

Boosting Construction Workers' Performances Through Motivation: A Study in Ghana

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ARTICLE INFO

Article history:

Received 25 December 2023

Revised 17 February 2024

Accepted 23 February 2024

Online first

Published 01 July 2024

Keywords:

Construction Industry

Employees

Motivation

Productivity

DOI:

10.24191/bej.v21i2.553

ABSTRACT

Motivation is essential for boosting worker's performance to achieve high productivity within an organisation. This study investigates the impact of various motivational strategies on construction worker performance in Cape Coast Metropolis, Ghana. We aim to identify the key factors that enhance employee engagement and productivity, informing effective management practices within the construction industry. A quantitative survey was conducted among construction professionals, including architects, quantity surveyors, civil engineers, builders, and artisans. Participants were selected from various company sizes (small, medium, and large) and experience levels (five to thirty-five years) to capture diverse perspectives and ensure some level of representativeness within the targeted population. Descriptive statistics and Relative Importance Index (RII) were employed to analyse data on employee perceptions of motivation and its impact on performance. Open-ended responses provided additional insights and context. The study reveals a strong link between motivation and construction worker performance. Factors like fair compensation, clear career development prospects, and a positive work environment were key motivators. Monetary rewards alone were deemed less impactful, highlighting the importance of both intrinsic and extrinsic motivators. The study is limited to the generalisable construction industry in Ghana; regional variations and cultural factors may require further investigation. The self-reported nature of the data poses potential bias, and future research could explore targeted interventions and leadership styles to refine motivational strategies. This study contributes to understanding motivation within the construction industry, offering valuable insights for practitioners to optimise workforce performance and boost productivity. The emphasis on quantitative and qualitative data analysis

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<https://doi.org/10.24191/bej.v21i2.553>

strengthens the findings and provides a more nuanced perspective on employee experiences.

INTRODUCTION

Like many others worldwide, Ghana's construction industry faces challenges in maximising employee performance. While factors like skills and resources are undeniably crucial, research consistently demonstrates that motivated employees outperform their counterparts (Garba et al., 2021; Jain, 2021). However, a significant gap exists in understanding the specific motivational factors that drive performance within the unique context of the Ghanaian construction industry. This research gap hinders efforts to develop effective strategies for boosting employee engagement, productivity, and project success.

Despite the industry's substantial contribution to Ghana's Gross Domestic Product (GDP) and employment (Ghana Statistical Service, 2023), construction projects often suffer delays, cost overruns, and quality issues (World Bank, 2022). These challenges can be partially attributed to suboptimal employee performance (Ackah, 2014). While studies have explored the link between motivation and performance in general (Tugade & Arcinas, 2023; Hemakumara, 2020), a deeper understanding of the specific motivational factors that resonate with Ghanaian construction workers is essential. Such insights are critical for companies to improve employee engagement and satisfaction: By identifying and addressing key motivators, companies can foster a more engaged and satisfied workforce, increasing productivity and loyalty (Aqmar, 2022; Hajilij et al., 2022). Akpoviro (2018) suggests that motivated employees can enhance productivity and efficiency, leading to improved project outcomes and reduced costs. Alase & Akinbo (2021) emphasise the importance of understanding and catering to employee motivators to attract and retain skilled talent in a competitive job market, which is crucial for the success of construction projects.

This study aims to address this critical gap by investigating the impact of various motivational factors on the performance of construction workers in the Cape Coast Metropolis, Ghana. By identifying the most relevant and practical motivational factors, this research will provide valuable insights for companies to develop targeted strategies that enhance employee engagement and performance and, ultimately, contribute to the success of the construction industry in Ghana.

