

RESEARCH ARTICLE



The Influence of Internal Corporate Social Responsibility Factors on the Innovation Climate of Employees in the Healthcare Industry

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Abstract: This study examined the relationship between employee innovation and employee-initiated corporate social responsibility (CSR) elements in medical diagnostic enterprises in Pakistan during the coronavirus disease 2019 pandemic. The research identified nine variables of employee-driven CSR, including communication, empowerment, and work satisfaction. The theoretical framework of the study was based on the theory of CSR and the expectancy theory of motivation. It evaluated their effects on the atmosphere for employee innovation using statistical analysis by using Statistical Package for the Social Sciences and after collecting data by using a survey questionnaire. The study population was employees working in the healthcare industry in Pakistan. The findings showed that employee-driven CSR and innovation were significantly correlated, with work satisfaction having the most impact. Overall, this quantitative study provides important insights for both theoretical understanding and practical application in fostering innovation through CSR initiatives. It emphasizes the critical role of job satisfaction as a key motivating factor for innovation within the framework of employee-driven CSR in the medical diagnostic sector.

Keywords: external and internal CSR, employee-driven CSR, leadership, horizontal and vertical communication, employee recognition, employee empowerment, innovation

1. Introduction

The start of the coronavirus disease 2019 (COVID-19) pandemic has created unprecedented hurdles for the global economy and serious dangers to global health. Global leaders were forced to reevaluate plans for handling present and potential dangers because most countries were ill-prepared for the pandemic (Leach et al., 2021). In 2020, a huge number of financial losses from company closures were brought on by the pandemic (Azoulay & Jones, 2020). At the same time, the pandemic caused a labor shortage and made it more difficult for many businesses to perform projects successfully (Majumder et al., 2022). Similarly, the developing countries like Pakistan faced more serious problems as compared to developed countries like the USA and others. The main query that emerges is as follows: how can executives in the medical diagnostics industry handle financial difficulties and labor disputes (Magalhães, 2022)?

In times of crisis, people become more demanding and sensitive, which calls for creative problem-solving to get beyond unforeseen challenges (Hostager et al., 1998). Leaders must establish creative business strategies and sustainable models to fulfill social needs. They must also handle crises by turning social difficulties into new economic opportunities (Guo & Lu, 2021). One of the important components of the healthcare system is innovation, as it plays a critical role in managing any shortages or disruptions during public

health pandemics (Abdel-Basst et al., 2020). Different firms use different indicators for innovation, which impact performance, market share, competitiveness, and business effectiveness (Schiavone & Simoni, 2019). Employee engagement and teamwork are critical to a company's performance during a pandemic since they play a critical role in fostering innovation (Pukkeeree et al., 2020). The association between employee-driven corporate social responsibility (CSR) initiatives and operative innovation in the COVID-19 medical diagnostics business is the main topic of this study. Expanding upon the work of Übüs and Alas (2010), the study focuses on nine employee-driven CSR initiatives and investigates how they affect the innovation climate. These initiatives include rewards and recognition, empowerment, resources, engagement, decision-making involvement, communication, job satisfaction, training, and leadership associations.

As customer expectations change, businesses must develop more transparency and actively interact with social, cultural, and environmental issues (Warrick, 2017). This is especially true for the vital medical diagnostics industry (He et al., 2019). The COVID-19 pandemic caused disruptions to the industry, which is crucial for reacting to pandemics. These disruptions affected lives, delayed projects, and challenged the sector's worldwide competitiveness (Majumder et al., 2022). Amid these obstacles, several executives in the medical diagnostics industry lack internal CSR plans to inspire creativity among staff members, especially given the continuing pandemic (Haque, 2021). Seeing the possibility of a move in the direction of social innovation tactics, using a conceptual model

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based on CSR theory and the expectation theory of motivation, this study aims to investigate the relationship between employee-driven CSR and innovation within the medical sector (Serhan et al., 2021). This study aims to close a significant knowledge gap regarding the impact of employee-driven CSR on innovation in the healthcare sector during a pandemic, providing scholars and industry leaders with insightful information (Hamid et al., 2020).

