

The Effect of Transformational Leadership, Integrity, and Collectivism on Corporate Sustainability of Medium-Sized Construction Companies in CALABARZON

Lorynel Mendoza Bacordo-De Castro^{a,b,*}

^a*lorynel_decastro@dls.edu.ph*

^a*Faculty of the College of Business, Economics, Accountancy and Management,
De La Salle Lipa, Mataas na Lupa, Lipa City, Batangas 4217, Philippines*

^b*LMB DC Construction, Santo Tomas City, Batangas 4234, Philippines*

Abstract

The construction industry plays a vital role in the economic development of the Philippines; however, it faces increasing pressure to adopt sustainable practices that balance economic, environmental, and social responsibilities. This study examined the effects of Transformational Leadership, Organizational Integrity, and Collectivism on Corporate Sustainability in medium-sized construction companies in the CALABARZON region, with Training and Development as a mediating variable. Grounded in the Triple Bottom Line and Environmental, Social, and Governance (ESG) frameworks, the study aimed to determine both the direct and indirect relationships among the variables. A descriptive-correlational research design was employed using a self-administered survey questionnaire distributed to 120 respondents, including managers, engineers, supervisors, and administrative personnel. Data were analyzed using descriptive statistics, simple regression analysis, and mediation analysis through Jamovi. Results revealed that all independent variables—Transformational Leadership, Organizational Integrity, and Collectivism—significantly influence Corporate Sustainability. Among these, Organizational Integrity emerged as the strongest predictor, followed by Collectivism and Transformational Leadership. Furthermore, Training and Development was found to significantly mediate the relationships examined, with full mediation observed for Transformational Leadership and Organizational Integrity, and partial mediation for Collectivism. The findings highlight that leadership behavior, ethical practices, and a collaborative culture are critical drivers of sustainability outcomes in construction firms. Moreover, Training and Development serves as a key mechanism in translating organizational values into effective sustainability practices. The study concludes that a holistic integration of leadership, integrity, collectivism, and continuous employee development is essential for achieving long-term corporate sustainability. These results provide both theoretical contributions and practical implications for enhancing sustainability strategies in medium-sized construction companies.

Keywords: Corporate Sustainability; Transformational Leadership; Organizational Integrity; Collectivism; Training and Development; Construction Industry; ESG; Philippines

1. Introduction

1.1. Background of the Study

Consistent with Beattie's (2024) tripartite framework, Corporate Sustainability is broadly defined as an organization's ability to balance economic viability, environmental responsibility, and social equity for long-term viability. From an economic perspective, organizations must transcend short-term profit maximization in

favor of strategic practices that ensure long-term competitiveness and market resilience. Environmentally, it emphasizes the integration of eco-friendly practices such as resource efficiency, waste reduction, and responsible supply chain management to reduce the firm's ecological footprint. Socially, it prioritizes the well-being of employees, communities, and stakeholders through ethical practices, inclusivity, and collective responsibility. Ultimately, Corporate Sustainability is achieved when businesses embed these three dimensions into their core strategies, creating value for both the organization and society while safeguarding future generations (Kwek et al., 2023).

Corporate Sustainability has emerged as a critical concern for organizations in the construction sector, where the need to balance profitability, environmental responsibility, and social accountability is becoming more urgent according to the World Green Building Council [WGBC] (2023). However, younger and medium-sized firms often struggle to achieve sustainability due to weak leadership systems, insufficient integrity structures, limited collectivist culture, and inadequate training and development (Nguyen et al., 2024). These gaps raise the problem of how organizational values and practices interact to influence sustainability outcomes.

According to Philstar.com (2023) and WGBC (2023), the local industry has experienced rapid growth in recent years, contributing significantly to the country's Gross Domestic Product (GDP). The industry contributes significantly to the country's GDP and serves as a major source of employment, providing livelihoods to millions of Filipinos. Its role in shaping infrastructure directly impacts economic growth, social development, and the quality of life of communities. However, the industry also has far-reaching environmental consequences, from resource depletion to waste generation, which become more evident during natural disasters when poorly planned or unsustainable projects exacerbate damage and vulnerability. A sustainable construction industry, specifically one that balances economic viability, social responsibility, and environmental stewardship ensures not only higher quality and more resilient outputs but also long-term community well-being. By embedding sustainability, the sector can reduce risks, strengthen disaster resilience, and align with global standards while continuing to drive national progress.

Corporate Sustainability in the construction industry is shaped not only by external requirements but also by internal organizational factors such as leadership, integrity, and collectivist values, which influence the adoption of Environmental, Social, and Governance or ESG practices (Flores et al., 2024). Despite emerging literature on sustainable construction, gaps remain in understanding how these organizational factors interact with training and development to drive long-term sustainability outcomes. This context highlights the need for empirical studies that bridge leadership, culture, ethics, and capacity-building with Corporate Sustainability in the construction industry.

The current study focused on three determinants of Corporate Sustainability: Transformational Leadership, Organizational Integrity, and Collectivism as revealed by Kwek et al. (2023). It examined Corporate Sustainability in three dimensions—economic, environmental, and social—emphasizing that these determinants serve as critical enablers for organizations to balance profitability with responsibility. Transformational leadership, integrity, and teamwork have been identified as key factors in Corporate Sustainability Kwek et al. (2020). Transformational leadership refers to leaders' ability to inspire, motivate, and engage employees toward organizational goals beyond personal interests, promoting innovation, ethical behavior, and a long-term focus (Nguyen et al., 2024). Recent studies highlight its role in sustainability: Mansaray and Atan (2025) argue that Transformational Leadership directly supports corporate social responsibility (CSR) by embedding ethical values and encouraging innovative work behavior that aligns with sustainability objectives. Similarly, Keil et al. (2025) emphasize that leaders who adopt transformational practices act as agents of sustainable change, ensuring that corporate responsibility is not only a requirement but a cultural norm.

Integrity, in the context of Corporate Sustainability, refers to the consistent adherence to ethical principles, transparency, and accountability in organizational practices. The Sustainability Directory (2025) defines integrity as “honest and ethical actions in all sustainability efforts, ensuring transparency, accountability, and genuine impact”. Integrity is not limited to compliance but represents a deeply ingrained organizational culture that prioritizes trust and credibility. FasterCapital (2025) notes that integrity enhances stakeholder relations, strengthens reputation, and drives long-term performance, making it a cornerstone of sustainable business. Thus, integrity ensures that sustainability initiatives are authentic and aligned with corporate values, preventing greenwashing, and fostering genuine corporate responsibility.

Collectivism is described as a cultural orientation that prioritizes group welfare and shared goals over individual interests. The Sustainability Directory (2025) explains that collectivism shapes corporate governance by emphasizing stakeholder interests and group responsibility rather than shareholder primacy. Xing and Zainal (2024) further demonstrate that collectivism-based organizational cultures promote workplace green behavior by empowering employees to act collectively toward environmental goals. In the context of Corporate Sustainability, collectivism fosters collaboration, inclusivity, and shared accountability, ensuring that sustainability is embedded across all levels of the organization.

