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A Systematic review of Leadership Development in the Ghanaian Construction Industry

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Abstract

In recent times, the nexus between construction and leadership has become even stronger. Construction is seen as a major vehicle for pursuing sustainable development goals. Leadership training is essential in the construction sector for a variety of reasons. While the construction industry in Ghana is a widely researched topic in the literature, relatively little effort has been given to exploring the leadership development dimensions of the phenomenon. A comprehensive analysis of the relevant literature was carried out on existing literature on leadership development in the Ghanaian construction industry. With the help of a multi-layered hierarchical iterative method, it conducted a search of important databases and conducted a thematic analysis of each of the papers that fit the inclusion criteria. It emerged from the analysis of the twelve documents that fit the inclusion criteria that the existing Ghanaian literature on the subject revolves around three key themes within the construction literature, namely, the role of leadership development, the types of leadership, and the importance of leadership in construction operations. The majority of the studies focused on the theme of leadership development, with the least being the types of leadership. The implications of these themes for the broader literature are discussed.

Keywords: Construction, leadership development, Ghana, leadership styles



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Introduction

Despite being one of the oldest activities, the construction industry has recently become perhaps more central to human affairs than ever before (Wu, 2019). In recent times, particularly in the last decade, construction has found expression in the discourse on development and, in several ways, has almost become synonymous with development. An assessment of the Sustainable Development Goals shows a clear representation of construction in Sustainable Development Goal 9 (Industry, Innovation, and Infrastructure), but it is also patently present in several other Sustainable Development Goals. Goal 4, for example, (Quality Education for All) cannot be achieved without the creation and expansion of physical learning spaces to create access for students and pupils. Goals 3 (good health and well-being), 6 (clean water and sanitation), 7 (affordable and clean energy), and 11 (sustainable cities and communities) are all motivated in the same way. Hence, in some sense, and very much so in the context of developing countries, development means construction and vice versa. (Ofori & Toor, 2021). Aside from its almost symbiotic relationship with development, the construction industry is critical to every nation for a myriad of readily-fathomable reasons, such as jobs and economic growth. The construction sector makes a substantial contribution to the economic and social growth of a nation. Construction is Ghana's second-largest contributor to GDP, accounting for 13.7 percent, trailing only agriculture (Boadu et al., 2020). As a result, it is not surprising that academics are interested in the construction business. A cursory Google-indexed search shows that there are more than 100 academic journals on the construction industry alone, and it is no exaggeration to indicate that producing an estimate of the number of scholarly pieces on the subject is simply impossible owing to the sheer number of publications turned out each year.

Leadership is important in every sphere of life, and in construction, it becomes even more imperative for three reasons. The first relates to the fact that construction is almost synonymous with development, a point that has already been exhaustively explained. Secondly, the peculiar nature of the construction industry makes leadership a critical ingredient of success in the field. According to Ofori and Toor (2012), the unique features of construction, such as the huge expense, diverse clientele, wide scope and range of operations, and long length of time such as projects span, make the call for leadership urgent. The third reason for which leadership is critical in the construction industry pertains to its implications for safety. Construction work, and by extension, the construction industry, is dangerous by default and fraught with many injuries and even fatalities (Grill et al., 2019). Thus, leadership in such an undertaking is critical to the preservation of human life. This recognition of construction as a key vehicle for sustainable development, as well as its well-documented central role in any country's life, community, or business, places an even greater imperative on leadership. For these and many other reasons, one would have expected an abundance of scholarly interest; however, the opposite is true, especially in the context of Africa, and by extension, Ghana, Ofori, and Toor (2021) acknowledge a gradual increase in scholarly interest in the subject but



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still bemoan the general paucity of literature on leadership development in the construction sector, indicating that there is still a gap in leadership studies in the construction industry, especially in developing countries.