This quantitative correlation study examined variations based on employees' gender, education level, and organization size to investigate the connection between employee-driven CSR elements and employee innovation in the Pakistani healthcare industry during pandemics (Azizi et al., 2021). To shed light on the effects of employee-driven CSR on the innovation atmosphere, the study concentrated on demographic data such as gender, organization size, and education level (Hopkins, 2012). According to the findings, executives in the medical manufacturing sector should prioritize employee-driven CSR to boost innovation, obtain a competitive edge, boost profitability, and solve issues with Pakistani unemployment and employee retention. This groundbreaking study advances our knowledge of how employee-driven CSR affects the culture of staff innovation in the Pakistani medical diagnostics industry and provides insightful information for better strategy formulation and financial success.

2. Literature Review

According to Proiakaki et al. (2018), CSR has its roots in moral philosophy, namely, ethics. Modern CSR emerged in the 1960s and asserts that company executives are morally obligated to do more for society than maximize profits (Hengst et al., 2020). On the other hand, Yasin (2021) proposed that leaders should fulfill their company objectives while simultaneously serving society. Protecting the social economy, respecting human rights, following social norms, advancing public policy values, and improving people's quality of life are all core tenets of CSR. Carroll (1979) distinguished four elements of CSR, profitability, legal compliance, ethical standards, and public support. A structured approach centered on social responsibility, economic growth, and environmental management was put out by Wilenius (2005).

As businesses struggle with economic, social, and environmental difficulties, the COVID-19 pandemic has increased the attention on CSR (Hoang et al., 2021). Employee performance and organizational value are positively impacted by CSR commitment, particularly when it comes to internal stakeholders like employees (Simpson et al., 2020). Still, not much has been studied on the correlation between internal CSR and innovation, especially in light of the current global health crisis (Titko et al., 2021). In order to shed light on the critical role that CSR plays in encouraging innovation (Thompson & Sanders, 1997), this study attempts to determine if employee-driven CSR encourages organizational innovation during the COVID-19 pandemic (Yasir et al., 2021). The goal of the study is to improve knowledge of the complex connection between employers and employees in the context of CSR by looking at the historical evolution of the practice and its movement toward moral and social concerns (Zafar, 2015).

2.1. External CSR

A company's dedication to environmental and social ideals is reflected in its external CSR, which shapes its reputation and authenticity with external stakeholders. This includes environmental preservation, wildlife conservation, corporate volunteering, and charity (Yang & Basile, 2022). The corporation's external reputation is greatly impacted by how external CSR is regarded (Chalabi, 2020). It

also includes the business's obligations to other parties, such as the environment, clients, community, and suppliers (Waheed et al., 2021). While environmental CSR concentrates on sustainability, pollution reduction, and environmental preservation, community CSR encompasses charitable donations and investments in community development. Offering top-notch products, being aware of customers' requirements, and defending their rights are all part of the company's commitment to its customers (Zastempowski & Cyfert, 2021). Although most CSR research focuses on external stakeholders, recent studies recognize that a balanced approach is necessary to evaluate both external and internal CSR efforts because employees and other internal stakeholders are important in determining how CSR activities will be perceived overall (Tuan, 2018).

2.2. Employee-driven CSR (internal CSR)

One important social responsibility aspect is employee welfare and well-being, the focus of employee-driven CSR or internal CSR (Low & Bu, 2022). Internal CSR encompasses a range of employee-supporting activities, such as developing policies concerning their mental and physical well-being, education, training, diversity, equitable opportunity, and recognition (Chan & Hasan, 2019). These programs have a big effect on workers' lives both inside and outside of the office, which helps businesses perform better and keep talented and motivated employees (Jia et al., 2022). Research indicates that internal CSR benefits employee behavior, trust, and engagement. This helps to improve work satisfaction, foster corporate citizenship, and retain employees (Carlini & Grace, 2021).

2.3. Innovation

Research has indicated that internal CSR positively impacts employee behavior, trust, and engagement. These effects lead to improved job satisfaction, corporate citizenship, and employee retention (Blader & Tyler, 2003). Furthermore, it has been shown that internal CSR encourages innovation and creativity among driven employees, which influences a business's competitive advantage and sustainability (Rampa & Agogué, 2021). Organizations are recommended to prioritize internal CSR activities to guarantee an engaged staff and continued performance despite problems (van Dick et al., 2004).