LITERATURE REVIEW

Concept of Motivation in the Construction Industry

The role of motivation in enhancing productivity and project success in the construction industry is well-documented, with both intrinsic and extrinsic motivators playing significant roles. While intrinsic motivators are significant, extrinsic motivators such as financial incentives, recognition, job security, training and development, and job satisfaction are also essential in enhancing the productivity of skilled workers within the construction industry (Maduekeh et al., 2023; Yoo et al., 2012). Maduekeh et al. (2023) Studies in the Nigerian construction industry emphasize the link between motivation and skilled workers' productivity, highlighting the significance of financial incentives, recognition, job security, training, development, and job satisfaction as key motivators.

Similarly, in Ghana, motivational strategies such as empowerment, quality of life, and monetary incentives significantly relate to motivation, suggesting their effectiveness in enhancing artisans' performance (Gyamfi et al., 2020). This finding aligns with the research conducted by Maduekeh et al. (2023), which underscores the importance of intrinsic and extrinsic motivators in achieving project success. Akbar et al. (2014) further suggest that organisational culture and human resource practices are critical in fostering these motivational elements.

Ndudi et al. (2023) noted that research within the construction industry emphasises the significance of both intrinsic and extrinsic motivators in enhancing employee productivity and performance. Studies across various industries also underscore the role of monetary and non-monetary incentives in driving organisational success through creativity and innovation (Malek et al., 2020; Wang & Holahan, 2017). The construction sector acknowledges the importance of intrinsic motivation, which can coexist with extrinsic rewards to boost work engagement and productivity (Jesumoroti & Draai, 2021; Amusan et al., 2021). A balanced approach to motivation, incorporating intrinsic and extrinsic factors, is crucial for achieving high worker performance and project success in the construction industry. Additionally, research in corporate industries and Catalonia's construction sector highlights monetary and non-monetary incentives, promotion opportunities, and working conditions in motivating employees toward organisational achievement and safety (Menon & Bhagat, 2023; Terrés et al., 2011). In global project teams, intrinsic motivators are found to be more influential than extrinsic ones, suggesting the potential benefits of promoting intrinsic motivation in such settings, with implications for training programs in the construction industry (Mundhra, 2010; Mo, 2011; Putra et al., 2016; Robinson, 2022).

Leadership Style

Leadership style influences employee motivation and performance across various industries, including the construction sector. Transformational leadership, characterised by the ability to inspire and motivate employees to exceed their interests for the sake of the organisation, has been shown to impact employee motivation and performance positively (Xue-Feng, 2023; Asiedu et al., 2022). In contrast, transactional leadership, which focuses on the exchange between leaders and followers, also affects motivation but may not be as effective as transformational leadership in fostering high motivation levels (Xue-Feng, 2023).

In the context of the construction industry, the leadership styles of Ghanaian Construction Project Managers (CPMs) have been compared with those of their expatriate counterparts. The study found that Ghanaian CPMs were more relationship-oriented, while expatriate CPMs were more socio-independent (Ametepey et al., 2022). However, the research did not find a significant difference in the effectiveness of leadership styles within Ghana's construction space, suggesting that participative and directive styles are common and potentially effective (Ametepey et al., 2022).

Connecting these findings to the research objective of investigating the impact of various motivational factors on the performance of construction workers in the Cape Coast Metropolis, Ghana, it is evident that understanding the influence of leadership style is essential. Since leadership style directly affects employee motivation, which influences performance, companies in the Ghanaian construction industry must consider the leadership styles that will best motivate their workers. By doing so, they can develop targeted strategies that enhance employee engagement and performance, contributing to the industry's success (Ametepey et al., 2022).

