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The Influence of Social Sustainability Practices on Time-Based Productivity in Project Teams

A Study on Project-Oriented Companies in Finland

School of Economics and Business Administration

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UNIVERSITY OF VAASA**School of Economics and Business Administration****Author:** Akash Anjum**Title of the thesis:** The Influence of Social Sustainability Practices on Time-Based Productivity in Project Teams: A Study on Project-Oriented Companies in Finland**Degree:** Master of Economics and Business Administration**Degree Programme:** Industrial Management**Supervisor:** Marko Mäkilouko**Year:** 2025 **Pages:** 90

ABSTRACT:

Sustainability has become a rapidly growing area in both research fields and in organizations. Despite being a growing area, project-based organizations remain underexplored. This study aims to fill the gap in integrating sustainability into project management. This study is based on how social sustainability practices influence time-based productivity in project teams. Social sustainability practices, such as work-life balance, training, health and safety, diversity, and inclusion, are being explored.

This study was conducted in project-oriented organizations across Finland and focused on the project managers who play a critical role in team productivity. The purposive sampling approach was used for data collection, and a total of 6 project managers from ongoing projects with relevant experience in managing teams were approached for unstructured interviews. Through a combination of deductive and inductive thematic analysis, the study examines how social sustainability influences time-based productivity, and the deductive approach enabled the author to assess based on theories such as social exchange theory, job-demand resource theory, and stakeholder theory. In contrast, the inductive approach provided new insights that emerged from the participants' experiences.

The findings of this study show that social sustainability practices have an impact on enhancing time-based productivity within project-oriented organizations in Finland. NVivo was used to create six themes based on the participant response, such as work-life balance, training and development, diversity, health and safety, inclusion and workplace collaboration, and clear communication with role clarity. All these themes elaborate on the influence of social sustainability practices on project team productivity and project completion on time. The findings show that the practices that promoted employees' well-being, such as flexible work hours, remote work, and summer vacations, increase motivation and efficiency. Training programs assist team members to work more efficiently and enhance team capability and productivity. Diversity in a team environment helps in generating innovative problem-solving ideas, enabling the team to minimize production time. Health and safety practices minimize the risks and establish a safe working environment, and the team can concentrate on the project goal. An inclusive and collaborative working environment encourages open communication, idea sharing, and engagement among team members. Lastly, clear communication has reduced ambiguity and coordination issues, hence improved individual effectiveness and supported the time-based productivity of the project.

The qualitative research design, the small sample size, and the project-oriented participants in Finland limit the study to generalization. The study concludes that integrating social sustainability practices into project teams enhances team performance and the project timeline.

KEYWORDS: Social Sustainability, Project teams, time-based productivity

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Abbreviations

TBL: Triple Bottom Line

PM: Project Management

EWB: Employee Well-Being

GANTT: Generalized Activity Normalized Time Table

PERT: Program Evaluation and Review Technique

PMBOK: Project Management Body of Knowledge

PRINCE2: Project IN Controlled Environment (Version 2)

JD-R: Job Demand-Resources

ST: Stakeholder Theory

SET: Social Exchange Theory

IT: Information Technology

PM: Project Management

1 Introduction

The introduction section presents the background of the research, the research gap, the research questions, and the objectives. The overall structure of the thesis will be outlined. Additionally, this section will highlight the importance of the thesis.

1.1 Background

In today's world, sustainability is recognized as an important trend in project management. Projects and project management directly influence the societal future by turning current objectives into long-term outcomes. They are crucial for promoting sustainability. Projects contribute to the sustainable development of companies and have an impact on the natural environment and local communities (Soares et al., 2024).

In the past, the sustainability discussion mainly focused on sustainable outputs. Now, the growing need for sustainable projects has led to a framework that goes beyond the sustainable outputs and prioritizes the sustainable development of the entire project (Soares et al., 2024). A sustainable strategy encourages resource efficiency, minimizes waste, and reduces the environmental impact of projects while considering the social and economic issues. The triple bottom line ensures that organizations' projects achieve their financial goals and benefit society and the environment (Shokouhi & Senisel Bachari, 2025).

The relationship between sustainability and projects is most obvious within project-oriented organizations, which focus on the internal project that helps the innovation within the organization rather than externally client-driven projects. The developing body of literature on sustainable project management considers projects and their management through broader perspectives over a range of duration and the interests of

stakeholders. Within this perspective, projects are evaluated based on the impact on society (Silvius et al., 2025).

Sustainability is generally recognized by three forms: environmental, economic, and social. In recent years, social sustainability has received attention, particularly in urban development, cities, and broader societal systems. Decision makers emphasize that the project should be socially, economically, and environmentally sustainable when initiating renovation projects or developing new residential areas (De Fine Licht & Folland, 2019).

This thesis focuses on the social dimension of sustainability, which is concerned with how project-oriented companies in Finland manage the project team to enhance productivity and complete the project on time. According to (Nordqvist et al., 2004) Project-related work, goal-focused and time-limited. Time-related concerns are the primary aspect of project management and project work. Completing a project on time is one of the measures of success. Social sustainability encourages fair labour practices, work-life balance, and the general well-being of the employees. When an organization focuses on social sustainability and sustainable leadership, they enhance productivity and overall performance (Lewandowska et al., 2023).

1.2 Research gap

The existing literature on sustainability in project management mainly focuses on the role of sustainability in project management, triple bottom line expansion, sustainable processes and challenges to implement them, sustainable indicators, and success factors related to sustainable project management. The literature examines the sustainability integration in the project's knowledge domain, primarily stakeholders and risk management. Furthermore, previous research has explored the contribution of sustainability to the project's success, such as sustainable practices leading to better management, like resource management, risk management, and stakeholder

management. The increase in efficiency of the project is achieved by managing resources sustainably. The overall project performance has increased by integrating the sustainability practices (Shokouhi & Senisel Bachari, 2025).

However, despite a growing body of research on sustainability in project management, limited attention has been given to the team-level outcomes. There are no studies done on project integration, communication, or quality domain in connection with sustainability. The research gap examining the effect of sustainability on project team productivity was identified in the article's future empirical recommendations as an important direction for future research (Shokouhi & Senisel Bachari, 2025).

Addressing this gap is crucial because the project teams have a critical role in implementing sustainability practices and project success. This study attempts to fill this gap by examining how sustainability practices influence team productivity. This study aims to contribute to the theoretical development of sustainability in project management. Furthermore, this study focuses on the social sustainability practices such as employee well-being, health and safety, training, and development, which are examined in relation to their influence on time-based productivity.

1.3 Research questions

- (1) How do social sustainability practices, like diversity, inclusion, work-life balance, employee training, health and safety, and development, enable the project team to complete the project on time in Finnish project-oriented companies?

1.4 Research objectives

- (1) To examine the perceived impact of social sustainability practices on team cohesion, motivation, and productivity within a project-oriented environment.
- (2) To examine the perspective of project managers/project teams about the contribution of social sustainability practices to the timely completion of the project.

1.5 Structure of the thesis.

The thesis is divided into five chapters to address the research objectives. Chapter 1: Introduction consists of a background study, the research gap, the research objectives, and the thesis structure. Chapter 2: Literature Review outlines the key concept of research from past publications and existing theories. Chapter 3: Research methodology explores the research design, data collection method, analytical method implied in the study, and ethical considerations. Chapter 4: Results and analysis present the findings and results related to the theories and a summary of key findings. Chapter 5: Discussion, practical implications, limitations of the research, and future research recommendations, and Chapter 6: Conclusion.

2 Literature review

The study examines the influence of social sustainability practices on time-based productivity in project-oriented organizations. The impact of social sustainability practices, such as work-life balance, diversity, training, health and safety, and mental well-being, on team performance. The study applied various theories such as social exchange theory, job demand resource theory, and stakeholder theory.

2.1 Main concept

2.1.1 Social sustainability in an organization

The concepts of sustainability, sustainable development, and social sustainability, etc, were introduced in 1987 (Kobal Grum & Babnik, 2022). The Brundtland Report defines sustainable development. This paper articulates sustainable development as a concept that prioritizes human livelihoods as essential to achieving ecological objectives through economic growth, which is said to meet the needs of the present without compromising the ability of future generations to fulfil their own needs (Eizenberg & Jabareen, 2017).

Social sustainability is the primary factor influencing organizational sustainability and effectiveness. The concept of organizational sustainability is explained through the Triple Bottom Line (TBL), which categorizes sustainability into economic, environmental, and social. The Social sustainability of an organization relates to the warmth and friendliness of its interactions with stakeholders (Ullah et al., 2021). The social sustainability of the organization includes employment opportunities, health and safety, training, and development (Gormezoglu et al., 2024).

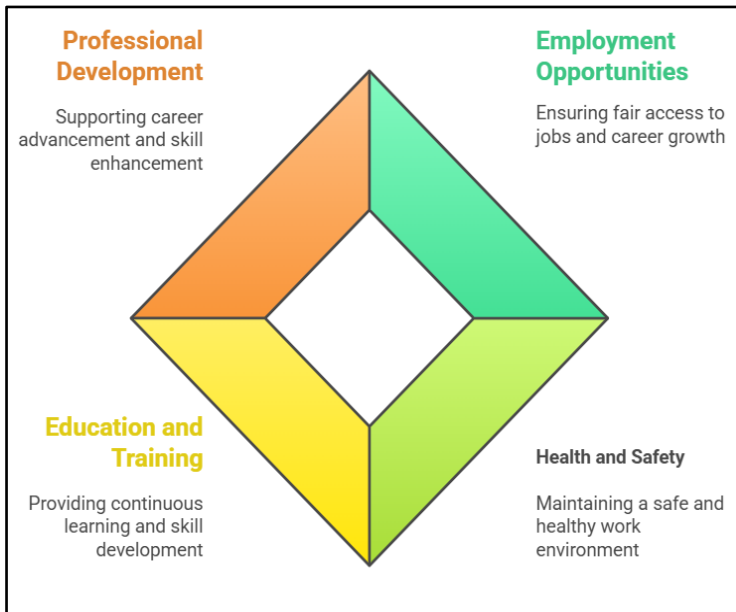


Figure 1. Social sustainability in an organization

2.1.2 Project teams

A project is a temporary endeavor undertaken to create a unique product, service, or result. Projects are unique in terms of how they are executed, their staffing, stakeholders, resources utilized, and completion timelines. Projects are temporary because they have a life cycle, consisting of an initiation stage and a closing stage (Cobb, 2012).

The project team comprises the project manager and a group of individuals who collaborate to perform the project's work and achieve its objectives (Project Management Institute, 2013). Project teams have numerous interests, with the primary objective being the completion of the project within established time and cost constraints, as well as delivering the required products and services. Furthermore, an additional interest is to maintain a smoothly operating project with minimal disruption (Cobb, 2012).

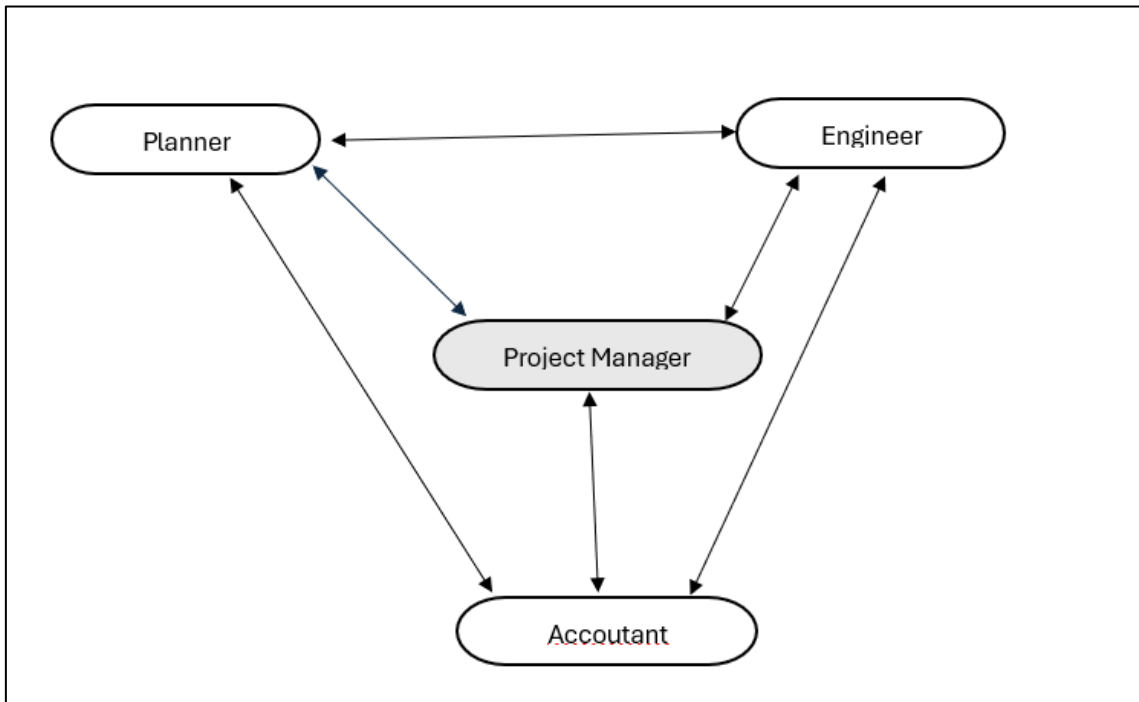


Figure 2. Team interaction source: (Burke & Barron, 2014)

2.1.3 Social sustainability practices in project teams

The intersection of sustainability and project management is known as sustainable project management (SPM), which is considered a new perspective that analyzes projects in terms of societal, economic, and environmental aspects. Sustainability is usually associated with the requirements of the triple bottom line. The PM context introduces the other dimensions to the understanding of the effects of sustainability, which include values, the time aspect, the geographical aspect, performance, stakeholder interactions, waste management, transparency, accountability, cultural aspects, risk mitigation, and political aspects (Soares et al., 2024).

