2018–2023)

	2018	2019	2020	2021	2022	2023
Satisfaction Score	76	79	82	83	83	80

Source: LEGO Group Sustainability Reports (2018–2023).

Figure 1. Employee Satisfaction Score at LEGO Group (2018–2023)
Source: LEGO Group Sustainability Reports (2018–2023).

Table 1 indicates a steady rise in employee satisfaction from 2018 to 2023. The satisfaction score steadily increased from 76 in 2018 to 83 in 2021, indicating consistent improvements in employee well-being and workplace conditions. However, in 2023, the score dropped slightly to 80, suggesting a potential need for the company to address emerging concerns or challenges in maintaining high levels of employee satisfaction. Nevertheless, the score remains good, reflecting overall positive employee sentiment.

3.1.2. Women Workforce

Women workforce representation is a key employee indicator, reflecting a company's commitment to gender diversity and inclusion. It assesses the proportion of women employed across various levels, from entry-level roles to leadership positions. This indicator highlights the organization's efforts in promoting equal opportunities, reducing gender disparities, and fostering an inclusive work environment, which contributes to overall social responsibility goals.

Table 2. LEGO Group Female Representation at Director Levels(2012–2023)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Rate of Females at Director Levels	34	37	43	43	44	41	43	36	38	40	41	41.5

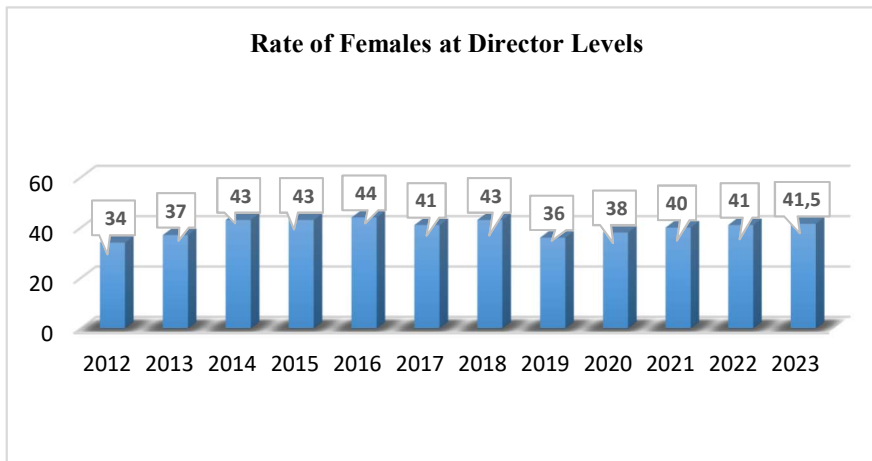Source: LEGO Group Sustainability Reports (2012–2023).

Figure 2. Female Representation at Director Levels in LEGO Group (2012–2023)

Source: LEGO Group Sustainability Reports (2012–2023).

The table shows the rate of females at director levels within the company from 2012 to 2023. There has been a general upward trend in female representation, starting at 34% in 2012 and reaching 41.5% by 2023. The most significant growth occurred between 2012 and 2014, with a notable rise from 34% to 43%. However, there was a dip in 2019 when the rate fell to 36%, followed by a gradual recovery in subsequent years. Despite some

fluctuations, the data reflect a steady commitment to improving gender diversity at leadership levels, although recent years show slower progress.

3.1.3. Injury Rate

Injury rate is a critical employee indicator in CSR evaluation, mirroring the company's commitment to workplace safety and employee well-being. It measures the frequency of work-related injuries per a set number of hours worked. A lower injury rate indicates better safety practices and a healthier work environment, while higher rates may signal the need for improved safety protocols, training, and compliance with regulations to protect employees from occupational hazards.

Table 3. LEGO Group Injury Rate (2012–2023)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Injury Rate (%)	1.9	1.7	1.7	1.4	1.3	1.4	1.3	0.9	0.4	0.4	0.5	0.6

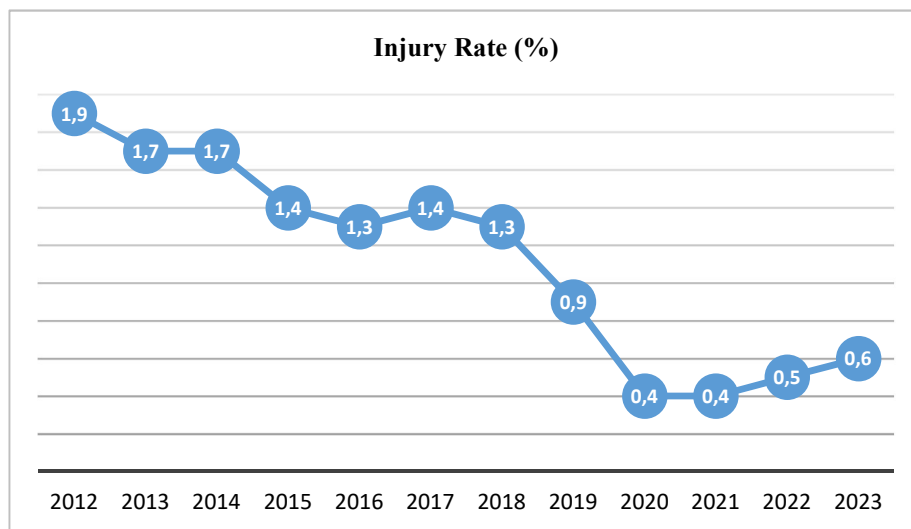Source: LEGO Group Sustainability Reports (2012–2023).