Employee Motivation and Performance

Employee performance is a critical determinant of organisational success, with motivated employees demonstrating increased effort, commitment, and quality of output (Rachman, 2022; Tumi et al., 2021). Cajurao et al. (2023) study suggests that intrinsic motivation, driven by personal interest and enjoyment, is essential for employee engagement and performance. However, extrinsic rewards such as recognition and compensation motivate employees (Emmanuel & Nwuzor, 2021; Smith et al., 2015). Studies by Smith et al. (2015) have shown that employees value intrinsic and extrinsic rewards, which can lead to satisfaction with the reward system. Intrinsic rewards motivate some employees, although extrinsic rewards like financial incentives remain highly ranked (Smith et al., 2015). Conversely, other research indicates that extrinsic rewards may have a stronger relationship with employee motivation than intrinsic rewards (Vannarajah, 2020). The impact of rewards on motivation is further complicated by the role of Corporate Social Responsibility (CSR), with external CSR initiatives related to local communities and business partners being linked to employee motivation and organisational commitment (Khan et al., 2014). This

suggests that employees value their organisation's ethical and social contributions, enhancing their motivation. Moreover, the perception of rewards and their impact on performance is not uniform across different contexts. For instance, in the context of the Ceylon Electricity Board, extrinsic rewards were found to be more influential in motivating employees (Vannarajah, 2020), while in the educational sector, intrinsic motivation was significant in job performance. However, extrinsic motivation was not (Cajurao et al., 2023).

Factors that Will Enhance Productivity among Employees

A combination of factors beyond mere financial compensation significantly influences employee productivity. Perceptions of fairness and equity in compensation and rewards are pivotal for motivation, as they contribute to an employee's sense of value within an organisation (Alase & Akinbo, 2021). However, non-monetary factors such as promotional opportunities, job security, a conducive work environment, comprehensive training programs, and recognition also play a substantial role in enhancing employee retention and engagement (Mangal & Dhamija, 2023; Malhotra, 2018; Negi, 2018).

Empowerment and recognition are identified as critical motivators, suggesting that when employees feel they have a voice and are acknowledged for their contributions, their productivity and commitment to the organisation increase (Mittal, 2023; Maharvi, 2021). Competitive compensation remains a fundamental motivator, but integration with work-life balance initiatives and professional growth opportunities creates a more holistic approach to employee motivation (Mangal & Dhamija, 2023; Malhotra, 2018).

A positive work environment, underscored by quality welfare programs, job expansion, and peer influence, further contributes to an employee's motivation and satisfaction, enhancing productivity (Rahman & Tahseen, 2023; Francisco et al., 2022). Financial incentives, while important, are most effective when complemented by these non-monetary factors (Alase & Akinbo, 2021). A comprehensive strategy addressing monetary and non-monetary motivators is essential for fostering employee productivity. Organisations implementing such strategies will likely see improved employee engagement, satisfaction, and retention, ultimately leading to higher productivity.

Factors Enhancing Employee Productivity

Employee productivity is significantly influenced by a combination of factors that extend beyond mere compensation. Perceptions of fairness and equity in compensation and rewards are pivotal for motivation, as they directly impact an employee's sense of value within an organisation (Francisco et al., 2022). However, non-monetary factors such as promotional opportunities, job security, a conducive work environment, training programs, and recognition also play a vital role in enhancing employee retention and engagement (Negi, 2018; Iqbal et al., 2017).

Empowerment and recognition are highlighted as critical motivators, suggesting that when employees feel they have a stake in the business and their contributions are acknowledged, their productivity will likely increase (Mittal, 2023; Maharvi, 2021). Competitive compensation remains a fundamental motivator, but integrating work-life balance and professional growth opportunities creates a more holistic approach to employee satisfaction (Alase & Akinbo, 2021; Malhotra, 2018b).

A positive work environment, which includes quality welfare programs, job expansion, and peer influence, further contributes to an employee's motivation and subsequent productivity (Rahman & Tahseen, 2023; Francisco et al., 2022). Financial incentives, while important, are most effective when complemented by these non-financial motivators (Alase & Akinbo, 2021).

Theoretical Underpinnings of the Study

The study integrates multiple theoretical frameworks to examine the impact of motivation on employee performance in the construction industry. Herzberg's Two-Factor Theory differentiates between motivators, which propel employee performance, and hygienic factors necessary to prevent dissatisfaction but may not

directly motivate (Bexheti & Bexheti, 2016). The theory's application is evident in the study's categorisation of factors that align with either motivators or hygienic factors, as seen in Table 1.

