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Motivational Leadership Practices of Site Engineers in Managing Construction Labour in the Global South: A Qualitative Study From Nepal

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ABSTRACT:

In the context of Global south countries like Nepal, Construction industry has been a very crucial in terms of the development process, also the practices of the motivational leadership in these area are under investigated empirically. The nature of construction sites in Nepal is characterized by informal labour arrangements, high physical job demands, resource constraints, and culturally specific workplace dynamics that differ significantly from the formal organizational settings wherein mainstream leadership theories have been developed and tested. This paper explores the ways in which site engineers can encourage the labour force in the construction sector through relational, supportive and equity-based leadership practices and the contextual challenges which inform their ability to do so.

The research design adopted was a qualitative research design involving semi-structured interviews with eight site engineers involved in on-going constructions in Tanahun, Pokhara, and Kathmandu, Nepal. Some of the projects were hydropower development, road construction, commercial building, and residential construction. The thematic analysis approach was used to analyse data based on an integrated theoretical framework of Leader-Member Exchange (LMX) theory, Job Demands-Resources (JD-R) model, and Social Exchange Theory (SET).

There were three themes, which were identified to be overarching. First, relational leadership and trust-building turned out to be the most basic aspect of motivational leadership supported by LMX theory. Second, fairness, recognition and reciprocity were also identified to be fundamental in maintaining worker motivation supported by Social Exchange Theory. Third, site engineers proactively handled the balance between high job demands and the provision of resources, such as safety equipment, practical guidance, welfare support, and supervisory presence - serving as demand buffer in line with the JD-R model.

The research provides empirically based, context-savvy knowledge on leadership and motivation in the Global South construction contexts, which extends the existing theoretical frameworks and provides practical advice to the site engineers, construction organisations and policymakers in Nepal and possibly in similar developing economy settings.

KEYWORDS: Motivational leadership, Site Engineers, Leader-Member Exchange (LMX), Job Demands-Resources (JD-R) model, Social Exchange Theory (SET)

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Abbreviations

JD-R : Job Demands-Resources model

LMX : Leader-Member Exchange

SET: Social Exchange Theory

PPE: Personal Protective Equipment

1. Introduction

1.1 Background of the Study

Construction industry has an underlying position in the socio-economic development of the countries in the Global South. It is an important factor for economic growth in Nepal especially, it generates mass employment opportunities and also facilitates a huge investment in the development of important infrastructure like road projects, hydroelectric projects, business zones, residential areas etc. (Shrestha & Pradhananga, 2010). The overall characteristics of these construction works are mostly labour-intensive methods, and the human resource management of the construction is the foundation of project success. The Nepali construction industry is structurally complex and challenging even though it has a role in the economy. The construction sites also require the services of semi-skilled and unskilled laborers who are contracted on a project-to-project basis that has little employment security or benefits. These laborers have habitually been subjected to physically strenuous work, inadequate safety, poor working conditions and economic insecurity (Sunindijo & Kamardeen, 2017) . The conditions make unique leadership issues which are highly different to those which occur in a formal corporate or institutional environment.

Site engineers are the key leadership point of contact on Nepali construction projects. Despite It is obvious that the traditional roles of planning, coordination, and supervision of quality control, the site engineers are at the same time frontline managers tasked with motivating, organising and leading the heterogeneous labour forces (Odusami, 2002). They are positioned at the crossroads of organisation's objectives and the realities construction labour in their day-to-day operations, and their motivational practices thus have a direct impact on labour productivity, safety compliance and welfare of the workers. A key aspect of motivational leadership in this context is the absence of formal motivational infrastructure.

In contrast to the corporate world where performance appraisals, financial incentive plans and human resources divisions offer systemic structures of motivation, sites in Nepal rely mostly on informal, interpersonal and situational forms of motivation (Dainty et al., 2007). The motivation is thus likely to come in regard to the nature of the relationships developed between workers and site engineers, the perceived equity in the distribution of tasks, the kind of communication style in the face of pressure and the levels of support offered during the high demand times.

There are three theoretical frameworks that are especially relevant to the dynamics of this. The quality of the dyadic relationships between leaders and subordinates which are defined by trust, mutual respect and mutual obligation is enlightened by Leader-Member Exchange (LMX) theory that states that motivation and commitment are direct results of the quality of the dyadic relationships (Graen & Uhl-Bien, 1995). Job Demands-Resources (JD-R) model is a structural perspective that allows analyzing how site engineers operate in the tension between high job demands (physical workload, time pressure, safety hazards) and availability of motivational resources (supervisor support, clear communication, guidance) (Bakker & Demerouti, 2017). The Social Exchange Theory (SET) builds on this discussion by describing how perceived fairness, recognition and supportive treatment are returned by employees through increased effort and organisational commitment (Blau, Peter M., 1964).

Despite the significant insights offered by such frameworks at the corporate and institutional level, no effort has been made to use them on the labor-intensive construction sector in developing economies. The processes of leadership and motivation in informal, high-pressure, and project-based construction workplaces could have significant differences with the processes that work within stable organisational hierarchies. The paper thus explores motivational leadership practices as practiced by site engineers in Nepal, which creates contextual based theoretical and practical understandings that not only add to academic literature, but also enhance management of construction sites in the Global South.

1.2 Problem Statement

Although increased academic awareness allows defining leadership as a factor influencing worker motivation and project performance, there remains a major gap in the field of empirical studies on motivational leadership as it is implemented in the labour-intensive construction industries in developing countries. In Nepal, construction projects provide an analytically different case: they must work under informal and temporary and resource-constrained environments, where such institutional scaffolding is often lacking.The site engineers in Nepal have to contend with intense management pressures. They must have the accountability to handle different teams of workers, important risks of safety, achieve productivity taking into account deadlines and motivate workers/employees facing job insecurity, physical problems, and are not available for formal sectors. Despite, how common these conditions are across Global south countries, very little studies have explored about how engineers balance between these conflicting needs by employing relational, supportive, and equity-based motivational approaches (Durdyev & Mbachu, 2011).

Although LMX theory, the JD-R model, and Social Exchange Theory are all substantive theoretical frameworks used to explain the study of leadership and motivation, their use in the context of the Nepali construction industry is not empirically developed. Basic issues are not answered: how do relational exchanges constitute and operate in temporary labour set-ups? How do resource limitations reshape the demand-resource balance? What is the relationship between the perceived fairness of interpersonal interaction in everyday situations and the commitment of workers in informal settings. This empirical inadequacy has both theoretical and practical implications. The absence of a clear explanation of motivational leadership in construction site conditions leaves organisations with continuous challenges in dealing with drop in productivity, safety non-conformance, labour turnover, and drop in morale. More so, the theory of leadership can easily become insular in theory without being exposed to the realities that define labour-intensive industries in developing economies. The gap in the knowledge on the subject matter, as portrayed by this work, is thus that, based on

the context of the study, there is no empirical evidence on the application of motivational leadership by site engineers in the high demand, resource constrained, and informal Nepali construction environment. This study aims to close the gap between the existing body of leadership theory and the realities of the construction site management in the Global South by capturing the lived experiences and professional perceptions of site engineers.

1.3 Research Questions and Objectives

1.3.1 Research Questions

The following research questions guide this investigation:

1. How do site engineers motivate their construction labour through relationships, support, and leadership practices on the construction sites?
2. What challenges and perceptions that shape the capacity of site engineers to motivate their workers through fairness, recognition, and reciprocal practices?

1.3.2 Research Objectives

The research objectives are as follows:

1. To explore how the site engineers develop and maintain relational bonds with construction labour.
2. To examine how the site engineers manage the high job demands or heavy job by providing and leveraging resources and support.
3. To understand how fairness, recognition, and reciprocity influence the worker motivation and their commitment.
4. To identify the contextual challenges that shape and constrain motivational leadership in the Global South construction industry environments.

1.4 Significance of the Study

The study has a definite and meaningful gap on the contextual level of the construction management literature in relation to Nepal. Even though Nepali construction industry is an important sector in nation development, the leadership practices at the site level are not well developed in empirical studies. The results will produce localised and particularised knowledge, that makes sense of the particular realities of informal labour arrangements, economic constraint and high-risk working conditions that typify the Global South - knowledge that cannot be simply extrapolated by studies in high-income economies.

In practical sense, the study provides practical solutions to site engineers, construction companies and human resource practitioners who aim at improving labour motivation and performance. Through the identification of suitable relational, supporting, and equity-based practices, the findings can guide the leadership development programmes and organisational policies aimed at enhancing labour productivity, well-being and safety compliance of the workers and retention of the employees working in the Nepali construction projects. The study adopts the qualitative research design, and the data were collected through semi-structured interviews with the eight site engineers who are actively working in the construction projects in Nepal, including hydropower projects, road construction, residential and commercial building sites in Tanahun, Pokhara, and Kathmandu.

2. Literature Review

2.1 Introduction

In this chapter, the main idea is to critically review scholarly literature that is relevant to the motivational leadership within the context of the construction environment and specifically in the Global South. The review follows a series of related areas: the unique nature of leadership in construction settings; the motivation process of labour-intensive work; the use of LMX theory, the JD-R model, and the Social Exchange Theory in the contexts of the discussed areas; and the synthesis of these areas into a clearly expressed research gap. This chapter places the present study in the context of the existing knowledge and therefore defines the theoretic premises of the study as well as empirically grounds the research questions examined.