In addition to the three independent variables mentioned above, this study investigates the mediating role of Training and Development. Training and development plays a crucial role in implementing Corporate Sustainability within construction firms. It equips employees with the knowledge, skills, and competencies necessary to apply sustainability frameworks such as Building for Ecologically Responsive Design Excellence (BERDE) and Leadership in Energy and Environmental Design (LEED) certifications, energy-efficient construction practices, and effective waste management protocols (Leyesa, 2024). Without adequate training, even firms with strong leadership, ethical practices, and team culture may struggle to turn these values into real sustainability outcomes.

According to the Philippine Contractors Accreditation Board (PCAB), a medium-sized construction firm is typically characterized by annual revenues of ₱50 to ₱500 million and a workforce of 50–200 employees. Medium-sized construction firms in the Philippines play a pivotal role in bridging national development goals with localized implementation. Medium-sized construction firms deserve special attention because they are in a crucial strategic position that neither big corporations nor small businesses can match. These firms are strategically significant because they contribute to regional and national development on a large scale and they remain culturally and leadership-wise responsive to interventions in ways that bigger, more bureaucratic organizations cannot. They are large enough to have formal sustainability systems in place yet small enough to remain adaptable despite resource constraints. These companies contribute significantly to regional growth while facing unique challenges in embedding sustainability practices (Leyesa, 2024). Medium-sized construction firms constitute a less studied group in the literature of Corporate Sustainability. Thus, field evidence from this sector is vital to helping both industry and government policymaking. Their operations reflect the balance between competitiveness, adaptability, and resource constraints, making them ideal cases for examining Corporate Sustainability in the sector (Flores et al., 2024).

This study contributes to the Corporate Sustainability literature by dissecting the direct and indirect relationships between Transformational Leadership, Organizational Integrity, and Collectivism, using Training and Development as a mediating factor that spurs sustainability outcomes in the construction industry. Global sustainability frameworks such as the Triple Bottom Line and ESG standards aim to guide companies. However, past studies have not sufficiently explored how these organizational dimensions are concretely reflected in the corporate sustainability performances of firms in developing countries where medium-sized businesses are limited by resources, have fragmented systems, and face cultural implementation issues. This study also

investigated the question of leadership, ethical values, and a culture of teamwork being collectively influential on the sustainability performance of the construction sector in the Philippines, a sector that is both a lever for the country's growth and a vehicle for sustainability but still largely researched. Lastly, this paper integrates theory and practice and furnishes evidence in the context of the operational limitations and organizational characteristics that firms in CALABARZON have failed to unveil. (Purbasari & Rokhim, 2024).

This study offers a framework for medium-sized construction firms in the Philippines to align with the United Nations Sustainable Development Goals (SDGs) by enhancing internal organizational behavior. It identifies Transformational Leadership and Organizational Integrity as key factors for sustainability, focusing on SDG 9 (Industry, Innovation, and Infrastructure) by promoting ethical leadership and resilient building practices. The research also highlights how collectivism can support SDG 12 (Responsible Consumption and Production) through collaborative actions that reduce waste. Lastly, it emphasizes the importance of training and development in enabling firms through skilled workforce (SDG 8: Decent Work and Economic Growth).

1.2. Study Objectives

The objectives of this study are centered on understanding the organizational drivers of Corporate Sustainability in medium-sized construction firms and explaining how Transformational Leadership, Organizational Integrity, and Collectivism—individually and through the mediating mechanism of Training and Development—translate into sustained economic, environmental, and social performance. Specifically, this study explains how each structural driver—Transformational Leadership, Organizational Integrity, and Collectivism—individually translates into sustained economic, environmental, and social performance, both directly and through the separate mediating mechanism of Training and Development. This study also seeks to determine if Transformational Leadership, Organizational Integrity, and Collectivism each significantly affect Corporate Sustainability across economic, environmental, and social dimensions. Furthermore, the study explores the individual mediating role of Training and Development on the respective relationships of Transformational Leadership, Organizational Integrity, and Collectivism with Corporate Sustainability.

1.3. Research Framework and Hypotheses

As illustrated in the research framework (Figure 1), the study will explore Transformational Leadership, Organizational Integrity, and Collectivism (Stimuli), if they directly influence Corporate Sustainability (Response), and if Training and Development (Organism) mediates these relationships in the context of medium-sized construction companies in the CALABARZON region in the Philippines. The framework also shows that Corporate Sustainability outcomes in construction companies was examined based on its performance across three dimensions: economic (financial soundness, competitiveness, and efficient project delivery), environmental (resource efficiency, waste reduction, and compliance with environmental regulations), and social/reputational (ethical conduct, stakeholder responsibility, and community trust).

A simple regression analysis was employed to examine the independent influence of each determinant on Corporate Sustainability, while hierarchical mediation analysis was subsequently conducted to assess the mediating role of Training and Development (Kwek et al., 2023). The findings revealed that all three determinants—leadership, integrity, and collectivism—positively and significantly influenced Corporate Sustainability outcomes (Ling et al., 2023). Moreover, Training and Development was found to play a critical mediating role, particularly strengthening the relationship between Transformational Leadership and Integrity with sustainability performance, suggesting that the impact of these leadership and ethical factors on Corporate Sustainability is substantially channelled through enhanced employee Training and Development initiatives.

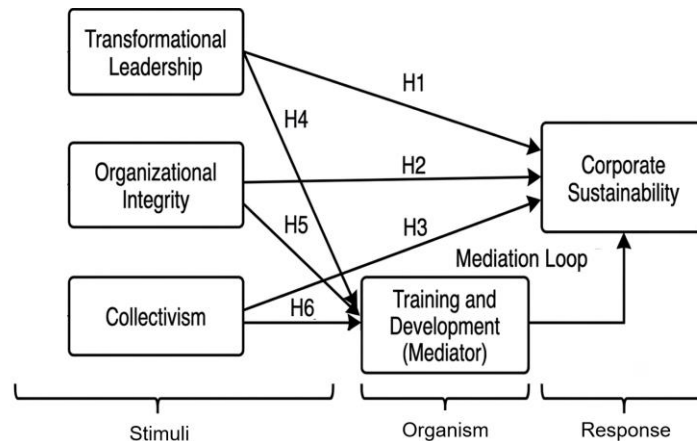


Fig. 1. The Conceptual Framework of the study adapted from Kwek et al. 's (2023) Determinants of Corporate Sustainability

In essence, the study concluded that firms in the Malaysian construction industry that cultivate visionary leadership, uphold integrity, and foster collectivist values are more likely to achieve sustainable outcomes, especially when these efforts are systematically reinforced through continuous training and capacity building that directly translates organizational values into measurable sustainability outcomes (Ling et al., 2023). These outcomes are influenced by three independent variables: Transformational Leadership, which inspires employees, encourages innovation, and aligns organizational efforts with sustainability goals; Organizational Integrity, reflected in ethical behavior, transparency, legal compliance, and uncompromised safety and environmental standards; and Collectivism, which emphasizes teamwork, shared accountability, and collaborative responsibility for sustainability performance. Training and development acts as the mediating variable, representing structured initiatives that enhance employees' technical, managerial, and sustainability-related competencies, thereby translating leadership behaviors, ethical integrity, and collectivist culture into measurable and sustained sustainability outcomes.