Self-determination theory (SDT) is also employed, highlighting the significance of intrinsic motivation from internal desires and extrinsic motivation by external rewards (Triswanto & Yunita, 2021; Triswanto, 2020; Chiang & Jang, 2008). Table 2 of the study underscores the importance of intrinsic motivators, such as empowerment and recognition, over extrinsic factors like salary and promotion, indicating their more substantial influence on productivity.

Goal-setting theory is referenced to suggest that well-defined and attainable goals can enhance motivation and performance. This is reflected in the study's Table 1 emphasis on motivation to help organisations achieve their goals more efficiently, aligning with the principles of the theory (Zailani et al., 2020).

Expectancy Theory is also considered, positing that motivation is a function of the expectation of success, the value of the outcome, and the perceived relationship between effort and performance. This is mirrored in the study's focus on the necessity of motivation for maintaining work efficiency and the consequences of its absence on work quality (Chiang & Jang, 2008).

In summary, the study synthesises these theoretical underpinnings to provide a comprehensive understanding of the dynamics of motivation and its effect on construction employee performance. It suggests that while both intrinsic and extrinsic factors are essential, intrinsic motivation may profoundly impact employee productivity in the construction industry.

METHODOLOGY

This study employed purposive sampling to recruit a diverse and representative sample of construction professionals directly involved in construction activities within the Cape Coast Metropolis. This technique was chosen to obtain rich data from individuals with relevant experience and knowledge, focusing on architects, quantity surveyors, civil engineers, builders, and artisans (Garba et al., 2021). Participants were selected from various company sizes (small, medium, and large) and experience levels (5 to 35 years) to capture diverse perspectives and ensure some level of representativeness within the targeted population (Zailani et al., 2020).

Data was collected through a self-administered questionnaire distributed in person during site visits. The questionnaire comprised closed-ended Likert scale questions (strongly disagree to agree strongly) and open-ended questions to gain deeper insights and perspectives (Aqmar, 2022). The Likert scale assessed respondents' perceptions of the impact of various motivational factors on their performance and the effectiveness of motivational strategies employed by their organisations. Open-ended questions allowed respondents to elaborate on their experiences and share additional thoughts not captured by the closed-ended items (Felix & Augustine, 2021).

Descriptive statistics (Mean and Standard Deviation) were used to analyse the responses to closed-ended questions, providing a quantitative picture of the overall trends and central tendencies (Sudhakar & Rao, 2023). The Relative Importance Index (RII) was then used to rank and prioritise the factors influencing employee productivity, with results presented in tables (Yaqoob, 2022). Finally, thematic analysis was conducted on the open-ended responses to identify recurring themes and patterns, complementing and enriching the quantitative findings with qualitative insights (Morris et al., 2022).

FINDINGS AND DISCUSSION

The demographic characteristics of the respondents show that most (68.0%, N = 34) of the respondents were males, with their age group ranging between 20 to 30 (96.0%, N = 48). Most (44.0%, N = 22) of the

respondents had Higher National Diploma (HND) certificates, followed by respondents with certificates of West African Senior School Certificate Examination (WASSCE) (34.0%, N = 17) certificates and have served as supervising builders (32.0%, N = 16) and supervising engineers (26.0%, N = 13) respectively. The majority (68%, N = 34) of the respondents were building technologists with Institution of Engineering and Technology (IET) professional certificates (60%, N = 30) and have worked with medium contractors (54%, N = 27) and large-sized (42%, N = 21) contractors, respectively.