2.2 Leadership in the Construction Industry

2.2.1 The Construction Context as a Leadership Environment

Construction projects are socio-technically challenging systems that put unique strain on leadership. In contrast to stable organisational environments that tend to be characterised by formalised hierarchies, long-term employment relations and systematic management of human resources, construction projects are temporal, goal-oriented projects with closely set deadlines and oscillating labour structures, physical risks and high financial strains (Bresnen et al., 2004). These structural characteristics essentially shape the nature of leadership interactions, the establishment of working relationships, and the available and applicable motivation strategies.

Leaders must be able to handle a number of interdependencies at the same time at construction sites. The site engineers usually monitor the contractors, subcontractors,

supervisors and direct labour teams whose efforts should be coordinated in changing phases of the project. The short-lived and project-oriented character of these arrangements restricts the temporal range over which one can develop relational trust, which places a strain on leaders to develop credibility and inspirational power within a short time (Toor & Ofori, 2008). This is highly contrasting the gradual relationship-building processes theorized in most of the mainstream leadership literature.

In addition to this, construction leadership is typified by a technical-managerial dual mandate. Engineers working in the site should at the same time not only have engineering competence, i.e. technical judgment in specifications, materials and methods, but also carry a substantial burden of interpersonal and motivational duties. This is described by (Odusami, 2002)as a complex leadership position that requires domain knowledge, as well as advanced interpersonal competence. The ability to change between these modes in a flexible manner is one of the characteristics of competent site engineers.

2.2.2 Leadership Styles and Their Effectiveness in Construction

The leadership style research on construction has focused on transformational and transactional styles. Transformational leadership, which is characterised by visionary communication, individualised consideration, and intellectual stimulation has been linked to improved safety culture, increased worker engagement and increased project performance in construction environments(Barling et al., 2002) .In comparison, transactional or laissez-faire leadership styles have been associated with a high accident rate, low morale, and low quality of the entire project (Braun & Clarke, 2006).

But the direct transfer of these findings to the Global South situation should be approached with caution. Most of these studies have been carried out within high-income and Western economies where the regulatory enforcement mechanisms and formal safety management systems and institutional support systems are significantly more advanced than those which exist in Nepal. As noted by (Sunindijo & Kamardeen, 2017), the construction conditions in the

developing countries can require the leader to implement adaptations that do not follow the models based on the high-income contexts. Transformational aspirations in resource constrained settings may require to be diluted by pragmatic, relational and situational responsive orientations.

2.2.3 Leadership in the Global South Construction Context

The Global South construction environment leadership practices are pre-conditioned by a range of structural and cultural factors that make them distinct from dominant Western framings. The informal labour relations, lax institutional regulation of safety conditions, economic instability and the ubiquitous shortage of official motivational infrastructure all influence the leadership choices of site engineers in such countries as Nepal (Durdyev & Mbachu, 2011).

In this case, cultural dimensions also mediate leadership effectiveness. The expectations of leadership behavior among the workers of Nepal are influenced by the broadly collectivist social orientation of the country, as it entails the focus on the harmony of relationships, respect towards the hierarchies and cohesion within the groups (Hofstede & Minkov, 2013). When leaders are viewed as steady, impartial, and really concerned about the well-being of workers, they will tend to have a larger legitimacy base and motivational power than leaders who use formal authority or positional power as a primary source of power. On the other hand, perceived inconsistency or favoritism may easily drain the relational trust on which informal motivational strategies are based.Also, hierarchical authority is not easily facilitated by the network form of leadership in construction. The delivery of successful project work often demands horizontal coordination and informal negotiation between the boundaries of subcontractors, as well as a change in leadership between a command-and-control model and a relational influence that act within a multi-party network(Bresnen et al., 2004).To appreciate motivational leadership in Nepali construction, it is important to note that the relationship between engineers and labour and the social and structural context in which this relationship is practised.

2.3 Worker Motivation in Labour-Intensive Construction Settings

2.3.1 Intrinsic and Extrinsic Motivation

The motivation of workers in labour intensive construction environments poses very unique challenges compared to knowledge or service-based environments. Construction labour is physically demanding, repetitive work, performed under time pressure, environmental exposure, and safety risk — conditions that make it difficult to directly apply motivation theories developed in white-collar and professional environments.

The intrinsic and extrinsic motivational variables combine in the construction context, but the salience of either can differ depending on the situation. Among these, extrinsic factors — especially wages, reliability of payment and simple employment security which form threshold conditions of motivation in low-income environments (Alinaitwe et al., 2007). The studies always reveal that payment of wages is one of the most effective factors of worker satisfaction in labour-intensive construction workplace. Nonetheless, monetary reward has been found not to be enough to maintain engagement especially in conditions of physical exertion and danger.

Intrinsic motivational elements such as recognition, respect, belonging, and the importance of perceived meaning of work are important complements. Empirical research carried out in different contexts of developing nations has shown that employees give a lot of importance to their supervisors who are honest, treat employees with dignity, and give them recognition of individual efforts (Enshassi et al., 2007).

2.3.2 The Role of Supervisory Behavior in Worker Motivation

One of the most consequential determinants of worker motivation in construction has been reported to be the behavior of the direct supervisors (Dainty et al., 2007). Favorable supervision - defined by guidance, autonomy-facilitation and equitable allocation of work -

has been identified to minimize job-related fatigue and stress, and punitive or unpredictable supervisory behavior increases disengagement and turnover intent.(Bakker & Demerouti, 2017).

Another aspect of this relation is the safety motivation. The trust and respect of the supervisors towards the workers is a strong mediator of the willingness of workers to undertake safety procedures. Safety compliance will be improved when engineers show actual interest in the well-being of workers not merely out of regulatory obligation but as a genuine interpersonal responsibility (Braun & Clarke, 2006). This observation highlights the fact that motivational leadership in the construction sector goes beyond productivity to include the basic occupational health concerns. The cultural norms also influence motivational role of supervisory behavior in collectivist countries such as Nepal. Task distribution, perceived equity, and group identity, as well as interpersonal harmony may have a more significant motivational value compared to individual incentives. The sense of injustice, especially in the decisions that are not consistent or fair, may destroy morale quickly because employees in informal labour markets will always have the alternative of going to different jobs when they feel that the conditions are unfair (Alinaitwe et al., 2007).

2.4 Leader-Member Exchange Theory

2.4.1 Theoretical Foundations and Core Propositions

One of the most widely developed theoretical explanations of the relational aspect of leadership is Leader-Member Exchange theory, which was formulated first by Graen and his colleagues in the 1970s, and later by Graen and Uhl-Bien (Graen & Uhl-Bien, 1995b). LMX departs from leadership theories that treat leader behaviour as undifferentiated — applied uniformly to all followers — and instead focuses on the quality of the bilateral, dyadic relationship established between a leader and an individual subordinate. The main argument of LMX is that leaders build exchange relationships with various followers that are

qualitatively differentiated, and the quality of such relationships is a key factor that determines the motivational and performance results.

The quality of LMX relationships is typified by high degree of mutual trust, respect, free communication, and the feeling of reciprocal commitment, which goes beyond contractual terms of the employment position. In such relationships, the subordinates tend to work harder at their own initiative, show organisational commitment and embrace proactive behaviours that are not required by their job descriptions. In comparison, low-quality LMX relationships are transactional and contractually constrained, and they are related to increased disengagement, diminished motivation, and increased turnover intent ;(Dulebohn et al., 2012);(Graen & Uhl-Bien, 1995).

2.4.2 LMX in Construction Environments

The analysis of using LMX theory to the construction settings has significant analytical utility, especially in an environment where formal motivational tools are constrained. In temporary, project-led labour set ups, the quality of the relationship between a site engineer and individual workers could be one of the strongest resources that can be used as motivation. Even in the short time frames of project work, open communication, feedback, and expressed concern about the welfare of the workers can develop better-quality exchanges even in the time-limited horizons of project-based work.

Nevertheless, LMX in the construction industry also faces unique challenges. The relational treatment that is differentiated defines LMX creates the potential of perceptions of favouritism - a risk that is especially acute in an environment where teams are not merely groups of individuals working together but where team cohesion and collective effort are both a necessity and an asset. Balancing the relational differentiation, and felt equity amid the labour force is a greater leadership challenge on site engineers (Toor & Ofori, 2008). Individualised versus collective fairness is a motif that is common in the construction leadership literature.

In spite of such complexities, there is limited empirical research on the application of LMX to construction environments. The majority of studies on LMX have taken place in the corporate and service and educational settings. The peculiarities of LMX in informal, labour-intensive, and project-confined settings, such as how trust is established in a short period of time, and how the relational quality affects safety behaviour are not researched to a considerable extent (Dainty et al., 2007). This gap pushes the LMX application of the Nepali construction scenario by the present study.