2.4. Innovation and internal CSR

In response to customer needs, the healthcare industry's fundamental requirements have evolved to incorporate an innovation plan. Businesses are using creative approaches to manage the urgent scarcity of medical supplies during the COVID-19 pandemic (Crupi et al., 2022). Businesses require an inventive environment, socially conscious behaviors, and a sustainable company model and strategy to innovate successfully (Guo et al., 2021). By praising and rewarding staff members for their creative achievements, managers may use internal CSR to foster innovation (Ardill, 2022). Fair labor compensation regulations and workplace treatment impact employees' incentives for high performance, which is crucial for promoting innovation (Bawa, 2017). Employee CSR has a favorable influence on motivation, high performance, and the success of innovations, according to Chinese Research. A company's dedication to employee-driven CSR enhances its innovation and gives it a competitive advantage (Donthu & Gustafsson, 2020). Managers may proactively promote internal CSR through culture and support, boosting social effectiveness and employee satisfaction (Espasandín-Bustelo et al., 2021).

2.5. Employee recognition, extrinsic and intrinsic rewards

The effect of leadership styles on employee-driven innovation (EDI) through the prism of employee appreciation has been examined (Flocco et al., 2021). Motivation, improved performance, and developing an inventive culture inside a company depend on employee recognition (Ali & Anwar, 2021). During the COVID epidemic, Kraiger and Ford (2021) highlighted the value of social and psychological benefits in promoting employee loyalty. For motivation and work satisfaction, pay must align with employee qualifications (Lam et al., 2021). Vroom and Jago (1988) expounded upon the significance of motivation as a managerial instrument, propelling personnel to attain intended outcomes. By offering incentives and resources for the spread of inventions, leaders may support organizational innovation (Cortes & Herrmann, 2021). Motivation and commitment are largely dependent on recognition, both intrinsic and extrinsic. Extrinsic rewards include stock options, bonuses, promotions, and competitive salaries, while intrinsic rewards center on fulfilling and pleasurable work activities (Luqman et al., 2021).

2.6. Employee empowerment

Businesses must constantly change to succeed in dynamic marketplaces (Sayfullina et al., 2022). An organizational structure that promotes empowerment and engagement is necessary for employee involvement in innovation (Atapattu & Huybers, 2021). Using human capital to its full capacity greatly increases the effect of CSR initiatives. The performance and efficacy of employees can be impacted by several ways of employee empowerment, such as decentralizing decision-making in operational systems (Rosin et al., 2022). Medical companies can enable staff members to use their expertise to contribute creatively to the community. It was stated by Echebiri et al. (2020), and it drew a connection between EDI and worker empowerment, highlighting the need for managers to provide the tools necessary for creativity and idea execution (Surya et al., 2021). Employee empowerment for effectiveness and productivity requires a motivating work environment (Ekvall, 1999). Employee empowerment allows them to face obstacles, take calculated risks, adjust to change, and accomplish corporate goals (Huntsman et al., 2021). Strong cooperation, openness to new ideas, problem-solving abilities, and a readiness to use creative solutions to complete tasks are characteristics of empowered workers (Huntsman et al., 2021). One of the most frequent reasons employees are dissatisfied with their companies is the absence of managerial assistance (Hull & Rothenberg, 2008).

2.7. Resources

According to ZD et al. (2021), businesses should devote resources to social innovation to meet societal concerns. Organizations use strategic resources, including time, money, technology, human capital, raw materials, and equipment, to spur innovation during times of crisis by utilizing the resource-based view hypothesis, which was created by Barney in 1991 (Shaw, 2021). Leaders must protect and allocate resources in the expression of economic, social, demographic, and environmental difficulties; employees are one of the most significant assets for a company's accomplishment (Del Gesso & Romagnoli, 2020). According to Sun and Guo's (2021) research conducted in China, several strategies may be used to encourage creativity among informed personnel, such as self-recognition, innovation capability, and establishing an environment that is error-tolerant (Golob & Podnar, 2021). Businesses face

significant risks when they neglect to devote resources to innovation and prioritize critical organizational requirements (Grint, 2020).