While Kwek et al. (2023) observed that only transformational leadership and integrity significantly influenced training initiatives in a Malaysian context, this study includes all three pathways (H₁, H₂, and H₃) to evaluate potential cultural variances within the Philippine construction sector. Transformational leadership serves as a primary behavioral stimulus, actively inspiring teams, fostering eco-innovations, and aligning operational vision with long-term ecological benchmarks. Concurrently, organizational integrity operationalizes this vision by establishing uncompromised safety records, transparent governance, and strict compliance with environmental regulations, which minimizes structural vulnerabilities during complex project lifecycles. A deeply rooted culture of collectivism ensures that these institutional goals are met with joint accountability and seamless cross-functional collaboration rather than fragmented individual resistance. These direct paths were reflected by the following proposed hypotheses:

- Hypothesis 1 (H₁): Transformational leadership has a significant positive direct effect on the corporate sustainability of medium-sized construction firms.
- Hypothesis 2 (H₂): Organizational integrity has a significant positive direct effect on the corporate sustainability of medium-sized construction firms.
- Hypothesis 3 (H₃): Collectivism has a significant positive direct effect on the corporate sustainability of medium-sized construction firms.

Within the context of the S-O-R paradigm, human resource cultivation represents the vital Organism which environmental stimuli are systematically translated into corporate actions. Structured training and development initiatives act as this precise bridge, equipping workforce tiers with the necessary technical, managerial, and green competencies required to execute a firm's sustainability objectives. Visionary leadership, high ethical standards, and a team-oriented culture naturally optimize a firm's training infrastructure by fostering a receptive learning climate, securing capacity-building resources, and encouraging collective skill-sharing. To empirically map these indirect pathways, the following mediation hypotheses were proposed:

- Hypothesis 4 (H₄): Training and development significantly mediates the relationship between transformational leadership and corporate sustainability.
- Hypothesis 5 (H₅): Training and development significantly mediates the relationship between organizational integrity and corporate sustainability.
- Hypothesis 6 (H₆): Training and development significantly mediates the relationship between collectivism and corporate sustainability.

2. Materials and Methods

2.1. Research Design and Sampling Method

Consistent with Beattie's (2024) tripartite framework, Corporate Sustainability is broadly defined as an organization's ability to balance economic viability, environmental responsibility, and social equity for long-term. This study employed a descriptive-correlational quantitative research design. The descriptive component provides a systematic account of the status of Transformational Leadership, Organizational Integrity, Collectivism, Training and Development, and Corporate Sustainability. Beyond its descriptive focus, this study adopts a correlational design to determine the strength and direction of the relationships between the independent and dependent variables (Ling et al., 2023). The correlational aspect examines whether and to what extent these organizational drivers influence sustainability outcomes, while simultaneously testing whether Training and Development serves as a mediating mechanism that strengthens these relationships. This dual approach allows the researcher to document current organizational practices and establish relevant relationships between variables that are deemed useful for practical recommendations to medium-sized construction firms seeking enhancement of their sustainability performance.

The study employed a purposive sampling method, with the company as the primary stratification layer and role within the organization (e.g., project manager, engineer, supervisor, sustainability officer, administrative staff) as the secondary categorization. The primary objective of this method was to obtain sufficient response representation. To limit the scope while ensuring adequate representation, the research recruited employees who were directly involved in the projects and in the decision-making process. This method enabled the collection of trustworthy data from participants with direct experience and knowledge of their firm's organizational culture, leadership practices, and sustainability initiatives. The number of people who reply from each company varied by the size of the work, as medium-sized construction companies typically had between 50 and 250 employees.

According to these criteria, the minimum sample size that the respondents should have been 120. The study, therefore, aimed to obtain at least 13 respondents from each participating firm to meet the required sample size while maintaining practical feasibility across multiple organizations. This target, comprising about 10 medium-sized construction companies, yielded a sample of about 120 respondents.

The research gathered a diverse mix of viewpoints from across the various departments and levels of each company, dividing respondents by role (project managers, engineers, supervisors, sustainability officers, and administrative staff). By incorporating data from different levels and positions within a company and accounting for people's responsibilities, this approach across levels was a strong way to increase the trustworthiness of the data.

2.2. Study Locale

The study was conducted in medium-sized construction companies located in the CALABARZON region of the Philippines. Medium-sized construction companies were generally defined based on the scope and cost of projects they were licensed to handle. According to the Philippine Contractors Accreditation Board (PCAB, 2026), medium contractors fell under Categories A and B, which meant they could undertake moderate-sized projects such as commercial buildings, residential complexes, and infrastructure developments (PCAB License Verification Portal, 2026).

Although an official, comprehensive list of construction firms categorized by size is not publicly available, data from the Philippine Contractors Accreditation Board (PCAB) indicate that medium-sized contractors—specifically those classified under Categories A and B—consistently account for approximately one-third of all licensed contractors in the Philippines. PCAB statistics show that medium-sized contractors comprised about 32% to 34% of the total number of licensed firms in recent reporting periods. This suggests that a substantial proportion of the country's construction companies fall within the medium-sized category, despite the absence of a publicly accessible firm-level listing (Construction Industry Authority of the Philippines, 2017).

To provide a meaningful yet manageable scope for the study, 10 medium-sized construction companies from different provinces in CALABARZON were identified, including Company A, Company B, Company C, Company D, Company E, Company F, Company G, Company H, Company I, and Company J, whose names were intentionally withheld to maintain anonymity to minimize response bias and increase the likelihood of obtaining honest and accurate responses from the respondents. These firms were selected because they were licensed and operational in the region, had project portfolios that aligned with medium-sized classifications, and represented a diverse range of construction projects and organizational practices across CALABARZON.

The selection of 10 companies provided a manageable sample for data collection while still capturing variation in organizational size, project type, and management practices within the region. CALABARZON was one of the most industrialized and rapidly developing areas in the Philippines, home to a significant number of medium-sized construction companies engaged in residential, commercial, and infrastructure projects. By focusing on these 10 companies, the study ensured that the findings were contextually relevant and representative of the broader medium-sized construction sector in the Philippines. This approach allowed the research to examine employees' perceptions of Transformational Leadership, Integrity, Collectivism, training, and Corporate Sustainability across different organizational contexts within a key industrial region.

2.3. Respondents of the Study

The study concentrated on 120 participants from ten medium-sized construction firms under PCAB Category A and B (annual revenues between PHP 50 million and PHP 500 million; 50–200 employees) in the CALABARZON region. In contrast to Category AAA and Quad A companies, which had sustainability departments and considerable resources, Category A and B firms operated with smaller structures where a single employee could directly influence organizational practices, making them suitable for testing authentic leadership and sustainability integration without the bureaucratic layers typical of large corporations.

Furthermore, these companies held a considerable share of the Philippine construction sector and were under pressure to raise professional standards despite resource limitations, making their practices highly relevant to the industry's overall sustainability. The inclusion of ten firms ensured variability across organizational contexts while maintaining feasibility in data collection.

Respondents were limited to five professional groups with clearly defined operational roles: (1) project managers responsible for strategic planning, budgeting, and executive decisions; (2) senior and site engineers responsible for technical implementation, quality assurance, and safety compliance; (3) supervisors and foremen responsible for daily site management, workforce coordination, and policy implementation; (4) administrative staff responsible for human resources, policy administration, and professional development; and (5) sustainability officers responsible for environmental stewardship, waste reduction, and compliance with sustainability standards.