2.5 Job Demands-Resources Model

2.5.1 Theoretical Foundations

(Bakker & Demerouti, 2017) offered a more detailed scheme of explaining motivational and well-being consequences of job demands-job resources balance, which are known as the Job Demands-Resources model. Job demands are considered to be those physical, psychological, social, or organisational factors of work that maintain sustained effort and are thus connected with physiological and psychological costs - such as heavy workloads, time pressure, role conflict and emotionally demanding interactions. Job resources on the other hand are elements of work that contribute to accomplishment of the goals, diminish the expenses of demands, and provoke personal growth and development, such as social support, feedback, autonomy, and learning opportunities.

According to the JD-R model, two central predictive pathways are created: a health-impairment pathway, where the chronic high demands are generated in the absence of sufficient resources, and a motivational pathway, where the availability of job resources leads to engagement, commitment, and high performance (Bakker & Demerouti, 2017). A major enhancement of the model is that hindrance demands which are generated by the individual as hindrances to progress and goal attainment are differentiated by challenge demands which are generated by the individual as growth-promoting and motivating although they are taxing

demands. This difference is especially important in construction environments, where time constraints and physical workload can serve as motivating challenge demands in the conditions of sufficient resources supply, but disabling in cases of their chronic shortage.

2.5.2 JD-R in Construction and Global South Contexts

Construction industry is a high demand paradigmatic environment. The common characteristics of construction site work include physical workload, safety risks, hard deadlines, and unpredictability of resources, as well as interpersonal conflict(Sunindijo & Kamardeen, 2017). These demands are further escalated in the Nepali case by the further resource limitations linked to working in a developing economy: formal safety training can be infrequent, equipment can be less than ideal, and the institutional support infrastructure can be very small.

In this context, site engineers play an intermediary role in shaping the demand-resource balance. Engineers have significant power over the distribution of both tangible and relational resources, i.e. safety equipment, allocation of clear tasks, sufficient time provisions, and guidance, emotional support, and communicative clarity, through their direct supervisory role. The JD-R model thus offers an effective model in examining the role of the site engineers through their leadership practices in determining the demand-resource balance that their labour force is exposed to and thus affect the motivational performance.

Current JD-R studies in the construction industry have been more on occupational health outcomes than the mediated role of resources provision through leadership as a motivational approach (Nahrgang et al., 2011). This is a pronounced gap: how do the site engineers actively control the demand-resource relation and what resources do they draw upon to maintain motivation in the conditions of high demand needs to be investigated, which the current research stands in a position to do.

2.6 Social Exchange Theory

2.6.1 Theoretical Foundations

Based on the early work by (Homans, 1958) and (Blau, Peter M., 1964) Social Exchange Theory theorizes relationships at work as a continuous cycle of mutual exchange where actors give up resources which are valued, such as material, informational, emotional, and status-related resources, as well as form normative expectations of a payback. It is also a characteristic of social exchange as contrasted with economic exchange that there is no specification of obligations: neither type nor amount of order of repayment of obligations is specified in a contract but is subject to social rules of fairness, reciprocity and quality of relationships. This ambiguity is what exactly contributes to social interactions as the source of building trust and relational commitment.

The Perceived Organisational Support concept proposed by (Eisenberger et al., 1986) which is referred to as the level of the belief that employees have that their organisations appreciate their efforts and that they are concerned about the well-being of the employees is similar to SET and has been widely used in explaining how supervisory support influences employee motivation, commitment and performance. Workers in turn respond with greater discretionary effort, increased organisational commitment, and reduced turnover intention when they believe leaders are treating them respectfully and with appreciation of their contribution and acting in their interests (Rhoades & Eisenberger, 2002).

2.6.2 SET in Labour-Intensive and Informal Construction Settings

The Social Exchange Theory is especially useful, in informal labour markets, where official instruments of incentives are scarce or unreliable. The relational quality of interactions with immediate supervisors is an exceptionally topical motivational resource in the environment where workers may not rely on institutionalised reward systems. Equitable distribution of tasks, payment of wages, recognition of individual effort, and regular communicative action

by site engineers has the potential to create social responsibility, which is then translated into increased employee dedication and productivity (Enshassi et al., 2007).

On the other hand, the perceived unfairness (the distribution of workload, disciplinary actions, or unequal treatment, etc.) can easily destroy the normative expectations of the reciprocity, without which social exchange would not be possible. The perceptions of injustice can be expressed in lower efforts, absenteeism or even in direct departure in informal labour markets where the workers still have a means of exit and institutional avenues of resolving grievances are minimal. SET therefore brings out the level at which the motivational performance of site engineers is dependent on how they are seen to be fair and consistent in relations to their daily leadership behaviours.

The use of SET in Nepali construction environment is also culturally subtle. Some of the characteristics of the social exchange in collectivist societies might also be functional at the group level (as opposed to individual one) with how engineers treat the collective work group (and not necessarily the individual workers) affecting the entire normative climate of reciprocity. This implies that site engineers have to focus on personalized and group dimensions of equity and acknowledgment in the development of motivating exchange associations at the same time.

2.7 Integration and Research Gap

The above discussion shows there are some convergences and gaps in the available literature. On its own, the LMX theory (Graen & Uhl-Bien, 1995), the JD-R model (Bakker & Demerouti, 2017), and the Social Exchange Theory (Blau, Peter M., 1964) all provide valuable explanatory tools to comprehend the concept of motivation leadership within the construction environment. LMX sheds light on the relational processes by which trust and discretionary effort are built; JD-R gives a structural view of how leaders create motivational circumstances

by maintaining demand-resource balance; and SET gives a normative and reciprocal view of how fairness and recognition bring about worker commitment.

Nevertheless, these structures have been used mostly individually, in stable organisational settings and in high income economies. The fact that they are built-in into one analytic framework, used in the labour-intensive and informal construction sector of Global South, is a great theoretical and empirical space to be explored. As far as, to the best of the researcher's knowledge, limited research has been published that has been adopted globally in studying all three frameworks together with the motivational leadership in site engineering in the context of construction in Nepal or other developing countries of the global south.

However, there is not sufficient literature available about the interrelationship between the relational quality, the structural resources and the mutual normative dynamic that occurs in the construction sites in developing countries like Nepal. This gap is directly filled in this study. The LMX theory, the JD-R model and the Social Exchange Theory are integrated into a clear analytical framework and that applied in a qualitative study of personal experiences and behaviours of site engineers, which not only adds to theoretical knowledge but also to the practical advice in this field.

3. Research Methodology

3.1 Introduction

The methodology of this section provides how we collected the data , analyzed to address the research questions. The descriptions provided, include the research design, philosophical background as well as the site of the research, sampling strategies, data collection tools, and procedures used to analyze the data collected. An overview of the ethical considerations and methodological limitations will also be provided.

The overall aim of the methodology was to reflect the lived experience and perspectives of the site engineers and to understand about how leadership practices influence the labour motivations in Global south.

3.2 Research Philosophy and Design

3.2.1 Philosophical Underpinning

This research utilizes an interpretivist philosophical position, which holds that individuals construct their own reality through their experiences and social interactions(Creswell & Creswell, 2017) .The relational and contextual nature of motivation leadership means that using an interpretive philosophical approach makes sense, given that the main focus of this research is to better understand how site supervisors experience, define, and implement motivation leadership under the informal and highly pressured environment at construction sites in Nepal, rather than attempting to validate pre-determined causative relationships in a controlled research environment.

3.2.2 Qualitative Research Design

This research adopted a qualitative design, in line with the interpretivist philosophy. The central objective is not to be able to test hypotheses or build causal connections but to create a profound insight into the experiences and activities of site engineers. A qualitative design allowed the investigation of subtle behaviours, perceptions and interactions that cannot be sufficiently addressed in a quantitative design.

Semi-structured interviews were used as a main data collection method in the research. This allowed a level of structure and flexibility to be achieved, balancing out the need for critical research to be able to proceed. Themes were covered while leaving participants at liberty to expound on their experience. This enabled the researcher to secure the detailed accounts which were based on the field and reflected the reality of leadership practices on construction sites.

3.3 Study Area

The study was carried out in various ongoing construction projects in Nepal with a variety of project types and geographic areas. This multi-site approach allows for a wider and more comprehensive picture of the motivational leadership practices in various construction context within the Global South.

Eight site engineers were involved in the study and each of them was involved in various types of construction projects. Some of the chosen locations are road construction, hydropower development, commercial buildings, and residential buildings construction thus capturing the structural diversity of the Nepali construction sector.

These sites were selected on purpose because they are typical informally organised, labour-intensive construction sites with the features of informal labour arrangements, temporary

and project-based employment, high physical and time-sensitive job demands and weak organisational and human resource system.

The study, by incorporating several types of projects in different locations, can capture changes in leadership practices within various construction conditions but still leave a focus area on the common issues as to how labour can be effectively managed within the resource-constrained environments.

This context is especially applicable in the study of motivational leadership in that, site engineers in such environments are deeply involved in organising, directing, and motivating labour while maintaining productivity in this highly stressful and uncertain working environment.

3.4 Sampling Strategy

3.4.1 Qualitative Sample -- Site Engineers

Eight site engineers were purposefully selected for in-depth interviews. Purposive sampling was appropriate here because the intent of the research was to collect rich, contextually relevant data rather than produce a statistically representative result (Patton, 2002). Criteria for selecting participants included:

i. currently engaged as an on-site construction project engineer within the proposed study's construction site
ii. directly responsible for supervising and managing construction workers
iii. minimum of 3 years' experience working as a construction site manager or equivalent.