Figure 3. LEGO Group Workplace Injury Rate (2012–2023)

Source: LEGO Group Sustainability Reports (2012–2023).

The injury rate data from 2012 to 2023 demonstrate a significant improvement in workplace safety over the years. Starting at 1.9% in 2012, the rate steadily declined to a low of 0.4% in 2020 and 2021, indicating the effectiveness of safety measures and protocols implemented by the company. However, there has been a slight uptick in the injury rate in 2022 and 2023, rising to 0.5% and 0.6% respectively. While the overall trend reflects positive progress in reducing workplace injuries, the recent increase suggests the need for renewed attention to safety practices to prevent any further rise and ensure the company maintains its commitment to employee well-being.

3.2. Environmental Indicators

Environmental indicators in CSR evaluation assess a company's impact on natural resources, focusing on metrics like carbon emissions, energy usage, waste management, and water conservation. These indicators reflect the company's commitment to sustainability and reducing its environmental footprint.

3.2.1. Carbon Emissions

Carbon emissions, as an environmental indicator, measure the amount of greenhouse gases a company releases into the atmosphere, typically in metric tons of CO_2 equivalent. Reducing carbon emissions is a key component of corporate sustainability efforts, reflecting a company's commitment to mitigating climate change and transitioning to cleaner, more energy-efficient practices.

Table 4. LEGO Group Carbon Emissions (2016–2023)

	2016	2017	2018	2019	2020	2021	2022	2023
Carbon Emissions (Tons)	98 865	100 444	109 310	110 637	111 037	134 047	130 635	119 089

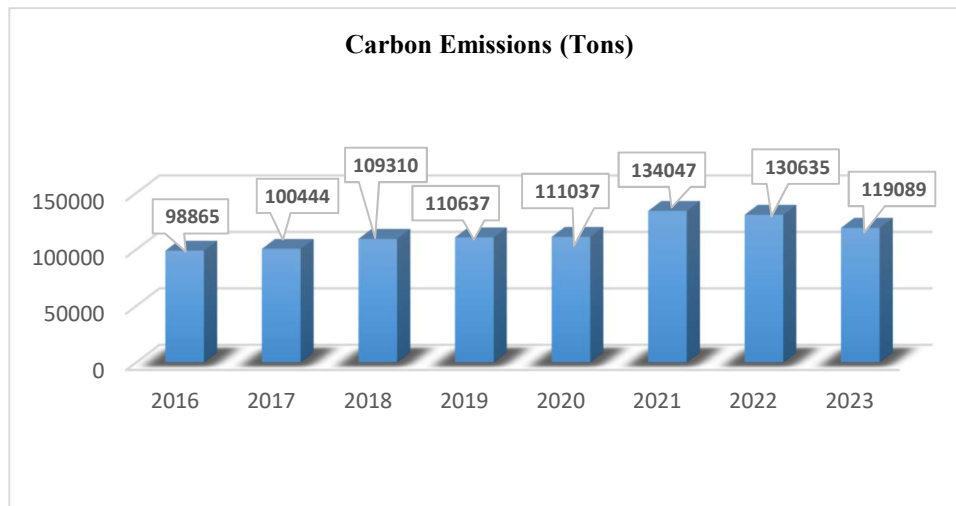Source: LEGO Group Sustainability Reports (2016–2023).

Figure 4. Annual Carbon Emissions of LEGO Group (2016–2023)

Source: LEGO Group Sustainability Reports (2016–2023).

The carbon emissions data from the LEGO Group show a general upward trend from 2016 to 2021, with emissions increasing from 98,865 tons in 2016 to a peak of 134,047 tons in 2021. This rise may indicate increased production or energy consumption over the period. However, in 2022 and 2023, there is a notable reduction, with emissions falling to 130,635 tons and then further to 119,089 tons. This recent decline suggests that the LEGO Group has likely implemented more effective carbon reduction strategies, signaling progress toward improving sustainability and addressing its environmental impact. Nonetheless, the company still needs to maintain momentum to achieve further reductions.

3.2.2. Water Consumption

Water consumption is a critical environmental indicator that measures the amount of water a company uses in its operations. It reflects the organization's impact on local water resources and its commitment to sustainable water management. Reducing water consumption indicates efforts to conserve water, improve efficiency, and minimize the environmental footprint, basically in industries where water use is significant. Effective management of water resources is essential for both operational sustainability and community responsibility.