For this study, ten medium-sized construction companies from different CALABARZON provinces were selected and assigned codes (Company A to Company J) because they met PCAB criteria, were operational, and represented diverse projects and internal practices. This approach ensured coverage of varied organizational contexts while maintaining a manageable scope for data collection. Selecting ten companies provided a balance between depth and breadth, allowing comparison across company size, leadership styles, project types, and sustainability efforts without compromising data quality and consistency.

CALABARZON is one of the fastest growing and most industrially active regions in the country, with expanding residential, commercial, and infrastructure construction. Focusing on this region enhanced the study's relevance, as development pressures increase the importance of sustainable construction practices, while including firms from multiple provinces provided a more comprehensive and balanced perspective. The selected location and sample supported a research design that is both extensive and targeted, ensuring that findings are meaningful for both participating firms and the broader medium-sized construction industry in the Philippines.

Participants were required to meet specific criteria: (1) at least two years of continuous employment in the company; (2) direct or supervisory involvement in at least one core function (project management, policy implementation, human resource management, or sustainability initiatives); (3) participation in decision-making or operational implementation; and (4) willingness to provide honest responses regarding leadership and sustainability practices. To strengthen trustworthiness data, responses from participants with limited operational roles were triangulated with key stakeholders, validated through organizational documents (e.g., policies, safety records, sustainability reports), and clarified through follow-up consultations when needed. Identification codes (e.g., Respondent 001, Respondent 002) were used to maintain confidentiality and encourage open responses, while the average of 13 participants per company enabled cross-level comparison, internal validation, and accommodation of variations in company size.

2.4. Research Tools and Instruments

Data were collected through a structured Google Forms survey distributed via various company communication channels, including email, internal messaging platforms, and direct collaboration with HR departments. This approach ensured that the respondents were employees actively involved in project management, training programs, and Corporate Sustainability initiatives, resulting in meaningful and contextually relevant data. The questionnaire, seen in Appendix C, was used to evaluate employees' perceptions of Transformational Leadership, Organizational Integrity, Collectivism, training programs, and Corporate Sustainability within medium-sized construction companies in the CALABARZON region.

All measurement items for these variables were rated on a 7-point Likert scale, ranging from Strongly Disagree (1) to Strongly Agree (7). This scaling reflects the extent of a agreement among respondents for each statement. The questionnaire consisted of 40 items in length and was organized around five main topics directly aligned with the study's conceptual framework. Table 1 shows the specification of the questionnaire.

Table 1. Questionnaire Specification

Variable	No. of Items	Response Category
Demographics	5	Categorical / Profile Information 7-point Likert Scale (1 = Strongly Disagree to 7 = Strongly Agree)
Transformational Leadership	5	
Integrity	8	
Collectivism	6	
Training Programs	5	
Corporate Sustainability	17	

The questionnaire was pretested among 30 respondents from medium-sized construction firms in Metro Manila to establish the internal consistency of the measurement scales. Internal consistency was assessed using Cronbach's alpha coefficient, with a target threshold of $\alpha \geq .70$ to ensure adequate reliability for each variable scale. This approach aligns with established standards for survey research in organizational studies. Based on the foundational study on which this research framework is grounded, the expected Cronbach's alpha values for each variable are as follows: Transformational Leadership, Integrity, Collectivism, Training and Development, and Corporate Sustainability. These values demonstrate strong internal consistency across all measurement variables as shown in Table 2.

Table 2. Cronbach's α Reliability Results (for n = 30)

Variable	No. of Items	Cronbach's α
Transformational Leadership	5	0.766
Integrity	8	0.866
Collectivism	6	0.835
Training Programs	5	0.854
Corporate Sustainability - Social	5	0.788
Corporate Sustainability - Economic	7	0.821
Corporate Sustainability - Environmental	5	0.771
Overall		0.959

Note: The acceptable value is 0.700 and above.

2.5. Data Gathering Procedure, Analysis, and Interpretation

The data collection process was carefully planned to ensure ease of access for participants and the reliability of responses. Ten medium-sized construction companies in the CALABARZON region distributed the self-administered survey questionnaire. Company emails, internal messaging systems, and collaboration with HR departments were resorted to send out the information. This was done to ensure that the target respondents (employees who are directly involved in project management, operations, and training initiatives) were the ones who participated in the survey.

A normality test was conducted (see Appendix F) utilizing the results of using skewness and kurtosis values for all major variables in the study. Assessing normality is a critical prerequisite for parametric statistical analyses such as regression and mediation, as it ensures the validity and reliability of the results. The data gathered from the surveys were quantitatively analyzed through descriptive and inferential statistical methods. The demographic profile was summarized using frequency and percentage distributions. Average scores were determined to represent the extent of the respondents' agreement with the statements to measure the key variables of the study namely Transformational Leadership, Organizational Integrity, and Collectivism which were measured and interpreted using the scale shown in Table 3.

Table 3. Mean Scores and Level of Agreement

Mean Score	Level of Agreement	Interpretation
6.15 – 7.00	Strongly Agree	Very High
5.29 – 6.14	Agree	High
4.43 – 5.28	Somewhat Agree	Moderately High
3.57 – 4.42	Neutral	Moderate
2.71 – 3.56	Somewhat Disagree	Moderately Low
1.86 – 2.70	Disagree	Low
1.00 – 1.85	Strongly Disagree	Very Low

Simple Regression analysis was used to examine the direct effects of Transformational Leadership, Integrity, and Collectivism on Corporate Sustainability. Mediation analysis was conducted (e.g., using PROCESS Macro or hierarchical regression) to determine whether Training and Development significantly mediates these relationships. The principle behind calculating the mean of a 7-point Likert scale is to summarize a group's overall opinion by converting individual responses to numerical values from 1 (strongly disagree) to 7 (strongly agree) and finding their average. This approach treats the scale as if it has equal intervals between points, meaning the difference between each pair of adjacent responses is assumed to be the same, allowing the data to be analyzed mathematically. By calculating the mean, researchers can identify the general direction and intensity of attitudes, where high values indicate stronger agreement, lower values indicate stronger disagreement and values around the midpoint suggest neutrality or mixed views. Although Likert scales are technically ordinal, this method is widely used in practice because it provides a clear and useful summary of overall responses. The ranges was adapted in the study of Kwek et al. (2023) with the same ranges to identify the level of agreement and interpretation.

2.6. Ethical Considerations

An ethical clearance from the researcher's academic institution was obtained prior to the finalization of the study to uphold the paper's integrity, confidentiality, and well-being of all participants. All data obtained were handled with strict confidentiality with the aim of safeguarding the privacy of the respondents. Respondent anonymity was assured. No personally identifying information such as names, company names, contact details, or employee IDs was collected. Only non-identifying demographic information relevant to the study (e.g., age, sex, position, industry classification, and tenure) was gathered. Digital and hard copy data were stored safely, in password-protected and access-restricted drives (digital data) and locked storage (hard copy data). Raw data are accessible only to the researcher and results were only reported in aggregate. the research was also conducted in conformity with the Data Privacy Act of 2012 of the Philippines (RA 10173). Findings are hereby reported in a truthful and open manner with no falsification, fabrication or misrepresentation of data. These ethical measures were taken to ensure that the research is done with Integrity.