Personal identification of the participants was not recorded; instead anonymized identification codes (i.e., SE-01 through SE-08) were assigned to participants to protect their confidentiality.Table 1 illustrates the profile of participants.

TABLE 1. Illustrative Participant Profile — Qualitative Sample

Participant	Experience (yrs)	Project Type	Team Size	Location
SE-01	5	Hydropower project	25–30 workers	Tanahun
SE-02	4	Road Construction Project	30–35 workers	Pokhara
SE-03	6	Road Construction Project	30–35 workers	Pokhara
SE-04	5	Commercial Building	20–30 workers	Pokhara
SE-05	3	Residential building	25–30 workers	Pokhara
SE-06	6	Residential building	20–25 workers	Kathmandu
SE-07	8	Residential building	25- 30 workers	Kathmandu
SE-08	5	Residential building	25-30 workers	Kathmandu

3.5 Data Collection

3.5.1 Qualitative Instrument -- Semi-Structured Interviews

The instrument for collecting qualitative data was a semi-structured interview guide with 30 questions aligned with the study's research questions, study objectives, and the theoretical framework of the study (see Table 2 below). The full interview guide is provided in the Appendix. Semi-structured interviews took place either in Nepali or English depending on the participant's preferred language of approximately 30 minutes long. In addition to obtaining consent from participants for audio-recording purposes, transcriptions (verbatim) were produced after each semi-structured interview. Using semi-structured interviews helps in varying levels of standardization and flexibility in the probing of the developing themes (Bryman, 2016). This interview guide contains following five thematic categories are as follows

i. the site engineer's role and the context;
ii. relational leadership and the trust development;
iii. fairness, recognition, and reciprocity associated with the Social Exchange Theory;
iv. managing demands and resources associated with the JD-R model
v. contextual challenges unique to the Nepali construction industry.

TABLE 2. Interview Question Themes Mapped to Theories and Objectives

No.	Question (Summary)	Theme	Theory
1	Role and responsibilities as site engineer	Context/background	General
2–6, 24, 25	Building relationships, trust strategies, conflict communication, respect, cultural values	Relational Leadership	LMX

No.	Question (Summary)	Theme	Theory
7–13, 20-22	Recognition, reciprocity, fairness in task assignment, consequences of unfairness, informal labour	Fairness & Exchange	SET
14–19, 23	Supporting heavy workload, resources available, safety support, organisational support, Limited resource impact	Demand-Resource Balance	JD-R
26–30	Extra effort, missing resources, worker response to openness, desired changes	Secondary Probes	SET / JD-R

3.6 Data Analysis

3.6.1 Qualitative Analysis — Thematic Analysis

Interview data were analysed through thematic analysis using (Braun & Clarke, 2006) six-phase approach, which consists of:

i. becoming familiarized with the data by reading the transcripts multiple times
ii. creating preliminary codes
iii. searching for themes across codes
iv. reviewing and refining those themes
v. defining and naming themes
vi. writing up results.

Coding followed an abductive approach, moving iteratively between inductive coding grounded in participants' verbatim accounts and deductive coding informed by the three theoretical frameworks (i.e., LMX, JD-R, SET).

Table 3 presents the thematic framework that guided the coding process.

TABLE 3. Preliminary Thematic Framework

Theme	Sub-theme	Interview Questions Addressed
Relational Leadership (LMX)	Trust-building; conflict handling; respect, culture	Q2, Q3, Q4, Q5, Q6, Q24
Fairness & Reciprocity (SET)	Recognition; perceived fairness; reciprocal effort; informal labour; temporariness	Q7–Q13, Q26, Q27, Q29, Q21, Q22
Demand-Resource Management (JD-R)	Workload support; resources; safety; organisational support; limited resources impact	Q14–Q19, Q28, Q23

3.7 Ethical Considerations

The study conformed to the ethical principles of voluntary participation, informed consent, confidentiality and the right to withdraw from participation. Prior to collecting data, the researcher sought ethical approval from the relevant institutional review authority. Participants will receive a written information brochure regarding the purpose and procedures of the study and their rights as research participants. Audio recordings were stored in a secure manner and will be destroyed upon completion of the study. Personal data, including name and contact information, work-related identifying information, will not be collected or reported, thus ensuring full participant anonymity throughout the study.

4. Result and Findings

4.1 Introduction

This chapter outlines the findings from the qualitative research that examines the motivational leadership practices of site engineers for construction labour management in Nepal. Eight site engineers from ongoing construction projects, such as hydropower plants, road construction, commercial and residential buildings in Tanahun, Pokhara and Kathmandu were interviewed using a semi-structured format.

The results are presented in three key themes: (1) Relational Leadership and Trust-Building; (2) Fairness, Recognition and Reciprocity; (3) Job Demands and Resources; and The chapter begins with the a description of each themes.

4.2 Theme 1: Relational Leadership and Trust-Building

The most consistent message expressed in the eight interviews was that the nature of the relationship between site engineers and workers underpins motivational leadership on the construction site. The respondents consistently described their leadership style as relational through regular face-to-face interaction, respectful communication and the gradual building of trust. The table 4 presents some quotes from the participants.

TABLE 4. Themes, Exemplary Quotes, and Evidence from Site Engineer Interviews

Theme	Sub- themes	Quotes from Participants
Leader-Member Exchange (LMX) (Relational Leadership)	Relational Leadership	"I talk with them daily… like normal talk. Not only work, sometimes general talk also. Then they feel comfortable. We usually call by their name which makes them more friendly. I don't show ego as a site engineer; instead, I treat everyone not as slaves but as friends." "Try to understand them personally. Ask about their village, family or personal life. When you show interest, they open up and start trusting you. Then they will share their knowledge and experience with you."
	Trust through consistency and competence	"I guide them how to work and respect them. Slowly they start trusting me. I also maintain a good relationship with labour. Understand their situation. They work in heat, cold, and tough conditions." "Workers trust when system is clear. They have contract, insurance and benefits, so they feel secure. Also, I try to be fair in work."
	Conflict resolution	"When misunderstanding happens, I don't use technical words. For example, instead of saying 'wall should be perpendicular', I say 'the wall should be straight'. First, I listen to them, then I explain in simple way. If needed, I show them practically." "Explain them in simple terms, some works requires strict discipline, some don't, since some workers are

Theme	Sub- themes	Quotes from Participants
		highly arrogant and doesn't understand the kind teachings but some workers are mostly mild and open to new teachings."
	Cultural Dynamics, Hierarchy, and Respect	"In my construction there are workers from three different regions. Their language, habits, and expectations are very different with eachothers. I have to communicate differently with each group. With older workers from hilly areas, I have to show more respect for their experience. With younger workers from Terai, I can be more direct on them." "Respect is important. In Nepal treating worker fairness and respect is important."

4.2.1 Building Relationships

The participants spoke about establishing working relationships with workers through regular, informal interaction. Discussing issues other than work - such as workers' families, home villages or personal lives - helped workers feel at ease and respected. A number of participants noted calling workers by their names was an important act which made workers feel valued as people.

Engineers on site felt it was important to avoid being arrogant. It was noted that treating workers like human beings, rather than subordinates, was the first step in developing a positive relationship. Engineers who were interested in workers as human beings were more likely to be respected and valued.

The length of time an engineer had been working with a group also affected the relationship. Those with longer-term relationships with their workers spoke of higher trust and improved

collaboration, while those who managed contractor-sourced or newly arrived workers reported needing to work harder and faster to establish trust.

4.2.2 Trust-Building

Three key ways participants-built trust with workers were identified. The first was consistency - being the same person every day, making and following through on promises and being predictable. Workers were reported to be watchful of whether engineers "put their shoulder to the wheel and delivered". As engineers fulfilled their commitments, trust increased.

The second was technical skills. They felt that engineers were competent if they knew how to do something correctly on site, not just tell them. When an engineer could demonstrate how to do something right, as opposed to just explain it, workers felt they were being guided by someone who truly understood the work.

The third was being on site. Physical presence on site when workers were doing difficult tasks - rather than being removed and supervising - was seen as sending a strong signal to workers that the engineer understood their struggle. It fostered feelings of trust and solidarity between the engineer and workers.

4.2.3 Conflict Communication and Relational Repair

The participants reported that they approached any issues of misunderstanding or conflict on site in a non-aggressive way. This involved listening to workers, and explaining the problem in simple terms that were easy for them to comprehend, avoiding technical jargon where possible.

Yelling or aggression was seen by all as unhelpful - it destroyed trust and collaboration. The majority of participants felt it was best to discuss problems privately and politely with the worker, rather than publicly, which might embarrass the worker in front of their peers.

Participants described resolving conflicts between workers by speaking privately with each worker and making suggestions for a fair compromise. It was observed that by dealing with conflict fairly, engineers received more trust and support from the entire team as they were seen to be fair.

4.2.4 Cultural Dynamics, Hierarchy, and Respect

Respect was identified as the most significant cultural value that affected the relationship between site engineers and workers in Nepal by all eight participants. They wanted to be spoken to politely, listened to and treated fairly. When this was the case, the relationship was harmonious. When they were not, the worker was less cooperative and engaged.