2.8. Employee engagement and decision-making

A wide range of organizational dynamics is significantly impacted by employee engagement, including creativity, absenteeism, collaboration, retention, and the improvement of procedures and practices (Berraies & Chouiref, 2023). Workplace effectiveness and creativity are greatly enhanced by actively engaged individuals who take the initiative and participate in decision-making (Boudrias et al., 2021). According to Ge and Sun (2020), employee engagement affects a company's competitiveness, productivity, and general engagement by creating a critical relationship between staff capabilities and creativity. Employee commitment must be maintained during times of crisis, and engaged workers who participate in decision-making are more likely to remain committed to the company (Boonsiritomachai & Sud-On, 2022). It was contended further by Ge and Sun (2020) that innovative behavior is encouraged by employee engagement, which in turn enhances organizational participation, productive cooperation, collaboration, and favorable brand reputation in the marketplace. The significance of fostering an engaged workforce for business performance is shown by the mutual link between employee engagement and creativity (Jason & Geetha, 2021).

2.9. Horizontal and vertical communication

Employees in the globalization era work in various cultural contexts, highlighting the significance of information transparency and efficient workforce management in shaping employee behavior and an organization's ability to innovate sustainably (Khalid et al., 2022). Corporate strategy and social action are heavily dependent on communication, and both vertical and horizontal channels are essential to the success of a business (Barić et al., 2021). When leaders connect with their team and give essential resources, effective communication, whether top-down or across hierarchical levels, is associated with enhanced productivity and profits (Mahvar et al., 2020). In particular, communication problems must be addressed in creative and decentralized systems to reduce organizational disputes, avoid mistakes, promote cooperation, and guarantee effective performance (Al-Hawari et al., 2021).

2.10. Employee job satisfaction

A key element in raising motivation and productivity at work is employee job satisfaction, a measure of happiness with one's line of work (Newman et al., 2020). Herzberg's theory highlights factors like self-growth, opportunities for advancement, recognition, self-achievement, meaningful tasks, and empowerment as contributors to employees' contentment, acknowledging the significance of job satisfaction in keeping employees (Newton et al., 2022). Encouraging work happiness lowers unemployment rates, stabilizes the social economy of employees, and increases organizational efficiency in industries like healthcare, where turnover is an expensive and disruptive problem (Rajan, 2021).

2.11. Employee training

Sun and Guo (2021) and Zhou et al. (2020) underlined the importance of different information and knowledge in fostering inventive activities. The basis for continuous innovation is the knowledge and competence of employees. Organizations should develop a training strategy to improve workers' job performance and

create a culture that is error-tolerant and conducive to learning to promote innovation (Xia et al., 2023). According to Jiu et al. (2020), employee knowledge acts as a mediating element between innovative intelligence and behavior. According to Kraiger and Ford (2021), training is essential for helping people learn new information and modify their behavior to fit the company's standards. According to Muñoz-Pascual and Galende (2017), assigning tasks to employees based on their skill sets benefits motivating connections. Therefore, employee training is essential for fostering firm creativity (Blowfield & Murray, 2008). It was emphasized by Beasley (2021) that employee training fosters self-improvement and self-efficacy, two other critical components that impact work behavior and inspire good performance (Berraies & Chouiref, 2023).

2.12. Leadership relationships

In quickly changing marketplaces, leaders must utilize innovation as a competitive advantage (Crane, 2008). Warrick (2017) has highlighted the need for creativity for leaders, particularly in times of crisis like the COVID epidemic that calls for creative solutions. According to Damanpour and Schneider (2006), corporate leaders' attitudes and behaviors play a major role in creating an innovative environment. By cultivating an innovative culture, leaders may convert inventive ideas into useful inventions (Hoang et al., 2021). To identify key elements for developing innovation capability as knowledge development, innovation attitude, and developing employee pay metrics (Varyash et al., 2020). According to the leader-member exchange theory, which strongly emphasizes the interaction between managers and staff, an inspiring workplace substantially impacts an organization's expansion (Thomas, 2021). In general, corporate culture, mentoring, vision, and motivation of executives all play a crucial part in determining how CSR encourages employee creativity (Tran, 2021).