Table 5. LEGO Group Water Consumption (2012–2023)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Water consumption 1000 m³	279	339	424	528	538	684	683	712	703	821	867	809

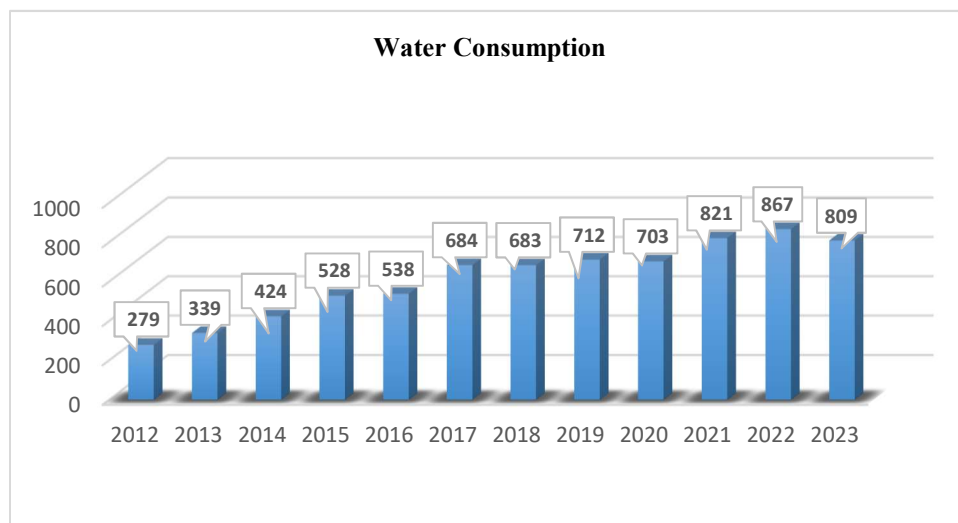Source: LEGO Group Sustainability Reports (2012–2023).

Figure 5. LEGO Group Water Consumption Over Time (2012–2023)

Source: LEGO Group Sustainability Reports (2012–2023).

The water consumption data from the LEGO Group show a significant upward trend from 2012 to 2022, increasing from 279,000 m³ in 2012 to a peak of 867,000 m³ in 2022. This consistent rise suggests growing water usage, likely driven by increased production activities or facility expansions. However, in 2023, there is a slight decline in water consumption to 809,000 m³, indicating a potential shift toward more efficient water management practices. While the reduction in 2023 is a positive sign, the overall trend highlights the need for sustained efforts to optimize water use and implement conservation strategies to mitigate the environmental impact of operations.

3.2.3. Waste Management

Waste to landfill is an important indicator of a company's waste management efforts, measuring the amount of waste that is disposed of in landfills rather than being recycled, composted, or repurposed. Reducing waste to landfill reflects a company's commitment to sustainability by minimizing its environmental impact, promoting circular economy practices, and improving waste reduction strategies. Effective waste management efforts, such as diverting waste from landfills, are key to achieving corporate environmental goals and reducing the overall ecological footprint of operations.

Table 6. LEGO Group Waste to Landfill (2012–2023)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Waste to landfill (Tons)	1708	1459	1407	1073	937	409	557	480	381	115	16	9

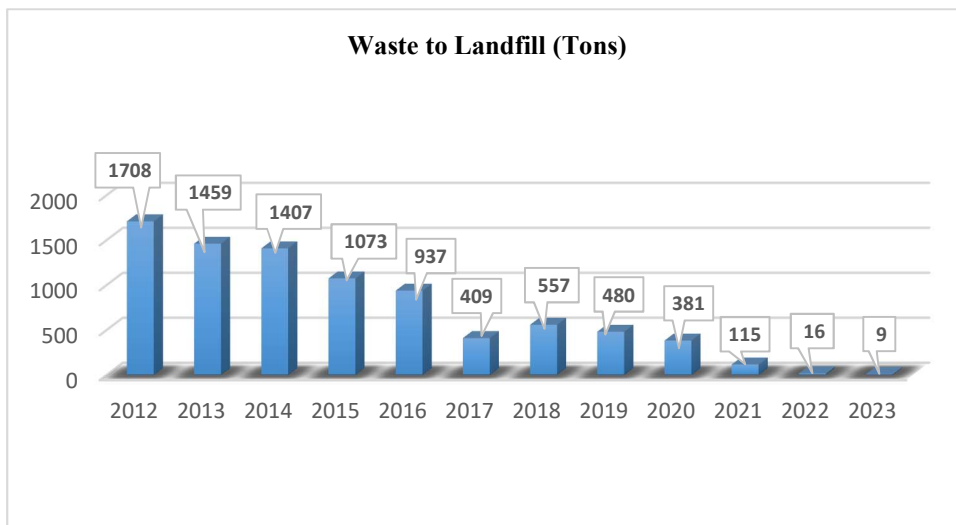Source: LEGO Group Sustainability Reports (2012–2023).

Figure 6. LEGO Group Waste to Landfill Statistics (2012-2023)

Source: LEGO Group Sustainability Reports (2012–2023).

LEGO Group's waste to landfill data reflects substantial and consistent reductions in waste disposal over the years. Starting at 1,708 tons in 2012, the company significantly decreased waste sent to landfills, reaching a minimal 9 tons by 2023. This impressive decline highlights the LEGO Group's strong commitment to improving its waste management practices, likely through increased recycling, waste diversion strategies, and sustainability initiatives. The near elimination of waste to landfill in recent years demonstrates a successful shift towards more environmentally responsible operations, reflecting progress in achieving their waste reduction goals.

