

The Influence of Emotional Intelligence on Team Dynamics in the Construction Industry

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ABSTRACT

This research project aims to investigate the relationship between emotional intelligence and team dynamics in the construction industry, particularly how individuals with higher levels of emotional intelligence are typically associated with enhanced team behaviours, especially in the areas of communication, adaptability, roles and responsibilities and conflict resolution. A quantitative approach was adopted to investigate this relationship by means of data collected from survey questionnaires distributed to construction professionals. The data was analysed through exploratory factor analysis and multiple regression analysis.

The results revealed that emotional intelligence is strongly associated with conflict resolution, however, no significant correlations to the other parameters were determined. Such findings indicate that whilst emotional intelligence may enhance certain team behaviours, its influence varies depending on the specific aspect of team dynamics being investigated.

This research accorded empirical evidence to the sector of construction management, particularly on the specific role that emotional intelligence plays on team dynamics. It highlights the value of emotional intelligence in conflict situations and suggests future research possibilities for a better understanding of the nuanced impact of emotional intelligence on construction teams.

KEYWORDS

Emotional Intelligence – Team Dynamics – Construction Industry – Conflict Resolution

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CHAPTER 1: INTRODUCTION

1.1 Significance of Emotional Intelligence in Team Dynamics

The concept of team dynamics is a major determinant in the global success and accomplishment of any company. Successful communication, emotional resilience and the capacity of individuals to come together towards a collective purpose are crucial in the achievement of a company's goals (Esfahani et al., 2013; Feyerherm & Rice, 2002). Emotional intelligence refers to an individual's ability of identifying, interpreting and controlling one's own emotions and temperaments as well as the emotions and temperaments of others (Goleman, 1996). The concept of emotional intelligence is significantly being recognised as a fundamental pillar of a group's cohesion and accomplishment (Kim & Ko, 2021). Teams which embrace emotional intelligence are more susceptible to successful communication, conflict resolution and problem-solving (Shaik et al., 2021; Reilly, 2022). Individuals who operate in the construction sector are known to perform in high-pressure environments and as such, companies which endorsed emotional intelligence have proven to possess more productive and resilient teams as well as increased overall levels of trust and self-efficacy (Kim & Ko, 2021).

1.2 Research Rationale

Despite the numerous sources of existing literature on emotional intelligence and its significance on a company's success and leadership, the particular effect of emotional intelligence on team dynamics within the construction sector remains highly unexplored. The majority of existing literature focuses on the company's advantages and thus, the effect of emotional intelligence on individuals in high-pressure environments such as the construction industry is significantly under-studied. The construction sector is traditionally more concerned with the individuals' technical capabilities and skills and as such, soft development skills such as the inclusion of emotional intelligence have been more challenging to adopt (Ngwenya et al., 2019). In addition, the nature itself of construction teams, which are comprised of several individuals stemming from several organisations and groups, presents difficulties in communication and conflict management. Consequently, this study aims to address the existing deficiencies regarding emotional intelligence in the Maltese construction industry and to compel information and understanding on how emotional intelligence can improve team performance and eventually, the overall project success.

1.3 Research Aims

The primary aim of this study is to evaluate the influence of emotional intelligence on team dynamics in the construction industry. Specifically, it seeks to understand how emotional intelligence affects communication, collaboration, adaptability and conflict resolution among team members.

1.4 Research Objectives

This study intends to examine exhaustively the function of emotional intelligence in team dynamics. The ultimate goal of this research is to establish a body of significant knowledge to be endorsed by academics and professionals who operate in the construction industry. The following are the objectives of this dissertation:

- To investigate the relationship between emotional intelligence and team dynamics in construction teams;
- To assess the levels of emotional intelligence among construction industry professionals;
- To analyse the relationship between emotional intelligence and communication effectiveness in construction teams; and
- To evaluate how emotional intelligence contributes to conflict resolution within construction teams.

1.5 Research Question

To guide this investigation, the following research question has been formulated:

How does emotional intelligence influence team dynamics in terms of (a) communication; (b) adaptability; (c) roles and responsibilities; and (d) conflict resolution within the construction industry?

1.6 Research Method

The research method selected for this study is the quantitative research method. Such choice was deemed the most appropriate due to a number of factors, such as the nature of the research question, the aims of the study and the information available. The quantitative research method embraces objective measurement, statistical examination and investigates correlation. The source of data collection was through the distribution of a questionnaire to competent individuals. Since this study aspires to examine the relationships amongst team members within the ambit of the local construction industry, the chosen method of data collection was deemed the most suitable for the successful recognition of patterns and correlations across a distinct sample. Such method also supplies a solid foundation for establishing conclusions on how emotional intelligence affects team dynamics in the construction sector (Holton & Burnett, 2005).

1.7 Dissertation Structure

This research project is comprised of five main chapters as outlined below:

Chapter 1 establishes the basis and the main concepts of the research project by explaining the objectives of the study, developing the research question as well as describing the selected research approach.

Chapter 2 outlines a thorough analysis of the existing literature on emotional intelligence and team dynamics, particularly focusing on their application within the construction sector. This chapter analyses theories, frameworks as well as practical studies to determine how emotional intelligence affects communication, performance and versatility in high-pressure environments such as the construction industry. Moreover, this chapter also explores the crossover between emotional intelligence and team dynamics, explaining how the behaviour of individuals that endorse emotional intelligence conveys increased resilience, collaboration and overall team success.