Table 1 reveals a nuanced understanding of motivation among construction employees. While extrinsic rewards like being rewarded for performance (Mean = 4.08) and organisational goals influencing individual performance (Mean = 3.92) hold importance, intrinsic factors like motivation as an inherent drive (Mean = 3.54) and its role in bringing out the best performance (Mean = 4.30) resonate even stronger. This aligns with Self-determination Theory (SDT) where intrinsic motivation, fueled by internal desires, can be more impactful than extrinsic rewards (Chiang & Jang, 2008; Triswanto & Yunita, 2021). This is further reinforced by the emphasis on empowerment and recognition, suggesting a desire for autonomy and validation beyond just financial incentives. However, the significant standard deviations across responses highlight individual variations in motivational preferences. This underscores the need for multifaceted approaches that cater to both intrinsic and extrinsic motivators, as suggested by Herzberg's Two-Factor Theory (Bexheti & Bexheti, 2016). By addressing both hygienic factors (e.g., fair compensation) and motivators (e.g., opportunities for growth, and meaningful work), organisations can create an environment that fosters employee engagement and optimal performance. Future research could delve deeper into understanding these individual variations and explore the specific types of intrinsic and extrinsic motivators that resonate most strongly with different construction employee demographics. This would enable the development of targeted strategies to optimise employee motivation and ultimately, project success.

Table 1. The impact of motivation on construction employee's performance

Impact Of Motivation on Construction Employee's Performance	Frequencies					Mean	Standard Deviation
	1	2	3	4	5		
Motivation is essential in the construction industry.	5	0	5	7	33	4.26	1.275
Motivation helps to bring out the best performance in employees.	3	1	4	12	30	4.30	1.111
Organisational goals are also referred to as employee's performance.	1	2	12	20	15	3.92	0.944
Employees perform when they are rewarded.	3	2	8	12	25	4.08	1.175
Motivation helps an organisation reach its goals.	5	1	8	10	26	4.02	1.301
The practices of quick rewards for performance will generate self-motivation.	3	1	7	20	19	4.02	1.078
Construction employees are skilled individuals involved in construction activities.	2	1	10	23	14	3.92	0.966
The most common policy adopted by managers to increase the effectiveness of performance is motivating employees.	2	1	9	20	18	4.02	1.000
Motivation is an employee's intrinsic enthusiasm and drives the employee to accomplish work-related activities.	3	5	14	18	10	3.54	1.110
Intrinsic motivation is a natural human tendency.	2	2	17	14	15	3.76	1.061

Source: Authors, 2023

Table 2 reveals that most respondents believe that employees' motivation was the most crucial factor in enhancing productivity (ranked first), aligning with Goal-setting theory where achieving organisational goals through motivated employees is emphasised (Zailani et al., 2020). This highlights the significance of fostering intrinsic motivation, as suggested by Self-determination Theory (SDT) (Chiang & Jang, 2008). Interestingly, good salary, career development, and healthy relationships (ranked second) followed closely, suggesting the interplay of intrinsic and extrinsic motivators (Herzberg, 1959). The importance of organisational culture and HR practices in nurturing these motivations, as noted in research on open-source projects (Akbar et al., 2014), is further emphasised. While financial incentives like salary were ranked lower (tenth), their role shouldn't be discounted, as Expectancy theory suggests they can influence motivation when tied to performance and desired outcomes (Chiang & Jang, 2008). Overall, Table 2 underscores the multifaceted nature of employee motivation, with a mix of intrinsic and extrinsic factors playing a role, and

highlights the need for holistic strategies that address both aspects for optimal productivity in the construction industry.