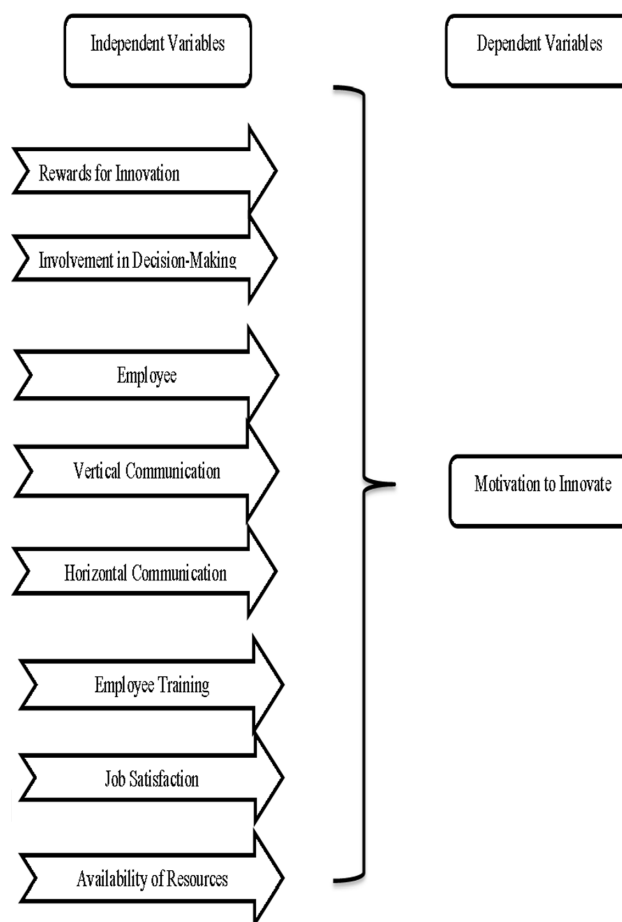
2.13. Leadership style and COVID pandemic

Corporate executives confront a variety of obstacles during the COVID pandemic, including changes in consumer demand, unpredictability in regulations, societal requirements, and supply chain disruptions (Camevale & Hatak, 2020). Leaders have to provide equal weight to the health and safety of their workforce, as well as creative and inventive communication, inspiration, and innovation (Ouyang et al., 2021). Understanding and identifying issues, adaptability, agility, a clear vision, taking risks, encouraging innovation, networking, cooperative teamwork, shifting cultural norms, risk assessment, decisiveness, and compassion are all necessary for effective crisis leadership (Bartsch et al., 2021). Pandemics highlight the importance of companies' social duty to their workforce, which includes providing training, fostering a healthy work environment, paying fairly, communicating effectively, ensuring safety, and providing chances for professional development (Dirani et al., 2020). It was stated by Gigliotti (2016) that a leader's identity is ultimately shaped by various elements influencing leadership styles, including industry dynamics, organizational culture, location, demography, and political governance.

The conceptual framework of the study is shown in Figure 1; on the basis of this conceptual framework, the study hypothesis was developed:

- **H0:** There is no relationship between different employee-driven CSR factors—such as job satisfaction, training, leadership relationships, empowerment, resources accessibility, engagement and decision-making contribution, and reward and recognition for employees and their motivation to innovate.

Figure 1
Conceptual framework



- **H1:** There is at least one of these employee-driven CSR elements, personnel empowerment, reward and recognition, engagement and decision-making involvement, resource readiness, job satisfaction, training, and leadership relationships, which does have a beneficial effect on encouraging staff to innovate.

3. Methodology

The research technique greatly influences the investigation process, and the research questions determine whether to use mixed, qualitative, or quantitative methodologies (Forward & Levin, 2021). Aligning the research challenge with a suitable approach and design is a step in decision-making. To comprehend participants' lived experiences and views, researchers in qualitative research employ open-ended questions to investigate the how and why of an occurrence within particular contexts (Binnie et al., 2021). However, a quantitative method was necessary for the current study, which studied the correlation between employee-driven social responsibility characteristics and the atmosphere for members' creativity.

Using a descriptive correlational technique, the study design examined associations and predicted correlations between the variables. Through systematic data collection, this methodology provided an objective perspective and a higher degree of confidence, making it appropriate to establish links between CSR elements and the innovation climate (Zhang & Zhao, 2023). Although experimental and quasi-experimental designs were considered, it was decided that

they did not apply to this study since they did not involve the assessment of causal linkages or treatments. The selected methodology enabled a thorough comprehension of the research phenomena, consistent with the study's objective of quantifying notions associated with CSR factors and innovation. The survey technique used a Google survey platform to collect digital data and guarantee a descriptive correlational design that satisfied the study objectives.