Chapter 3 outlines the research design adopted for this study and explains why it was deemed to be the most apt for accomplishing the project's research objectives. This chapter explains in detail the data collection method used for this research, including the formulation of the

questionnaire itself, how the main variables were measured and the sampling procedure. Moreover, this chapter also addresses the data analysis process and ethical issues which had to be considered.

Chapter 4 interprets the results and the findings, acknowledges the research question and thoroughly assesses the results of the research and as such, establishing a detailed comprehension of the study's significance and outcomes.

Chapter 5 outlines the main outcomes of the study, reassesses the aims of the research, outlines the limitations faced by the researcher in order to guarantee the transparency of all the participants and establishes the insights derived from the study, whilst closing with the concluding remarks of this research journey.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter offers a thorough examination of the literature on team dynamics and emotional intelligence, with a particular emphasis on their impact on the construction industry. This section begins by defining emotional intelligence, analysing its core domains and competencies and exploring its importance. The concept of team dynamics is then explored, highlighting its foundational elements, development stages and optimisation strategies. Special focus is given to the construction industry, as both emotional intelligence and team dynamics play important roles in navigating complex, high-pressure project environments. The final section looks at how emotional intelligence and team dynamics intersect, emphasising on how emotionally intelligent behaviours enhance communication, flexibility and resilience in construction teams.

2.2 Emotional Intelligence

2.2.1 What is Emotional Intelligence?

Emotional intelligence is the ability to identify our own emotions as well as those of others, to motivate ourselves and to effectively manage emotions in ourselves and in our relationships (Goleman, 1996). Gardner (1983) was the first to propose the idea of emotional intelligence, which paved the way for future research to be done. Emotional intelligence was later conceptualised by Salovey and Mayer (1990) as a set of skills involving emotional awareness and regulation, aimed at fostering both interpersonal and intrapersonal effectiveness. Daniel Goleman (1998) popularised the term emotional intelligence, highlighting its role in leadership and workplace success. He expanded the concept, arguing that emotional intelligence is just as important, if not more so, than traditional cognitive intelligence (IQ) in determining an individual's success in both personal and professional domains (Goleman, 1996). Unlike IQ, emotional intelligence is malleable and can be learnt at any stage of life (Goleman, 1996).

2.2.2 The Four Domains and The Twelve Competencies of Emotional Intelligence

Goleman developed four domains, comprised of self-awareness, self-management, social

awareness (empathy) and relationship management (social skills) to help people comprehend the meaning of emotional intelligence (Goleman et al., 2013). Self-awareness involves the power of understanding one's feelings and how such feelings affect your impulses, perceptions and thoughts (Goleman et al., 2013). Self-management concerns the individual's capability of controlling emotions, thoughts and behaviours (Goleman et al., 2013). Social awareness comprises the ability of assessing one's surroundings and understanding other human beings' emotions, needs and perspectives (Goleman et al., 2013). Relationship management involves the ability of building successful relationships, communicating and working with other individuals (Goleman et al., 2013).

Within these domains, Goleman established twelve competencies that describe individuals who possess high emotional intelligence (Truninger et al., 2018). These include emotional self-awareness, emotional self-control, adaptability, achievement orientation, positive outlook, empathy, organisational awareness, influence, coach and mentor, conflict management, teamwork and inspirational leadership (Truninger et al., 2018). These competencies offer a thorough framework that help in understanding and evaluating the application of emotional intelligence in multiple contexts.

Goleman makes a significant distinction between emotional intelligence and emotional competence (Cherniss, 2000). Emotional competence comprises a variety of learned skills and qualities that facilitate an effective work performance, which skills are directly linked to an individual's level of emotional intelligence (Cherniss, 2000). Gowing states that a specific level of emotional intelligence is crucial for achieving and applying such competencies (Cherniss, 2000). A clear example is that the recognition of other individuals' emotions sustains the development of influence whilst controlling one's own emotions promotes the achievement of goals and initiatives. Hence, whilst emotional intelligence provides the much-needed basis, emotional competence is the aspect which ultimately ensures workplace effectiveness (Cherniss, 2000).

2.2.3 The Importance of Emotional Intelligence

Emotional intelligence is essential for the development of improved performance in individuals and organisations, especially due to the influence it emits on the leading aspects of Human Resource Management (HRM) (Ngwenya et al., 2019). Research has shown that

emotional intelligence boosts creativity, innovation and job satisfaction whilst substantially reducing burnout (Ngwenya et al., 2019). Additionally, the role of emotional intelligence also extends to leadership development by aiding emotionally intelligent leaders in exhibiting team management, conflict resolution and decision-making potential, ensuring the organisation's success (Ngwenya et al., 2019). Finally, emotional intelligence also improves communication between individuals, guaranteeing a productive and collaborative work environment (Ngwenya et al., 2019).

Studies have indicated that emotional intelligence within a team drastically boosts trust and minimises conflict, two characteristics which are fundamental to team performance (Rezvani et al., 2019). In fact, high levels of emotional intelligence within construction project teams have resulted in better communication, stronger unions and improved conflict resolution (Rezvani et al., 2019). Emotional intelligence strengthens group resilience and flexibility, both of which are key characteristics in high-pressure environments (Rezvani et al., 2019).