Starting with pioneering work by Ofori (1989) and Ahadzi (2007), Ghana's construction industry has been comprehensively researched through the years from different perspectives. Nonetheless, a scan of the extant literature suggests two deficits. The first is that in Ghana's construction industry, few insights into the understanding and practices of leadership development are available. There is a general, relative underrepresentation of studies focusing on leadership within the broad construction literature on Ghana. Secondly, there is an absence of a contemporary study that provides a synthesis of the available literature on the matter. But, as Tranfield et al. (2003) aver, it becomes imperative to undertake some form of summary so that the knowledge becomes properly organised and documented.A key critique of the 'traditional literature is that it lacks structure, exhaustiveness, and transparency. As Mallet et al. (2012) opine, systematic reviews afford the authors the ability to conduct deeper, well-structured searches of the literature rather than the 'cursory' searches that are undertaken in traditional reviews. Systematic reviews have always been used in the field of medical research but are only recently becoming widespread in humanities research (Hiebl, 2021). This article is cast in the form of a systematic review and sets out to undertake a systematic review of the previously published material on leadership in Ghana's construction sector over the last few decades with the aim of providing an organised thematic summary of the knowledge produced so far in the area. The study is driven by two key research questions: What does the existing literature say about leadership development in Ghana's construction industry? And what themes emerge from the analysis of the existing literature? The paper ends by identifying knowledge gaps and proposing new frontiers to be chartered in the enterprise of researching the country's construction industry.

Literature Review

An overview of the general leadership in construction literature

During the 1990s, the majority of leadership studies in the construction industry focused on leadership style, traits, and behaviours (Rowlinson et al., 1993; Muir & Langford, 1994; Zimmerer & Yasin, 1998; Dulaimi et al., 2005). Transformational leadership (Chan & Chan, 2005), power dynamics (Liu & Fang, 2006), intercultural communication (Toor & Ogunlana, 2008), emotional intelligence in leaders, and leadership development (Skipper & Bell, 2006) are some of the topics that have become the focus of construction leadership studies in the past decade. Several studies are continuously being conducted on the issue of leadership styles, personality traits, and behaviours in the construction industry (Songer et al., 2006; Wong, 2007). Questions have been raised (e.g., Abdelhaleem & Seymour, 1995) about the degree to which models of leadership developed in other disciplines are useful when applied in the construction industry. Nonetheless, the literature is unequivocal in its assessment



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of the significance of leadership in the construction industry. According to Ofori and Toor (2012), effective leadership is a critical but lacking component in the construction industry in developing countries. They further argue that effective leadership in construction is more needed in developing countries because of the long-term implications it has for such nations and their citizens. Leadership is a skill that is essential in every aspect of human endeavour. The building process as a whole, as well as individual construction projects, make effective leadership even more important. Construction projects are costly and difficult technically, and the project teams are broad and diversified to accommodate these challenges (Ofori and Toor, 2012). Leadership is one of the primary factors that contribute to the success of a company, and one might argue that leadership is of even greater significance in the construction sector than in the vast majority of other types of industries. Due to the unpredictability of the external environment in which construction organisations operate, effective leadership and management have evolved from the status of mere buzzwords to that of an absolute requirement (Kouzes & Posner, 2007). According to Odusami et al. (2003), the absence of a focus on leadership is not only a problem in practice but also in academic research.

Leadership and the construction industry; The 4Ss

The literature uncovers four major reasons why leadership is important in the construction industry, which are summarized in the 4Ss: safety, success, sustainability, and size. The first has to do with safety. Construction has always been known as a rough and steady industry (Abdelhaleem & Seymour, 1995) because it has a high risk factor in terms of injuries and other occupational hazards. A Eurostat (2017) report indicates that more than one-fifth of all occupational injuries happen in the construction industry. Consequently, leadership is critical to avoiding risk (Grill et al., 2019). According to Grill et al. (2019), leadership is responsible for reducing injuries as a moderating factor. Similar findings have been made by Pilbeam et al. (2012). In the words of Grill et al. (2019), leadership is an important component of effective safety. Finally, the projects and the finished product have serious implications for the workers' and the general public's health and safety. Another reason that leadership is important is that it helps construction projects succeed. Amirali (2016) asserts that a project's ability to succeed hinges on the presence of strong leadership within the team. According to Ofori (2000), the key to success in businesses is no longer repeating yesterday's procedures or doing them marginally more effectively. Instead, he recommends that significant adjustments be made to company procedures, methods, and leadership capabilities. According to Alkahtani (2015), the leader's choice of desirable behaviour is an essential component for the achievement of organisational success in terms of the timely delivery of the project. Oyetunji et al. (2019) discovered a positive linear correlation between leadership and construction worker performance in a study conducted in Nigeria. Their research went on to identify relationships between the type of leadership and the outcomes of construction projects, and they came to the conclusion that the success and quality of construction projects, as well as their timely delivery, are dependent, among other things,