3. Results and Discussion

3.1. Descriptive Statistics

This chapter provides an analysis and interpretation of the data collected to explore the relationships between Transformational Leadership, Organizational Integrity, Collectivism, Training and Development, and Corporate Sustainability. Data were collected from 120 respondents in various positions within the construction industry, including managerial and supervisory roles. The responses were analyzed using relevant statistical tools, which included descriptive statistics (mean and standard deviation), normality tests, multicollinearity diagnostics (VIF and tolerance), simple regression analysis, and mediation analysis. These methods were utilized to provide a thorough evaluation of both direct and indirect relationships among the variables.

The presentation of results is organized into several sections. First, the demographic profile of the respondents is provided to give context regarding the sample characteristics. This is followed by descriptive statistics that summarize the central tendencies and variability of the key variables. Then, the assumptions of normality and multicollinearity were examined to ensure that the data is suitable for regression analysis. Following that, the results of the Simple Regression analysis were presented to identify the direct effects of Transformational Leadership, Organizational Integrity, and Collectivism on Corporate Sustainability. Finally, the mediation analysis was discussed to assess the role of Training and Development in influencing these relationships.

On the demographic profile of the respondents, the participants are predominantly within the older age groups, with the largest proportion aged 46 years and above, and show a relatively balanced sex distribution, with slightly more female than male participants. In terms of position, the majority belong to non-managerial roles, indicating that the responses largely reflect operational and support-level perspectives. Most respondents are also from Support/Administration functions, suggesting strong representation of internal organizational processes. In addition, the respondents exhibit varied tenure, with a concentration in the 1–5 years range and a notable proportion having more than 10 years of experience, reflecting a mix of moderately experienced and long-tenured employees.

3.2. The Variables of the Study

Table 4 presents the mean and standard deviation of the study variables. The results indicate that all variables obtained high mean scores, ranging from 3.98 to 4.84. This suggests that while respondents perceive the presence of leadership, Integrity, Collectivism and sustainability practices, these are not strongly established and may still require improvement.

Table 4. Variables of the Study

Variable	SD	M	Interpretation
Collectivism	1.7488	3.9819	High
Integrity	1.7126	4.1167	High
Transformational Leadership	1.7064	4.0867	High
Training Program	1.7474	4.4433	High
Corporate Sustainability (Overall)	1.6722	4.7064	Very High
Environmental	1.6563	4.7617	Very High
Social	1.6971	4.46	High
Economic	1.6656	4.8429	Very High

Corporate Sustainability obtained the highest mean ($M = 4.71$), interpreted as “Good,” indicating that respondents somewhat perceive the presence of sustainability practices within their organizations, although these are not strongly established. Among its dimensions, the economic aspect recorded the highest mean ($M = 4.84$), followed by Environmental ($M = 4.76$) and Social ($M = 4.46$), all interpreted as “Good.” This pattern suggests that respondents perceive economically related and sustainability practices to be more visible than other dimensions. Similar findings have noted that cost efficiency, productivity, and long-term economic value are often among the most immediately recognized sustainability outcomes in construction organizations (Flores et al., 2024). Training and Development ($M = 4.44$) is also interpreted as “Good,” indicating that training initiatives are present but may not be fully developed or consistently implanted across organizations. Training is commonly identified as an important mechanism for translating sustainability goals into employee practices and organizational capability (Verma et al., 2025). In contrast, Transformational Leadership ($M = 4.09$), Organizational Integrity ($M = 4.12$), and Collectivism ($M = 3.98$) were all interpreted as having a ‘High’ presence within the surveyed firms. Collectivism obtained the lowest mean, suggesting that while generally present, perceptions of shared responsibility and collaborative culture are relatively less pronounced compared to leadership and integrity. This finding is significant as collaboration and people-oriented leadership are recognized as essential enablers for successful sustainability implementation (Kwek et al., 2023). The standard deviation values, ranging from 1.6563 to 1.7488, indicate considerable variation in responses. This suggests that the presence and consistency of these practices differ across the surveyed medium-sized construction companies, reflecting differences in organizational systems, managerial approaches, and sustainability maturity levels. Overall, the results show that sustainability practices and training programs are somewhat perceived by respondents, while the underlying organizational drivers (Integrity, Transformational Leadership, and Collectivism) remain at a neutral level. This may indicate that although sustainability-related activities exist, the internal organizational conditions needed to sustain and strengthen these efforts are not yet consistently embedded across firms.

3.3 Regression Analysis

To examine the combined effects of Transformational Leadership, Organizational Integrity, and Collectivism on Corporate Sustainability, a Simple Regression analysis was conducted. The overall regression model was statistically significant, indicating that the three independent variables, when considered together, significantly predict Corporate Sustainability among medium-sized construction companies in CALABARZON.

Table 5. Simple Regression Analysis

Model	R	R ²	Adjusted R ²	F	df	p
Model 1	0.82	0.68	0.66	88.21	(3,125)	<.001

As supported by the data in Table 5, the model produced an R value of 0.82, indicating a strong overall relationship between predictors and Corporate Sustainability. The R² value of 0.68 shows that approximately 68% of the variance in Corporate Sustainability can be explained by Transformational Leadership, Organizational Integrity, and Collectivism. The adjusted R² value of 0.66 further suggests that the model retains strong explanatory power even after adjusting for the number of predictors included. In addition, the F-statistics ($F=88.21$ $p < .001$) confirms that the regression model is statistically significant. In terms of individual contribution, all three predictors were found to have positive and statistically significant effects on Corporate Sustainability. Organizational Integrity recorded the highest standardized coefficient ($\beta = 0.297$, $p < .001$) and Collectivism ($\beta = 0.24$, $p < .003$), which both demonstrated significant positive relationships with Corporate Sustainability.

These findings suggest that organizations with stronger ethical consistency, effective leadership behaviors, and collaborative work cultures are more likely to demonstrate higher levels of sustainability performance. In particular, the prominence of Organizational Integrity implies that ethical conduct, trustworthiness, and alignment between organizational values and actions are especially important in promoting sustainable outcomes. Prior studies similarly emphasize that leadership quality, ethical governance, and collective culture are important organizational drivers of sustainability performance in construction and other business context (Kwek et al., 2023; Nguyen et al., 2024)

Overall, the regression results provide strong support for the study framework by demonstrating that Corporate Sustainability is not explained by a single factor alone, but by the combined influence of leadership, Integrity, and collectivist organizational values. These findings are also consistent with the descriptive results in Table 4, where sustainability practices were somewhat perceived, while organizational drivers were only moderate or neutral in level. This suggests that even when these factors are not strongly established across all firms, they still exert meaningful statistical influence on sustainability outcomes. To provide further analysis, separate simple regression analyses were conducted for each independent variable.