Emotional intelligence also assists psychological mechanisms that affect motivation and grit at the work place (Cherniss, 2000). Cherniss (2000) determined that individuals with increased emotional intelligence administer setbacks and frustration better than other individuals and they are also better at retaining concentration when faced with problems. Such emotional capabilities are especially beneficial in compelling and challenging environments, whereby individuals must promptly adjust to challenges without losing their drive (Cherniss, 2000). In virtue of such characteristics, emotional intelligence upholds individuals' confidence and commitment, resulting in an enhanced long-term performance (Cherniss, 2000).

2.2.4 Developing Emotional Intelligence

Emotional intelligence is not comprised of one single feature but it is made up of an array of characteristics that are developed over time with the right tools and systems (Watkin, 2000). A major tool is the Emotional Competence Inventory, which is an enhanced feedback instrument specifically designed to evaluate emotional and social competencies (Watkin, 2000). The Emotional Competence Inventory assists organisations in assessing major behaviours, including empathy, adaptability and teamwork, in addition to mentoring individuals on successfully aligning personal development and performance (Watkin, 2000).

Such guidance is essential in guaranteeing successful outcomes by means of emotional intelligence (Watkin, 2000).

Studies over time have determined that developing emotional intelligence in organisations results in improved productivity, leadership effectiveness and an enhanced personnel performance (Watkin, 2000). Such characteristics do not apply to high-ranking individuals only, emotional intelligence development is employed across all levels and positions, especially in organisations where communication and collaboration are fundamental to the organisation's accomplishments (Watkin, 2000). Thus, it is clear that emotional intelligence can be successfully transmitted across multiple roles, teams and environments (Watkin, 2000).

Cherniss (2000) determined that short-term and passive interventions are not enough to sustain a feasible emotional intelligence development. In fact, he stated that "the most effective programs for developing emotional intelligence are those that involve active learning, long-term follow-up and integration into performance management systems" (p.12) (Cherniss, 2000). Likewise, Watkin (2000) notes that emotional intelligence development is the most successful when paired with concrete job demands and when it is aligned with actual leadership and performance schemes. Such development does not only improve individual potential but it also provides increasingly inventive and resilient teams (Watkin, 2000).

Studies have further sustained the impact of biological and social influences on the development of emotional intelligence (Qualter, Gardner & Whiteley, 2007). Qualter, Gardner and Whitley (2007) have determined that emotional intelligence develops by means of a consolidation of genetic factors and environmental influences such as educational learning experiences. They also differentiate between the characteristics of trait and ability (Qualter, Gardner & Whiteley, 2007). Whilst trait emotional intelligence is based on self-perception and self-worth, ability emotional intelligence relies on cognitive skills that are taught and instructed (Qualter, Gardner & Whiteley, 2007). Such learning programs have proven to substantially enhance emotional regulation and social competence in the educational sector (Qualter, Gardner & Whiteley, 2007). As a result, it has been determined that educational settings possess a fundamental role in the growth of emotional intelligence development within workplace initiatives (Qualter, Gardner & Whiteley, 2007).

2.3 Team Dynamics

The term team dynamics defines behavioural interactions amongst individuals in a team as well as the effects of such interactions on the team's final outcomes and performance (Nazzaro & Strazzabosco, 2009). Team dynamics are comprised of individual personalities, the organisation's goals and purposes as well as other external factors (Nazzaro & Strazzabosco, 2009). When team dynamics are successfully implemented, collaboration, innovation and productivity are improved, whilst inferior team dynamics often result in disagreement and inefficiency (Georgiadis, 2015; Nazzaro & Strazzabosco, 2009).

2.3.1 What are Teams?

Despite the fact that the terms “team” and “group” are used reciprocally, it is important to keep in mind that they refer to different concepts. Whilst a group typically comprises an accumulation of individuals who, despite sharing knowledge, do not rely on each other for the attainment of goals, a team is characterised by interdependence, shared obligations as well as well as the quest of a common goal (Lyubovnikova et al., 2015; Hollenback et al., 2012).

Teams traditionally function within defined boundaries and maintain common modes and techniques when dealing with tasks (Katzenback & Smith, 1993). Such characteristics differentiate teams from groups and confirm team dynamics as a key element in performance (Katzenback & Smith, 1993). Project-based organisational settings, such as the construction industry, are composed of numerous teams made up of individuals with mixed levels of experience, with the ultimate goal of accomplishing their targets in a specified time-period (Kozlowski & Bell, 2012). Thus, the comprehension of the structure and purpose of a team is a major pillar for the determination of how team dynamics affect effectiveness (Kozlowski & Bell, 2012).

2.3.2 Key Elements of Team Dynamics

A leading characteristic in team dynamics is communication. Communication permits individuals forming part of a team to contribute ideas, give feedback and address any challenges that may arise (Georgiadis, 2015). Good communication between individuals

guarantees that views are aligned, whilst groups that lack communication often wind up with misunderstandings and disrupted progress (Georgiadis, 2015).

Another important characteristic of team dynamics is trust (Georgiadis, 2015). Individuals who trust one another effortlessly share ideas and dilemmas, in turn, creating an inventive and problem-solving environment (Georgiadis, 2015). Nevertheless, the establishment of a good foundation of trust necessitates time, constant actions, transparency and respect (Georgiadis, 2015).