A sustainable society necessitates sustainable projects. The social aspect encompasses the project's impact on society, including its impact on the project team, stakeholders, and the broader community. There is increasing interest in the notion of corporate social

responsibility within project management. Some countries have begun to implement rules establishing minimum requirements for labour accommodation. Research demonstrates it led to increased production. Project managers must acquire the appropriate knowledge and skills to include this issue in project planning (Salama, 2018).

2.1.4 Work-life balance and employee well-being

According to Gálvez et al. (2020), healthy organisations are those whose business structures incorporate work-life balance as a fundamental element of individual well-being and, consequently, a more sustainable society. Work-life balance fosters sustainable human growth via role-specific involvement. The topic of work-life balance primarily relates to human dignity within the workplace, while also encompassing a comprehensive perspective on gender equality, communal advancement, and a future where the responsibility for children's care and upbringing is not solely borne by their parents.

Work-life balance and employee well-being policies are not directly correlated with job performance but indirectly enhance the EWB, to evaluate employment performance, the policies are classified into four categories: (1) flexible working hours (flexi-time), (2) extended paid and unpaid leave, (3) geographical flexibility (flexi-place), and (4) employee and family support services. The results indicate that neither the presence nor the availability of work-family policies directly improves job performance. Their influence is indirect, functioning through enhancements in EWB. This indirect effect persists across all policy categories, except for employee and family support programs (Medina-Garrido et al., 2017).

Psychological safety improves employee well-being by reducing anxiety, ambiguity, and dissatisfaction. Psychological safety refers to team members reacting positively when an individual shares their opinions, new ideas, or admits errors or requests feedback. It allows other team members to speak about the problems and difficulties they are facing,

thereby giving team members essential information. It creates a healthy environment for discussion, in which team members can openly engage, which supports learning and progress. Hence, enhancing team performance (Buvik & Tkalich, 2022).

Project-oriented organizations indulge in temporary work processes for a product or service for a customer. The work environment, with its temporary nature and deadlines, creates a dynamic with numerous pressures, workloads, uncertain requirements, and multiple roles demands. These pressures can lead to issues for employee well-being and ethical treatment, which need to be managed. These are managed by HR managers who play an employee-support role, caring for the well-being of employees (Turner et al., 2008).

2.1.5 Diversity, equity, and inclusion

Diversity within an organization refers to the presence of differences among employees' attributes such as gender, ethnicity, cultural background, and sexual orientation (Platania et al., 2025). A team composed of diverse individuals enhances creativity. The team members come from different backgrounds and have different experiences, which makes them more open to diverse perspectives (Vedres & Vásárhelyi, 2023).

Inclusion, in simple terms, means creating an environment where every individual is thoroughly respected. At the organizational level, inclusion includes recognizing and eliminating barriers such as physical, procedural, intentional, and unintentional that limit the participation of all members (Lecours et al., 2025). Inclusion in a work team experience is defined as active participation among team members of diverse backgrounds, which turns diversity into an asset (Vedres & Vásárhelyi, 2023).

In general managerial discourse, inclusion is often perceived as the method by which organisations can optimise the advantages of diversity by nurturing and advocating for the full rights, access, and opportunities for employment and advancement for all

members (Adamson et al., 2021). Recent research points out that the intrinsic diversity of team members enhances creativity, promoting innovation and decision-making, hence, positively affecting operational efficiency and team productivity (Lecours et al., 2025).

The concept of equity is founded on justice; everyone is treated fairly and has equal access to available resources and opportunities, considering the challenges that they might encounter. The equity principle of management of work accommodation is particularly applied to occupational rehabilitation (Lecours et al., 2025).

2.1.6 Occupational health and safety practices

The Occupational Health and Safety Management System (OHSMS) is a proactive framework that promotes the elimination of occupational health and safety hazards and risks prior to their introduction in the workplace, by assessing new items, equipment, substances, and procedures for their possible risks (Althaqafi & Elssy, 2014).

Numerous studies on safety and project management indicate that the complete integration of safety management and project management is necessary to minimize ambiguities and gaps in a project-oriented workplace. The studies conducted concluded that most firms implement safety plans to avoid government penalties. The implementation of safety plans is viewed as an additional activity (Althaqafi & Elssy, 2014).

2.1.7 Training, development, and fair labour practices

The optimal project-oriented organization possesses a distinct management culture characterized by employee empowerment, process orientation, teamwork, both continuous and discontinuous organizational change, customer orientation, and

networking with clients and suppliers. Consequently, competencies and skills are required by project personnel to collaborate effectively in projects. This may necessitate the project-oriented organization to implement training and development practices to cultivate employees proficient in the project environment (Turner et al., 2008).

2.1.8 Participative leadership and stakeholder engagement

Participative leadership is a democratic methodology that involves subordinates in organisational decision-making and management. The objective is to significantly and actively augment employees' sense of ownership and align their objectives with organisational goals. Consequently, in the everyday leadership process, leaders actively employ "participation management" for their subordinates by communicating significant values, systematically organising reports, and utilising various flexible promotion tactics (Wang et al., 2022).

Leadership is essential in project management for achieving an effective outcome. The engagement of a leader with their team enhances motivation and hence improves the team's performance. Project teams with different backgrounds and diverse skills, and the leadership style influences the team to be more collaborative, adaptable to challenges, and able to achieve goals (Muhammad Abrar Ahmed et al., 2023).

Project stakeholders are individuals who can have an effect or can be affected by the project process, contents, or results. Project stakeholders comprise investors, suppliers, consumers, users, regulatory bodies, media, and others. Stakeholder engagement is essential for addressing systemic challenges (Eskerod et al., 2015).

The project stakeholders are crucial to the project's success for at least four primary reasons. The initiative requires contributions, both financial and non-financial, from stakeholders. The secondary stakeholder establishes the criteria for evaluating the project's success. Potential resistance from stakeholders may jeopardise the project's

success. The fourth project may impact stakeholders both positively and negatively (Eskerod et al., 2015).

2.2 Time-based productivity in project teams

In an organisation, time has been a crucial metric for planning, measuring, and assessing performance. An organisation employs time-management techniques at an organizational level. Extensive assignments are subdivided into smaller components, each with specified timeframes. In projects, time is particularly critical because of their temporary nature. Effective time management is crucial for project managers throughout the project execution process, as project failure is frequently associated with the risk of failing to meet deadlines (D. Wu & Passerini, 2013).

A fundamental indicator for assessing project performance is adherence to timelines, budgetary constraints, and specifications. A visual time representation of the project activities is made by GANTT, PERT, and other timeline orientation charts to enhance the understanding of project activities among the project agents. Time-based visualization enables a visual display of project functions such as scheduling, allocation, task synchronization, and negotiation(D. Wu & Passerini, 2013).

2.2.1 Determinants that influence time-based productivity

Determinants that affect time-based productivity include communication and coordination, leadership style, team motivation, and resource availability. According to Pamuji et al. (2025), external elements influencing time management include changes in customer needs, unpredictable hazards, and market dynamics.

2.2.1.1 Communication and coordination

Effective communication is an essential factor that influences time-based productivity. Communicating and involving team members can help to complete the task on time. Team members who are well-communicated with the project goals are motivated to work. Open and transparent communication helps resolve ambiguity and accelerate the decision-making process. All team members can communicate and collaborate more effectively by establishing a communication channel to share information, which minimizes the risk of delays (Pamuji et al., 2025).

The PMBOK (Project Management Body of Knowledge) initially addresses communication in project management as part of the ten knowledge areas and three processes. In 2008, PMBOK identified five processes: stakeholder identification, communication planning, information distribution, stakeholder management, and performance reporting. The PRINCE2 approach has seven processes. The communication management plan encompasses communication procedures, reporting mechanisms, communication timing, and information requirements (Nyandongo, K.M & Davids, M, 2017).

Table 1. Communication management (Nyandongo, K.M & Davids, M, 2017)

PMBok	PRINCE 2
3 communication process	Communication management strategy
Plan communication management	Stakeholder Analysis Communication procedure Roles and responsibilities Tools and techniques Records Timing and communication activities (depicting when and where communication needs to occur).
Managing communication	Information needs

Control communications	Reporting Timing and communication activities (Control management performance audits)
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2.2.1.2 Transformational leadership

Transformational leaders motivate followers to outshine. These types of leaders also encourage a healthy working environment. Transformational leadership has four dimensions: idealized influence, intellectual stimulation, inspirational motivation, and individual consideration (Aga et al., 2016a).

Transformational project managers encourage team engagement and foster mutual understanding, which enhances creative ideas and diverse viewpoints among team members. Team members under a transformational project manager are given freedom to explore, discuss, make their own decisions, and solve problems independently. This helps in team building. If the project team is competent and high-performing without effective leadership, it will not be successful (Aga et al., 2016a).

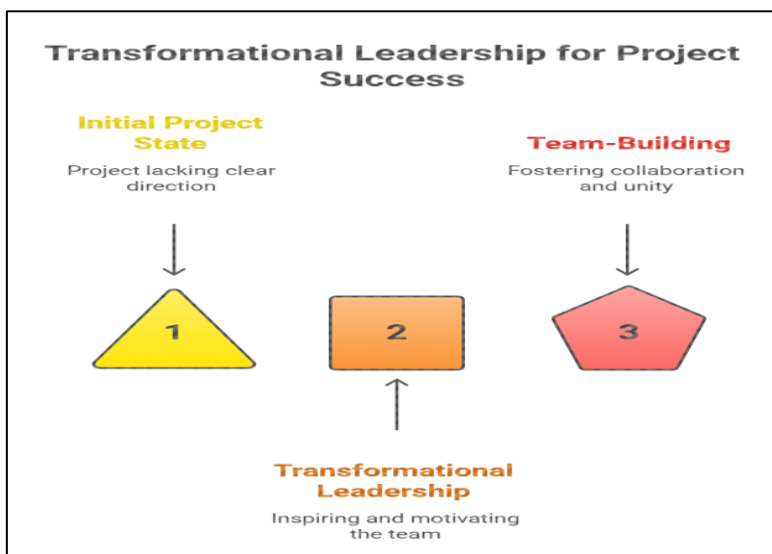


Figure 3. Transformational leadership

2.2.1.3 Project team motivation

Project teams encompass individuals with diverse experiences, expertise, and varied knowledge, working together toward shared goals of developing a new product, a new concept, activity, or creating a new change. The team members are mutually reliant on completing the task efficiently. Motivation includes behavioural characteristics such as an individual's willingness to perform (Dasí et al., 2021).

Project team motivation is an essential factor in the project's success. Team members should be involved in all stages of the project. Team members can be motivated by involving them in discussions, such as their input, ideas, suggestions for developing a solution, and making decisions (Brenner, 2007). A highly motivated team is built on trust and behavioural collaboration, in which individuals strive to achieve shared outcomes. A low level of motivation suggests that team members have reduced trust or may lack commitment to the project goal, resulting in poor performance (Dasí et al., 2021).

According to Brenner (2007), the project manager must motivate their team members as their roles have become broad. They are not only the leader but also a mentor, motivator, coach, and facilitator to make their team work together toward a successful project. A project manager can make team members feel like an essential part of the project by thanking them for small contributions, acknowledging them for small tasks completed, and a further step is to reward the team with monetary rewards, which is a great motivator. These steps can boost their self-esteem and increase the team spirit.

The Project manager needs to inspire team members to enhance their motivation. The term "Inspire" can be represented as illustrated in Figure 4. If the project manager is successful in inspiring and motivating the team members, the project can be completed within budget, on schedule, and achieve customer satisfaction (Brenner, 2007).

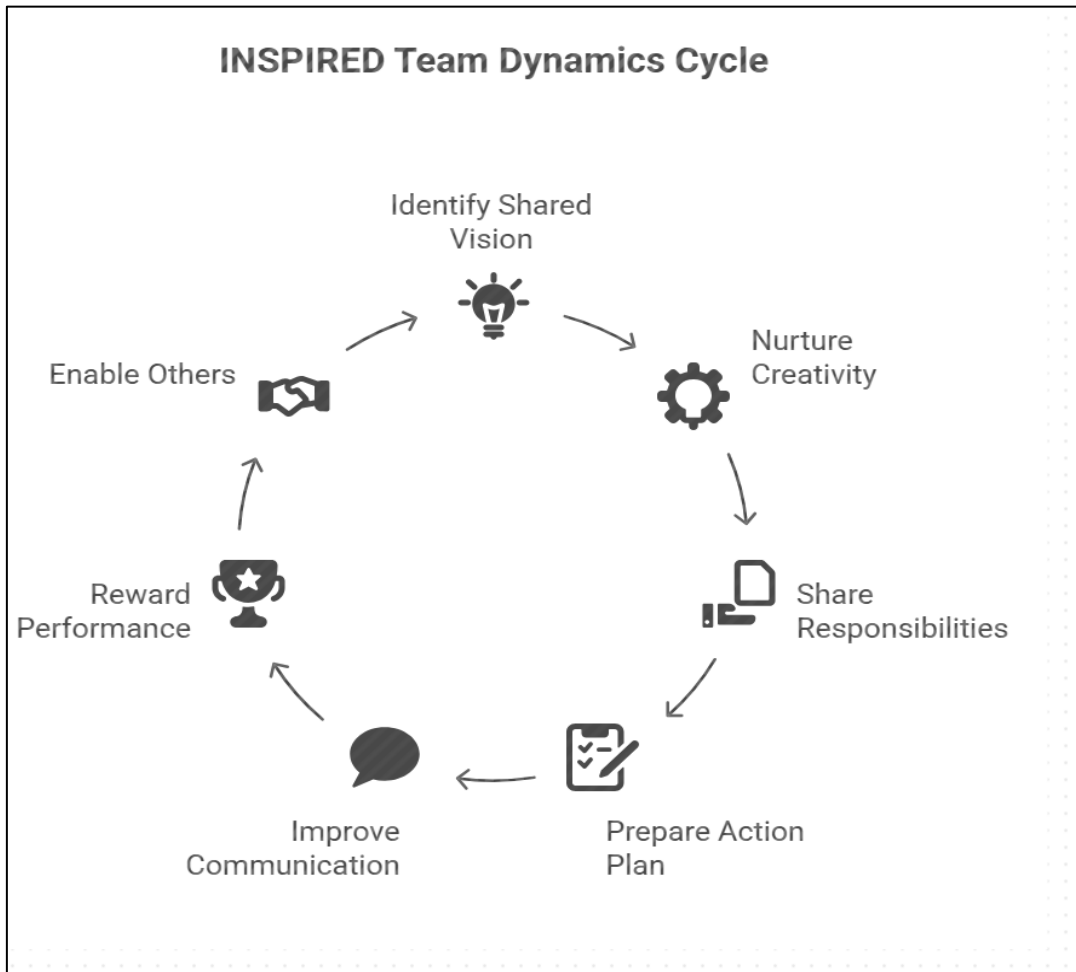


Figure 4. Inspired team

2.2.1.4 Resource-Constrained project scheduling problem

In project management, project scheduling is essential for allocating resources within constraints and for establishing the timeframe for the project activities. These activities follow set precedence relationships to compete for limited resources, hence leading to an optimal schedule for achieving the project goal. This is known as a Resource-Constrained Project Scheduling Problem (RCPS). The RCPS is widespread across various domains, such as engineering, construction, manufacturing, software development, and logistics management(Ding et al., 2023).