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on the leadership qualities of the project manager. Leadership skills are very important to project success and, in some cases, can even be a substitute for technical deficiencies. (Mascarenhas-Mateus; 2020; Jones 2022)

In the construction sector, business and project failures are widespread. According to numerous studies from both developed and developing countries (Jannadi, 1997; Enshassi et al., 2006). These mishaps have been blamed on a variety of factors. According to Bjeirmi et al. (2007) findings, the construction industry in the United Kingdom has been subjected to criticism for a very long time due to its fragmentation as well as its track record on quality, waste, financial claims, and efficiency. As a result of improper procurement practices, the construction process has been criticized for its lack of communication and transparency. Inadequate procurement systems, lack of resources, design and construction discrepancies, insufficient project management practices, variation orders, communication gaps, cultural issues, and differences in the interests of the participants are among the major issues confronting Thailand construction projects (Toor & Ogunlana 2008). Abdul-Rahman et al. (2007) discovered that in Malaysia, the quality of management for contractors working on public design-and-build projects was inadequate. This situation was exacerbated by budget constraints, time constraints, client complexity, poor communication, and design variations. According to Davidson and Maguire (2003), the leading ten reasons for the failure of construction companies in the United States are as follows: rapid growth; work in new geographic regions; an increase in the size of single jobs; new types of work; high employee turnover; insufficient capitalization; poor estimations; poor accounting systems; and poor cash flow. Similar issues, such as frequent delays, cost overruns, insufficient quality, and inadequate safety, were identified by Pires et al. (2007) in Portugal. These issues have made the industry less competitive. The following factors, according to their survey, contribute to such issues: design and client responsibilities, insufficient construction management, and insufficient specific training. According to numerous studies, leadership is even more important in construction (Odusami, 2002; Long et al., 2004). For example, Thamhain (2003) emphasized the importance of the leader in creating a supportive work environment for project participants. Whether a project succeeds or fails is strongly dependent on the project leader, according to Munns and Bjeirmi (1996). Chinyio and Vogwell (2007) discovered that effective leadership among a construction project's many stakeholders can help align their goals and avoid conflict.

Closely linked to success is the third's' importance, which relates to sustainability. The literature posits a clear association between leadership style and the sustainability of projects. Numerous studies, including Archer et al. (2010), Wang et al. (2019), and Zhao et al. (2021), have discovered a positive relationship between construction site managers' leadership abilities and project sustainability. All of these studies argued that the project manager's leadership abilities are critical determinants of project success. It has mostly been found empirically (e.g., Scott-Young et al., 2019; Iqbal et al., 2020) that a higher level of



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psychological empowerment will result in a higher indirect influence of sustainable leadership on sustainable performance through organisational learning. Finally, size (the fourth S) is a key reason the literature adduces for leadership being important in the construction industry. The central hypothesis in the literature is centred on the fact that the sheer size and diversity within and among construction require good leadership to ensure success. Construction projects tend to be vast and complex, requiring a wide range of specialized skills and knowledge. There are many different construction disciplines represented on these huge teams, which need strong leadership in the sector (Hillebrandt, 2000; Mascarenhas-Mateus, 2020). Furthermore, today's projects are typically expensive, and a country's savings are heavily reliant on its building stock (Jones, 2022). As a result, the quality of the finished product is critical. In general, the completion of projects can take a significant amount of time and include a large number of distinct activities, both of which contribute to a rise in the number of time-related hazards as well as complications in communication, coordination, and risk management (Oyetunji et al., 2019). The construction industry, therefore, has a need for effective leadership to manage the sheer size and diversity as well as the multiplicity of problems outlined.