However, a number of participants also indicated the engineer had to maintain a certain level of professional credibility. For example, being seen as too "one of them" by socialising as they did was seen as diminishing the engineer's credibility and the respect they received. Participants were navigating a fine line between being accessible and professional every day.

Workers described as requiring trust in their engineer's technical expertise. An engineer who appeared to lack confidence, be inconsistent or not demonstrate sound practical skills quickly lost the respect and authority of the workers. Both technical authority and personal warmth were needed - one without the other was not enough to motivate workers in the Nepali context.

Participants also identified the increasingly diverse workforce as a challenge. Expectations of how to engage in dialogue, directness in communication and other communication norms differed between worker groups. Those who were able to adjust their communication style to the different cultural norms were more successful in developing cooperation among a culturally diverse workforce

4.3 Theme 2: Fairness, Recognition, and Reciprocity

The second prominent theme that emerged from the interviews was the importance of fairness, recognition and reciprocity to worker motivation. Participants all mentioned a consistent pattern across their sites: motivated workers felt valued and recognised and became disengaged if they felt treated unfairly. The table 5 presents some quotes from the participants.

TABLE 5. Themes, Exemplary Quotes, and Evidence from Site Engineer Interviews

Theme	Sub- themes	Quotes from Participants
Social Exchange Theory (SET)	Informal Recognition	"I used to appreciate in front of others, which they feel more respected." "I say good work in front of others. Sometimes I give them more responsible work. They feel proud when we recognize. Sometimes I give small appreciation, like asking if they had food or giving small support."
	Reciprocal Effort	"One time during concrete work, I trusted one group to handle work properly without too much checking. They felt good and worked more carefully. They even stayed little extra time to finish work nicely. After that, quality of work was also better."

Theme	Sub- themes	Quotes from Participants
		"Yes, one time we give meal, after that they work extra time without saying anything. This is because in small thing also they become happy."
	Perceived Unfairness	"The tile contractor left the site and didn't come for 2 days because they couldn't get the flow of their work right, their labour management couldn't be done properly because the site engineers just told them to complete room 1 or 2 without considering that doing those would be loss for the tile contractor." "Once one worker felt he is always given difficult work. He started showing less interest. After discussion, I adjusted work and situation improved."
	Informal labour Arrangements	"Labour are temporary… they don't stay long, so which makes them difficult to motivate. Main challenge is workers are migrant from different regions and not stable. They come for few months for work and then leave. Also, they don't have proper facilities and security from the organiztion. Because of this, their motivation is low for the work and difficult to manage by us." "Informal labours don't focus much on work and can leave anytime in work. They already looking

Theme	Sub- themes	Quotes from Participants
		for other work in another day so they are prepared about their future work, if they get another work, they leave."

4.3.1 Informal Recognition Practices and Their Motivational Effects

Without a formal system of performance appraisal and rewards, the participants used informal recognition to reward good performance. Most commonly and effectively this took the form of verbal recognition in the presence of others. Publicly recognizing a worker boosted their self-esteem and their status in the group, according to participants, which was a strong motivator.

Some participants also engaged in small material acts of recognition, such as giving food or snacks, longer breaks or (occasionally) small sums of money. These were described as highly motivating as they were seen by workers as their own personal acts of recognition from the engineer, rather than as a policy.

One participant described a regular informal practice of publicly recognizing the highest-performing worker every two weeks. This created a simple, structured practice for recognition that workers could expect and strive towards and introduced a healthy sense of competition in the team.

Another way of recognizing workers was to delegate more critical tasks. Being relied on to do a more important or technical task was interpreted by workers as a sign of trust by the engineer, which further motivated them to work harder and to do a good job.

4.3.2 Reciprocal Effort: Workers Going Beyond Formal Obligations

The interviewees felt that when workers were shown appreciation and support by their site engineer, they reciprocated by putting in more effort than they were required to. This effort included working voluntarily beyond the regular work hours, unprompted care for equipment and tools, working harder to ensure tasks were done well, and assisting when the project reaches peaks without being asked.

This mutual exchange occurred on a variety of project types and sites. What was commonly described by participants was that workers willing to go above and beyond were those who felt they had been treated well or received personal kindness or care.

Participants felt this was a reciprocal relationship: when the engineer gave something - attention, respect, food, trust - workers gave something back. When the engineer treated workers like people to be ordered around, workers treated the job like a task to be done in return for pay.

4.3.3 Perceived Unfairness and Its Consequences for Motivation

The participants described how, when workers felt they were treated unfairly - in the allocation of tasks, of wages, or in the way they were addressed - the effects were rapid and tangible. Productivity declined, less work was done, complaints were made and, in some instances, workers stopped coming to work.

The most frequently cited sources of perceived unfairness were allocating the worst tasks to the same workers, failure to pay wages on time (or at all), and inconsistent relationships between the engineers and workers. All three undermined the norm of reciprocity that provided workers' incentives to work hard.

Timely wage payment was especially problematic in the Nepali market where workers often used wages to support their families. A delay in payment - even a few days - was sufficient to

undermine motivation and trust. Participants observed that workers who had not been paid on time showed reduced productivity, lower quality output, and diminished teamwork.

Some participants also noted that the underlying unfairness of the informal labour system (i.e. no contracts, insurance, or other protections for workers) contributed to an overall sense of unfairness that could not be satisfied by individual site engineers. Even an equitable engineer could only achieve fairness in the narrow scope of their job.

4.3.4 Informal Labour Arrangements and Worker Instability

Interviewees described the informal and temporary status of construction workers as the greatest challenge they faced in motivating their workers. It was suggested these workers, who are itinerant, lack contracts and are not guaranteed employment, are more difficult to motivate and less likely to do good work.

When workers are engaged on project sites via a contractor, rather than directly by the project company, there is little formal power the site engineer can exercise over workers. They are employed by the contractor. This complicates the potential to develop informal relationships and limits organizational resources (such as formal authority) that the engineer can draw on to motivate workers.

The accounts of participants who managed directly employed workers (with contracts and benefits) showed a much lower incidence of problems with turnover and motivation. Employees who were paid and had job security had an incentive to stay engaged and to be motivated. This was one of the most striking differences between the two groups of participants: the form of employment has a large impact on the kind of motivational leadership that can be exercised.

4.4 Theme 3: Managing Job Demands and Providing Resources

This theme is all about physical and temporal job demands faced by the workers in construction work and how site engineers managed it for keeping up motivation and productivity in work. Each participant described their role as proactive — both directing work and intervening to help workers manage demanding conditions. Table 6 presents some quotes from the participants.

TABLE 6.Themes, Exemplary Quotes, and Evidence from Site Engineer Interviews

Theme	Sub- themes	Quotes from Participants
Job Demands-Resources (JD-R) model	Demand Environment	"Work in hydropower is difficult. I guide them and give rest time when possible. In tunnel, conditions are very tough." "We have three different kinds of pressure at the same time --finish work on time, keep safety standard, manage workers who are tired. These pressures don't go away. A good site engineer has to absorb some of that pressure and not let it all fall on the workers at once."
	Resource Provision	"Proper tools, machines and safety equipment are important. Without that, work becomes slow. If the work is hard then we add more workers to complete the task." "Safety equipment, tools and living facilities are important. If workers get good condition, then

Theme	Sub- themes	Quotes from Participants
		they will work better. Also, clean water and food and other basic needs are very important. These basic things improve performance of the work."
	Safety as motivation	"Safety is very important. Workers feel secure and work without fear." “One time proper harnesses were not available for upper floor work of the building. It was not that workers were refusing to work but their speed of work was very slow. The next day, we had all the necessary equipment and the pace was up and running right away. So there's a direct effect of Safety on confidence.”
	Resource Constraint	"when there is no resource on time then there would be delay in construction work also there would be dad quality of works. When safety equipment is not available then workers are not confident in their work." "If material is delayed, workers sit idle and also they feel bored. That reduces their whole interest. Work flow and the speed of work also gets disturbed."

4.4.1 The Demand Environment: Physical Intensity and Temporal Pressure

Participants identified physically intense and time-pressured working conditions on their construction sites. Manual lifting, work in high temperatures, working in small spaces (for example, in tunnels) and tight deadlines were reported as the significant demands of their work.

These pressures were not consistent - they spiked at some stages of the construction project, such as pouring concrete, formwork, or finishing work. Participants explained that they had to manage the flow and allocation of work during these times to avoid workers becoming exhausted and de-motivated.

Some participants commented the combination of time, physical, and safety demands meant that workers were under a high degree of pressure, which they found difficult to cope with without leadership intervention. Without intervention by the engineers, workers could become fatigued, complacent, or slow down in an attempt to cope with the pressure.

4.4.2 Resource Provision: Tangible and Relational Resources

The interviewees mentioned two resources that they distributed to the workers. The first were material resources: tools and equipment, food, water and extra hands if the work was heavy. The provision of these physical resources was continually cited as essential for the workers ‘productivity and morale. Without supplies or materials, people were left waiting and this had a very negative effect on motivation.