RCPSP consists of two constraints: the precedence constraint and resource constraints. In precedence constraints, the project activities are arranged in a sequence of activities, giving priority to which activity comes before or after. While resource constraints provide details regarding the resources required for the project activity at each stage of the project, from execution to completion (Đumić & Jakobović, 2022).

The resources required for execution are categorized into renewable, non-renewable, or doubly constrained. The renewable resources are the resources whose quantity remains constant across time. The non-renewable resources are the resources that diminish with usage, doubly constrained, which are the limited resources in each time period for the whole project. Before the execution of an activity, the duration and the amount of resources required for the activity are established (Đumić & Jakobović, 2022).

2.3 Theoretical framework

This study applies the stakeholder theory, Job Demand-Resource Model, and social exchange theory to examine the impact of social sustainability practices of the Finnish project-oriented companies on the time-based productivity of a team. The frameworks provide a multidimensional approach that examines the external influence, the company being socially responsible, and its relationship with the employees, which determines its workplace productivity. Each theory offers a perspective on how social sustainability practices contribute to enhancing team productivity.

2.3.1 Stakeholder theory

Stakeholder theory is a business ethics and management-based theory of an organization (Mahajan et al., 2023). The fundamental concept behind the stakeholder theory is that the organization must provide value to all its stakeholders. Stakeholders include employees, shareholders, customers, suppliers, and communities. Companies

should not give priority to shareholder interest over their other stakeholders. According to this theory, another role of the manager is to prevent trade-offs and provide mutual benefits for all stakeholders (Dmytriyev et al., 2021).

The stakeholder theory promotes the identification and consideration of stakeholders' needs, wants, and demands in the decision-making process and prioritizes the interests of the stakeholders. The organization's responsible strategy helps create value, make strategic decisions, attain long-term success, and sustainability (Mahajan et al., 2023).

In this research, the Stakeholder theory can be utilized as a methodical approach to assessing whether the project managers in Finnish companies prioritize the well-being and safety of employees rather than the interests of shareholders. The project managers must refrain from making trade-offs and ensure that all the stakeholders receive reciprocal advantages. This theory ensures that effectively engaging all stakeholders' organizations can achieve their sustainability objectives. Communicating with all stakeholders helps them align with the project's sustainable goals and thus improves the project's efficiency.

2.3.2 Job demand-resources (JD-R) model

The Job Demand-Resources (JD-R) model was developed by four scholars: Demerouti, Bakker, Nachreiner & Schaufeli (2001). This model was developed to challenge the burnout model, as it only considers burnout to be found in human service professions such as social work, healthcare, and teaching. The JD-R model suggests that burnout can occur regardless of the type of work. It can happen when job demands are high, and job resources are scarce, as these adverse working conditions result in energy depletion and decrease employees' motivational level (Demerouti et al., 2001).

According to Bakker and Demerouti (2007), the JD-R model indicates that occupations may involve distinct risk variables associated with job stress. The risks can be classified

into two categories: job demands and job resources. Job demands pertain to the physical, psychological, or organisational aspects involved in employment. For example, high work pressure, a stressful physical environment, and emotionally draining customer interactions. These may become sources of job stressors when employees encounter demands that require significant effort, particularly if they have not yet recovered from prior stress.

According to the JD-R model, Job resources denote the physical, psychological, social, or organisational elements of a job that are functional in attaining work objectives. Mitigate job demands and the corresponding physiological and psychological expenses. Foster individual growth, learning, and development. Consequently, resources are essential not only for managing job demands but also hold intrinsic value (Bakker & Demerouti, 2007).

In the JD-R model, job demands represent strain resulting from poorly designed jobs, health impairment processes, or chronic job demands (e.g., work overload, emotional pressures), which deplete employees' mental and physical resources, leading to less energy and, consequently, reduced performance. The job resources can enhance employee motivation through events organized by the organization that promote growth, learning, and development. A motivated employee might increase work engagement, hence facilitating the attainment of work objectives (Bakker & Demerouti, 2007).

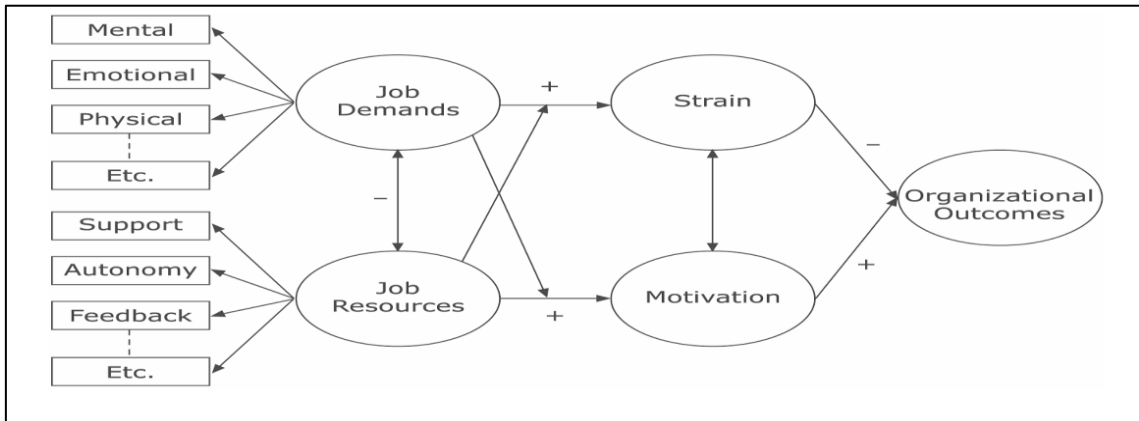


Figure 5. JD-R model (Bakker & Demerouti,2007)

In this study, the JD-R model was utilized to analyse the working conditions within Finnish project-oriented companies. The model provides an insight into how employee well-being practices are implemented in Finnish project-oriented companies and their impact on the employees' performance. The project managers need to ensure that the employees are not stressed out and are motivated enough to achieve the project objective.

2.3.3 Social exchange theory

In 1958, Homans proposed the social exchange theory. He introduced a framework of social behaviour grounded in the principle of exchange. He essentially posited that trades encompass not only tangible items but also symbolic value, such as approval and prestige. His writing interconnected various disciplines and facilitated the emergence of diverse theories on social exchange. Social exchange involves behaviours dependent on the favorable responses of others, which, over time, facilitate mutually beneficial transactions and relationships (Cropanzano & Mitchell, 2005).

The company's commitment to employees' welfare and development may subsequently improve employees' social exchange with the firm. The company engages in work-life balance, fair practices, and support for employee development. Employees in such companies perceive that the organization prioritizes their wellness and offers emotional

support. Consequently, employees are more inclined to cultivate positive social relationships with the organization. Employees excel in their jobs when they experience positive social exchange with their company. According to social exchange theory, employees reciprocate positively when a favourable exchange exists with their company. Employees who excel at work can increase their productivity, thus increasing company growth(Han et al., 2024).

In this study, social exchange theory was utilized to analyze how employees or team members reciprocate to social sustainability practices, such as work-life balance, employee well-being, training, and development, as implied by the organization, and whether the team is reciprocating it positively. The performance of the team is increased or decreased. This theory ensures that effectively engaging in employee well-being can increase employee productivity and hence achieve the project objective of completing it on time.

2.3.4 Integration of ST, JD-R Model & SET for this research.

The integration of the stakeholder's theory, job-demand resource theory, and social exchange theory provides a strong framework for how social sustainability practices are implemented in the Finnish project-oriented companies that influence team productivity. ST theory highlights how corporate responsibilities to its employees and stakeholders facilitate the implementation of socially sustainable practices. The JD-R model clarifies how these practices reduce excessive demand while increasing resources and thereby enhancing team motivation and productivity. SET highlights how team members' fair treatment, trust, support, and well-being can encourage them to reciprocate by engaging in collaborative and productive work.

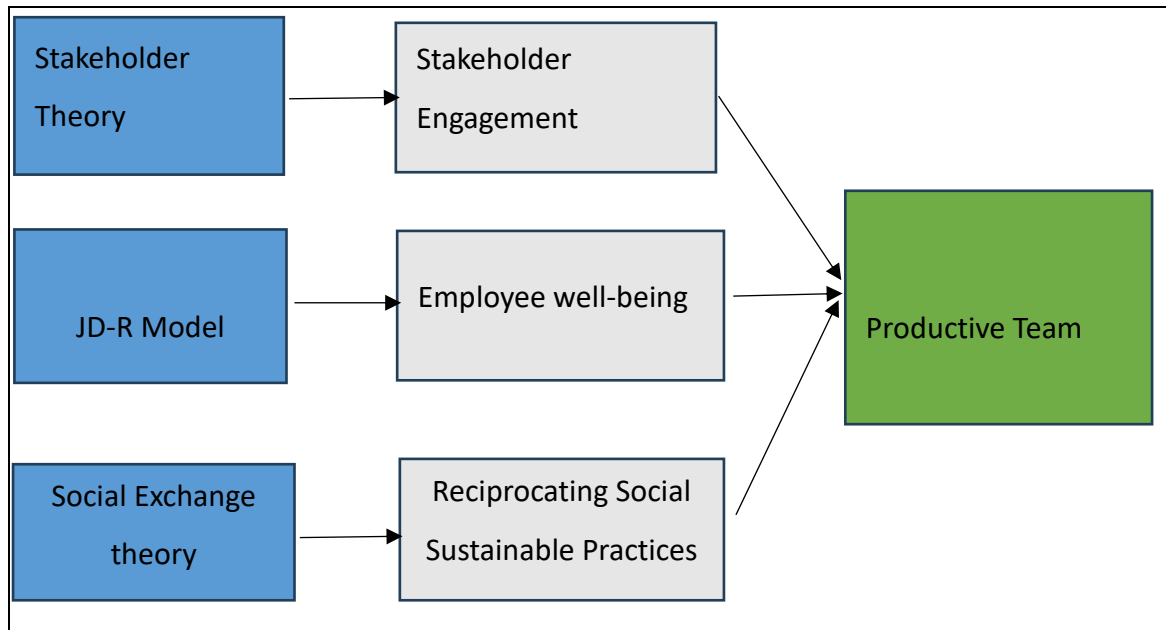


Figure 6. Integration of ST, JD-R Model & SET

2.4 Literature gap

The existing literature effectively examines the sustainability impact on project management. According to Shokouhi & Senisel Bachari (2025), numerous studies have been done on the relationship between sustainability and project success. To clarify the relationship between sustainability and project success, some researchers have identified sustainability factors that contribute directly and indirectly to project success.

Despite the extensive research on sustainability and project management, studies that link social sustainability and the project team's time-based productivity in Finland are limited and have not been explored. Additionally, there is limited knowledge on how the theoretical perspectives, such as stakeholder theory, social exchange theory, and the JD-R model, can be integrated to explain how socially sustainable practices enhance the productivity of the project team in a time-constrained setting. This study discusses these gaps by providing insight into social sustainable practices in the Finnish project-oriented companies.

3 Research methodology

In this chapter, the research methodology is explained for the study of the influence of social sustainability practices on time-based productivity in project teams. It will lay out research design, research approach, sample, data collection, data analysis approach, ethical considerations, and AI declaration.

3.1 Research design

The research design focuses on creating a framework for collecting and analyzing the data. The core element of research design is a time-based framework (Wilson, 2014). This study employs an exploratory research design as the research aim is to explore the influence of social sustainability practices on time-based productivity in project teams. According to Wilson (2014), the exploratory research design follows an inductive approach, and it is used by the researcher who researches the research problem where currently there exists limited data. Hence, there is a lack of published articles and a lack of knowledge about the research topic. In exploratory research, a better insight into a topic is gained.

In this study, an exploratory design is utilized due to the lack of published research on social sustainability practices followed in project-oriented companies in Finland. This research design helps in discovering the perspectives on how social sustainability practices influence time-based productivity in project teams by analysing the primary data. Exploratory research facilitates this study to develop into an emerging topic and provide insights into participant viewpoints. The study employs both inductive and deductive approaches. Inductively, themes were created from the data to generate new insights into social sustainability practices and time-based productivity. While deductively, the findings were related to the existing theoretical framework for assessing the applicability of the established theories.