Table 2. Factors that will enhance productivity among construction employees through RII

Factors That Will Enhance Productivity Among Construction Employees	Frequencies					Mean	Standard Deviation
	1	2	3	4	5		
Motivation helps an organisation reach its goals faster because employees work towards achieving them.	1	3	2	19	25	0.856	1st
Good salary, career development prospects, and healthy relations are some of the major factors for the motivation of workers.	3	1	3	16	27	0.852	2nd
Workers in any organisation need to be motivated to keep working efficiently.	3	2	3	19	23	0.828	3rd
Some forms of Motivation are promotion, job security, insurance, etc.	3	2	5	18	22	0.816	4th
The most common policy adopted by managers to increase the effectiveness of performance is motivating employees.	1	2	6	26	15	0.808	5th
Monetary benefits paid are significant to employees for the accomplishment of predetermined tasks.	1	4	9	22	14	0.776	6th
Motivation concerns factors or events that move, drive and lead to certain human inaction or action during a given time.	2	2	11	22	13	0.768	7th
Empowerment and recognition have a positive impact on employees' motivation.	2	3	10	24	11	0.756	8th
In the absence of motivation, employee's quality of work will deteriorate.	3	5	11	18	13	0.732	9th
The salary of every employee is enough to keep them working for an organisation.	6	7	12	12	13	0.676	10th

Source: Authors, 2023

CONCLUSION AND RECOMMENDATIONS

This study examined the understanding of motivation among construction employees in Cape Coast Metropolis, Ghana, and its impact on productivity. Drawing upon Self-determination theory (SDT) and Herzberg's Two-Factor Theory, the findings highlight the significance of both intrinsic and extrinsic motivators for employee performance. While factors like being rewarded and aligning individual goals with organisational objectives hold importance, intrinsic motivators like personal drive and the desire to excel resonate even stronger. This suggests that fostering a work environment that caters to both hygienic factors (e.g., fair compensation) and motivators (e.g., opportunities for growth and meaningful work) is crucial for optimal employee engagement and productivity. Theoretically, the study contributes to the understanding of motivation in construction settings by demonstrating the applicability of established theories like SDT and Herzberg's Two-Factor Theory in this specific context. It also emphasises the need for further research exploring individual variations in motivational preferences and the cultural nuances that might influence them. Socially, the findings hold significance for promoting employee well-being and fostering a positive work environment within the construction industry. By recognising the diverse motivational needs of employees, organisations can create more engaging and fulfilling work experiences, potentially reducing turnover and attracting top talent. This can contribute to a more robust and sustainable construction sector in Ghana. Practically, the study offers valuable insights for construction companies seeking to optimise employee performance. Implementing strategies that nurture intrinsic motivation through empowerment, recognition, and meaningful work alongside competitive compensation and career development opportunities can yield significant benefits. Additionally, fostering a healthy organisational culture that emphasises open communication, collaboration, and respect can further enhance employee engagement and productivity.

While the study provides valuable insights, limitations exist. The sample size and focus on the Cape Coast Metropolis necessitate caution in generalising the findings to the entire Ghanaian construction industry. Future research could explore a wider geographical scope and incorporate diverse employee

demographics to achieve greater representativeness. Additionally, delving deeper into the specific types of intrinsic and extrinsic motivators that resonate most strongly with different employee groups would enable the development of even more targeted interventions. By addressing these limitations and pursuing further research, the construction industry can gain valuable insights into effectively motivating its workforce, ultimately leading to enhanced productivity, employee well-being, and project success.

ACKNOWLEDGEMENT

The authors would like to acknowledge the support of the construction companies operating within the Cape Coast Metropolis and the selected construction professionals (architects, quantity surveyors, civil engineers, builders, and artisans) during the time of the study.

CONFLICT OF INTEREST STATEMENT

The authors agree that this research was conducted without any self-benefit commercial or financial conflicts and declare the absence of conflicting interests with the funders.

AUTHORS' CONTRIBUTIONS

Gbettey Wisdom conducted the research, and wrote, and revised the article. Zakari Mustapha conceptualised the central research idea and provided the theoretical framework. Benjamin Boahene Akomah and David Mensah designed and supervised the research progress; Zakari Mustapha, Benjamin Boahene Akomah, and David Mensah anchored the review, made revisions, and approved the article submission. Chris Kurbom Tieru completed the final review and editing for the article submission.

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