The second were relational resources, which included clarity in explanation, emotional support, and physical support in difficult tasks and give freedom of choice to the workers to make the decision on how to do their tasks or work. These resources were also valued by workers. Workers who knew why and what they were doing worked harder and were more responsible than those who were just told what to do.

A few respondents also said that it was actually a negative consequence when there was too much control, but when employees felt they were micromanaged, they felt distrusted and under surveillance. Participants also told about utilizing their own resources where organisational resources were not available like bringing food or medicine from their own pocket, to hire extra employees on an unpaid basis to assist. This personal assistance of the employees was essential to keep the workers' morale up when there was no official support.

4.4.3 Safety as a Motivational Resource

The participants considered that safety support was a critical resource for sustaining workers' motivation, particularly on hazardous work areas like working at height, tunnels, and, heavy traffic on the roadsides of construction sites. The availability of safety gear, such as helmets, harnesses, gloves, and boots, helped to instill confidence and readiness among workers to work to the fullest of their capabilities.

A number of interviewees mentioned that in the absence of protective equipment, workers were still willing to work but they took longer to complete tasks, were less confident, and were less effective. Once the equipment was supplied, they sped up again. Safety was therefore seen as more than just compliance but also a major consideration of worker motivation and productivity.

Engineers on site spoke about their efforts to advocate for safety equipment for their workers when this was not provided by the company. This activity - speaking on behalf of a worker to get their request for safety materials to managers - was seen as part of the engineer's role in looking out for their team and was valued by workers as an indication that their engineer cared about their safety.

4.4.4 Limited Organizational Resources and Infrastructure

The interviewees cited organizational resource shortage as a major issue in being able to support and motivate workers. This included a lack of materials and equipment, safety

equipment, worker welfare (accommodation, food, sanitation), and organizational support when things went wrong.

Delays to materials were most problematic. Delays caused workers to have nothing to do and they became disinterested. The effects of this were devastating to the work relations, as the morale boost that the engineer had worked hard to build at the start of the project could be quickly eroded by periods of forced inactivity due to resource constraints, which were beyond the control of either the engineer or the workers.

A number of participants spoke about making up for this lack of resources themselves - purchasing food, medicine or basic tools at their own expense to prevent morale from slipping while waiting for organizational approval and supply. This was understood to be a short-term solution, but one which could not be sustained and that the organisations should ultimately be responsible for providing resources, not the engineer.

4.5 Integrating the Three Theoretical Frameworks

The results from all four themes demonstrate that a combination of the three theoretical frameworks in this study is needed to understand motivational leadership in the Nepali construction industry. The complexity of the situation cannot be explained by any one of them.

LMX is reflected in the fact that the personal relationship between engineer and worker is the most important determinant of motivation. Those who were given the time and attention to be treated as individuals - listened to, addressed by name, and treated as individuals - were more motivated, more cooperative, and more inclined to work harder.

The Social Exchange Theory is reflected in the reciprocity that we observed in most interviews. When site engineers provided workers with recognition, respect and small acts of kindness, workers increased their discretionary effort. When fairness was violated, motivation quickly declined. The engineer-worker relationship was based on fairness and reciprocity norms that were easily violated.

The JD-R model is reflected in the fact that engineers moderate job demands and resources for workers. Through buffering time pressures, supplying workers with physical safety resources, providing guidance and emotional support, and ensuring fair workloads, the engineers minimized the de-motivating effect of high job demands on workers and kept them motivated.

The mapping between frameworks and the main findings are presented in Table 7 below.

TABLE 7.Summary of Findings Against Theoretical Frameworks

Theoretical Framework	Key Findings from the Study	Participants
LMX (Relational Leadership)	Trust built through daily engagement, calling workers by name, consistent behaviour, and physical presence on site. Conflict resolved through listening and simple language. Relational investment generated extra effort from workers. Cultural norms around respect and hierarchy shaped all leadership interactions. Diverse workforce required adaptive communication.	All 8 (SE-01 to SE-08)
SET (Fairness & Reciprocity)	Informal recognition — public praise, food, breaks, small bonuses — generated reciprocal effort. Delayed payment and unfair task allocation caused immediate motivation loss. The structural injustice in informal	All 8 (SE-01 to SE-08) Reciprocal effort: 7 of 8

Theoretical Framework	Key Findings from the Study	Participants
	labor was beyond the capacity of individual leaders. Informal labor limited relationship bonds.	
JD-R (Demand-Resource Balance)	Engineers acted as demand buffers. Both tangible resources (tools, PPE, food) and relational resources (guidance, presence, autonomy) were critical. Tangible safety equipment was directly responsible for workers' confidence and productivity levels. Resource scarcity forced personal compensation by engineers.	All 8 (SE-01 to SE-08)

4.6 Chapter Summary

This chapter has reported on the semi-structured interviews with site engineers in various construction project types in Nepal. We have identified four key themes: relational leadership and trust-building; fairness, recognition, and reciprocity; managing job demands and providing resources; and challenges in the Nepali construction context.

The results continually demonstrate that motivational leadership in the Nepali construction industry relies on informal, interpersonal and situational approaches rather than formal systems and structures. It is site engineers who motivate workers by navigating the interplay of challenging work environments and relational and practical resources required for job engagement. This leadership practice can be better understood by the three theories - LMX, SET and JD-R - in combination than any single theory. The implications of these insights are discussed in the next chapter.

5. Discussion

5.1 Introduction

This chapter discusses the results reported in Chapter 4 also theoretical approaches and prior literature reviewed in Chapter 2. It is structured in the same three themes as discussed in Chapter 4 - relational leadership and trust building, fairness, recognition and reciprocity and job demands and resources management, before they are synthesized to form an integrated theoretical contribution and its implications for a specific context, the construction industry in Nepal. Finally, the chapter summarizes the findings, and how they add to, expand, and enhance existing knowledge of motivational leadership in Global South construction industries with labour-intensive operations.

5.2 Leadership Trust and Relational Development: LMX in Action

This study can be considered as supporting the fundamental principles of Leader Member Exchange (LMX) theory in the context of Nepali construction environment. According to LMX theory, motivation and extra effort of a subordinate depend on the nature of the individual relationship between a leader and subordinate. (Graen & Uhl-Bien, 1995). The findings show that in practice, site engineers in Nepal are indeed establishing these types of personalized, trust-based exchange relationships - through daily personal interactions, predictable behaviour patterns, on-site availability and empathetic conflict management.

The benefits of calling workers by their names, greeting them every day and asking about their families are in line with the LMX view that quality exchanges are characterized by respect and personalized relational effort (Dulebohn et al., 2012). In the organizational field, LMX quality emerges over extended time scales through formal interactions. In the context of temporary projects - where time is limited and workers can be rotated from project to

project - this research confirms that engineers achieve high-quality relationships quickly through informal interactions - which suggests that LMX may operate differently in a temporary, project-based context.

This adds to (Toor & Ofori, 2008) insight that construction leaders need to build credibility and motivation rapidly because of the transitory nature of project work. This study offers empirical contextual evidence of how this rapid LMX development takes place through humanizing mundane exchanges, performing practical expertise and maintaining a consistent approach under pressure.

The differences between participants who manage the workers directly hired by the organization versus those who manage contractor-based informal workers is an important contrast. The workers directly hired by the organization with direct employment provided a foundation for trust on which the relational leadership could draw. In the latter case, the relationship with the site engineer was a critical, and often sole, source of trust and security. This insight highlights that the quality of LMX relationships in the construction industry varies according to the form of employment: it is more important, and harder to achieve, in the absence of formal institutional structures.

(Dainty et al., 2007) called for LMX research in construction to take into account the particularities of the project-based environment. This research directly addresses this call by showing that while LMX's propositions are valid in the Nepali case, they are moderated by structural variables - employment formality, project duration, and labour market conditions - which have been little discussed in the LMX literature.

The preference for calm listening-oriented conflict approaches also aligns with cultural research on the Nepali and more generally the South Asian region. (Hofstede & Minkov, 2013)reported that collectivist cultures value interpersonal harmony, saving face and group solidarity. The conflict de-escalation strategies that the eight participants describe result not

only from effective leadership practice but also social norms, which is an element of relational leadership that generic LMX theory under develops and which this research reveals.

The findings on the cultural factors of respect, hierarchy and culturally sensitive communication confirm and complement the insights of (Hofstede & Minkov, 2013)on collectivist cultural patterns to the workplace in South Asia. More specifically, this study reveals that respect in the Nepali construction environment has a double dimension: it must be given to workers through polite, attentive and fair treatment; and it must be maintained by the engineer through technical expertise and professional distance. The need to balance these requirements - what the one of the site engineer describes as “being human but knowing what you are doing” - is a culturally specific leadership challenge that is not theorized in current leadership theories based on Western or high-income economies.

The diversity finding – The site engineer description of managing laborers from three different regions speaking three languages with different cultural norms and expectations - highlights an emerging issue in Nepali construction as urbanization and migration cause increased labour diversity. This aspect shows the complexity to motivate by the site engineers.