Research philosophy means “the development of knowledge and the nature of that knowledge”. A researcher develops knowledge in a specific field. The accepted philosophy will be influenced by pragmatic factors. There are three ways of thinking about the research philosophy: epistemology, ontology, and axiology(Saunders et al., 2007). Epistemology refers to “the nature of knowledge, which means how we conceive our surroundings.” In epistemology, there are three approaches: positivism, interpretivism, and pragmatism(Wilson, 2014).

In this study, interpretivism philosophy is utilized as the most appropriate approach, as it seeks to examine the influence of social sustainability on the project team productivity by using information obtained through qualitative data. According to Wilson (2014), interpretivism philosophy involves the data that are qualitative and subjective in nature.

3.2 Research approach

The qualitative research method is an open and flexible design, and is less rigorous (Corbin & Strauss, 2015). The study employed this method to obtain insight from the project manager. The interviews were conducted according to the project manager’s flexibility in participating in the interview. Some respondents opted for online team interviews rather than face-to-face interviews. The time and date of the interviews were determined according to the participants’ availability. Some participants wanted to have a questionnaire before the interview; the questionnaire was sent by email to them. An open-ended questionnaire was made to explore in-depth information about their experiences and perspectives.

According to (Corbin & Strauss, 2015), a qualitative approach is to explore the area that remains underexplored. Due to the limited publications on the influence of social sustainability practices on project team productivity, this approach is appropriate.

Quantitative methods are a more structured design (Corbin & Strauss, 2015), which is not appropriate for this study.

3.3 Research sample

This study employs purposive sampling. Purposive sampling involves selecting participants based on specific characteristics relevant to the study. The participants possess extensive knowledge regarding the study to gain an in-depth understanding of the study. Purposive sampling is flexible, which enables the selection of a sample that is diverse enough to understand the range of experiences or perspectives on the research topic, hence enhancing the sample strength (Hennink et al., 2020a).

Sample size in qualitative research is determined by the usefulness of the data in terms of richness and diversity rather than the number of participants. Saturation refers to the point in data collection where additional data will not enhance understanding of the issue. Sometimes, the data saturation is reached after gathering the data from a few participants. The appropriate sample size for saturation will depend on the range of parameters; it is likely to vary between studies. Therefore, offering the universal guidelines on the sample size required for saturation would be ineffective (Hennink et al., 2020a).

In this study, the sample comprises six project managers from Finnish project-oriented companies. The project managers were purposively selected to get insight into the study. The participants with experience working in project-oriented companies were selected. The participants have experience working as project managers, ranging from one to twenty years. The participants were from diverse industries like engineering services, IT services, industrial machinery manufacturing, and commercial and service industry machinery manufacturing.

Table 2. List of participants

Participants	Position on a Project	Experience	Industry
1	Project Manager	3	Industrial machinery manufacturing
2	Project Manager	20	Industrial machinery manufacturing
3	Project Manager	1	IT services
4	Project Manager	6	Engineering services
5	Project Manager	15	Industrial machinery manufacturing
6	Project Manager	3	IT services

3.4 Data collection

The data were collected through semi-structured in-depth interviews to achieve a thorough understanding of each participant's perspective on the study. Semi-structured and in-depth(unstructured) interviews are non-standardized. These interviews are commonly used for qualitative research. In semi-structured interviews, the researcher will compile a list of questions to be addressed during the interview. However, the researcher may ask additional questions to explore further research questions and objectives. This type of interview is open and flexible in nature, with data usually gathered via audio recording (Saunders et al., 2007).

The interview questionnaire consisted of four parts, each containing open-ended questions designed to gather unrestricted responses from the participants. The first section, the general background of the participant, included questions focused on participants' previous experience. The second section, social sustainability practices,

questions related to the implementation of social sustainability practices and their impact on productivity, aiming to evaluate project managers' perspectives on these practices. The third part, time-based project team productivity, comprised open-ended questions to gather the perspective of the project managers related to projects that were completed on time and the challenges of implementing social sustainability practices on the project. The last part of the questionnaire was reflections and recommendations, which encouraged participants to discuss the failure of any project due to time and to provide suggestions on implementing social sustainability practices.

Interviews were conducted through Microsoft Teams due to participant preferences and convenience. The University of Vaasa account was utilized to make the meeting link to create trust that the interviewer is a university student. The questionnaire was sent to the participants before the interview. With the participants' approval, all interviews were recorded in audio format, and the transcripts were later downloaded into MS Word to ensure data accuracy.

3.5 Data analysis

Data collected through interviews needs to be analyzed to uncover their underlying meaning. Qualitative data analysis enables the development of a theory from the data. In this approach, both inductive and deductive reasoning are applied. This resembles assembling a jigsaw puzzle, which involves the simple processes ranging from categorization responses to the more complex identifying of relationships between these categories(Saunders et al., 2007).

Open coding involves the unitization and categorization of qualitative data. The data will be categorized into conceptual units and assigned labels. The data unit may pertain to a single word, a sentence, or a paragraph. The resulting array of code labels must be compared and organized into broader, relevant groups. The categories are phrases

utilized by the participants or derived from established theory or literature. The categorization derived from the data represents the significant topics. These themes will guide us to where to focus. It aids in establishing a distinct relationship with the research question. The effort will be concentrated on refining and limiting the scope of the study question (Saunders et al., 2007).

The subsequent phase involves conducting axial coding to examine the links among the categories that have arisen from the open coding. This procedure is referred to as theoretical development. Upon acknowledgment of the link, the codes are organized into subcategories. This is conducted to investigate and elucidate a phenomenon. The subsequent phase is selective coding, wherein one primary category is identified as the central or core category (Saunders et al., 2007).

This study utilizes NVIVO software to code and create themes. Interviews were coded and analyzed through thematic analysis using NVIVO software. The codes were created through the interviewee's replies; each sentence was analyzed and thoughtfully coded. Then, related codes were put into the parent code that were themes. During this phase, the themes were assessed in terms of coherence and differentiation. This procedure made sure that each theme represented the main concept of the relevant data and that themes were properly stated. This study employs thematic analysis to identify patterns and themes. The thematic analysis of the collected data will be conducted to discover common themes. Themes formed by initial codes are shown in the table below:

Table 3. Themes

Themes	Number of Participants	Participants quote
Development	3	6
Inclusion and a collaborative team	5	6
Challenges faced in implementing Social Sustainability Practices	4	4

health and safety practices	5	13
Nature of training programs provided by the organization.	6	11
Social Sustainability Practices improve time-based productivity	4	4
The Critical Role of Clear Communication and Role Clarity.	5	14
Project delay causes	2	3
Work-life balance and flexibility	5	20
Workplace diversity	6	11

The thematic analysis is directly aligned with the research objectives, ensuring that the identified themes accurately address the influence of social sustainability practices on time-based productivity.

3.6 Ethical considerations

In qualitative research, ethical considerations are of essential relevance due to the comprehensive nature of the investigative process. The ethical considerations become more significant when conducting face-to-face interviews. The participant's consent is also necessary. The participant must be adequately informed about the research and possess the autonomy to choose whether to participate or decline (Mohd Arifin, 2018). In this study, all the participants were provided with detailed information regarding the research objective and process, and they were given the option to participate or decline.

Participation in the interviews is voluntary, and there will be no consequences if the participant wants to leave the study while it is underway (Mohd Arifin, 2018). In this study, participants had the option to leave at any moment, even during the interview, without any consequences.

The anonymity and confidentiality of the participants were maintained by not revealing their names and company names during data collection and analysis. The participants' names were replaced with numerical identifiers, and the company names were generalized in the report by indicating the nature of their operations, such as manufacturing, IT services, engineering, and industrial machinery manufacturing. This approach guaranteed the participants' identities and the confidentiality of their organization throughout the research process.

Regarding data protection, all the audio recordings and transcripts were stored on the password-protected device that the researcher could only access. During the study, security measures were taken to protect the data. All the personal data will be securely deleted at the end of the study in accordance with the organization's data retention guidelines.

The comfortable environment was created by the researcher to ensure participants felt comfortable sharing their experiences. Participants were not forced to answer the questions that made them uncomfortable. Following the ethical standards improved the integrity and reliability of the research.

3.7 AI declaration

Artificial intelligence tools are used in this thesis to improve its quality and coherence. The Quill Bot paraphrasing tool and Grammarly were used to enhance grammar and linguistic flow. The researcher's original idea, content, and analysis are still intact in the thesis. AI tools were used only for linguistic refinement. Moreover, all AI-generated suggestions were thoroughly checked and corrected to ensure that they are suitable in terms of academic standards and the thesis purpose. Using these tools enhances the writing process, but it doesn't replace the author's own intellectual work.

4 Findings

In this chapter, the findings from interviews with project managers from Finnish companies will be presented. The results were connected to the theoretical framework developed in the literature review. A thematic analysis of six interviews was conducted using NVivo, and significant patterns were identified based on the respondents' answers. The findings are organized into themes according to the study's purpose.

A combination of theory-led and data-driven thematic analysis resulted in the identification of the themes. The theoretical framework integrates elements of social exchange theory, the Job-Demand-Resource model (JD-R model), and stakeholder theory, thereby establishing preliminary analytical classifications. These models provide the foundation for understanding how social sustainability practices influence team productivity.

The responses were coded using NVivo, and the participants' quotes were coded. These are known as initial codes. Inductive coding enabled the development of themes that were supported by recurrent patterns in participants' quotes. The shared pattern and meaning of the initial codes were combined to form themes.

In NVivo, a hierarchy chart was created by the researcher to visually present themes and sub-themes and illustrate how they relate to one another and to logically cluster and synthesize participants' quotes. Thematic coherence is strengthened by the visual presentation, which is part of **Appendix 3** for increased analysis traceability and clarity.

Additionally, a conscious effort was made to maintain data integrity and narrative coherence by directly linking participants' quotes to categories. The quote-based approach allows readers to comprehend the actual voices of the participants and discern the thematic content. Further, it makes it possible to read the data more deeply and logically.

Furthermore, rather than interpreting the data in a linear question-by-question format, a thematic structure was employed. This provided the opportunity to explore the viewpoint in depth. Through this approach, a new theme was identified: “The Critical Role of Clear Communication and Role Clarity.” Although this theme does not relate to the social sustainability practices in projects. This theme will be further emphasized in the discussion chapter.

4.1 Influence of work-life balance on team productivity.

The work-life balance practices implied in the project were a recurring theme. Figure 7. Work-life Balance and Productivity shows the participants’ responses to the question, “*In your opinion, following work-life balance practices, is the team more productive?*” 4 out of 6 participants agreed that following a work-life balance increases productivity.

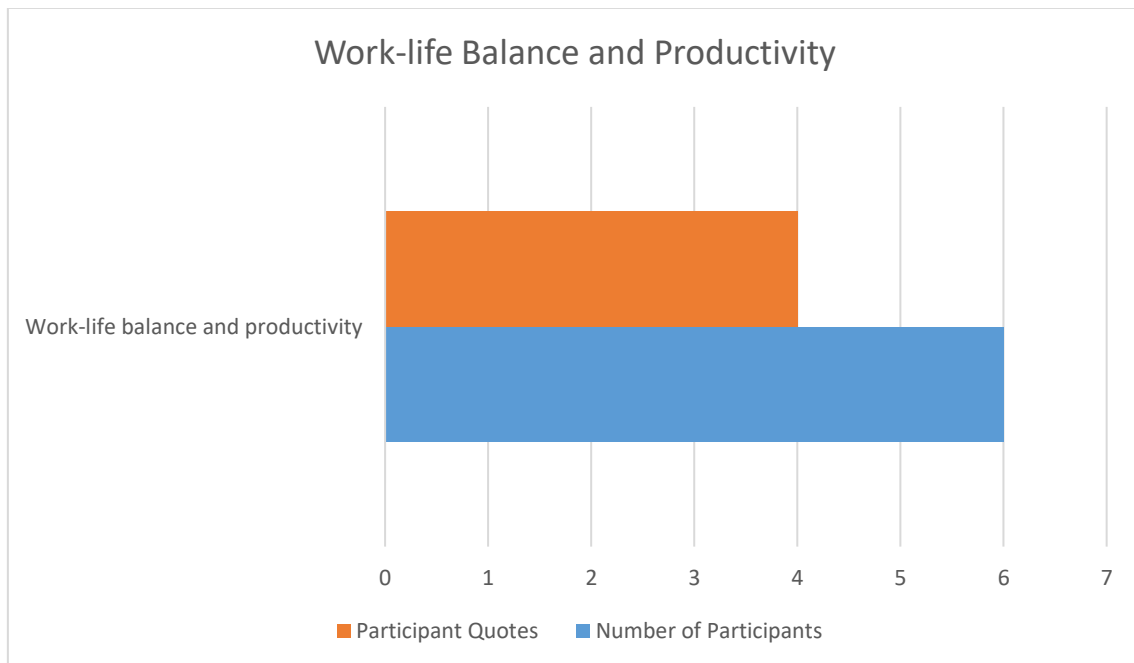


Figure 7. Work-life Balance and Productivity

Participant 1, from industrial machinery manufacturing, shared his opinion about work-life balance and time-based productivity:

“All the projects have been going very smoothly, so in my opinion, yes.”

Participant 2 from the construction project explained why work-life balance is needed and its importance to productivity:

“If you're working too much, then you are getting tired, and the more tired you get, the less productive.”

Participant 3 from the IT service gave the cause and effect of the following work-life balance practices:

“Yes, absolutely, absolutely. Because if we wouldn't follow these practices and did not regard work-life balance, it would burn people out, I guess.”

Participant 5 from the system installation project explains the importance of work-life balance practices and productivity:

“I think that they are more productive because they are not getting stressed out because of the project.”