3.1. Sampling

To minimize biases in the selection process, probabilistic sampling, more specifically, and random sampling were used to provide every employee of the target population with an equivalent chance of participating. An online survey form was used to gather data, using the internet's efficiency and wide geographic reach. A crucial component of research is gathering data. In this study, the researcher concentrated on choosing the right processes and sample techniques to guarantee accurate and legitimate outcomes. Two hundred forty volunteers who worked in different divisions of healthcare setup in Pakistan and had three or more years of experience made up the target group. The population was carefully chosen to guarantee that participants met the requirements to answer the study's questions. The study used the closed-ended, Likert-scale-based Übius and Alas's (2010) "CSR and innovation climate" survey, which focused on employee-driven CSR aspects. The survey forms were electronically sent to the 2021 Pakistan Medical Diagnostics firms' database to provide a representative and easily available sample. The Statistical Package for the Social Sciences (SPSS) was used to evaluate and safely store the acquired data.

3.2. Descriptive statistics

To examine the connections between participants' perceptions of internal CSR and their innovation atmosphere, the study used a variety of inferential statistical tests. These tests included descriptive analysis, analysis of variance (ANOVA), multi-regression, Pearson's correlation coefficient (r), and the two-tailed significance t -test. With a 95% confidence interval and an alpha level of 0.05, multiple regression analysis was pertinent to finding significant correlations between several independent factors and the dependent variable.

3.3. Results

This quantitative study explores the relationship between the innovation atmosphere among employees in the Pakistani medical device business during pandemics and employee-driven CSR characteristics. The research uses a strict quantitative methodology to test hypotheses, examine relationships, account for other possible causes, and use statistical analysis to forecast future results. The study also examines how this association can change depending on work position, education level, and gender. The demographic statistics are given in Table 1.

3.4. Correlation and regression

The "Pearson correlation coefficient" was employed by the researcher in the analysis to verify the validity of the direction of the link between the variables. Using this procedure, the best-fit line for the data was determined, and the coefficient was used to show how close the gathered data points were to the best-fit line. Researchers must ensure multicollinearity is absent to prevent it from complicating the interpretation of variable contributions to variance. Multicollinearity is a circumstance where independent variables

Table 1
Demographics

Corporation size	Frequency	Percent
Cities		
City 1	96	40%
City 2	29	12%
City 3	67	28%
City 4	48	20%
Gender		
Male	127	53%
Female	113	47%
Education level		
High school	11	5%
College	26	11%
Bachelor	101	42%
Master	55	23%
Professional	9	3%
Doctorate	38	16%
Designation		
Superior manager midst manager	96	40%
Intermediate	60	25%
	53	22%
Entry level	14	6%
Others	3	8%
Experience		
3–6	74	31%
7–10	48	20%
Over 10	118	49%
Total	240	100%

substantially correlate ($r > 0.8$). Regression analysis revealed no multicollinearity in the dataset, thankfully, since none of the predictor correlations in our study exceeded 0.8 as per Clark, Negash, and Warrick in their studies.

A tolerance rate of less than ten in collinearity analysis denotes higher relationships between variables and may indicate multicollinearity. Moreover, values of the variance inflation factor greater than ten likely indicate multicollinearity. But, as the table shows, every indicator evaluated in this research had tolerance values of more than 0.10 and variance rise factor values of less than 10.

Using a variety of diagnostic measures, including model fit, R^2 , change statistics, descriptions, parts and partial correlation, collinear diagnosis, Durbin–Watson, and Case-wise diagnostics, the researchers used multiple regression analysis in both Excel and SPSS for correlation and multi-regression computations (Binnie et al., 2021). As shown in Table 2, the regression coefficients and model fit, as well as the multiple R value (0.55), R square (0.30), and modified R square (0.22), were important elements in multiple regression analysis. The relationship between employee-driven CSR and the atmosphere of creativity among employees was shown by the R value, which ranged from -1.0 to $+1.0$. The modified R

Table 2
Multiple regression results between dependent and independent variables

Coefficients		Standard error	<i>t</i> Stat	<i>P</i> -value
Employee job satisfaction	0.55	0.14	4.33	0.000
Leadership relationships	0.18	0.10	0.79	0.043
Horizontal communication	0.40	0.14	1.27	0.021
Employee rewards	0.15	0.13	0.75	0.05

square measured the model's generality, while the R square showed the proportion of innovation movement related to employee-centered CSR. The significance of changes in R^2 and the effect of adding additional variables were evaluated using the change statistic. A strong link was found in the findings ($R = 0.546$, $p = 0.000309$), suggesting that employee-driven CSR may explain 55% of employee creativity. Among the employee-driven CSR factors, job satisfaction had the largest impact ($\beta = 0.55$), followed by horizontal communication ($\beta = 0.40$). These findings confirm that at least one employee-driven factor positively influences workers' creativity.