Another crucial aspect of team dynamics is leadership (Nazzaro & Strazzabosco, 2009). Competent leaders are able to direct their teams in favour of their objectives and targets, aid collaboration between individuals and positively resolve challenges (Nazzaro & Strazzabosco, 2009). Leadership is also ever-changing because it alters amongst individuals according to the task or situation (Nazzaro & Strazzabosco, 2009). Diversity is another significant factor for improved creativity and adaptability in a team, especially when it comes to different experiences, skills and outlooks (Nazzaro & Strazzabosco, 2009). Nonetheless, diversity entails an enhanced sensitivity towards other cultures and typical prejudices, guaranteeing respect, cohesion and inclusivity (Nazzaro & Strazzabosco, 2009).

Conflict management is another key characteristic of team dynamics (Nazzaro & Strazzabosco, 2009). The presence of multiple individuals results in increased conflicts and disagreements within a team, however, effective teams and leaders solve conflicts positively by offering resolutions rather than by conveying blame (Nazzaro & Strazzabosco, 2009). Accordingly, the group's harmony is successfully sustained (Nazzaro & Strazzabosco, 2009).

Finally, team interdependence and shared responsibilities are also important aspects of team dynamics (Tang, 2023). Tang (2023) determined that thriving teams are founded on mutual accountability, coordinated endeavours and the consideration of individual strength. Such factors implement competent task distribution, a firm commitment to the group's objectives and improved trust (Tang, 2023). Moreover, interaction frequency and equitable participation are two factors which guarantee information exchange and broad decision-making, the two of which are essential for a team's effectiveness and success (Tang, 2023).

2.3.3 Stages of Team Development

Nazzaro and Strazzabosco (2009) have determined five probable stages for team development. These include the forming stage, the storming stage, the norming stage, the performing stage and the transforming stage (Nazzaro & Strazzabosco, 2009). The forming stage acquaints individuals and introduces the group's objectives, making it substantially superficial (Nazzaro & Strazzabosco, 2009). The storming stage typically initiates conflicts and disagreements, since the individuals are voicing their opinions and views and as such, efficient leadership is essential during this phase so that cohesion is maintained (Nazzaro & Strazzabosco, 2009). The norming stage is comprised of the group's cooperation and alignment towards the team's goals (Nazzaro & Strazzabosco, 2009). The performing stage introduces the highest level of the team's efficiency and effectiveness, which is brought about by open communication, trust and practical problem-solving (Nazzaro & Strazzabosco, 2009). Finally, the transforming stage exhibits the team with the capability of adapting and adjusting itself so as to solve new challenges and tests (Nazzaro & Strazzabosco, 2009).

2.3.4 Strategies for Enhancing Team Dynamics

Effective team dynamics entails premeditated plans and strategies. Hence, transparent objectives guarantee that all individuals are able to provide equal efforts towards a common goal (Nazzaro & Strazzabosco, 2009). Proper communication guarantees trust between individuals as well as diminishes misunderstandings (Nazzaro & Strazzabosco, 2009). Relationships are also further strengthened and reinforced by means of team-building endeavors (Nazzaro & Strazzabosco, 2009). Adequate coaching and guidance are also imperative for effective team dynamics, especially in the sectors of communication, conflict resolution and general awareness. This successfully prepares individuals with much-needed qualities for cohesive interactions (Nazzaro & Strazzabosco, 2009). A team that employs successful and constructive feedback aids its members in improving themselves, particularly by recognizing their strengths and areas that require growth (Nazzaro & Strazzabosco, 2009).

Another important tool for improving team dynamics is the application of feedback based on team behaviour (Tang, 2023). Such feedback is achieved through particular approaches such as examining team interaction and it has proven to enhance communication, performance as well as creativity (Tang, 2023). Said approaches offer impartial information to individuals on

how communication is successfully dispersed and achieved (Tang, 2023). Studies have determined that such feedback also permits teams to adjust dysfunctional patterns within a prescribed time-period (Tang, 2023). It has been proven that teams that employ such approaches cultivate efficient modes of trading ideas and dealing with problems (Tang, 2023).

2.4 Emotional Intelligence within the Construction Industry

Emotional intelligence is becoming more important in the construction industry due to its potential to increase project success, labour productivity and leadership effectiveness (Ngwenya et al., 2019). Since construction projects consist of a dynamic, high-pressure and multidisciplinary nature, emotional intelligence plays an important role in managing stress and enhancing decision-making (Ngwenya et al., 2019). Professionals in the construction industry are used to working in fast-paced environments with tight deadlines and unforeseen challenges, which makes emotional and social competencies crucial for successful project execution (Rezvani et al., 2016). However, although emotional intelligence has gained a significant amount of recognition in multiple industries, its application in the construction industry still remains under-explored (Kukah et al., 2021).

2.4.1 The Role of Emotional Intelligence in Construction Management

Success in construction management does not only depend on technical expertise but also on the ability to manage complex interpersonal relationships (Saini & Soni, 2016). Professionals in the construction industry that have a high level of emotional intelligence tend to manage stress better, enhance the involvement of stakeholders and create positive working environments (Saini & Soni, 2016). Emotional intelligence supports effective communication between construction teams and stakeholders, which is essential for ensuring consistent alignment with project goals (Ngwenya et al., 2019).