3.3. Community Indicators

Community indicators in CSR evaluation assess a company's contributions to societal well-being through initiatives like charitable giving, volunteerism, and local community development. These metrics reflect the company's commitment to fostering positive social impact and strengthening its relationships with the communities in which it operates.

3.3.1. Community Engagement

Community engagement can serve as a key indicator for evaluating Corporate Social Responsibility (CSR) initiatives, measuring the extent to which a company actively involves and positively impacts local communities. High levels of community engagement, such as volunteer programs, partnerships with local organizations, and responsiveness to community needs, often reflect a company's commitment to CSR and its effectiveness in creating shared value.

Table 7. LEGO Group Children Reached by Community Engagement (2014–2023)

	2014	2015	2016	2018	2019	2020	2021	2022	2023
Number of Children	50 000	66 000	100 000	839 120	1 859 601	3 229 390	3 513 924	9 882 512	9 861 354

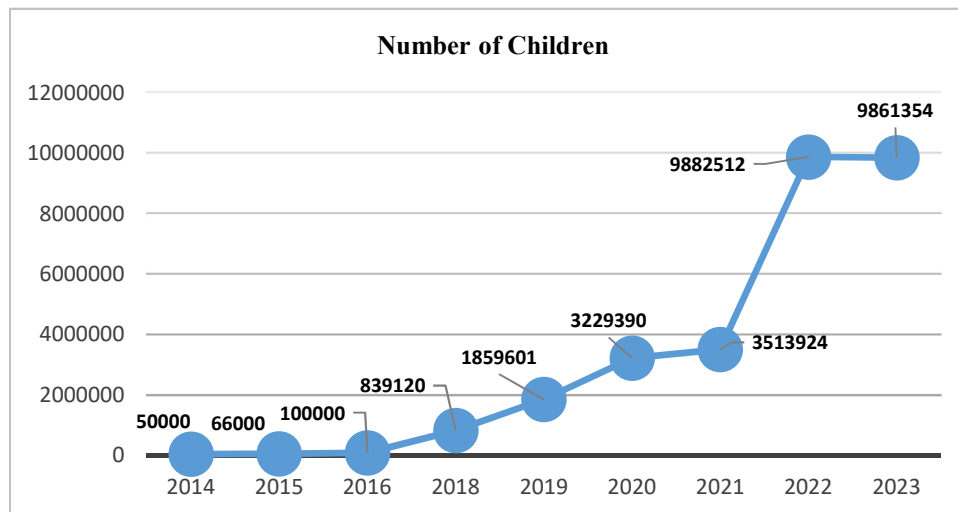Source: LEGO Group Sustainability Reports (2014–2023).

Figure 7. LEGO Group Children Reached by Community Engagement (2014–2023)

Source: LEGO Group Sustainability Reports (2014–2023).

The data presented in this table showcase the LEGO Group's remarkable growth in reaching children over a decade, from 2014 to 2023. Starting with a modest 50,000 children in 2014, the company's impact expanded exponentially, culminating in nearly 10 million children reached by 2023. This trajectory reflects LEGO's likely increased focus on corporate social responsibility and child-centric initiatives. Notable jumps occurred between 2017-2018 and 2021-2022, suggesting significant expansions or new programs

during these periods. The consistent upward trend, with a slight plateau in recent years, indicates LEGO's sustained commitment to engaging with and positively impacting children's lives, possibly through educational programs, charitable efforts, or other outreach activities. This growth aligns well with LEGO's core business of producing toys and educational products for young people, demonstrating a synergy between their commercial offerings and social impact goals.

3.4. Customers Indicators

Customer indicators in CSR commitment focus on measuring a company's responsiveness to customer needs, satisfaction levels, and overall customer experience. These metrics can include customer satisfaction scores, product quality and safety measures, and the effectiveness of customer support and complaint resolution processes. By prioritizing customer-centric indicators, companies demonstrate their commitment to ethical business practices and social responsibility, which can enhance brand loyalty and contribute to long-term business sustainability.

3.4.1. Product Recall

Product recalls serve as a key metric of Corporate Social Responsibility (CSR) toward customers, demonstrating a company's commitment to consumer safety, accountability, and transparency by addressing defects and preventing harm.

Table 8. Product Recall at LEGO Group (2012–2023)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Product recall (Number)	0	0	0	0	0	0	0	0	0	0	0	0

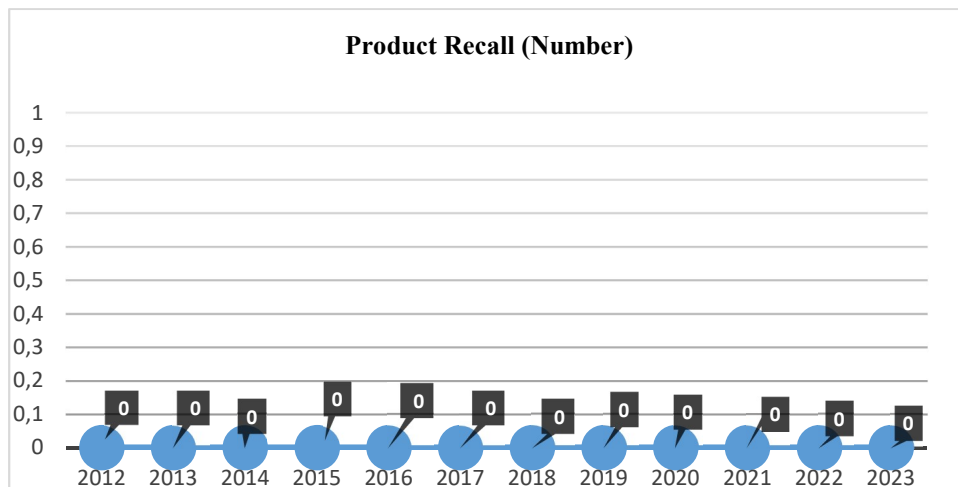Source: LEGO Group Sustainability Reports (2012-2023).