These perspectives highlight that the following work-life balance practices enhance productivity by mitigating fatigue, stress, and burnout, and hence completing the project on time.

4.1.1 Work-Life balance practices

Work-life balance practices followed by different Finnish companies depended on the nature of the company. Figure 8 illustrates the types of work-life balance practices followed by the Finnish companies according to the participant responses to the question, *“In Finland, work-life balance is practiced. Which of these practices are implemented in your company to support work-life balance in a project?”*

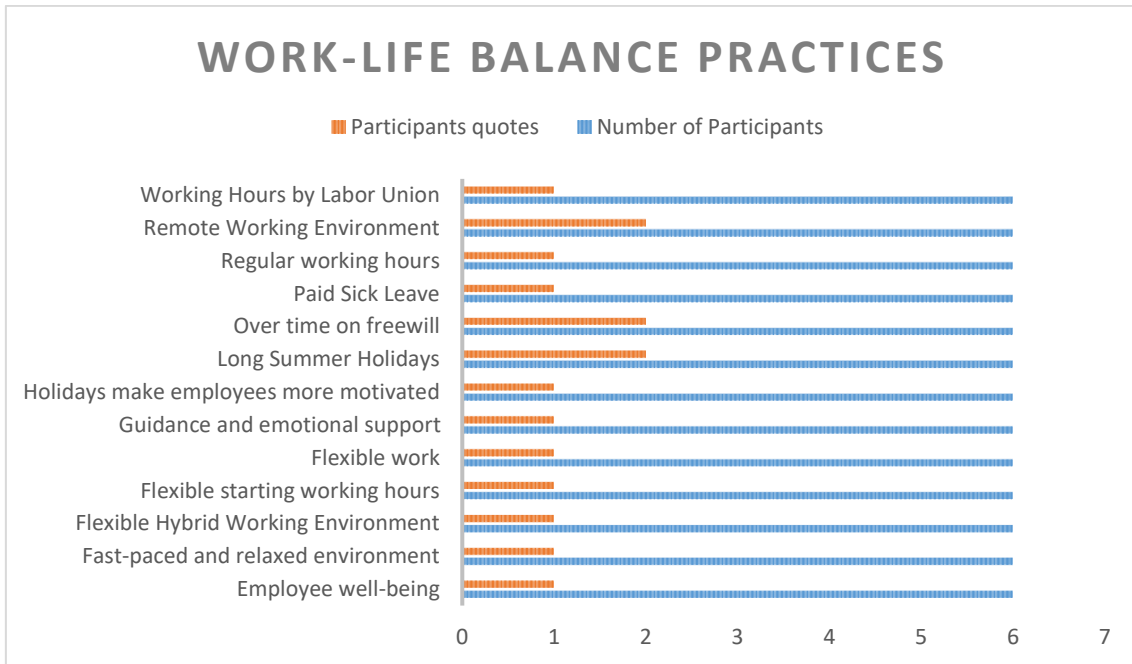


Figure 8. Work-life balance practices

The bar chart illustrates a range of work-life balance practices employed by Finnish companies, demonstrating a strong commitment to employee well-being and flexibility. These practices included regulated working hours by the labour union contract, along with paid sick leave, long summer holidays, a flexible hybrid working environment, and voluntary overtime. All these practices help prevent burnout.

4.1.1.1 Working hours by labour union & regular working hours

Two participants discussed the working hours regulation and regular working hours. Participant 2 from industrial machinery manufacturing commented that:

“Defined in the Labor Union contracts, we have maximum working hours, and we have maximum overtime working hours. What we need to follow up on.”

It was also discussed by another participant from an IT service background about working hours:

“Regular working hours from everyone are supposed to be available from 9:00 to 3:00.”

(Participant 3)

These quotes highlighted the importance of working hours. The established working hours by the labor union and the standard working hours adopted by the companies for the project. These working hours mitigate employee burnout and promote a healthier work-life balance.

4.1.1.2 Remote working environment & flexible hybrid working environment

The IT company and the engineering service company work remotely. The remote working environment allowed employees to work from their own comfort zone. The remote working environment allowed employees to complete the task from their preferred space. One of the participants shared the remote working environment:

“Most of the projects we are handling are remote. We have a lot of people from all around the world involved in the project, so it is also hard to have a face-to-face meeting.”

(Participant 5).

Another participant also shared the remote working environment and working at home, and the company has no physical office; everyone is working remotely:

“We're located in other separate cities in Finland, so we don't have an office, and the other project teams are consultants and developers, and tech leads.” (Participant 6).

One of the participants from an industrial machinery manufacturer shared about a flexible hybrid working environment. The employees can work from home, and when it is required, they go to the on-site location. Participant shared:

“Well, we do have a hybrid. For example, now that I am at home, I can work from home. It's very easy for me because we have all the systems and all the software that is easy, but if ever needed, I will be on the field or at the office as well. So, it's kind of flexible.”

(Participant 1).

These insights discussed the working environment of the project. Remote work and a hybrid working environment offer flexibility on how and where the work is to be performed. These working environments support work-life balance and reduce work-related stress and hence increase productivity.

4.1.1.3 Flexible work & flexible starting working hours

Project-based IT sector companies have flexible work to allow employees to actively work when the project needs their expertise. This allows efficient use of resources to align with the project timeline. Participant 6 stated that:

“The positive part of the work-life balance is that it's my flexibility. So, I work when I'm needed, basically, and where I'm needed as a project manager. You know, it's not nine-to-five jobs, it's more of a job when needed.”

The regular working hours for the project in an IT-based company are from 9 am to 3 pm. The employees are given flexible start working hours. This flexibility allows employees to schedule according to their personal needs. Participant 3 shared:

“People start working earlier, 7:00 or something like that. Even some people start working at 6:00, so it depends on the person and their preference, and their life situation.”

The flexible work and flexible starting working hours allow employees to control overtime and align their work with personal and family responsibilities. This reduces stress-related time and results in increased productivity.

4.1.1.4 Long summer holidays & holidays make employees more motivated

A Project manager from the Industrial machinery manufacturing project industry mentioned that project-based companies also have long summer holidays. The summer breaks are in accordance with national labor practices. Participant 1 discussed the duration of the summer holidays:

“I had five weeks' holiday in the summer. I could say that it was a holiday for sure.”

Another participant from IT services illustrated:

“Due to the flexibility, if I'm on holiday when everyone else is on holiday, then I get to be on holiday like in summer. But if I want to go somewhere in winter, you know, then it's kind of like up to me.” (Participant 6).

Participant 6 reflected on vacation, and its impact on the employees' well-being, stated:

“People need holidays for their mental health, and you know, motivation and all that. So that comes first.”

Holidays promote work-life balance, reduce stress, increase family time, and after the vacations, employees are more motivated and productivity increases.

4.1.1.5 Employee well-being & guidance, and emotional support

In project-oriented firms in Finland, employee well-being is the foremost focus for employers. It is regarded as a crucial facilitator for sustained project performance. An employee with mental health issues can impact project performance. Participant 5 stated:

“It's important that people are feeling happy and that they are not getting stressed out, and that they are mentally also totally stable.”

Another participant 6, from the IT services projects, reflected on emotional support illustrated:

“Basically, the more senior person walks you through the process, and yeah, they provide additional emotional support.”

These quotes discussed the importance of employee well-being and the emotional support provided by the senior. This decreases stress, enhances emotional regulation, supports work-life balance enrichment, and hence increases productivity.

4.1.1.6 Fast-Paced and relaxed environment

The IT project working environment alternates between a fast-paced environment and a relaxed environment, as discussed by participant 3:

“The working environment is sometimes very fast-paced, and sometimes it's a bit more relaxed.”

The working environment allows employees to manage work stress fluctuations. This type of environment supports work-life balance by reducing stress and maintaining

employee well-being.

4.1.1.7 Overtime on freewill

A Finnish project-oriented company's overtime is voluntary. Participant 2 from the construction project shared:

"I am obligated to work, and overtime is always based on your own free will, so no one can order you to work overtime unless you agree to."

Another participant 3 from IT services shared:

"Some kinds of migrations or deployments during weekends, for example, are all communicated very early to us. It will always depend on their current life situation. Can they do it or not?"

Over time, on free support work-life balance by providing employees with autonomy over their working time. It enhances motivation and increases employee productivity.

4.1.1.8 Paid sick leave

Employees in Finland are entitled to paid sick leave at any workplace. Employees at the project-focused organization are also entitled to paid sick leave. Employee well-being is given priority, and sick leave is not jeopardized. Participant illustrated:

"The healthcare at the company offers extra holidays, and you could get paid."

Paid sick leave promotes employee well-being, reducing financial stress and facilitating faster recovery. It helps employee retention, creating sustainable productivity.

4.2 Impact of training on time-based productivity

Training is an integral part of all occupations in Finnish companies. In project-oriented training is provided in certain industries; mostly, they employ experienced individuals

with certification, hence negating the necessity for training. The industries that provide training result in timely project completion. **Figure 9** shows the impact of training on time-based productivity. 4 out of 6 participants reported that training increases productivity.

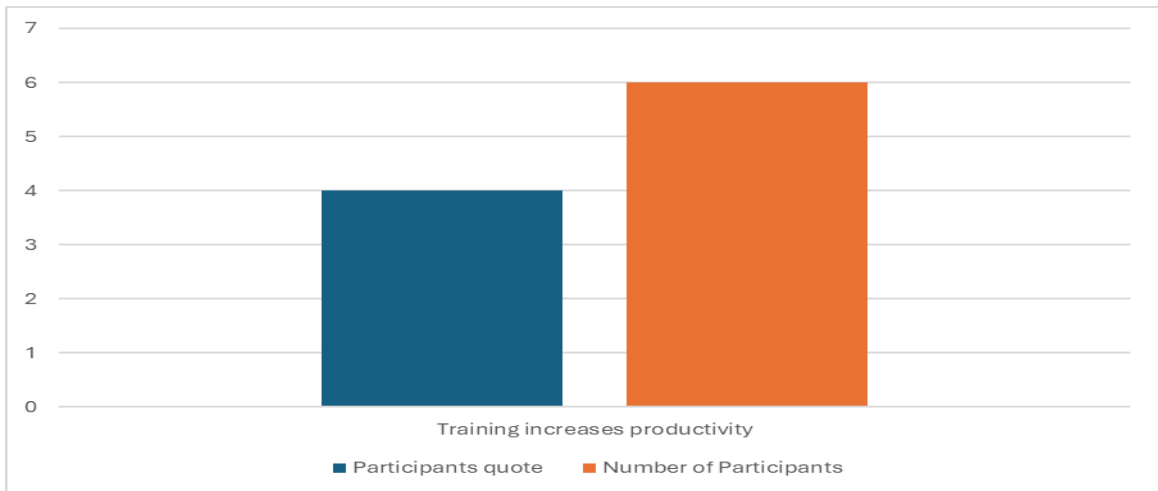


Figure 9. Training increases productivity

Participant 1 responded to the question: *“Yes, training increases productivity.”*

Participant 2 illustrated:

“Yes, and that's quite true, because if they, if they all understand clearly what they are doing and they understand the risks of what they are doing, then they can, let's say, mitigate the risks and concentrate on doing it safe and qualitative manner.”

Participant 3 shared his opinion:

“In my opinion, it's absolutely that they become more efficient, and if something is usually more efficient, it's also productive.”

Participant 4 expressed that:

“Yeah, you can make everything more efficient and improve it.”

These quotes indicate that training enhances productivity by equipping employees with an understanding of their roles, mitigating the risks associated with task completion. Secondly, making employees more efficient and productive ensures that projects are completed on time.

4.2.1 Nature of training provided by project-oriented companies

The type of training provided by project-oriented companies in Finland depends on the projects. Figure 10 illustrates the training nature of the participants' responses to the question: "What types of training are provided to your project team?" The project-driven training approach is flexible, and according to the project requirements.

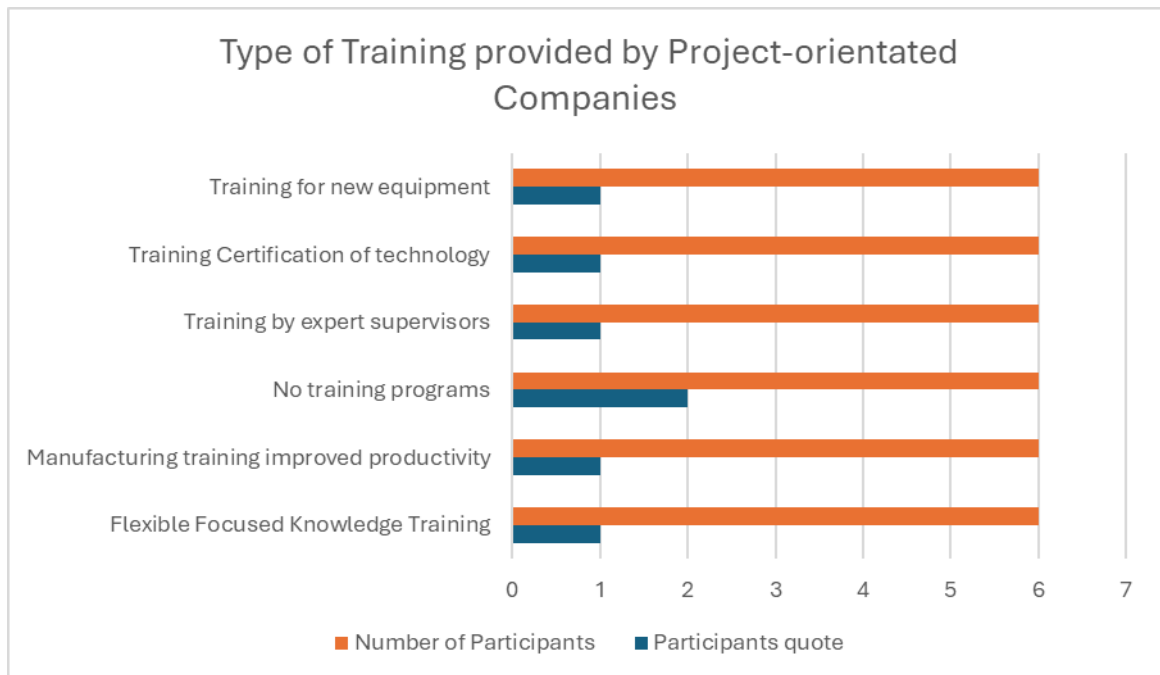


Figure 10. Type of training provided by project-oriented companies in Finland.