This quantitative research investigated the relationship between employee CSR variables and the innovation atmosphere in the medical device sector in Pakistan during pandemics. The study aimed to evaluate hypotheses using various methods, including multi-regression, ANOVA, t -tests, correlation, and descriptive analysis. There was no discernible difference in the influence of organizational size on innovation encouragement among the 240 employees in the research. Similarly, there were no discernible differences in how employees responded to innovation based on their gender or level of education. Using correlation analysis, nine internal CSR characteristics were shown to correlate substantially with the innovation climate. Notably, work satisfaction had the largest influence ($\beta = 0.61$), with horizontal communication coming in second ($\beta = 0.18$), confirming their positive correlation with the innovation climate of employees ($R = 0.546$, $p = 0.000309$, accounting for 55% of the variance in innovation). The study underscored the impact of internal CSR on the attitudes and actions of employees toward innovation in the medical device sector.

4. Discussion

Two significant findings on employee creativity in medical diagnostic enterprises were found in the study. First off, there were no appreciable differences found across small, medium, and big firms, indicating that organizational size had no discernible effect on workers' incentive for innovation. Furthermore, there were no statistically significant variations seen in the replies provided by employees with respect to creativity related to gender and education. This shows that during the COVID-19 epidemic, medical device firm workers consistently encouraged innovation, regardless of organizational size, gender, or educational background. This may have been motivated by loyalty, dedication, and duty.

In line with the expectation theory of motivation, this research also found a significant association between employee work satisfaction and creativity. The results suggest that companies may develop a risk-taking corporate culture and a creative atmosphere by utilizing work satisfaction and successful internal CSR tactics, such as horizontal communication. This emphasizes how crucial it is to address employee happiness as a major innovation engine, stressing its significance in attaining individual development goals and desirable organizational objectives.

4.1. Practical implications

The study's findings imply that incorporating employee-driven CSR practices—which prioritize work happiness and efficient communication—can help medical diagnostic enterprises cultivate a creative culture. In line with theories of motivation and CSR, job happiness has emerged as a crucial motivating element driving innovation. Organizational leaders should prioritize horizontal communication, effectively explain the business goal, and include workers in decision-making, according to the report. These tactics are

essential for developing a company culture that inspires workers to take creative actions, particularly in times of crisis.

4.2. Recommendations and future research directions

The findings of the study indicate that medical organizations may foster employee creativity through internal CSR methods that prioritize work happiness and communication. To foster an innovative culture and support employee-driven CSR, leaders are urged to develop and prioritize CSR–innovation initiatives. The report also emphasizes the necessity of educating leaders in internal CSR and calls for more investigation into the variables influencing work happiness and creativity. Since the study was carried out in Pakistan, it is acclaimed that parallel investigations be carried out in other cultural and economic situations, taking into account the differences in motivating factors. All things considered, the results provide insightful information to managers who want to improve their staff members' creativity, dedication, and crisis management abilities.

5. Conclusion

This quantitative study investigated the association between employee innovation in Pakistani healthcare during pandemics and employee-driven corporate social characteristics. Gender, educational attainment, and organizational size were taken into consideration as the research, which focused on workers across many departments, examined the influence of CSR elements on creativity. The study identified nine important employee-driven CSR variables, including incentives, recognition, empowerment, resources, engagement, communication, work satisfaction, training, and leadership connections. It did this by drawing on Übuis and Alas's CSR and innovation climate survey.

The theoretical underpinnings of the study included expectancy theories of motivation and CSR, with a focus on the quality of life of employees, human rights, social impact, and the preservation of the social economy. Notably, the study formulated a research topic and hypotheses and examined the connection between employee-driven CSR variables and employee creativity. The results showed that employee-driven CSR and innovation were significantly positively correlated and that two important variables impacting innovation were work satisfaction and horizontal communication.

Ethical Statement

This study does not contain any studies with human or animal subjects performed by the author.

Conflicts of Interest

The author declares that he has no conflicts of interest to this work.

Data Availability Statement

The data that support this work are available upon reasonable request to the corresponding author.

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