Figure 8. LEGO Group's Record of Product Recalls (2012–2023)

Source: LEGO Group Sustainability Reports (2012–2023).

The data presented in this table show an impressive and consistent track record for the LEGO Group regarding product recalls from 2012 to 2023. Over this 12-year period, the company has maintained a perfect record of zero product recalls. This exemplary performance speaks volumes about LEGO's commitment to product quality, safety standards, and rigorous quality control processes. It suggests a robust approach to design, manufacturing, and testing that effectively prevents safety issues or defects from reaching consumers. Such a consistent record is particularly noteworthy in the toy industry, where product safety is paramount due to the primary consumer base being children. This zero-recall history likely contributes significantly to LEGO's reputation for reliability and safety, potentially enhancing consumer trust and brand loyalty. It also reflects positively on the company's risk management and corporate social responsibility practices, demonstrating a strong commitment to customer safety and satisfaction.

4. CORPORATE REPUTATION AT LEGO GROUP 2013–2023

The LEGO Group has consistently maintained a strong global reputation, positioning itself as a leader in the toy industry. Its performance on the RepTrak platform, which evaluates company reputations based on various factors, provides valuable insights into how LEGO is perceived by stakeholders over time. By examining both its ranking and score, we can better understand the fluctuations in LEGO's reputation and its overall market presence.

RepTrak is a platform and corporate reputation measurement tool that helps companies assess how stakeholders perceive them across various dimensions. It was developed by the Reputation Institute (now known as The RepTrak Company) and is one of the most widely used frameworks for quantifying corporate reputation.

The RepTrak methodology involves collecting real-time survey data from stakeholders, such as customers, employees, and investors, to measure how they feel, think, and act toward a company. It evaluates reputation on a scale from 0 to 100, using seven key drivers: Products & Services, Innovation, Workplace, Governance, Citizenship, Leadership, and Financial Performance. By analyzing these drivers, RepTrak offers insights into the company's strengths and areas needing improvement. This data help organizations track their reputation over time, benchmark against competitors, and make strategic decisions to improve their standing in the market (RepTrak, 2024).

Table 9. LEGO Group RepTrak Ranking and Score (2012–2023)

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
LEGO Ranking	10	10	9	6	6	2	2	2	1	1	3	1
LEGO Score	76.35	75.02	75.01	76.69	77.4	79.46	77.9	83.9	80.1	80.4	71.2	76.8

Source: RepTrak Platform Reports (2012–2023).

The LEGO Group's ranking on the RepTrak platform has shown a notable rise over the years, reflecting a strong reputation performance. Starting at the 10th position in both 2012 and 2013, LEGO consistently improved its rank, reaching 6th place by 2015 and maintaining that position through 2016. A significant breakthrough occurred in 2017 when LEGO jumped to the 2nd position, which it retained through 2018 and 2019. This upward momentum culminated in achieving the 1st rank in 2020, a position it held again in 2021. However, the company saw a slight decline in 2022, falling to 3rd place, before returning

to 1st place in 2023. Overall, LEGO's ranking over this period demonstrates a remarkable trajectory, consistently placing it among the top companies, with several years at the very top.

LEGO RepTrak Ranking

Figure 9. LEGO Group RepTrak Ranking (2012–2023)

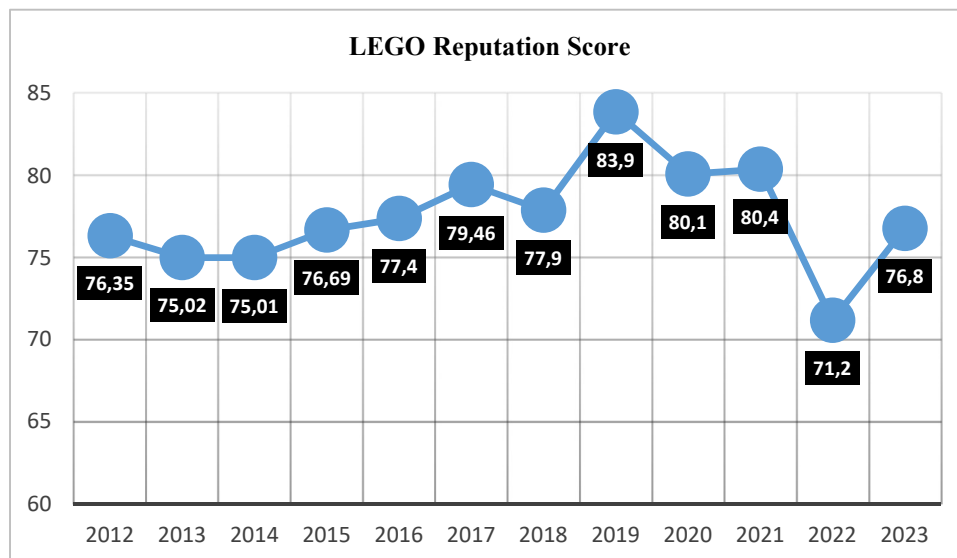Source: RepTrak Platform Reports (2012–2023).