4.2.1.1 Training for new equipment

The Project has specific training tailored to technical requirements. Participant 1 from manufacturing machinery, currently working on a gas station project, shared:

"Oh, yes. For example, every time we need it, for example, now our technicians are going to Italy, and there is one company that manufactures certain equipment we need, and they are having the training for that. It's the extra training, and they have had that training before. But every time when there's coming something new comes for the equipment we have for this kind of training."

This quote indicates that in the project, training is provided even though the time is a strain. The training aims to utilize the new equipment, which will enhance production and ensure timely project completion.

4.2.1.2 Training certification of IT

IT training certification obtained by the team member enhances productivity. Team member becomes more competent in problem-solving, reducing errors, and using best practices. Participant 3 shared his experience:

“I have experienced that an expert did some kind of training and development programme on a particular technology, and after he was certified.

It was a lot smoother to complete all the tasks needed for us to get the project going and so on. So that's something. I've personally experienced. If the expert is not certified, it can be hard to complete those projects on time.”

The training results in improved efficiency, hence enhancing the productivity of team members, and the project is completed on time.

4.2.1.3 Training by an expert supervisor

In the IT project, team members are provided training by the expert supervisor. This training facilitates knowledge transfer. Participant 3 mentioned:

“Training programmes are provided absolutely, and they're provided in our experts' own teams by their own supervisors.”

This quote gives insight into supervision training. The training ensures the team is aligned with the project goals. Furthermore, continuous learning under expert supervision enhances productivity.

4.2.1.4 Manufacturing training

Manufacturer training is to develop the team's skills related to machinery. Participant 1 from an industrial machinery manufacturer highlighted the importance of manufacturer training:

"I could say that manufacturer training helps to understand how things work better, so we can get projects. Finish earlier and even tell the customer how it should work, how it is working right now, and why it is working."

This quote suggests that manufacturer training facilitates project acquisition and timely completion, and client retention. Effective training enhances the efficiency and quality of the team's performance.

4.2.1.5 Flexible focused knowledge training

Flexible focused knowledge training is on one topic per week, and a hybrid. Participant 4 mentioned:

"Like half-hour sessions where we try to focus on one topic, and once a week, we have this situation that we all attend virtually or on-site. It's kind of a good thing because that increases the general knowledge and awareness of certain topics."

This quote emphasizes the importance of conducting focused training weekly on a specific topic to raise awareness among team members. This supports continuous learning and hence enhances the productivity of the team.

4.3 Diversity's effect on time-based productivity

One of the distinct themes that emerged was diversity. This theme was in response to the question "From your perspective, does diversity affect team productivity?" The response was mixed; among six participants, three expressed positive feedback, two conveyed negative opinions, and one participant indicated their team lacks diversity.

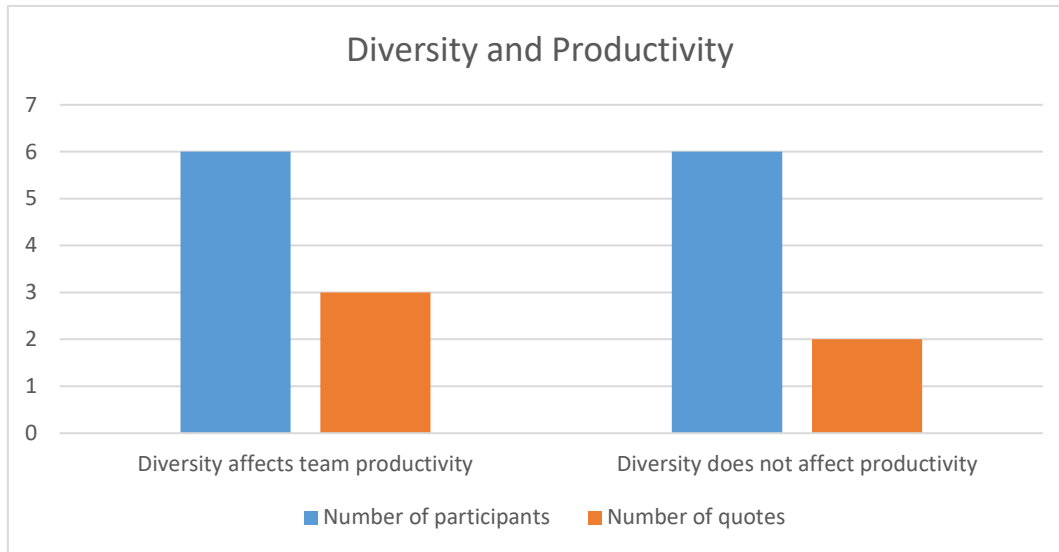


Figure 11. Diversity and productivity.

Diversity has a positive effect on time-based productivity. Participant 3 from IT services shared his experience:

“From my experience, it really affects good because people from different backgrounds, different experiences, think more outside the box. And it's something that we all should welcome, and that's good in, in, in the project environment.”

Participant 4 from a construction project expressed that:

“I think a different approach, different mindsets, and like. The international aspect is also there, so it's good.”

Another participant from the system installation highlighted:

“The productivity, I think it is higher, and the main reason is that they have different backgrounds, they have different points of view where they're working on an issue, and sometimes.”

These quotes indicate that diversity has a positive effect on productivity when people from different backgrounds and experiences work together. They offer diverse perspectives on problem-solving, thereby fostering innovative thinking.

4.3.1 Diverse team

A diverse team refers to a team with diverse backgrounds, skills, experiences, and areas of expertise. The project has a diverse team. The participant responded to the question: *Diversity in what way is your team diverse in terms of different backgrounds, experience, language, and culture?* One of the participants from construction shared:

“The large-scale industrial projects I’m working on involve suppliers all around the world. So, it’s quite common to meet contractors and subcontractors arriving from countries outside Finland.” (Participant 2).

Another participant from IT services claimed:

“In the projects, sometimes there are different people from different backgrounds, but usually it’s Finnish. People with the same language and culture with maybe similar experiences. There are some Europeans also in means from the Netherlands or from Estonia.” (Participant 3)

Participant 4 from the construction project shared:

“I think we have a very diverse team. They’re like colleagues who are from Estonia, Russia, also from Pakistan, and India.”

Participant 5 from IT services stated:

“Most of the time, we have about 80% of the team outside of Finland, and they’re coming from Asia. They come from the US. They come from Latin America.”

Participant 6 from IT services mentioned:

“I have a couple of coworkers on the team that’s who are from India, and then some of them are in Serbia.”

The above quotes indicate that diverse teams are widespread in Finnish project-based companies. The team members are from Asia, Latin America, America, Europeans. The diverse team brings various expertise, which the project utilizes to work effectively and hence enhances productivity.

4.3.2 Diversity brings innovative ideas

A distinct theme that emerged was that diversity brings innovative ideas. The presence of a diverse team sharing varied perspectives enhances creativity. Participant 5 from IT

services highlighted: *“It’s good to have a different point of view because they come with different solutions which you didn’t expect.”* This quote reflected the importance of diversity in a team. Solutions proposed by an expert from a different background, with experience, can be unique and lead to increased productivity.

4.4 Health and safety practices and time-based productivity

Health and safety practices a theme that emerged in response to the question *“From your perspective, how do health and safety practices affect productivity?”* Participant 1 shared:

“Very well. We have now had more than a year without any accidents or incidents because before every work we do, we always do that kind of preparation. List where we check all the risks. What could be in that work? What we are right now.”

Another participant mentioned:

“Yes, I do believe that this is the case because if you are doing things in a safe manner, typically you get good quality, and you get things done on the first go.” (Participant 2)

Participant 3 stated: *“Obviously, they affect.”*

According to the above quotes, health and safety practices enhance productivity by providing a safe environment, checking the risk, and mitigating risks. Team working in a safe environment can do quality work fast. Figure 12 shows the number of quotes per participant.

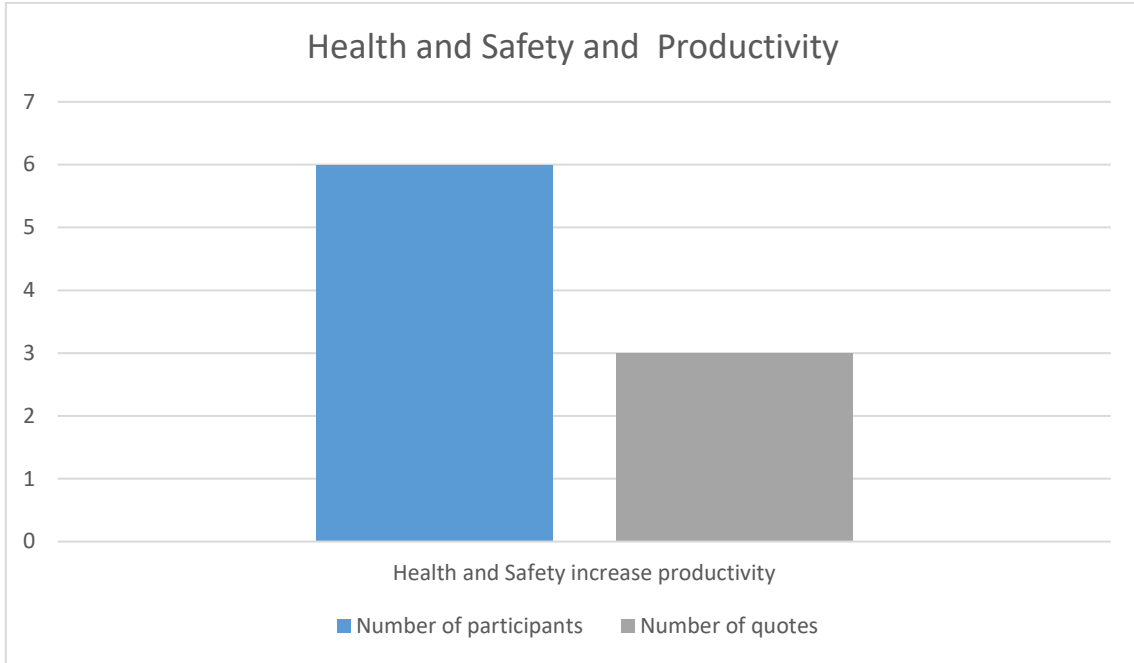


Figure 12. Health and Safety increases Productivity

4.4.1 Health and safety practices

Health and Safety practices followed in the project-oriented companies in Finland depend on the project and the company. Project-oriented companies conduct safety inspections annually, weekly, and in some cases, daily. The practices followed are shown in **Figure 13**



Figure 13. Health and Safety Practices.

4.4.1.1 Safety certification

Safety certification is required in project-oriented companies to manage safety and mitigate risks. One of the participants from IT services shared:

“The ISO certificates are all of those certificates we have in our company, so they review the health and safety protocols and all of that regularly.” (Participant 3).

From this quote, a project-oriented organization requires obtaining safety certifications. These certifications are a governance tool that mitigates uncertainty and hence increases productivity.

4.4.1.2 Regular health and safety reviews

Regular health and safety reviews are conducted by the organization annually. In project-orientated health and safety reviews are also conducted. Participant 1 from the machinery manufacturing project shared: “We all know that it's like once a year or twice a year, once every two years. However, it's going, but it's regular.”

Another participant stated:

“Continuous health and safety reviews, the company has separate programs to evaluate health and safety.” (Participant 5)

From the quotes, a regular and continuous health and safety review guarantees employee safety and facilitates the implementation of corrective measures. This builds employees' confidence that they are working in a secure environment, hence enhancing time-based productivity.

4.4.1.3 Health and safety yearly review questionnaire

Health and Safety yearly review questionnaires are taken in the IT services project companies. Participant 6, while responding to the question related to health and safety practices, shared:

“We have questionnaires. If you're speaking about our company, we are a global company, and I would say that the way it's handled is the review it's conducted through yearly questionnaires.” (Participant 6).

4.4.1.4 Safety rule exam

The construction project document, comprising safety regulations, is provided to the team members. An exam is administered, and upon passing, individuals are granted entry into the building. Participant 2 stated:

“We have the client safety document, which is part of the air FQ material. The client is setting up the safety rules, demands for the construction site, and before anyone can enter to work on the site, they must ensure safety. So that all the safety-related rules are presented to them, and then they take a written exam. And if they pass the exam, then they are allowed to enter the site and do their work. We'll ensure that all the safety-related items have been taken into consideration and noted.”

4.4.1.5 Weekly safety inspections

In a construction project, weekly safety inspections are conducted. In a month, 130 safety-related observations are recorded. Participant 2 stated:

“We are doing weekly safety inspections on the construction site. Also, making observations on a regular basis. So typically, we have 130 safety-related observations every month. These inspections ensure the safety of the team and make sure that the work is not stopped due to incidents. Although inspections also take time, they can reduce the time if a big incident happens.”

The weekly safety inspections can reduce the time if big incidents happen, therefore, it can increase time-based productivity.

4.4.1.6 Accident prevention due to safety practices

In an industrial manufacturing project, daily safety inspections are conducted at the beginning of work. Accidents are prevented due to daily inspections. Participant 1 shared:

“We have now more than one year, no accidents or anything, because before every work, before what we do, we always do safety checks where we check all the risks. What could be in that work? What we are going right now.”