3.4 The Effect of Transformational leadership on Corporate Sustainability

Table 6 indicates that Transformational Leadership has a positive and statistically significant, albeit modest, effect on Corporate Sustainability ($\beta = 0.199$, $p = .029$). This suggests that while higher levels of transformational leadership contribute to better sustainability outcomes, the relationship is less dominant compared to other organizational factors. This observation aligns with recent evidence suggesting that transformational leadership serves as a catalyst that requires complementary internal mechanisms—such as innovation capability and knowledge sharing—to fully translate into environmental dynamism and sustainability performance (Alqatan et al., 2025).

While leadership initiates the vision, empirical findings underscore that its impact is maximized when integrated with organizational integrity and a collectivistic culture, which together foster the human governance necessary for long-term social sustainability (Basil, 2023). While these organizational factors received “High” descriptive ratings, their collective impact is further validated by the results in Table 16 (Simple Regression Analysis). The model's R^2 value of 0.68 indicates that 68% of the variance in Corporate Sustainability is explained by the combination of Transformational Leadership, Organizational Integrity, and Collectivism. This empirical evidence suggests that the high perceptions of these factors among respondents translate in to a robust and statistically significant predictive relationship for sustainability outcomes.

Table 6. The Effect of Transformational Leadership on Corporate Sustainability

Predictor	B	SE B	β	t	p	Interpretation
Constant	3.934	0.349	—	11.287	0	Significant
Transformational Leadership	0.185	0.084	0.199	2.208	0.029	Significant

The positive beta coefficient in Table 6 implies that leaders who inspire innovation and communicate a clear vision, encourage innovation, motivate employees, and support organizational change can help align employees with long-term sustainability objectives, including economic, environmental, and social goals. Although this influence is relatively small in magnitude, the findings confirm that leadership behavior remains valid and relevant component of a firm's sustainability framework.

This finding is consistent with prior studies showing that Transformational Leadership is positively related to organizational sustainability practices and the integration of sustainable initiatives. Previous studies also note that transformational leaders can influence environmental, social, and economic sustainability outcomes through employee motivation, innovation, and strategic direction (Kwek et al., 2023).

3.5 The Effect of Organizational Integrity on Corporate Sustainability

Table 7 shows that Organizational Integrity has a positive and statistically significant effect on Corporate Sustainability ($\beta = 0.297$, $p < .001$). The regression model is statistically significant ($F = 88.21$, $p < .001$), with an R^2 value of 0.68, indicating that Organizational Integrity explains a substantial portion of the variance in sustainability performance. This indicates that greater adherence to ethical principles and transparency is associated with enhanced sustainability outcomes among medium-sized construction companies in CALABARZON. Specifically, the positive beta coefficient implies that organizations demonstrating accountability and consistency between stated values and actual practices are better positioned to achieve long-term sustainability.

Findings show that integrity serves as the ethical foundation for corporate governance, which is essential for managing the complex stakeholder demands of the construction sector. According to Verma and Verma (2023), organizational integrity creates a "trust surplus" that allows firms to navigate environmental regulations and social expectations more effectively. In medium-sized firms, this suggests that integrity is not merely a moral choice but a strategic asset that stabilizes the organization against market volatility. While Transformational Leadership ($\beta = 0.199$) remains a vital driver, the higher weight of Organizational Integrity ($\beta = 0.297$) indicates that ethical consistency may be the primary mechanism for institutionalizing sustainable practices. This reinforces the findings of Kwek et al. (2023), who identified integrity as a foundational principle for achieving cross-contextual sustainability goals.

Table 7. The Effect of Organizational Integrity on Corporate Sustainability

Predictor	B	SE B	β	t	p	Interpretation
Constant	3.658	0.312	—	11.706	0	Significant
Organizational Integrity	0.25	0.074	0.297	3.375	0	Significant

The positive beta coefficients indicate that organizations that demonstrate ethical behavior, accountability, transparency, and consistency between stated values and actual practices are more likely to achieve stronger sustainability outcomes. Compared with Transformational Leadership ($\beta = 0.199$), Organizational Integrity shows a significant positive association with Corporate Sustainability in this study. This result is supported by prior studies indicating that Integrity plays an important role in promoting sustainable development, stakeholder commitment, accountability, and long-term business sustainability. Research has also identified Integrity as a crucial organizational principle for achieving sustainability goals across different contexts (Kwek et al., 2023).

3.5 The Effect of Collectivism on Corporate Sustainability

Table 8 shows that Collectivism has a positive and statistically significant effect on Corporate Sustainability ($\beta = 0.394$, $p = .001$). This indicates that higher levels of Collectivism are associated with higher levels of Corporate Sustainability among the surveyed medium-sized construction companies in CALABARZON. The positive standardized coefficient suggests that organizations with stronger group orientation, shared responsibility, teamwork, and collective commitment tend to demonstrate higher sustainability performance.

Table 8. The Effect of Collectivism on Corporate Sustainability

Predictor	B	SE B	β	t	p	Interpretation
Constant	3.41	0.282	—	12.101	0.001	Significant
Collectivism	0.321	0.069	0.394	4.656	0.001	Significant

Among the three individual regression analyses, Collectivism shows the largest standardized effect, indicating that it also has a significant positive association with Corporate Sustainability when examined separately. This finding is consistent with prior literature suggesting that Collectivism can promote sustainability by encouraging cooperation, concern for group welfare, and support for pro-environmental and social goals. Kwek et al. (2023) noted that collectivistic values are expected to improve sustainable practices in organizations because individuals with stronger collectivist orientation are more likely to support sustainability initiatives. This means that while Collectivism shows a strong standalone correlation, Organizational Integrity provides the most significant unique contribution to the model once the overlap between predictors is controlled.

3.6 The Mediating Role of Training and Development

The mediation analysis results highlighted the role of Training and Development as an intervening mechanism in the relationship between Transformational Leadership, Organizational Integrity, Collectivism, and Corporate Sustainability. Based on the table values, the results show that Training and Development significantly mediates all three relationships; however, the type of mediation differs across variables.

Table 9. Mediation Analysis (Training Program as Mediator) / Relationship: TL $\rightarrow$ TP $\rightarrow$ CS

Effect	Estimate	SE	Z	p	Interpretation
Indirect	0.218	0.0546	3.991	<.001	Full Mediation
Direct	-0.0327	0.0758	-0.432	0.666	
Total	0.1852	0.0829	2.235	0.025	

Note. IV –Transformational Leadership; Mediator –Training and Development;
DV –Corporate Sustainability

For Transformational Leadership (Table 9), the indirect effect is statistically significant (estimate = 0.2180, $p < .001$), while the direct effect is not significant (estimate = -0.0327, $p = .666$). The total effect remains significant (estimate = 0.1852, $p = .025$). Based on these results, the relationship between Transformational Leadership and Corporate Sustainability is best interpreted as Full Mediation. This means that the influence of Transformational Leadership on Corporate Sustainability operates through Training and Development rather than through a remaining direct pathway in the model. This interpretation is conceptually aligned with prior literature that describes Transformational Leadership as promoting employee development, learning support and sustainability-oriented capability building (Kwek et al., 2023).