LEGO Reputation Score

Figure 10. LEGO Group Reputation Score (2012–2023)

Source: RepTrak Platform Reports (2012–2023).

In terms of the scores LEGO Group received, the company demonstrated steady progress over the years, with slight fluctuations. Starting with a score of 76.35 in 2012, LEGO experienced a minor drop in 2013 and 2014 but recovered by 2015 with a score of 76.69. It continued to improve its performance, achieving 79.46 in 2017 and peaking at 83.9 in 2019, the highest score recorded in this period. After a slight dip in 2020, with a score of 80.1, LEGO maintained consistent scores above 80 through 2021. In 2022, LEGO saw a significant drop to 71.2, before bouncing back to 76.8 in 2023, marking a recovery in its reputation score.

5. EXPLORING THE CORRELATION BETWEEN CORPORATE SOCIAL RESPONSIBILITY INDICATORS

Following the verification of the normality assumption for the study variables, Pearson's correlation coefficient was applied to explore the relationships between the study variables (Cohen, 2003). The table below presents the results of the correlation analysis, highlighting the relationship between quantitative corporate social responsibility (CSR) indicators as independent variables and corporate reputation ranking as the dependent variable.

Table 10. Correlation Test between CSR Indicators and Corporate Reputation

CSR Indicators	Pearson Coefficient	Significance
Injury Rate	0.835**	0.000
Carbon Emissions	- 0.164	0.306
Water Consumption	- 0.934**	0.000
Community Engagement	- 0.359	0.126
Waste to Landfill	0.944**	0.000
Women Workforce	- 0.199	0.268
Employees Satisfaction	- 0,014	0.483

** Correlation is significant at level 0,01.

Source: SPSS Output.

The correlation analysis reveals a complex interplay between LEGO Group's CSR indicators (environmental, social, employee, and customer metrics) and their impact on corporate reputation. Notably, the data indicate a strong positive correlation between waste to landfill and the company's reputation ranking ($r = 0.944$, $p < 0.01$). This finding suggests that improvements in waste management, particularly the reduction of waste sent to landfill, are closely associated with an enhancement in corporate reputation. Conversely, another key environmental indicator, water consumption, demonstrates a significant negative correlation with reputation ranking ($r = -0.934$, $p < 0.01$), signifying that reduced water usage contributes positively to the company's standing. Consequently, LEGO Group's water management practices emerge as a pivotal factor in bolstering its corporate reputation.

In addition to environmental indicators, employee-related metrics exhibit notable correlations. Specifically, the employee injury rate shows a strong positive correlation with the corporate reputation ranking ($r = 0.835$, $p < 0.01$). This result suggests that a higher number of worker injuries is associated with a negative reputation ranking. This finding

highlights the importance of prioritizing employee health and safety as a key element in sustaining and enhancing a company's reputation. The correlation emphasizes the critical role that proactive measures in workplace injury prevention play in shaping external perceptions of the company.

Other CSR indicators present weaker correlations with reputation ranking, pointing to varying levels of influence. For instance, carbon emissions and community engagement reveal weak to moderate negative correlations with reputation ranking ($r = -0.164$ and $r = -0.359$, respectively, $p > 0.05$). While these indicators do not demonstrate a statistically significant impact, they still suggest that efforts in reducing emissions and fostering community involvement could contribute to improving corporate reputation. Likewise, the Employee Satisfaction Score shows a negligible negative correlation ($r = -0.014$, $p > 0.05$), indicating limited direct influence on reputation. The rate of women in the workforce also displays a weak negative correlation ($r = -0.199$, $p > 0.05$), suggesting that this social metric may not be a primary driver of reputation improvements within the LEGO Group during the period under study.

CSR indicators with weaker correlations, such as employee satisfaction and carbon emissions, invite further exploration. One plausible explanation is the lower visibility of these initiatives to key stakeholders, limiting their perceived impact on corporate reputation. For example, while reducing carbon emissions is critical for sustainability, it may not resonate as strongly with consumers compared to waste management.

In conclusion, the findings from this correlation analysis underscore the nuanced relationship between CSR performance and corporate reputation at the LEGO Group. Environmental management, particularly in areas like waste to landfill and water usage, plays a pivotal role in shaping public perception and corporate standing. Moreover, the analysis reveals the importance of employee health and safety, as reflected in the injury rate, as a critical factor in enhancing the company's reputation. Other CSR indicators, while displaying weaker correlations, still point to opportunities for continued improvement. Overall, this analysis highlights the multifaceted nature of CSR contributions to corporate reputation, with some areas exerting more influence than others in defining public and stakeholder perceptions.