This type of inspection prevents accidents and diminishes the risk, thus increasing time-based productivity. It is also helpful to understand the project’s status and what can be accomplished.

4.5 Inclusion and collaborative team

The inclusion and collaborative team theme emerged in response to the question “What measures are taken to ensure all team members feel included in the project?” The codes were created, as illustrated in Figure 14.



Figure 14. Inclusion and Collaborative Team Practices.

4.5.1 Workplace collaboration

One of the participants from construction shared about workplace collaboration:

“Let's say, able to produce the friction between different people on the working side, that helps everybody. And all the other people can concentrate on their work rather than something that is not so relevant.”

In this quote, the participant is expressing his experience of workplace collaboration.

Collaboration among team members in the workplace can help the team focus on the work. The team members help each other with the work, and can complete the work before time, and consequently, overall productivity is increased.

4.5.2 Team cooperation

Team cooperation refers to the coordinated efforts among all the team members to achieve a goal. The efficiency of the team increases if they are well-coordinated. It is the essential factor in the success of the project, as mentioned by participant 1:

“The primary factor of success in a team is cooperation among team members. Any project can operate well.”

The success of any project is completing on time and delivering what is required. Team cooperation enhances the team's efficiency and consequently increases time-based productivity.

4.5.3 Mutual respect and understanding among the team

Mutual respect and understanding among team members are the foundation elements of effective collaboration. It opens the door to communication and accepting diverse perspectives. Team members are more likely to engage in constructive discussions and can manage all the situations. Participant 4 from the construction project shared:

“There is mutual respect, an understanding, and a reasonable approach to the situations.”

The mutual respect and understanding help to manage conflict productively, the team members feel included, and hence the performance of the team increases.

4.5.4 Fairness and non-discrimination team

Fairness and non-discrimination among the team are the organizational policy. The team members are selected based on their qualifications and can do the work. Participant 1 shared his experience:

“There's no harassment in our team, we have women in our team, we have different. I couldn't say a different religion. We are not looking for that. We are not looking for ages. We are not looking for any racism. Everything. It doesn't matter where you're coming. For example. Me. I'm 62 now, and I have been working in a company for three years. I was 60 years old at the time of applying for the job. If you qualify, that's enough.”

Fairness and non-discrimination at the time of hiring help to hire qualified people. The team members are experienced and knowledgeable, and hence their time is productive, and consequently, the project is completed on time.

4.5.5 Inclusion

Inclusion means that team members feel included in the project. Two participants shared the inclusion. Participant 5 from the system installation shared:

“Because they have some tasks assigned and know what they need to do, they've also felt included in the project.”

Another Participant 6 from IT

“Yeah, yeah. I mean, from my perspective, inclusion is the most important thing. You cannot leave anyone out.

It is important that everybody is equal. No one in the project is the boss. So, we're all sitting around the round table, also with the client. So that everyone is included in the process.”

The above quotes describe how the team members are included in the project. No one is the boss; everyone is equal, so they can share their ideas openly and are included throughout the process. Team members feel included when they are given importance during the process, and they are assigned a task. Team members feel included and important in the project, so their productivity also increases.

4.6 Clear Communication and Role Clarity

A distinct theme of clear communication and role clarity emerged as participants responded to the question about inclusion. Clear communication is essential for task clarity, reduces ambiguity, and errors. As a result, it reduces the time to perform the task. In the project environment, clear communication is essential to enhance productivity.

Figure 15 shows the codes created from the participants' quotes.

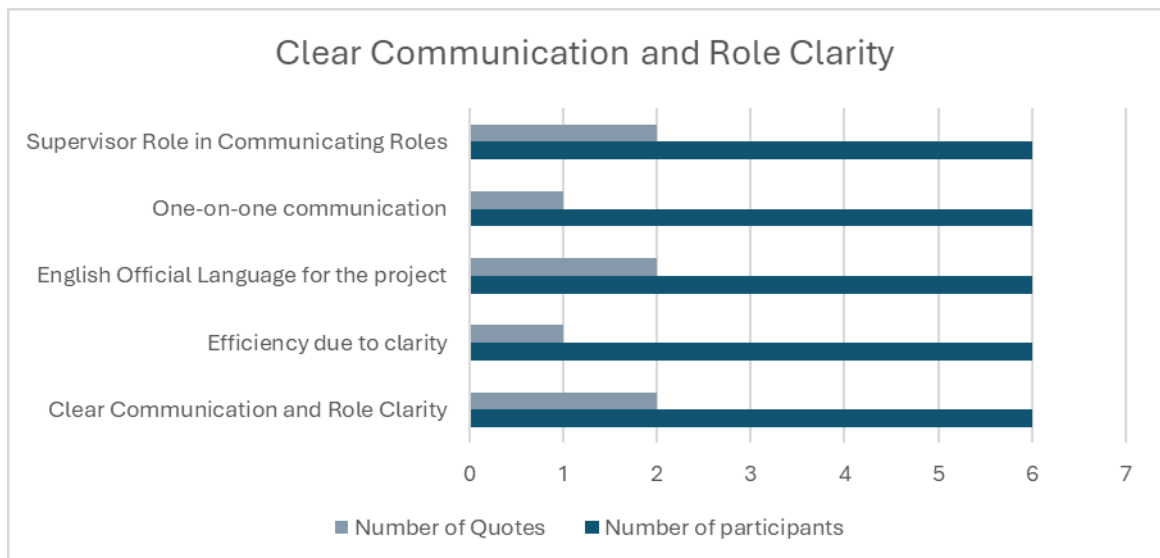


Figure 15. Clear Communication and Role Clarity

Participant 1 shared:

“Before every project, there is a meeting at the beginning, and everybody who is involved in that project is present and briefed about the project. Every team member knows what he will be doing, when, how, and where.”

Participant 3 mentioned:

“In the project, during internal project planning meetings or status meetings, we ensure that everyone has a voice, everyone feels comfortable sharing their opinions and can bring any ideas.”

The above quotes highlight that team members communicate with clarity. The meetings at the beginning of the project and the status meeting are held to make sure that everyone is heard. Participant 1 shared: *“If everyone knows what they're doing and how the project is going, so we can have time if something is missing.”* If the communication is done clearly, the project can be completed on time.

4.6.1 Supervisor role in communicating roles

The Supervisor’s role in communication in the project is identified as crucial. Participant 1 shared:

During the time of the project, there is also a supervisor who is telling that if something changes, he's telling why we're changing your position in this project, and at what time, or if you have to go to another project, so everybody knows what's happening.

Another participant mentioned:

I only have a couple of supervisors who are looking after the contractors’ work.
(Participant 2)

Supervisors’ crucial role in communication is mentioned in the above quotes. The supervisor aligns team members with the project through effective information exchange, and team members know what they are supposed to do; this type of communication reduces misunderstandings and reduces time.

4.6.2 One-to-one communication

One-to-one communication is direct communication with the project manager. It helps the immediate flow of information, enabling clarification, feedback, and adaptation.

Participant 3 from IT services mentioned:

“We take measures such as having one-to-one meetings with the project manager, just to know the overall feel of the project, team members, and what they think. People tend to talk more when it's one-to-one.”

4.6.3 English as the official language for the project

Finnish project-based companies collaborate with suppliers and team members from all over the world; therefore, English is the official language for communication. The adaptation of the English language removes the language barrier and promotes effective communication throughout the project. Participant 2 from construction shared:

“Typically, the official project language is English.” Participant 6 from IT services also shared: *“Language is English, so that's the most effective because everyone speaks English.”* These quotes emphasize the importance of a common language to communicate, and that language is English.

4.7 Findings related to theories

In the literature review, three theories were introduced: social exchange theory, the JD-R model, and stakeholder theory. These theories provide a foundation for the analysis. The theories also support the analysis of key variables. The table below presents participants' quotes that are relevant to the social exchange theory.

Table 4. Participants' Quotes related to Social Exchange Theory

Quotes	Social Exchange Theory
<i>If everyone knows what they're doing and how that is most affected, how the project will go. For example, a project that I have had lately is all going on schedule, all of them, and no late or whatever, but it's like before the time. So, we can have time if something is missing. (Participant 1).</i>	This highlights that communication builds trust among team members, and they then reciprocate by completing the project on time. Social exchange theory focuses on building trust among team members.
<i>There is a mutual respect, and there's also understanding. And there's also like. Reasonable approach to the situations, which is good, and as we have well. (Participant 4).</i>	A sense of inclusion and support is fostered among team members through mutual respect and understanding. According to social exchange theory, mutual support can reciprocate into positive work behaviors.
<i>I always try to put the work-life balance first. And I think that they are more productive because they are not getting stressed out about the project. (Participant 5)</i>	Work-life balance shows that organizations care about the employees, and this is reciprocated by team productivity.
<i>Training and development and occupational health and safety have been provided to the project team by their employer, and it does, yeah, it does help in their work. So that means that we're able to complete the project on time. (Participant 6)</i>	Social sustainability practices followed by the organization are reciprocated by the project by completing the project on time.

The JD-R model of job demand and resource model, in which job demands are stressors that create ambiguity, and employees are physically and mentally stressed out. Job resources are those that decrease job demands and enhance productivity. Table 4 shows the link between participants' quotes and the JD-R model

Table 5 Participants' quotes linked to the JD-R model

Participants Quotes	JD-R model
<i>Training programs are provided absolutely; they're provided in our experts' own teams by their own supervisors. In my opinion, it's absolutely that they become more efficient, and if something is usually more efficient, it's also productive (Participant 3).</i>	This highlights training program reduces job demands by eliminating the ambiguity in the job and enhancing job resources by learning and making team members more efficient.
<i>If I'm on holiday when everyone else is on holiday, then I get to be on holiday like in the summer. But if I want to go in winter, you know, then it's kind of like up to me. People need holidays for their mental health, and you know, motivation and all that. So that comes first. (Participant 6).</i>	Stresses the importance of long holidays, which is a job resource. Temporarily reducing job demands, the team members can rest, which helps restore their energy. The employees feel more motivated and productive.
<i>We are clear with the client. We just plan it well and integrate it (Participant 6).</i>	Note that the clear job requirement and planning job is a job resource, as it reduces job-related stress by designing the job well.

Stakeholder Theory must provide value to the stakeholders. In the project, the stakeholders are the project team members, clients, and suppliers. The participants' quote that is linked with the stakeholders' theory:

"I have had one project where one of the participants got stressed out badly. And that was for a migration project in the Netherlands, and she ended up going home and needed to take leave. And as she was one of the key persons, that project got delayed quite heavily." (Participant 5)

This quote highlights that the project manager gives priority to the stakeholder; in this case, a team member's health was valued over the shareholders.

4.8 Summary of key findings.

The study identified six key themes that collectively demonstrated the influence of social sustainability practices on project team time-based productivity. Themes are closely linked to the impact of social sustainability practices on the completion of the project on time. The themes highlight the social sustainability practices followed by a project-oriented organization, and which practice is more effective in achieving the project goals. By addressing these themes, a project-orientated organization can better support its project teams in improving productivity and project performance.

The work-life balance theme shows the importance of balancing work and personal life. In Finland, work-life balance is already practiced in organizations, including project work. Participants generally recognized that the project supports work-life balance through regular working hours given by the labour union, a remote working environment, flexible starting working hours, long summer holidays, a hybrid working environment, and overtime on freewill. Participants indicated that employees are more effective and motivated when they can have family time and personal time to recharge. These Findings suggest that Finnish companies are considering work-life balance in project work, and high importance is given to employees' well-being.

The second theme: training in project-oriented companies. Training is an important part of the organization in Finland. Training is provided on how to use the new equipment. For training, some team members move abroad to learn to use the new equipment. Expert supervisors assist team members, and lastly, focused training is provided once a week. In some projects, no training is provided due to time constraints; they hire experienced team members. All the participants agreed that the training program can enhance productivity.

The third theme: diversity in team members. The project-oriented teams are diverse in different projects. In manufacturing, workers from different nations and IT sector team members from different parts of the world are working remotely. Some projects are

working with different suppliers all over the world. Participants emphasized that diversity brings innovative ideas as team members are from different backgrounds and experiences. 4 out of 6 participants highlighted that diversity could enhance the overall performance of the project and hence increase productivity.

Fourth theme: health and safety theme, in Finnish organizations, employee safety is the top priority. The government has rules and regulations, such as safety certification, must be obtained by organizations. Participants highlighted that the health and safety practices are being followed. The practices depend on the nature of the project, for example, in manufacturing, continuous health and safety reviews. Participants emphasized that following health and safety practices prevents accidents are prevented and mitigate risks, hence increasing productivity, and the project is completed on time.

The fifth theme: inclusion and workplace collaboration highlights the importance of creating an environment of team cooperation, mutual respect and understanding among team members, fairness and non-discrimination among team members, and inclusion. Participants noted that the team members experiencing psychological safety and the opportunity to be part of the project are more likely to share new ideas, give feedback, and engage in problem-solving. Participant emphasized that team members having a cooperative team, getting respect from fellow team members, and being heard during the meetings are more productive, and it's important for the project completion on time.

Last theme: clear communication and role clarity emphasized the importance of communication and clarity among team members, resulting in effectiveness and productivity. Participants highlighted that the supervisor's role in communicating roles to the team members enhanced clarity and productivity. Role clarity ensured what was expected from the team members, removing ambiguity, hence increasing productivity. Further, one participant stated that one-to-one communication with the project manager is required to enhance communication and what is required from that individual team member. In the IT project, the official language of the project is English,

as the project involved people from all over the world. Initiatives are taken to communicate to team members their tasks, and this prevents obstacles at the individual level, improving the time-based productivity.