5.3 Fairness, Recognition and Reciprocity: Social Exchange Theory

The data provide strong evidence that Social Exchange Theory (SET) is a central feature of motivational leadership in Nepali construction. SET suggests that workers give extra effort and build stronger commitment to the organisation in response to the perceived fairness, support and recognition of their leader - not because of formal obligations, but because of the social norm of reciprocity (Blau, Peter M., 1964) ; Rhoades & Eisenberger, 2002). As evidenced, participants reported that workers: spontaneously gave discretionary effort

(worked late and on weekend; took care of tools) motivated by small but genuine acts of support and recognition from their engineers.

There is a high level of informal personalized recognition, such as by means of public verbal praise, eating together. Informal personalized recognition is well developed, for example through public verbal appreciation, shared eating or drinking. This is due to the lack of formal systems of reward on Nepali construction sites. (Enshassi et al., 2007) report that in developing country construction sites, interpersonal recognition, and respectful treatment are particularly potent in motivating workers where formal incentives are absent. This research builds on this by demonstrating that recognition in the Nepali context is most effective when it is initiated personally - seen by the workers as being motivated by the engineer personally rather than by policy. One participant's description of offering snacks after a tough task shows how the personal element of the recognition gesture enhances its motivational effects.

The discovery that one of the participants put in place a systematic fortnightly recognition practice of publicly rewarding the top-performing worker is significant. Although unstructured, this practice introduces a measure of repetition to recognition practices, which the SET and recognition literatures suggest helps prolong motivational effects (Rhoades & Eisenberger, 2002).The emergence of such a practice in the absence of an organizational initiative suggests a site engineer's intuitive grasp of the reciprocal nature of the organizational relationship that SET describes.

The detrimental effects associated with perceived unfairness - work stoppage, disengagement, overt withdrawal of effort - were swift and pervasive. This behaviour is consistent with SET's hypothesis that disrespect of the reciprocity norm destroys the social exchange relationship, and prompts a withdrawal of the discretionary effort that reciprocity had generated(Blau, Peter M., 1964). Stories such as those told by some participants show

that even minor injustices - a worker being allocated harder work, delayed payment of wages - can undermine the foundation of weeks of relational work.

The informal labour market challenge identified by participants limits the potential for SET quality. The present study shows that in temporary, contract-free, high-mobility labour markets, the quality of SET exchange that is possible is constrained - not by the relational competence of the site engineer, but by the duration and uncertainty of the worker-engineer relationship. This result corroborates (Bresnen et al., 2004) claim that the temporary nature of construction work hampers the relational trust-building processes assumed by leadership theories. The current study provides evidence from a developing country setting, where this limitation is exacerbated by lack of institutional employment security.

5.4 Regulation of Demands and Resources: JD-R model for the Nepali Construction

The present study draws on the Job Demands-Resources (JD-R) model (Bakker & Demerouti, 2017) as a useful model to understand the motivational impact of site engineers in responding to the demanding working conditions faced by workers in Nepali construction. According to this model, motivation and wellbeing are maintained when sufficient job resources neutralize the de-motivating effects of high job demands. The results of this study provide strong evidence for this process and demonstrate that site engineers are the key conduits for regulating demands and delivering resources to employees.

The demands described by participants - intense physical work, heat, tunnels, safety risks and deadlines - constitute a strong bundle of job demands. The JD-R literature suggests such demands are a risk factor for burnout, disengagement and safety violations (Nahrgang et al., 2011). This study provides a detailed account of how site engineers intervene in the demand-resource relationship through mundane work leadership actions: giving workers rest breaks,

balancing work among work teams, maintaining a physical presence at the work site and communicating tasks to workers.

The role of the site engineer as a demand buffer - to absorb organizational and time pressure so that it is not passed on to workers - is an important empirical contribution, theoretically compatible with the JD-R model, but not previously specified in the construction leadership literature. (Sunindijo & Kamardeen, 2017)observed that the conditions of construction sites in developing countries present compounded demand structures that impact worker wellbeing. This research shows that the site engineer is both the primary and often the only buffer in these circumstances.

The two-fold resource provision (tangible and relational) finding adds to the JD-R model's resource category in a context-specific way. In organizational contexts, job resources tend to be structural and provided by the organisations - training programs, feedback, welfare. In the Nepali construction industry, most of these resources are provided by the site engineer. Some Participants account of sometimes using personal resources to supplement institutional resources illustrates an extreme case of individual resource provision filling institutional gaps.

In particular, the finding on safety as a motivational resource is in line with (Nahrgang et al., 2011) meta-analytic result that resources specific to safety are among the strongest predictors of engagement in dangerous work. The comments from participants working at hydropower tunnelling and upper floor residential work without harnesses, illustrate the immediate interplay between safety provision and worker confidence and speed. Crucially, the participants portrayed safety not simply as a compliance issue but also as a motivational resource that site engineers can use - a finding that connects the safety and leadership motivation literatures.

JD-R literature has recently come to recognize the role of personal resources (such as self-efficacy, resilience, and leadership competence) in combination with job resources in

motivating performance(Bakker & Demerouti, 2017). This research suggests that in the Nepali construction sector, site engineers' relational and communication skills constitute personal resources that increase the motivational impact of the resources they offer. A site engineer who provides resources (safety equipment) while also maintaining a positive and trusting relationship with workers has a greater motivational effect than one who provides resources without investing in positive relationships.

The issue of resource scarcity also identifies a constraint on the JD-R model. The model presumes that resources are available to be distributed by leaders and organisations; it does not consider the case where resources are chronically absent at the organizational level and require compensation through individual leadership. This study reveals that in low-resource Global South construction contexts, the JD-R balance between demands and resources is persistently skewed, and site engineers have to take the greatest share of responsibility for compensating via individual resource provision. This is unsustainable at the level of the individual and suggests the need for organizational resource provision to enable effective motivational leadership.

5.5 Integrated Theoretical Contribution

Overall, the results of this study indicate that the LMX, JD-R and SET theories are not complementary theories but are rather closely connected to understand a motivational leadership in the contect of labor-intensive construction. The quality of the relationship between the engineer and the worker (LMX) directly affects how the workers receive and values the resources that the engineer provides them (JD-R) and how the workers feel obligated to the engineer based on that relationship (SET). Where structural factors (informal labour, resource provision, cultural diversity) reduce the effectiveness of any component of this integrated dynamic, the motivational leadership of the site engineer as a whole is diminished.

This integration makes a specific contribution to the theory of the leadership in Global South construction: it shows that by applying three theories together provides additional value in the context, rather than an isolated approach. A site engineer who has high LMX but is unable to provide the necessary physical resources (JD-R deficit) will find that worker trust and reciprocity is tempered by a lack of security. Similarly, an engineer who provides all required resources but is seen as being inconsistent or unfair will find resource provision is insufficient to sustain motivation.

The study also adds to the growing calls for context sensitive leadership theories that take into account the structural, economic and cultural environment of developing economy workplaces(Durdyev & Mbachu, 2011; Zhang et al., 2011). The results reveal context is not merely an antecedent or moderator, but a constitutive element of motivational leadership - which affects the available strategies, their efficacy and the trade-offs site engineers face.

5.6 Practical Implications

This study has implications for site engineers, construction firms and policymakers in Nepal and other Global South construction markets. For site engineers, this study confirms that relational investment - which involves daily personal contact, consistency, task sharing and empathetic communication - is the most affordable and powerful motivational practice that can be implemented in informal construction environments. These behaviours require no financial outlay, but have a significant motivational effect, as shown across a wide range of project types and countries. Site engineers should focus on these practices on their site which helps to add more technical oversight.

For construction companies, the research shows that individual site engineers are currently making up for institutional shortfalls - in safety equipment, timely salary payments, worker welfare arrangements and employee protection - with time and sometimes money. This is

neither equitable nor sustainable. Employers should make structural investments in timely wage payments, personal safety equipment, minimum worker facilities, and formal contracts (where feasible) because these enhance the motivational influence of individual site engineers and ease the workload for individual managers.

The results have some implications for the construction sector, especially to those individuals that are not part of the construction process; i.e. leaders in the industry and policy makers: The results illustrate the fact that the basic requirements and security of the labors are not adequately addressed in the construction industry. Lack of formality, safety, contract, and insurance profits and these issues are not only related to the welfare of the workers but also the motivational and productive factors of the labor force, as depicted in the results.

Therefore, in order to enhance both productivity and sustainability within the construction sector, making proper employment agreements, work safety, and insurance coverage for employees working in Nepal becomes imperative. The current research argues that certain training related to developing leadership qualities, cross-cultural communication skills, just management, and resource advocacy should be provided to site engineers. However, apart from training engineers with technical knowledge, it is also essential to train them with interpersonal and cultural skills that have been mentioned in this research, since they will be equally important to deal with motivational leadership issues at construction sites. The next section will discuss conclusions, limitations, and possibilities for future research.

6. Conclusion

6.1 Study Background

This research sought to understand the motivational leadership practices of site engineers in managing construction labour in a typical Global South construction context, such as Nepal, which is characterized by informal labour relations, resource scarcity and a particular cultural milieu. The following two broad questions guided the study: How do site engineers motivate construction labour through relationship, support and leadership practices? and What perceptions and challenges impact their capacity to motivate construction labour through their leadership practices, Fairness, Recognition and Reciprocal practices?