Leadership styles in the construction industry

Leadership styles have also been considered in the literature in this regard. Leadership styles are defined by how people engage with the people they want to lead. Some of the leadership styles categorized are autocratic leadership, democratic leadership, transformational leadership, and transactional leadership (Price, 2009). Autocratic leaders tell others what to do and then expect them to do it. Although it may be effective in certain circumstances and in the short run, it is not effective in the long run. Democratic leaders are those who make final decisions after consulting with the people they lead and seeking consensus (Bartol et al., 2003). Critics of this approach argue that popular decisions are not necessarily the best ones to make and, hence, may fail to achieve the intended outcome. Transformational leaders, on the other hand, offer their team members the freedom to make their own judgements based on the knowledge they have and have limited influence over the decision-making process. Although this is a time-consuming procedure, it is successful when the members of the team have a strong dedication to the accomplishments of the firm. Transactional leaders are goaloriented leaders who want their team members to be entirely focused on the work at hand. These leaders have very high expectations for their team members. These leaders also believe in rewarding their employees. Opponents argue that this leadership style is too narrowly focused and frequently focuses on the wrong issues (Bartol et al., 2003). To this end, it is commonly considered that a leader's personal qualities influence their leadership qualities or style, and thus their success. Leaders are born with the qualities they possess, according to this approach. Traditional and behavioural techniques compare and contrast ineffective and effective leadership behaviour. Proponents of this idea hold the belief that effective leadership is defined more by acceptable behaviour, abilities, and actions than by personal



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attributes. The distinction between this strategy and the one that came before it is crucial due to the fact that qualities are often stable over time, but skills are something that can be acquired and modified (Bass & Avolio, 1994). In order for managers to be effective, they must not rely on predetermined sets of successful attributes but rather be able to recognise and utilise the leadership style that is most suited to the circumstances. In addition, they should be able to adjust to new conditions and situations that are often contradictory, which requires them to demonstrate adaptability and flexibility. According to Price (2009), the success of any type of leadership depends on a combination of transformational and transactional factors. Transformational factors include characteristics such as charisma, inspirational motivation, intellectual stimulation, and individualised consideration. Transactional factors include characteristics such as contingent reward, management-by-exception, active and passiveness. In addition, the research suggests that characteristics of a leadership style that are positively viewed by construction professionals include inspiring motivation, idealised traits, intellectual stimulation, idealised behaviours, contingent reward, and individualised concern. According to Price (2009), building construction professionals should embrace and encourage transformational leadership in their interactions with employees in order to generate improved employee satisfaction. One of the few studies that have been conducted on the topic of construction leadership in developing nations revealed that transformational leadership was the most prevalent method taken by construction project managers in Thailand (Limsila & Ogunlana, 2008). They came to the conclusion that the transformational leadership strategy was more successful in delivering the targeted leadership results than the transactional leadership approach or the laissez-faire leadership approach. Through transformational leadership, it is possible to attain higher levels of productivity and quality, as well as imaginative problem-solving by subordinates.

A review of Ghana's Construction industry

Large-scale construction in Ghana began during the colonial era after the country became a British protectorate and was characterised by the construction of some schools, hospitals, and, most importantly, railways and two harbours for the colonial government's exploitative agenda. Mass housing construction works, however, took off much later, some three decades after independence, when the government in the late 1980s, through the Social Security and National Insurance Trust (SSNIT), initiated a number of mass housing building projects (Ahadzie & Amoah-Mensah, 2010). According to Laryea (2010), the growth of the building industry began in 1945, when contractor development began. The construction industry in Ghana is multifaceted, with a diverse set of stakeholders. (Dadzie et al., 2012). Since October 2012, the Chartered Institute of Building in Ghana estimates that over 1,600 building contractors have been working in Ghana (Oxford Business Group, 2014), and they have been classified into different groups based on their worth and the value of the projects they execute. Building contractors are divided into four categories by the Ministry of Water