Additionally, emotional intelligence fosters trust in teams, which helps leaders resolve issues and keep the morale of the team high (Rezvani et al., 2016). Research shows that construction managers with high emotional intelligence are more adaptable, which enables them to control and manage unexpected challenges (Rezvani et al., 2016). Adaptability is valuable in managing the risks and uncertainties inherent in construction projects (Kukah et al., 2021).

2.4.2 Emotional Intelligence and Leadership in Construction

In construction, effective leadership is more than just technical decision-making, it also involves the ability to motivate, assist and direct diverse teams (Saini & Soni, 2016). Stronger relationships are formed between teams and leaders with high emotional intelligence, which enhances productivity, engagement and motivation (Saini & Soni, 2016). Additionally, leaders with a high level of emotional intelligence are able to manage stress better since they can control their emotions and support their teams during high-pressure situations (Rezvani et al., 2016).

One of the main advantages of emotional intelligence in leadership is the ability to improve job satisfaction (Ngwenya et al., 2019). Employees which have emotionally competent managers show higher levels of job satisfaction, which leads to better commitment and reduces workforce turnover (Ngwenya et al., 2019). Furthermore, a leadership which is driven by emotional intelligence establishes a work culture that values emotional well-being which reduces burnout and improves the overall workforce stability (Kukah et al., 2021).

Existing literature and case studies have confirmed that an interrelationship exists between the concepts of emotional intelligence and leadership (Esfahani et al., 2013; Feyerherm & Rice, 2002; Zhao & Cai, 2021). A predominant case study investigated the leadership methods employed by Howard Schultz at Starbucks. Such case study illustrated how a team leader's endorsement of emotional intelligence positively affects the company's performance and achievements (Michelli, 2007). The Six Leadership Styles Model, formulated by Goleman (2000), is a prominent framework which further corroborates the idea that leaders have the ability of aligning their teams to specific exigencies simply by changing their leadership styles by means of emotional intelligence.

2.4.3 Challenges in Implementing Emotional Intelligence in Construction

Despite its advantages, there are a number of challenges that are linked to emotional intelligence in the construction industry. The industry's traditional emphasis on technical skills over soft skills is a major barrier (Ngwenya et al., 2019). This leads to a number of experts undervaluing the importance of emotional competencies in project success (Ngwenya et al., 2019). Furthermore, the hierarchical structure of construction companies does not always

encourage open communication and emotional expression which makes it difficult for the employees to acquire and use emotional intelligence (Saini & Soni, 2016).

The lack of emotional intelligence training programs designed precisely for the construction is an additional setback (Rezvani et al., 2016). The construction sector is behind in terms of emotional intelligence initiatives when compared to other sectors like healthcare and corporate management (Rezvani et al., 2016). These sectors integrate emotional intelligence into professional development (Rezvani et al., 2016). Moreover, differences in cultures in international construction projects pose further setbacks since different perspectives on how one should convey emotions affects the successfulness of emotional intelligence management techniques (Kukah et al., 2021).

Kukah et al. (2021) highlights that although emotional intelligence is widely acknowledged as a soft skill, in the construction industry it is still unexplored, particularly with regards to stress and risk management. In their study, Kukah et al. (2021) suggested that emotional intelligence is essential for managing emotions that are present in high-pressure projects, such as rage and frustration. The authors also draw attention to the absence of empirical research and interdisciplinary collaboration in emotional intelligence (Kukah et al., 2021). This hinders its integration into standard construction practices and human resource development frameworks (Kukah et al., 2021).

2.4.4 Benefits of Emotional Intelligence in Construction

Emotional intelligence has several advantages for individuals and organisations in the construction industry. Emotional intelligence improves decision-making by allowing professionals to think critically, control emotions under pressure and apply well-thought-out solutions (Rezvani et al., 2016). Project leaders with a high level of emotional intelligence are better at resolving conflicts and encouraging teamwork, which improves the outcomes of a project (Ngwenya et al., 2019).

Emotional intelligence also fosters empathy and understanding among team members, which enhances relationships at the workplace (Kukah et al., 2021). Employees with high emotional intelligence are more effective at handling interpersonal problems, interpreting non-verbal cues and sustaining constructive communication (Kukah et al., 2021). These elements improve

the overall performance of a team, lower stress levels and create a more peaceful workplace (Kukah et al., 2021).

Emotional intelligence plays an important role in managing risks (Sani & Soni, 2016). Leaders and teams with emotional intelligence are more capable of dealing with ambiguity, remaining resilient during challenges and effectively handling catastrophes (Sani & Soni, 2016). Construction companies that put an emphasis on emotional intelligence increase productivity and achieve long-term success by cultivating a culture of adaptability and continuous development (Sani & Soni, 2016).

Lastly, emotional intelligence improves the overall performance of a company or a business by strengthening its connections with stakeholders and clients (Ngwenya et al., 2019). Companies that put an emphasis on emotional intelligence in their workforce development strategies typically build stronger alliances, which bring in more business opportunities and a positive reputation in the sector (Ngwenya et al., 2019). These benefits make emotional intelligence a critical component of the long-term sustainability and competitiveness of construction organisations (Ngwenya et al., 2019).

2.5 Team Dynamics in the Construction Industry

The construction industry involves constant project-focused work which comprises the composition of diverse teams with the purpose of achieving different goals (Kwofie et al., 2015). Such teams often function under extreme pressure, distressing timelines and ever-changing settings (Kwofie et al., 2015). Thus, the concept of team dynamics is fundamental for the success of such settings. Teams forming part of the construction industry are typically put together from different organisations and businesses and as a result, such teams necessitate additional coordination and integration to function successfully (Georgiadis, 2015).