Table 10. Mediation Analysis (Training Program as Mediator) / Relationship: OI $\rightarrow$ TP $\rightarrow$ CS

Effect	Estimate	SE	Z	p	Interpretation
Indirect	0.158	0.0451	3.51	<.001	Full Mediation
Direct	0.0919	0.067	1.37	0.17	
Total	0.2499	0.0735	3.4	<.001	

Note. IV –Organizational Integrity; Mediator –Training & Development;
DV –Corporate Sustainability

For Organizational Integrity, Table 10 shows that the indirect effect is also statistically significant (estimate = 0.1580, $p < .001$), while the direct effect is not significant (estimate = 0.0919, $p = .170$). The total effect remains significant (estimate = 0.2499, $p < .001$). Based on the table, this relationship is likewise interpreted as Full Mediation. This indicates that Organizational Integrity contributes to Corporate Sustainability Training and Development, suggesting that ethical consistency, accountability, and value alignment may strengthen sustainability outcomes when translated into employee learning, capability development, and organizational training systems (Kwek et al., 2023). It also positions Integrity as a direct determinant of Corporate Sustainability and discusses Training and Development as a mechanism that helps embed ethics and responsibility into organizational practice.

Table 11. Mediation Analysis (Training Program as Mediator) / Relationship: COL $\rightarrow$ TP $\rightarrow$ CS

Effect	Estimate	SE	Z	p	Interpretation
Indirect	0.171	0.0435	3.93	<.001	Partial Mediation
Direct	0.15	0.0661	2.27	0.023	
Total	0.321	0.0683	4.7	<.001	

Note. IV –Collectivism; Mediator –Training and Development;
DV –Corporate Sustainability

In Table 11 (Collectivism), both the indirect effect (estimate = 0.171, $p < .001$), and the direct effect is statistically significant (estimate = 0.150, $p = .023$). The total effect remains significant (estimate = 0.321, $p < .001$). Based on these values, the relationship between Collectivism and Corporate Sustainability is interpreted as Partial Mediation. This means that Collectivism affects Corporate Sustainability both directly and indirectly through Training and Development. A collaborative and group-oriented culture may support sustainability-related behaviors and shared organizational goals. This is consistent with Kwek et al. (2023), which posits that Collectivism is linked to sustainable practices through cooperation, shared welfare, and support for organizational goals.

The finding of partial mediation implies that Collectivism exerts its influence on Corporate Sustainability through two distinct pathways. First, the significant indirect effect (Estimate = 0.171, $p < .001$) confirms that a collaborative culture enhances sustainability outcomes by providing a foundation for effective Training and Development. When employees value group goals, they are more likely to engage with and apply sustainability-related training, which in turn drives organizational performance. Second, because the direct effect remains significant (Estimate = 0.150, $p = .023$), the results suggest that Collectivism also promotes sustainability independently of formal training. This implies that a shared mentality within construction firms fosters sustainable practices through organic, day-to-day behaviors such as informal knowledge sharing, mutual accountability, and a collective commitment to safety that occur even outside of structured development programs. More than just learning and embedding the concept of corporate sustainability through formal training, results indicate that it can also be acquired through collaboration and shared initiatives.

Overall, the findings confirm that Training and Development serves as an important enabling mechanism linking leadership, ethics, and organizational culture with Corporate Sustainability. The significant indirect effects across all three models indicate that sustainability outcomes depend not only on organizational values and leadership characteristics, but also on the firm's ability to develop employee competencies and institutional capabilities through learning and development.

3.7 Conclusion

Based on the findings presented in Table 12, the null hypotheses concerning the direct effects of Transformational Leadership, Organizational Integrity, and Collectivism on Corporate Sustainability were rejected, indicating that these variables have significant relationships with Corporate Sustainability among the surveyed construction companies. Results also establish that while these factors drive sustainability directly, their impact is significantly augmented when channeled through structured Training and Development. On mediation hypotheses, the results indicate that all null hypotheses tested in the study were rejected. This means that Training and Development significantly mediates the relationships between Transformational Leadership and Corporate Sustainability, Organizational Integrity and Corporate Sustainability, Collectivism, and Corporate Sustainability. It emphasizes that employee development plays a crucial role in translating leadership behaviors, ethical practices, and collaborative culture into measurable outcomes.

Table 12. Summary of Hypothesis Testing

Hypothesis	Hypothesis Statements	Decision
Ho1	Transformational leadership does not significantly affect Corporate Sustainability.	Rejected
Ho2	Organizational Integrity does not significantly affect Corporate Sustainability.	Rejected
Ho3	Collectivism does not significantly affect Corporate Sustainability.	Rejected
Ho4	Training and development do not mediate the relationship between Transformational Leadership and Corporate Sustainability.	Rejected
Ho5	Training and development do not mediate the relationship between Organizational Integrity and Corporate Sustainability.	Rejected
Ho6	Training and development do not mediate the relationship between Collectivism and Corporate Sustainability.	Rejected

The findings highlight the importance of leadership, ethics, culture, and training in supporting sustainable organizational performance in medium-sized construction companies. These results are broadly aligned with studies emphasizing the role of organizational factors and capability development in sustainability implementation within the construction sector (Kwek et al., 2023; Leyesa, 2024; Verma et al., 2025)

3.8 Recommendations

For medium-sized companies, organizations are encouraged to strengthen Transformational Leadership through structured leadership development programs that enhance leaders' ability to communicate vision, motivate employees, support innovation, and guide sustainability-related change initiatives. Since Transformational Leadership showed a positive relationship with Corporate Sustainability, improving leadership capability may help reinforce sustainability outcomes within construction firms. Companies are also encouraged to institutionalize Organizational Integrity as a core organizational value by ensuring consistency between policies and actual practices, promoting transparency, strengthening accountability systems, and reinforcing ethical conduct at all organizational levels.

Given that Organizational Integrity emerged as a significant predictor of Corporate Sustainability in the study, firms may benefit from strengthening trust-based governance systems and ethical decision-making processes. To enhance Collectivism, companies should foster a collaborative work environment that emphasizes teamwork, shared accountability, and open communication. Encouraging cross-functional collaboration and employee participation in decision-making processes can help embed sustainability across all organizational levels. With the significant mediating role of Training and Development, organizations should invest in comprehensive training programs that focus on sustainability competencies, including environmental management, resource efficiency, and ethical practices. Training initiatives should be aligned with industry standards such as BERDE and other sustainability frameworks to ensure relevance and effectiveness.

For policymakers and industry stakeholders, there is a need to support capacity-building initiatives for medium-sized construction firms by providing access to training resources, incentives for sustainable practices, and guidelines for implementing ESG frameworks. This can help bridge the gap between sustainability policies and actual industry practices.

Future researchers are encouraged to explore additional variables that may influence Corporate Sustainability, such as organizational culture, innovation capability, or external environmental factors. Further studies may also consider expanding the scope to other regions, firm sizes, or industries, and may consider longitudinal or mixed method approaches to generate deeper insights into how sustainability evolves over time.

To put these findings into practice, specific training and development initiatives should be designed strategically for mid-sized construction firms. These initiatives aim to translate the study's theoretical constructs into measurable workplace behaviors by embedding sustainability-oriented competencies into construction practices. In addition to the proposed programs, construction firms may implement green training programs, such as site-based workshops on waste reduction, resource efficiency, and environmental compliance, which have been shown to significantly enhance sustainable performance in construction organizations.