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Resources, Works, and Housing, which is in charge of the country's housing infrastructure and construction. Projects worth up to \$75,000 (D4K4), projects worth \$75,000-250,000 (D3K4), projects worth \$250,000–500,000 (D2K2), and projects worth more than \$500,000 (D1K1) (Frimpong & Kwasi, 2013). The vast majority of Ghana's companies fall into either the D4K4 or D3K4 categories (Oxford Business Group 2014). The construction business is marred by unethical activities, despite the fact that it makes a major contribution to the nation's economy and, by extension, to the advancement of social progress (Asamoah & Decardi-Nelson, 2014; Boadu et al., 2020). Lack of planning plagues the industry, resulting in wasteful consumption of both water and electricity, excessive building material consumption, failure to address the requirements of consumers and tenants, and fragmented stakeholder collaboration (Twumasi-Ampofo et al., 2014). These problems are the product of an industry that is rife with corruption and does not have transparent recruiting procedures for consultants and contractors (Asamoah & Decardi-Nelson, 2014). Building construction techniques that are unsustainable combined with constant environmental degradation continue to impede Ghana's development (Djokoto et al., 2014). Ghana's building construction industry now lacks cohesion in its approach to addressing current challenges, necessitating the formation of a regulatory council to oversee the industry's efforts (Ofori-Kuragu et al., 2016). All these problems underscore the importance of having strong leadership at every tier in the building construction industry. In summary, this paper has explored some definitions and types of leaders and has sought to forge a nexus between leadership and the building construction sector. It has emerged from the literature that leadership and leadership development are very critical success factors in determining the success and sustainability of building construction projects. In addition, many of the issues in the building construction business can be overcome if leadership development is treated seriously. Construction projects are costly and technically demanding, with large and diverse project teams. The process takes a long time and is comprised of a large number of separate yet interrelated steps. Because the goods that are created have an impact on the socioeconomic growth of developing countries over the long term, unsatisfactory project performance can have severe repercussions for the nation and its citizens. As a result, the need for effective construction leadership is even greater. To that purpose, leadership development should be given more attention.

Methods

A multi-layered iterative approach was adopted. At the first stage, a bibliometric search was undertaken in the SCOPUS database in the top 10 ranked construction journals using the keywords 'leadership development in Ghana's construction industry'. This search yielded only one result, and it thus became necessary to refine the search query by broadening the scope of both key words and databases. New keywords such as 'performance', 'human capital development', 'management practices', 'leadership styles', 'project management', 'management styles', and 'importance of leadership' were included in the search because



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it was observed that leadership was often used interchangeably with such words and phrases. The search query was also expanded to include all sources that the Google Scholar-indexed search could find. Google Scholar is recognised as a credible, useful, and powerful bibliometrics search engine and has become a major search tool used by scholars. A similar approach has been adopted by Allam et al. (2014), Haddaway et al., (2015), Fagan, (2017), Halevi et al., (2017), and Strzelecki (2020). The search yielded a total of 33 documents, and at the third level, the documents were screened using the criteria (inclusion and exclusion) outlined in Table 1. Thus, in all, a total of 12 documents were used for the analysis.



• initial search with string 1 keyword in Top 10 impact ranked journals.

Stage 2 (33 articles) Creation of more strings to include three more key phrases ('performance', 'human capital development', 'management practices' an open search in google scholar.

Stage 3 (12 articles) Screening of materials for exclusion criteria and selection of shortlisted documents for analysis.

Figure 1: information search process

Table 1: Inclusion and Exclusion Criteria

Inclusion criteria	Justification
Published papers in 2010 to 2021 in journal or conference proceedings.	Focus on relatively recent information
Papers which have information on leadership or leadership development in Ghana's construction industry	Helps to narrow down the search to the specific topic of leadership development
Papers relating to project management in the construction industry.	In the literature, project management and construction are closely related, particularly in construction journals.
Exclusion criteria	Justification
Papers published in leadership development in construction but not focused on Ghana.	The article country-specific information
Papers not written in English	The target audience of the article.
Grey Literature	Not all grey literature is subject to scientific standards



The data, once accessed, was mapped and categorized based on emerging themes (Booth et al., 2016; Tranfield et al., 2003).