6. CONCLUSION

The LEGO Group's commitment to CSR from 2012 to 2023 has led to significant achievements, particularly in waste reduction and employee safety, which strongly correlate with enhanced corporate reputation. Progress in water consumption management has also been commendable. However, weaker correlations in areas such as carbon emissions, community engagement, and employee satisfaction reveal opportunities for a more balanced and comprehensive CSR strategy.

LEGO's emphasis on environmental sustainability and workplace safety reflects the unique priorities of the toy industry, where consumer expectations favor visible and impactful actions, such as product safety and ecological stewardship. This focus has proven effective but diverges from broader CSR literature that often highlights the importance of employee engagement and community involvement. Expanding efforts in these dimensions could further strengthen LEGO's reputation.

Looking ahead, maintaining excellence in environmental and safety initiatives will be essential, but greater attention to employee satisfaction and community engagement could enhance stakeholder trust and loyalty. Transparent communication of CSR achievements

and alignment with global sustainability goals, particularly in carbon reduction, will solidify LEGO's position as a leader in responsible business practices.

This study not only offers actionable insights for LEGO but also provides a blueprint for CSR strategies across the toy industry. Companies can benefit from prioritizing impactful activities like waste reduction while ensuring clear and consistent communication of achievements. By adopting a balanced approach to CSR, businesses can align with stakeholder priorities and navigate the complexities of corporate responsibility.

Future research should explore causal relationships between CSR efforts and corporate reputation, employing methodologies such as longitudinal studies or multi-variable regression analysis. These approaches would yield deeper insights into the interplay between CSR metrics, helping organizations strategize more effectively for sustained success and positive societal impact.

REFERENCES

Ali, H., Yin, J., Manzoor, F., An, M. (2023). *The impact of corporate social responsibility on firm reputation and organizational citizenship behavior: The mediation of organic organizational cultures. "Frontiers in Psychology",* 13. DOI: 10.3389/fpsyg.2022.1100448.

Barnett, M.L., Jermier, J.M., Lafferty, B.A. (2006). *Corporate reputation: The definitional landscape. "Corporate Reputation Review",* 9(1). DOI: 10.1057/palgrave.crr.1550012.

Barney, J. (1991). *Firm resources and sustained competitive advantage. "Journal of Management",* 17(1).

Berber, N., Aleksic, M., Slavic, A., Strugar Jelaca, M. (2022). *The relationship between corporate social responsibility and corporate reputation in Serbia. "Inzinerine Ekonomika-Engineering Economics",* 33(3). DOI: 10.5755/j01.ee.33.3.29316.

Bhattacharya, C.B., Sen, S. (2004). *Doing better at doing good: When, why, and how consumers respond to corporate social initiatives. "California Management Review",* 47(1).

Bowen, H.R. (1953). *Social responsibilities of the businessman.* University of Iowa Press.

Božić, B., Kolić Stanić, M., Jurišić, J. (2021). *The relationship between corporate social responsibility, corporate reputation, and business performance. "Interdisciplinary Description of Complex Systems",* 19(2). DOI: 10.7906/indecs.19.2.7.

Bromley, D.B. (2000). *Psychological aspects of corporate identity, image, and reputation. "Corporate Reputation Review*", 3(3). DOI: 10.1057/palgrave.crr.1540117.

Carroll, A. (1979). *A three-dimensional conceptual model of corporate performance. "Academy of Management Review",* 4(4).

Chun, R. (2005). *Corporate reputation: Meaning and measurement. "International Journal of Management Reviews",* 7(2). DOI: 10.1111/j.1468-2370.2005.00109.x.

Clarkson, M.B.E. (1995). *A stakeholder framework for analyzing and evaluating corporate social performance.* "Academy of Management Review", 20(1).

Cohen, J., Cohen, P., West, S.G., Aiken, L.S. (2003). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences* (3rd ed.). Routledge.

Davis, K. (1960). *Can business afford to ignore social responsibilities*? "California Management Review", 2(3).

Davis, K. (1970). *The case for and against business assumption of social responsibilities.* "Academy of Management Journal", 16(2), 312–322.

Deephouse, D.L., Carter, S.M. (2005). *An examination of differences between organizational legitimacy and organizational reputation.* "Journal of Management Studies", 42(2). DOI: 10.1111/j.1467-6486.2005.00499.x

DiMaggio, P.J., Powell, W.W. (1983). *The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields.* "American Sociological Review", 48(2).

Eells, R.S.F. (1956). *Corporation giving in a free society.* Harper.

Etter, M. (2014). *Broadcasting, reacting, engaging: Three strategies for CSR communication in Twitter.* "Journal of Communication Management", 18(4).

Fatima, T., Elbanna, S. (2022). *Corporate social responsibility (CSR) implementation: A review and a research agenda towards an integrative framework.* "Journal of Business Ethics", 1–17. DOI: 10.1007/s10551-022-05000-2.

Fellag, M. (2016). *Corporate social responsibility.* Yazouri.