2.5.1 Nature of Construction Teams

Construction teams are shaped with the intention of planning, designing and delivering a particular project (Kwofie et al., 2015). Teams are formed of numerous individuals, including clients, architects, project managers, engineers, contractors and consultants, stemming from

different firms and establishments (Uher & Loosemore, 2004). As a result, construction teams are highly varied and cross-functional (Uher & Loosemore, 2004).

Alas, the construction industry is also characterized as highly fragmented, resulting in antagonistic relations between individuals, misaligned goals and feeble performances (Orgen et al., 2012). Such poor conduct is further imposed by decreased cohesion and collaboration amongst team members (Evbuomwan & Anumba, 1998). Hence, successful team integration and dynamics are essential (Kwofie et al., 2015).

2.5.2 Key Determinants of Team Effectiveness in Construction

Team effectiveness in the construction industry depends significantly on the effective management of team dynamics (Kwofie et al., 2015). The Input-Process-Output (IPO) Model states that team effectiveness in the construction industry is characterised by components such as composition, communication, trust, leadership and adaptability (Salas et al., 2009). Kwofie et al. (2015) have determined five major aspects that establish team effectiveness in the construction industry:

1. Effective communication among team members;
2. Clear team goals and objectives;
3. Efficient team leadership;
4. Mutual trust along team members;
5. Well-defined roles and responsibilities.

Such factors guarantee coordination and integration amongst individuals, resulting in effective project completion (Kwofie et al., 2015). Communication is important because it facilitates decision-making and the resolution of disagreements in a timely manner (Kwofie et al., 2015). Clear goals and objectives establish direction and guidance (Kwofie et al., 2015). Strong leadership promotes ambition and accountability (Kwofie et al., 2015). Trust provides emotional safety, allowing individuals to communicate their opinions and worries (Kwofie et al., 2015). Finally, well-explained roles and responsibilities avoid confusion and repetition at the workplace (Kwofie et al., 2015).

2.5.3 Team Size, Incentives and Effort

Team size and incentives are two major pillars in the foundation of team behaviour and dynamics in project settings (Georgiadis, 2015). Georgiadis (2015) endorsed a model in which individuals involved in long-term projects employ increased efforts at the concluding stage of a project, since incentives are at their highest. Such behaviour is highly compelled by the concept of remuneration on project completion, enhancing individuals' motivation along time (Georgiadis, 2015).

Georgiadis (2015) determined that team size also affects individual input by means of the concepts known as the “encouragement effect” and the “free-riding effect”. Whilst the quicker completion of a project may inspire an individual to exert more effort into his work, such fast accomplishment may also encourage individuals to free-ride on other people's endeavours (Georgiadis, 2015). In fact, studies have shown that large teams are more likely to function better when a project is far from completion, as opposed to small teams which become more efficient as a project progresses due to decreased free-riding (Georgiadis, 2015).

This concept has resulted in practical suggestions for establishing the ideal team size (Georgiadis, 2015). Projects which are planned to have longer time-frames are believed to advance by making use of larger teams at the earlier stages and downsizing the team as the project moves forward (Georgiadis, 2015). Additionally, employers that compensate their teams on project completion have proven to promote improved accountability and efforts (Georgiadis, 2015).

2.5.4 Challenges in Construction Team Dynamics

Construction projects often find it difficult to sustain successful team dynamics (Kwofie et al., 2015). A leading problem faced is the fragmentation of the team, which consists of various individuals emanating from a multitude of organisations that possess diverse goals and working styles (Kwofie et al., 2015). This decreased unity often affects collaboration between individuals as well as the alignment of shared goals and objectives (Kwofie et al., 2015).

Such dilemma is typically brought about by the temporary composition of teams, whereby individuals have no prior rapport to each other, resulting in struggles to build trust and

communication (Kwofie et al., 2015). Within temporary organisations, construction teams perform under tight timeframes and are disposed of after project completion, resulting in limited opportunity for the gradual advancement of cohesion and trust (Lundin & Söderholm, 1995). Turner and Müller (2003) further implement that such temporariness boosts the importance of leadership and soft skills, such as emotional intelligence, to promote collaboration and to manage interpersonal dynamics. Thus, the temporary and transient character of construction teams represents a structural threat, which influences directly how effectively emotional intelligence can be applied in practice.

Dilemmas also arise when the members' loyalty is shifted from the project to individual organisations (Orgen et al., 2012). Such associations typically result in mixed priorities, decreased teamwork and more resistance (Orgen et al., 2012). Feeble leaders and systems of hierarchies are also factors which add to deferred decision-making and decreased accountability between individuals, affecting project efficiency and performance (Kwofie et al., 2015).

The ever-changing nature of project settings is another challenge of team dynamics (Georgiadis, 2015). The unpredictable nature of construction projects introduces strategic behaviours amongst individuals (Georgiadis, 2015). Thus, effort allocation and risk aversion substantially affect individuals' conflict with their workload (Georgiadis, 2015).