Findings

The study found that the existing literature is organised around three key themes, namely, the role, type, and importance of leadership (Table 2). The role of leadership was the most commonly occurring theme, with a total of five articles. This was followed by the 'importance of leadership in construction' and 'types of leadership' themes with three and four articles, respectively. Table 2.

Table 2: Breakdown of literature by themes

Theme	Authors	Key findings/ argument
The role of leadership in construction	Ofori &Toor, 2012	The sheer size, cost, nature, diversity and numerous stakeholders in the construction industry, makes leadership an imperative. Without good leadership, the industry is in disarray.
	Kissi, et, al., (2014).	The authors found that three out of the five major constraint of project management were leadership oriented. These include lack of clearly defined roles, poor communication and weak operational environment.
	Nubuor, et, al., (2017).	Findings from the study demonstrate that the project manager's influence and leadership style play a significant role in the success of a construction project.
	Baffoe & Ofori- Kuragu (2019)	The leadership abilities of management staff of construction firms is an important factor in their success.
	Acheampong, et al, (2021)	Emotional intelligence can boost project performance by up to 50.7 percent.
Type of leadership style	Addy & Cofie (2014)	Situational leadership, contingency leadership, transactional leadership, and transformational leadership are the most common forms of leadership in Ghana.
	Boateng &, Ackon (2018).	According to the findings of this study, transactional leadership is more prevalent in Ghana's construction sector than transformational leadership
	Owusu-Manu et al., (2021),	The outcomes of the study indicated that the Ghanaian construction sector was characterised by a prevalence of democratic, transformational, and situational leadership styles. The "development attitude" was found to be favoured by project managers, according to the findings of the study.



Benefits of developing leadership for the construction industry.	Ahadzie & Amoa- Mensah, 2010	Developing the leadership potential of project managers is critical in helping to improve the effective delivery of future housing projects.
	Ofori & Toor, 2012,	Developing leadership skills in the construction industry goes a long way toward resolving many of the industry's problems.
	Fugar, et, al., (2013).	Investing in leadership development is the human capital base of a construction firm and places it in a good position for growth
	Boadu, et, al., (2020)	Lack of leadership at the institutional level poses a major challenge within the construction industry in Ghana.

Discussion

The findings validate the earlier assertions by Ofori and Toor (2021) on the paucity of data on leadership development in the construction industry. While the 12 papers finally settled upon are generally low, they represent the best reflection of the available information on the topic. Though a further broadening of the search filters, as happened in stage two (Figure 1), yielded almost triple the number of papers, the expansion introduced other information that provided diversionary information. Here, we address two of the reasons why there is a lack of research on construction leadership. In the first place, social scientists performing leadership research are not aware of the construction industry's vast study prospects (Langford et al., 1995). To add to this lack of interest, the construction industry has tended to stress project and organisational management above leadership; therefore, the topic has not arisen as one worth exploring. Finally, only a small number of researchers have the requisite knowledge and resources to conduct this type of study (in most countries) (Chinowsky & Diekmann, 2004). One intriguing fact is that all the articles were co-authored. It could well be a metaphorical representation of the fact that in the real world, construction work involves a wide range of actors and services (Ofori & Toor, 2012; Boadu et al., 2020). A typical construction project will involve architects, Quantity surveyors, electricians, plumbers, masons, and procurement specialists, to name a few. On the whole, the findings point to the fact that, while the Ghanaian literature is relatively recent, it covers essentially the same areas as the mainstream literature. The three themes that emerged from the findings are similar to the main themes of leadership development in the broader literature. The themes of the role, types, and relevance are also reflected in broader themes that have been reviewed in the literature. In conclusion, the study found that the literature on leadership development in Ghana's construction industry is at present narrow and focused on three key themes, namely the role, type, and importance of leadership. Other areas of interest could be the strategies for leadership development, determinants and antecedents of leadership development, challenges facing leadership development, and more recently, leadership development in a crisis period such as the COVID-19 pandemic. Also of interest will be information on the experiences of leadership trainees as well as the role of technology in



leadership development in the industry.

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