By incorporating the six themes into a unified strategy framework, which addresses the gap in the influence of social sustainability practices on project-oriented organizations in Finland. The organization can effectively address the social sustainability practices that influence time-based productivity. This framework highlights the importance of implementing government and organizational policies and social sustainability practices that ensure the team members' well-being. Implementing social sustainability practices such as work-life balance, training, development, diversity, health, and safety practices promotes a flexible working environment, skill development, and supportive leadership, and encourages a collaborative environment. Such measures ensure employees feel valued, safe, and heard within the team and can maintain work and family life while increasing productivity.

5 Discussion

The purpose of this study is to examine how social sustainability practices, such as work-life balance, training, health and safety practices, diversity, and inclusion, influence project team time-based productivity. The results of this research demonstrate participants' perceptions and experiences of working on socially sustainable projects. The deductive approach enabled the author to assess the theoretical establishment of relationships between social sustainability practices and their influence on productivity. The inductive approach allowed the author to recognize the emergent pattern from participants' experiences of how these practices interact in practical project work. The findings show that the social sustainability practices, including work-life balance, training, health and safety, diversity, and inclusion, have a positive influence on time-based productivity. These findings align with the existing literature on how these practices are related to productivity. Their impact depends on how effectively these practices are implemented.

The participants highlighted that work-life balance enhances time-based productivity in project teams. This aligns with the study by (Panday & Bhagat, 2018), which found that work-life balance practices enhance employees' productivity and organizational image and performance. Their study was based on a project-oriented organization. Furthermore, the study noted that the work-life balance practices improve employees' motivation, commitment, retention, and loyalty, which helps in project execution and increases productivity.

The participants emphasized that the training plays an important role in improving the efficiency of the team and enhancing productivity, which increases the likelihood that the project will be completed on time. This aligns with the findings of (Korir & Gichure, 2019), who found that the training improves project team performance by effectively managing resources, ensuring the project is completed on time. The training on the project included teaching identified knowledge, skills, and abilities needed by workers.

These trainings helped the worker to be efficient in the development of delivery methods.

The findings of this study confirm that diversity and inclusion improve productivity in project teams. When the project team consists of team members from different backgrounds, experiences, and cultures, they can generate new ideas to deal with challenges and enhance creativity. In a Finnish project-oriented organization, the team is diverse, and measures are taken to include all the team members. Diversity and inclusion increase productivity. These findings align with (Amayo et al., 2023), who stated that inclusion in a multinational diverse team brings more innovation and helps in making effective decisions. Project-oriented organization teams that are diverse and in which inclusion is practiced can adjust rapidly, reduce delays, and achieve higher performance. Similarly, the finding of (G. Wu et al., 2019), are consistent with the study by showing that diversity positively influences project team performance. According to their study, knowledge diversity creates new knowledge, and value diversity improves creativity. Together, these studies support that diversity improves time-based productivity by enabling team members to work more efficiently.

The findings of this study show that health and safety practices enhance project team productivity. The participants emphasized that project teams working in a safe environment are more productive as accidents are reduced and risks are mitigated. This aligns with the findings of Lari (2024), his study, which was based on a project-oriented organization. The results demonstrated that Occupational Health and Safety (OHS) intervention not only diminishes risks but also enhances employee well-being and engagement. It improves employees' vigilance, attitude, and engagement, which results in employees being more productive over time. Further, the findings are supported by the findings of Génesis et al. (2022), which highlighted that occupational health and safety management systems are a component of labour productivity. Their study emphasized that occupational health and safety management systems not only reduce

workplace incidents but also promote the sense of security that makes working for the company easier.

Clear communication and role clarity emerged as a finding in this study. The participants highlighted that clear communication through supervisors helps team members stay focused and productive. In some projects, English is used as the common language of communication. When communication is clear, mistakes among team members are minimized, and the project is completed on time. This aligns with the findings of Majeed et al.(2026), it stated that in the absence of communication, team members cannot work effectively and are unable to achieve the desired outcome. Effective communication is important to achieve the project goal. When communication is improved, the project's success rate increases. Communication facilitates understanding among team members, enabling the timely and efficient achievement of the project objectives.

According to the Project Management Institute (2021), the principle of project management is an element of leadership direction. The project leader should be a diligent, respectful, and caring steward. Stewardship refers to the focus on ethical leadership, responsible management, and resource management. Stewardship requires project managers to treat the project team members with respectful engagement, fair treatment, and to provide opportunities. It means that project team members can openly communicate, and their contributions are acknowledged. This aligns with the findings of the study related to the social sustainability practices, which promote fair treatment, respectful engagement, and equal opportunity for the project team members. Therefore, the stewardship leadership practices in project management support the social dimension of sustainability in a project-oriented organization

The objective of effective leadership is to enable a high-performing team. Several elements that can contribute to a high-performing project team include open communication, shared understanding, trust, collaboration, adaptability, and resilience. Open communication by project managers fosters a safe environment for productive

meetings, problem-solving, and clarity. A project manager builds trust among team members, the project, and the organization. Trust among team members can deliver extra value and make them more productive. Team collaboration can make the team generate more ideas, and productivity is increased. Adaptability of the team to an uncertain environment can make a high-performing team (Project Management Institute, 2021). These elements align with the findings of the thesis, like clear communication by the project manager, implementation of health and safety practices enhances trust among the team members, inclusion helps in collaboration to generate more ideas, and training helps team members adapt to the team environment. The elements of effective leadership collectively enhance team performance in a socially sustainable environment.

5.1 Practical implications

The findings of the study have several practical implications for a project-oriented organization to increase time-based productivity while being socially sustainable. The organization can incorporate these practices (work-life balance, training, diversity, and health and safety) into its strategic and operational framework. By encouraging work-life balance, burnout and absenteeism are mitigated through flexible work schedules, workable loads, flexible start times, and hybrid work environments. These policies can support employees to continue to deliver high performance throughout the project. The encouragement of diversity and inclusion can be achieved by hiring staff fairly, providing inclusive leadership, and being culturally competent in communication practices, enabling project teams to communicate effectively, share their views, and enhance creativity. To further increase the level of clarity and limit the communication barriers, it might be beneficial to establish English as a common working language for the project in multinational teams.

The active measures and attention to health and safety practices provide a stable and safe work environment, which mitigates the risks of disruptions and ensures the stable productivity of an employee. In a construction project, daily checking of machinery safety and site safety reduces the number of accidents, ensuring a smooth and productive workplace. Training is another significant way to improve time-based productivity. Investing in the training of new equipment and continuous skill development can improve technical competence and interpersonal effectiveness. The structured training program can also provide the necessary skills to cope with intricate project requirements that are consistent with the changing technologies. These implications, combined, indicate that the organization that aims at enhancing productivity should maintain a holistic approach, ensuring that social sustainability, role clarity, and clarity of communication, as well as constant learning, are embedded within the management systems. In doing so, they will be able to create resilient, highly motivated, and high-performing project teams who can give higher-quality results and ensure the success of the project.

5.2 Limitations and future research

The study has limitations despite its contributions. Firstly, the study has a qualitative design, which limits the generalizability of the findings. The findings are based on a particular view of a group of participants rather than the general population. Secondly, the small sample size may affect the findings. Finally, the project-oriented organization in Finland was used to select the participants. The study can provide some contextual bias since it is likely to influence their view of social sustainability practices and productivity. Such an approach limits the results to other nations and industries. These limitations suggest a prospect for future research. Future research should expand on these results by using a larger or more diverse sample to increase the external validity of the results. Quantitative or mixed methods can be used to do comparative analysis by type of project and cultural context. Additionally, future research can explore the role of

organizational culture, leadership style, and digital communication tools can influence social sustainability in project-oriented organizations. The study of these factors would provide a detailed explanation of how the project-oriented organization can create a sustainable work environment that consistently supports high productivity.

6 Conclusion

The study explores the influence of social sustainability practices on time-based productivity in a project team in Finland. Social sustainable practices such as work-life balance, training, diversity, health and safety practices, and inclusion play a significant role in enhancing time-based productivity in a project-oriented organization. These practices reduce delays, improve collaborations, and build trust among the team and the project. The social sustainable practices are being followed by the Finnish project-oriented organization, and the projects are being delivered on time. An inductive and deductive approach was used for the investigation of the study. The findings of this study reveal that participants agreed that the social sustainable practices have an influence on time-based productivity. These practices are already being followed by the organizations as per Finnish law. The participants stated that the team members are more productive after the long summer vacations when they have more time to spend with the family. Following these practices creates an environment in which team members feel valued, safe, and motivated to contribute effectively. Furthermore, the result revealed that the project-oriented organization in Finland is concerned about the team's well-being, mentally and physically.

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Appendices

Appendix 1. Interview Questionnaire

Interview Questions for the project-oriented companies

General Background

- a) What is your present job on the project? How long have you been working on this project?
- b) How is the working environment in your project team?

Social Sustainability's practices

Work-life balance

- a) In Finland, work-life balance is practiced. Which of these practices are implied in your company to support work-life balance in a project?
- b) In your opinion, following these practices, is the team more productive?

Diversity:

- a) In what way is your team diverse in terms of different backgrounds, experience, language, and culture?
- b) What percentage of the team is diverse?
- c) From your perspective, how does diversity affect team productivity?

Inclusion:

- a) What measures are taken to ensure all team members feel included in the project?
- b) From your perspective, how does inclusion improve their productivity?

Occupational Health and Safety practices:

- a) When was the latest occupational health and safety review done in your company?
- b) From your perspective, how do the health and safety practices affect productivity?

Training:

- a) What type of training programs are provided to your project team?
- b) Are the training programs effective for the team members?
- c) From your perspective, do training programs support team members to become more efficient or productive?

Development:

- a) What types of professional development are provided to your team?
- b) In your point of view, do the developments help to make the team productive?

Time-based project team's productivity

- a) In your opinion, do social sustainability practices (diversity, Occupational health and safety, training, and development) help to complete the project on time?
- b) Is there any experience where these practices positively impacted the project outcome? Can you share?
- c) Did you face any challenges implementing social sustainability practices in your team?

Reflections and Recommendations

- a) Do you have any suggestions regarding improving social sustainability practices in your team?
- b) What is your view on whether these practices are more important than the current practices followed by your company?
- c) How many projects have you worked on, and which were successful and which failed?
What were the reasons for success, and what were the reasons for failure?
- d) Do you want to share anything else regarding how your team's social sustainability is managed?

Appendix 2. Codebook

Name	Description	Files	References
Challenges faced implementing Social Sustainability Practices	No Challenges faced implementing Social Sustainability Practices	4	4
Development	Employee development can increase productivity	3	6
Development increase productivity		1	1
Professional development increase productivity		1	1
Professional Knowledge development		3	3
Role rotation for learning		1	1
Inclusion and a collaborative team	Including all the team member can increase productivity	5	6
Fairness and non-discrimination team		1	1
Inclusion		1	1
Inclusion improves productivity		1	1

Name	Description	Files	References
Mutual Respect and Understanding among the team		1	1
Team Cooperation		1	1
workplace collaboration		1	1
Proactive health and safety practices	Ensuring the health and safety of employees increases productivity	5	12
Accident prevention due to Safety Practices		1	1
Continuous health and safety review		1	1
Health and Safety increase productivity		3	3
Health and Safety yearly review questionnaire		1	1
Limited health and Safety involvement		1	1
Regular Health and Safety Reviews		2	2
Proactive health and safety practices	Ensuring the health and safety of employees increases productivity	5	12
Accident prevention due to Safety Practices		1	1

Name	Description	Files	References
Continuous health and safety review		1	1
Health and Safety increase productivity		3	3
Health and Safety yearly review questionnaire		1	1
Limited health and Safety involvement		1	1
Regular Health and Safety Reviews		2	2
Safety Certification		1	1
Safety Rule Training		1	1
weekly safety inspections		1	1
Safety Certification		1	1
Safety Rule Exam		1	1
weekly safety inspections		1	1
Project delayed causes	Project delayed due to maintaining social Sustainability	2	3

Name	Description	Files	References
Project delayed due to employees being stressed out		1	1
Project delayed due to sick leave		2	2
Role and nature of training programs provided by the organization	Implementing training can increase efficiency, hence productivity is increased	6	11
Flexible Focused Knowledge Training		1	1
Manufacturing training		1	1
No training programs		2	2
Training by expert supervisors		1	1
Training Certification of technology		1	1
Training for new equipment		1	1
Training increases productivity		4	4
Social Sustainability Practices improve time-based productivity	Social Sustainability Practices improve time-based productivity	4	4

Name	Description	Files	References
The Critical Role of Clear Communication and Role Clarity	Communicating with the employee can decrease the time taken to do the task, hence increasing productivity	5	10
Clear Communication and Role Clarity		2	2
Client oversight		1	1
Communication Challenges		1	1
Efficiency due to clarity		1	1
English Official Language for the project		2	2
One-one communication		1	1
Supervisor Role in Communicating Roles		2	2
Work-life balance and flexibility	Maintaining employee well-being and work-life balance can increase productivity	5	20
Employee well-being		1	1
Fast-paced and relaxed environment		1	1
Flexible Hybrid Working Environment		1	1

Name	Description	Files	References
Flexible starting working hours		1	1
Flexible work		1	1
Guidance and emotional support		1	1
Holidays make employees more motivated		1	1
Long Summer Holidays		2	2
Over time, on freewill		2	2
Paid Sick Leave		1	1
Regular working hours		1	1
Remote Working Environment		2	2
Working Hours by Labour Union		1	1
Work-life balance increases Productivity		4	4
Workplace diversity	Diverse employees increase productivity	6	11
Diverse Team		5	5
A diverse team brings innovative ideas		1	1

Name	Description	Files	References
Diversity affects team productivity		3	3
Diversity has no effect on productivity		2	2

Appendix 3. Hierarchy Chart