6.2 Study Limitations

The following limitations are noted in this study which must be taken into account when interpreting the results: Although the number of site engineers (n=8) was appropriate for a qualitative study in order to afford the opportunity for theory transferability, this limited the scope of the study. It does not have a statistical representativeness and might not be able to be replicated in other parts of Nepal, project types or even in other cultures in the Global South.

The semi-structured interview approach raises the possibility of recall bias and social desirability bias - interviewees may have responded in a more positive manner than reality would suggest in terms of their leadership practices. Although the use of specific incident questions and probing was designed to reduce this risk, it is impossible to entirely rule out the risk in self-report studies.

6.3 Future Research

This study opens several avenues for future research. First, a study using matched interviews with site engineers and their subordinates would offer a much more comprehensive picture of the dynamics of motivational leadership, by including the perspectives of both parties to the exchange relationship.

Second, a comparative study across different Global South construction sites (such as Nepal-Bangladesh, Nepal-Uganda, or Nepal-Vietnam) would help tease apart which of the findings in this study are unique to the Nepalese setting and which are reflective of broader practice of motivational leadership in informal, labor-intensive construction sites.

Third, time-based analysis of leader-worker relationships across the duration of a construction project would provide insights into the temporal dynamics of LMX in project-based work contexts - something that is difficult to capture in cross-sectional interview-based studies.

Fourth, quantitative support for the integrated LMX-JD-R-SET model developed in this study would complement this research. Quantitative research measuring relational quality, resource provision, perceived fairness and worker motivation through surveys of a broader sample of construction sites in Nepal would enable the relationships found in this study to be tested for their statistical validity and generalizability.

Finally, specific research into the leadership training needs of site engineers in Nepal - such as what training is currently offered, what skills are most important to develop and how leadership training can be designed to address relational and cultural leadership skills - would bridge the gap from the findings of this study to workforce development policy.

6.4 Concluding Remarks

The current research has revealed that motivational leadership in the context of Nepali construction industry is contextual, relational and multifaceted. The informal, under-resourced and culturally diverse nature of a construction site creates distinctive motivational challenges for its engineers, and this is particularly true where there is a lack of institutional mechanisms to support them. These challenges are tackled through relational dynamics, the use of procedural justice, provision of resources and cultural awareness.

The study demonstrates that LMX, JD-R, and Social Exchange Theory as applied to the Global South construction industry are both relevant and valid; it also suggests key limitations and extensions that have not been explicitly theorized in the past. The study adds theoretically robust and practically relevant empirical knowledge to the body of research, answering a call in the construction management literature for more research on motivational leadership in the Global South.

Ultimately, the study confirms that the workers who build roads, dams, and houses in Nepal are best motivated not by institutional management systems (which may not exist) but by the day-to-day human decisions of their site engineers to listen, to be equitable, to be present and to treat all workers with the dignity that makes effort worthwhile.

References

Alinaitwe, H. M., Mwakali, J. A., & Hansson, B. (2007). FACTORS AFFECTING THE PRODUCTIVITY OF BUILDING CRAFTSMEN - STUDIES OF UGANDA. JOURNAL OF CIVIL ENGINEERING AND MANAGEMENT, 13(3), 169–176. https://doi.org/10.3846/13923730.2007.9636434

Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. Journal of Occupational Health Psychology, 22(3), 273–285. https://doi.org/10.1037/ocp0000056

Barling, J., Loughlin, C., & Kelloway, E. K. (2002). Development and test of a model linking safety-specific transformational leadership and occupational safety. Journal of Applied Psychology, 87(3), 488–496. https://doi.org/10.1037/0021-9010.87.3.488

Blau, Peter M. (1964). Justice in social exchange. Sociological Inquiry, 34(2), 193–206.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Bresnen, M., Goussevskaia, A., & Swan, J. (2004). Embedding New Management Knowledge in Project-Based Organizations. Organization Studies, 25(9), 1535–1555. https://doi.org/10.1177/0170840604047999

Bryman, A. (2016). Social Research Methods (6th ed.). Oxford University Press.

Creswell, J. W., & Creswell, J. D. (2017). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches (5th ed.). SAGE Publications.

Dainty, A., Green, S., & Bagilhole, B. (2007). Contexts and challenges. In People and Culture in Construction: A Reader (Vol. 1).

Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A Meta-Analysis of Antecedents and Consequences of Leader-Member Exchange: Integrating the Past With an Eye Toward the Future. Journal of Management, 38(6), 1715–1759. https://doi.org/10.1177/0149206311415280

Durdyev, S., & Mbachu, J. (2011). On-site Labour Productivity of New Zealand Construction Industry: Key Constraints and Improvement Measures. Construction Economics and Building, 11(3), 18–33. https://doi.org/10.5130/AJCEB.v11i3.2120

Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. Journal of Applied Psychology, 71(3), 500–507. https://doi.org/10.1037/0021-9010.71.3.500

Enshassi, A., Mohamed, S., & Mayer, P. E. (2007). FACTORS AFFECTING LABOUR PRODUCTIVITY IN BUILDING PROJECTS IN THE GAZA STRIP. JOURNAL OF CIVIL ENGINEERING AND MANAGEMENT, 13(4), 245–254. https://doi.org/10.3846/13923730.2007.9636444

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. The Leadership Quarterly, 6(2), 219–247. https://doi.org/10.1016/1048-9843(95)90036-5

Hofstede, G., & Minkov, M. (2013). VSM 2013: Values Survey Module. Hofstede Insights.

Homans, G. C. (1958). Social Behavior as Exchange. American Journal of Sociology, 63(6), 597–606. https://doi.org/10.1086/222355

Nahrgang, J. D., Morgeson, F. P., & Hofmann, D. A. (2011). Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. Journal of Applied Psychology, 96(1), 71–94. https://doi.org/10.1037/a0021484

Odusami, K. T. (2002). Perceptions of Construction Professionals Concerning Important Skills of Effective Project Leaders. Journal of Management in Engineering, 18(2), 61–67. https://doi.org/10.1061/(ASCE)0742-597X(2002)18:2(61)

Patton, M. Q. (2002). Qualitative Research and Evaluation Methods (3rd ed.). SAGE Publications.

Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. Journal of Applied Psychology, 87(4), 698–714. https://doi.org/10.1037/0021-9010.87.4.698

Shrestha, P. P., & Pradhananga, N. (2010). Correlating Bid Price with the Number of Bidders and Final Construction Cost of Public Street Projects. Transportation Research Record: Journal of the Transportation Research Board, 2151(1), 3–10. https://doi.org/10.3141/2151-01

Sunindijo, R. Y., & Kamardeen, I. (2017). Work Stress Is a Threat to Gender Diversity in the Construction Industry. Journal of Construction Engineering and Management, 143(10), 04017073. https://doi.org/10.1061/(ASCE)CO.1943-7862.0001387

Toor, S.-R., & Ofori, G. (2008). Leadership versus Management: How They Are Different, and Why. Leadership and Management in Engineering, 8(2), 61–71. https://doi.org/10.1061/(ASCE)1532-6748(2008)8:2(61)

Appendix A

Interview Questions

1) What is your job as a site engineer and what does site engineer do to manage construction workers?
2) What are your typical ways of establishing working relationships with the workers you supervise?
3) What strategies do you use to gain the trust of workers on a construction site?
4) Have you ever experienced a problem or increase in productivity that was resolved through a good working relationship with workers?
5) When misunderstandings and conflicts arise, how do you communicate with workers?
6) What types of leader behaviour enable employees to feel valued and respected?
7) What are some ways you demonstrate your appreciation to fellow workers for good work?
8) When workers feel respected or supported by you, how do they usually respond in their work behaviour?
9) Do you have any examples of workers going the extra mile due to feeling valued or trusted?
10) How do you make sure tasks or responsibilities are assigned fairly to workers?
11) What do workers do when they feel the decisions or task assignments are unfair?
12) Have people ever become demoralized because they felt unfairly treated?
13) How important do you think fairness is in you experience for workers to cooperate?
14) How do you support workers when they are under heavy workload or encounter a challenging work environment?
15) What types of resources do workers need to work more efficiently (tools, safety, communication, etc.)?

16) What does the supervisor need to do to ensure workers are motivated to continue working?
17) What does Safety Support do to keep workers motivated?
18) How will you assist workers if they have personal or work related issues during a project?
19) What kinds of assistance could the organization provide to better motivate its workers?
20) According to your knowledge, what are the major problems to motivate the workers in the construction industry of Nepal?
21) What is the impact of informal labour arrangements on leadership and workers motivation?
22) What is the effect of temporary or short-term work on workers' engagement in their work?
23) In your opinion, how can limited resources on the construction site influence the motivation and productivity of workers?
24) What is the difference between an engineer and a worker?
25) What in your view makes a good leader to motivate construction labour on construction sites?
26) Do you observe any changes in effort/commitment when you are helping workers out during challenging tasks?
27) Do there ever seem to be times when employees exceed their normal responsibilities due to feeling respected or supported?
28) What are the most frequently missing resources on the construction site in Nepal?
29) When workers are informed and engaged in decision-making by their supervisors, how do they typically react?
30) If you had the opportunity to make one change to the way workers are managed on construction sites, what would it be?