2.6 The Intersection of Emotional Intelligence and Team Dynamics

Emotional intelligence concerns the understanding and recognition of one's own emotions and the emotions of others, whilst team dynamics refers to relationships and interactions that affect team efficiency (Chang et al., 2011). Research has determined that teams which possess a heightened level of shared emotional intelligence exhibit increased cohesion, adaptability and resilience, ultimately resulting in improved and efficient accomplishments (Gunasekera et al., 2021).

2.6.1 The Link Between Emotional Intelligence and Team Interactions

Emotional intelligence is a major determinant in the effective communication and collaboration of a group. Teams with increased emotional intelligence are more likely to

convey strong connections, resulting in enhanced communication and psychological safety (Kumar et al., 2021). Psychological safety is a term used to describe a work environment in which individuals are able to voice their opinions, ideas and concerns without being anxious of criticism (Chang et al., 2011). Teams with emotional intelligence are also more likely to foster the group's emotional awareness, allowing members to acknowledge other individuals' emotional states, safeguarding the group's harmony and decreasing disagreements (Raza, 2023). Such emotional unity further boosts the group's decision-making modes (Gunasekera et al., 2021). Moreover, studies have determined that groups that adopt emotional intelligence methods are more likely to establish cooperative mindsets within their members, resulting in consolidated problem-solving systems and decreased competitiveness (Chang et al., 2011).

2.6.2 How Emotional Intelligence Enhances Team Adaptability, Productivity and Innovation

A key pillar for the foundations of effective teamwork is the individuals' adaptability, especially in settings where project objectives are more susceptible to change (Kumar et al., 2021). Emotional intelligence strengthens adaptability by assisting individuals in controlling emotions, maintaining composure and easily adapting to new targets and instructions (Kumar et al., 2021). Emotional intelligence primarily aids adaptability by means of emotional regulation. Studies have shown that teams with increased emotional intelligence are more likely to retain their focus and orientation, handle stress and uphold productivity, even in tedious situations (Gunasekera et al., 2021). Teams that embrace emotional intelligence typically display adaptable problem-solving methods (Raza, 2023). Such individuals search for multiple perceptions, change their approaches and adopt different solutions when faced with challenges (Raza, 2023). As a result, emotional intelligence assists team members in rationally evaluating their scenarios, thus, minimizing pressure and impulsivity (Chang et al., 2011). Teams with increased emotional intelligence also possess improved ways of dealing with interpersonal dynamics in varied work settings. Thus, individual differences relating to culture and personality will not affect the team's collaboration (Kumar et al., 2021). Emotional intelligence establishes a team's capacity to operate efficiently when faced with difficult challenges and disputes.

Emotional intelligence is a predominant contributor to improved productivity and innovation (Hwang, 2024). Lopes et al. (2005) determined that individuals who embrace and employ

emotional intelligence are more able to control high-stress situations, ultimately leading to sustained performance. As such, emotional intelligence creates cooperative surroundings that bolster creativity and innovation by encouraging communication and an open exchange of ideas (Dulewicz & Higgs, 2004). Individuals who endorse emotional intelligence are more capable of noticing and understanding their teammates' emotional states and as such, resulting in safe environments where individuals are able to think and express themselves willingly (Carmel et al., 2009).

2.6.3 The Role of Emotional Intelligence in Strengthening Team Resilience

Resilience is a term used to describe a team's capacity to uphold motivation and recover from hindrances. Emotional intelligence is a major contributor to a team's resilience since it encourages emotion control, reduces tension and bolsters group perseverance (Gunasekera et al., 2021). Emotional intelligence in group resilience is substantially determined by emotional buffering, meaning that individuals encourage each other when faced with tension, emotional exhaustion and stress (Chang et al., 2011). Such moral support upholds the team's esteem and guarantees that the project's development is not hindered by futile setbacks (Kumar et al., 2021). Teams with enhanced emotional intelligence are also more inclined towards positive mind-sets and reevaluate setbacks as a chance for growth (Raza, 2023). In fact, research has shown that teams that exercise emotional intelligence foster optimism, convey original solutions and uphold motivation at the workplace (Raza, 2023). Team resilience which is supported by emotional intelligence encourages commitment since individuals are more likely to possess job satisfaction, workplace loyalty and minimal turnover rates (Gunasekera et al., 2021). Such characteristics make up the foundations for a consistent, reliable and successful workplace.

2.6.4 Emotional Intelligence in Communication and Conflict Resolution

Successful communication between individuals is fundamental for attaining cooperation and collaboration (Hwang, 2024). Emotional intelligence facilitates effective and open communication by applying a number of qualities, including listening, compassion and assertiveness (Hwang, 2024). Through one of his studies, Goleman (1995) determined that compassion is a fundamental quality for successful communication because it allows individuals to comprehend their peers' opinions and beliefs and it also bolsters the group's

feeling of respect. Moreover, Parker (2005) held that individuals who are capable of controlling their own emotions, are also proficient in openly expressing themselves without causing anger and disagreements.

Over time, studies have proven that emotional intelligence is indeed a fundamental factor in the successful resolution of disagreements within a group of individuals (Hwang, 2024). Druskat and Wolff (2001) determined that members of a group with increased levels of emotional intelligence possess enhanced problem-solving skills when it comes to the resolution of disagreements. Lopes, Salovey and Straus (2003) also held that individuals with high emotional intelligence qualities are more capable of controlling their own emotions in scenarios of dispute and are more considerate towards the feelings of others. Consequently, such individuals are more inclined towards more direct and unequivocal problem-solving processes.