Fombrun, C.J., Rindova, V.P. (2001). *The road to transparency: Reputation management at Royal Dutch/Shell* [In:] Fombrun, C.J., Shanley, M., eds., *Organizations, policy, and the natural environment: Institutional and strategic perspectives* (p. 77–96). Stanford University Press.

Fombrun, C.J., Shanley, M. (1990). *What's in a name? Reputation building and corporate strategy.* "Academy of Management Journal", 33(2).

Fombrun, C.J., van Riel, C.B.M. (1996). *The reputational landscape.* "Corporate Reputation Review", 1(1/2).

Frederick, W.C. (1960). *The growing concern over business responsibility.* "California Management Review", 2(4).

Freeman, R.E. (1984). *Strategic management: A stakeholder approach.* Pitman Publishing Inc.

Gotsi, M., Wilson, A.M. (2001). *Corporate reputation: Seeking a definition.* "Corporate Communications: An International Journal", 6(1). DOI: 10.1108/13563280110381189.

Goyal, S., Routroy, S. (2023). *Analyzing environmental sustainability enablers for an Indian steel manufacturing supply chain.* "Journal of Engineering, Design and Technology", 21(1). DOI: 10.1108/JEDT-09-2022-0504.

Johnson, H. (1957). *The emerging pattern of corporate citizenship. Address delivered before the Institute of Life Insurance Annual Meeting,* New York City, NY, USA.

Juniarti, Nathania, C., Krisnanda, A. (2024). *The role of company reputation as a moderating variable in the relationship between CSR and firm performance.* "Revista de Gestão Social e Ambiental*v, 18(6). DOI: 10.2487/e05347.

LEGO_Group. (2024). *The LEGO Group History.* Access on the internet: https://www.lego.com/en-us/aboutus/lego-group/the-lego-group-history

Licandro, O., Vázquez-Burguete, J.L., Ortigueira, L., Correa, P. (2023). *Definition of corporate social responsibility as a management philosophy oriented towards the management of externalities: Proposal and argumentation.* "Sustainability", 15. DOI: 10.3390/su151310722.

McGuire, J.W. (1963). *Business and society*. McGraw-Hill.

Melero-Polo, I., López-Pérez, M.E. (2017). *Identifying links between corporate social responsibility and reputation: Some considerations for family firms. "Journal of Evolutionary Studies in Business",* 2(2). DOI: 10.1344/jesb2017.2.j034.

Molleda, J.C., Jain, R. (2013). *Identity, perceived authenticity, and reputation: A dynamic association in strategic communication* [In:] Men, L.R., Dodd, M.D., eds., *The handbook of strategic communication* (p. 435–448). Wiley-Blackwell.

Montiel, I. (2008). *CSR and corporate sustainability: Separate pasts, common futures. "Organization & Environment",* 21(3).

Pires, V., Trez, G. (2018). *Corporate reputation. "Revista de Gestão"*, 25(1). DOI: 10.1108/REGE-11-2017-005.

Porter, M.E., Kramer, M.R. (2011). *Creating shared value. "Harvard Business Review",* 89(1/2).

Pradhan, S. (2016). *Impact of corporate social responsibility intensity on corporate reputation and financial performance of Indian firms. "Business: Theory and Practice",* 17(4). DOI: 10.3846/btp.17.11123.

RepTrak. (2024). *100 most reputable companies*. Access on the internet: https://www.reptrak.com/globalreptrak/.

Selekman, B.M. (1959). *A moral philosophy for management*. McGraw-Hill.

Sheehy, B. (2014). *Defining CSR: Problems and solutions. "Journal of Business Ethics",* 131(3).

Spence, M. (1973). *Job market signaling. "The Quarterly Journal of Economics",* 87(3).

Steiner, G. (1971). *Business and society*. Random House.

Suchman, M.C. (1995)*. Managing legitimacy: Strategic and institutional approaches. "Academy of Management Review", 20*(3).

Teece, D.J. (2007). *Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. "Strategic Management Journal"*", 28(13).

Walker, K. (2010). *A systematic review of the corporate reputation literature: Definition, measurement, and theory. "Corporate Reputation Review",* 12(4). DOI: 10.1057/crr.2009.26.

Walton, C.C. (1967). *Corporate social responsibilities*. Wadsworth Publishing Company.

Wartick, S.L. (2002). *Measuring corporate reputation. "Business & Society",* 41(4). DOI: 10.1177/0007650302238774.

Yan, X., Espinosa-Cristia, J.F., Kumari, K., Cioca, L.I. (2022). *Relationship between corporate social responsibility, organizational trust, and corporate reputation for sustainable performance. "Sustainability",* 14. DOI: 10.3390/su14148737.

Zhang, J., Hossain, G.M.S., Badiuzzaman, Rahman, M.S., Hasan, N. (2023). *Does corporate reputation play a mediating role in the association between manufacturing companies' corporate social responsibility (CSR) and financial performance? "Green Finance",* 5(2). DOI: 10.3934/GF.2023010.

Zhao, Y., Abbas, M., Samma, M., Ozkut, T., Munir, M., Rasool, S.F. (2021). *Exploring the relationship between corporate social responsibility, trust, corporate reputation, and brand equity. "Frontiers in Psychology",* 12. DOI: 10.3389/fpsyg.2021.766422.