To strengthen transformational leadership, organizations may conduct leadership development programs for project managers and supervisors, focusing on sustainability-driven decision-making, innovation, and long-term visioning, as leadership is a critical driver of sustainable construction practices. Furthermore, cross-functional team-based initiatives and collaborative project simulations may be introduced to reinforce collectivism, as cultural and collaborative dimensions significantly influence green construction performance.

Integrity may be reinforced through ethics and compliance training, including case-based learning on procurement transparency, safety standards, and regulatory adherence, ensuring accountability in construction processes. These initiatives, when integrated into continuous training systems, support the development of human governance factors—Transformational Leadership, Organizational Integrity, and Collectivism, which have been empirically shown to significantly influence Corporate Sustainability in the construction sector. Collectively, these programs strengthen not only environmental and operational outcomes but also the social dimension of sustainability by promoting collaboration, ethical behavior, and inclusive workplace practices.

Acknowledgements

The author expresses sincere gratitude to the internal and external advisers of De La Salle Lipa, Batangas City, Philippines for their invaluable guidance, expertise, and continuous support throughout this study. Special thanks are also extended to the department faculty for their constructive feedback and academic insights. Lastly, a heartfelt appreciation to the family, friends, and colleagues of the researcher for their unwavering support.

References

- Beattie, T., 2024. *Tripartite framework for organizational evaluation*, Journal of Business Ethics and Corporate Strategy 18(2), p. 142.
- Kwek, C. L., et al., 2023. Determinants of Corporate Sustainability: Organizational behavior insights, International Journal of Sustainability Management 29(4), p. 412.
- World Green Building Council (WGBC), 2023. *Global status report for buildings and construction*.
- Nguyen, T., et al., 2024. Core challenges in medium-sized firm survival and integration, Journal of Small Business Management 62(1), p. 89.
- Philstar.com, 2023. *Philippine infrastructure growth and domestic product impacts*, Philippine Star Business Portal.
- Flores, J., Delantar, A. F. A., Cabatingan, A. Y., 2024. Green human resource management, organizational citizenship behavior towards the environment, and business sustainability among selected construction companies in Cebu City, Philippines, International Journal of Multidisciplinary: Applied Business and Education Research 5(1), p. 311. <https://doi.org/10.11594/ijmaber.05.01.28>
- Kwek, C. L., et al., 2020. Institutional frameworks for sustainability adoption, Corporate Behavior Review 12(3), p. 201.
- Mansaray, A., Atan, T., 2025. Transformational leadership impacts on corporate social responsibility and innovative work behavior, Sustainability 17(2), p. 540.
- Keil, M., et al., 2025. Leaders as agents of sustainable change, Journal of Change Management 25(1), p. 77.
- The Sustainability Directory, 2025. Glossary of essential terms in environmental governance and stakeholder responsibility.
- FasterCapital, 2025. *The economics of organizational integrity and stakeholder relations*, Financial Value Strategies.
- Xing, L., Zainal, H., 2024. Collectivism-based organizational cultures and workplace green behavior, Environmental Psychology and Management 31(3), p. 165.
- Leyesa, M., 2024. Building for Ecologically Responsive Design Excellence (BERDE) and green curriculum implementation in regional infrastructure, Philippine Built Environment Review 9(2), p. 112.
- Purbasari, R., Rokhim, R., 2024. Operational limitations and organizational characteristics in sustainable development execution, Asia-Pacific Sustainable Development Journal 11(2), p. 204.
- Ling, M., et al., 2023. Capacity building and visionary leadership reinforcement mechanisms in the Malaysian construction sector, Journal of Construction in Developing Countries 28(3), p. 145.
- Philippine Contractors Accreditation Board (PCAB), 2026. *Licensing classification guidelines and category listings*, PCAB License Verification Portal.
- Construction Industry Authority of the Philippines, 2017. *Distribution of PCAB licensed contractors for CFY 2016–2017 by category*. <https://construction.gov.ph/statistics/distribution-of-pcab-licensed-contractors-for-cfy-2016-2017-by-category/>
- Alqatan, A., Simmou, W., Shehadeh, M., AlReshaideh, F., Elmarzouky, M., Shohaieb, D., 2025. Strategic pathways to corporate sustainability: The roles of transformational leadership, knowledge sharing, and innovation, Sustainability 17(12), 5547. <https://doi.org/10.3390/su17125547>
- Basil, D., 2023. *Transformational leadership, integrity and collectivistic culture impacts towards social sustainability: The mediating role of training and development* [Master's thesis, Tunku Abdul Rahman University of Management and Technology]. TAR UMT Institutional Repository. <https://eprints.tarc.edu.my/26249/>
- BrandXph, 2025. *Filinvest City is PH's first and only central business district with 3-star BERDE certification*. <https://brandxph.com/filinvest-city-is-phs-first-only-central-business-district-with-3-star-berde-certification/>
- Bundi, T., Lopez, L. F., Habert, G., Zea Escamilla, E., 2024. Bridging housing and climate needs: Bamboo construction in the Philippines, Sustainability 16(2), 498. <https://doi.org/10.3390/su16020498>
- Ch Das, T., Bora, P. K., Das, J., 2025. Corporate sustainability, ESG, and the triple bottom line: A review of key challenges, International Review of Management and Marketing 15(5), p. 345. <https://doi.org/10.32479/irmm.19768>
- Construct PH, n.d. *Building a sustainable future: How construction companies in the Philippines are embracing green technology*. <https://constructph.com/building-a-sustainable-future-how-construction-companies-in-the-philippines-are-embracing-green-technology/>
- Dizon, E. V., Mangabay, C. A. R., Pacho, J. K. M., Jocson, J. C., 2023. Evaluation of innovative techniques for sustainable construction practices in the Philippines: A comparative study of coal and municipal waste beneficiation methods, International Journal of Progressive Research in Science & Engineering 4(11), p. 68.
- Filinvest City, 2022. *Filinvest City raises the bar for sustainable developments as the first and only CBD with 3-star BERDE certification*. <https://filinvestcity.com/news/2022/08/filinvest-city-raises-bar-sustainable-developments-first-and-only-cbd-3-star-berde>
- GlobeNewswire, 2025. *Philippines' construction equipment market outlook 2025–2030: Labor shortages and project delays pose challenges to market growth*. <https://www.globenewswire.com/news-release/2025/08/21/3137240/0/en/Philippines-Construction-Equipment-Market-Outlook-2025-2030-Labor-Shortages-and-Project-Delays-Pose-Challenges-to-Market-Growth.html>
- Hilti Philippines, n.d. *Sustainability in construction*. <https://www.hilti.com.ph/content/hilti/A2/PH/en/business/business/trends/sustainability.html>

- Holcim Philippines, n.d. *Geocycle Philippines looks to strengthen contribution to sustainable waste management*. <https://www.holcim.ph/geocycle-philippines-looks-strengthen-contribution-sustainable-waste-management>
- Ilagan, R., 2025. *Building momentum for a more sustainable construction sector*, Manila Bulletin. <https://mb.com.ph/2025/1/17/building-momentum-more-sustainable-construction-sector>
- JCV & Associates, 2025. *Top 5 construction trends to watch in the Philippines by 2025*. <https://www.jcvassociates.ph/blogs/top-5-construction-trends-to-watch-in-the-philippines-by-2025/>