2.7 Conclusion

Emotional intelligence is becoming increasingly important in the construction industry, particularly in terms of improving communication, collaboration and resilience among diverse, high-pressure project teams. Emotionally intelligent people are better suited to deal with interpersonal issues that frequently arise in dynamic construction environments, where multidisciplinary teams must work together under tight deadlines and evolving project scopes.

Although emotional intelligence has received more recognition in construction management research, the majority of the existing literature focuses on generalised benefits at an organisational level. There is still a considerable gap in understanding how emotional intelligence influences day-to-day team interactions, such as communication and cooperation, at an individual level. This under-explored topic emphasises the need for further research into how individual emotional competencies influence team dynamics and contribute to project outcomes.

Recognising this gap provides a valuable foundation for more specific research that could enhance our understanding of how emotional intelligence works in construction teams and how it can be used to support more effective teamwork in practice.

The development on the insights identified in the literature review, such as the components of emotional intelligence and team dynamics, serve as the foundation for further developing the study's methodology.

CHAPTER 3: METHODOLOGY

3.1 Research Design

To understand how emotional intelligence influences team dynamics in high pressure industries such as the construction industry, a research approach that is capable of measuring across a wide range of individuals is required (Ghanad, 2023). This study aimed to determine the correlation between emotional intelligence and specific aspects of team dynamics by analysing the relationships between psychological traits and team behaviours in the construction industry.

To achieve this, a quantitative research approach was employed. This method facilitated the acquisition of structured, standardised data that could be analysed statistically to examine correlations among the variables (Creswell, 2014). It enabled the examination of how emotional intelligence scores related to reported behaviours such as conflict and decision-making in workplace scenarios. Additionally, as Holton and Burnett (2005) explain, quantitative research is better suited for examining large groups of individuals and for determining trends from groups of data to the general population which makes it more reliable for establishing general trends and patterns. Comparable arguments are made by Oranga and Matere (2025), who determined that quantitative methods encourage external validity and generalisability and as such, allow insights from a sample to be further expanded to a broader population. Xiong (2022) further accentuates the strength of quantitative designs, particularly in terms of objectivity, replicability and the potential to control measurement error. Additionally, quantitative designs are especially effective in determining relationships between constructs and thus, making such approach particularly appropriate for investigating how emotional intelligence influences particular aspects of team dynamics in the construction industry (Cresswell, 2014; Edmonds & Kennedy, 2022).

The implementation of a standard and closed-ended questionnaire guarantees an increased consistency in the participants' responses as well as an enhanced reliability of the results (Kuphanga, 2022). Such questionnaires also allow the summarisation of the findings which can consequently be shared with the professionals forming part of the construction industry and thus, distributing valuable information on how emotional intelligence affects communication, teamwork and outcomes in the industry.

3.2 Target Population and Sample

This study was centred on professional individuals in the Maltese construction industry, including architects, structural engineers, civil engineers, project managers, construction managers and draughtsman, amongst others, as the target of the study. Such candidates were chosen especially due to the fact that their positions require constant interpersonal interaction, group collaboration and decision-making. Thus, such individuals are relatively well-positioned to contribute their views on the influence of emotional intelligence on team dynamics and overall performance within the construction sector.

The study targeted a vast professional population and thus, the precise size of the population could not be determined reliably. As a result, the required sample size was calculated using Cochran's (1977) formula for an unknown population at a 95% confidence level and a 5% margin of error, yielding $n = 385$ respondents. In practice, this study collected 93 valid responses, which correspond to an achieved margin of error of approximately $\pm 10.2\%$ at the 95% confidence level. Thus, the results are not truly representative of the local industry, however, they provide valuable and indicative insights into the construction sector in Malta.

3.3 Quantitative Measurement Method

The questionnaire was divided into four main sections. The first section assembled the participants' demographic information, including the candidates' age ranges, their occupations and years of experience. The second section comprised various questions about emotional intelligence. The third section examined the participants' knowledge on team dynamics within the construction industry. The fourth and final section incorporated real-life workplace situations so as to determine the candidates' emotional intelligence behaviour. The questionnaire was cultivated with a specific technique in order to accumulate enough information and material to establish a comprehensive view on the current situation within the construction industry. The researcher also had to ensure that a feasible length was maintained throughout the questionnaire whilst achieving the material needed, so as not to discourage the participants from engaging in the study.

In section two, emotional intelligence was examined by Daniel Goleman's well-established framework. This comprises the four main domains of self-awareness, self-management, social

awareness (empathy) as well as relationship management (social skills). Respondents answered questions pertaining to the aforementioned domains using the Likert Scale varying from Point 1 (Never) to Point 5 (Always). This five-point scale was selected for its efficacy in quantifying attitudes and behaviours with statistical reliability (Joshi et al., 2015). The Likert Scale Survey is the most appropriate for determining personal values and approaches, since it establishes a cross-sectional perception of subjective opinions of different human beings (Creswell, 2009; Løvaas, 2022).

In section three, the evaluation of the concept of team dynamics was based on four main parameters comprised of communication, adaptability, roles and responsibilities and conflict resolution. These parameters were extracted from the literature review and were chosen because they represent key elements of team dynamics. This section was also measured with the five-point Likert Scale.

In the final section of the questionnaire the respondents were presented with real-life workplace situations. The respondents were requested to choose a preferred method of how they would act in each scenario. The five response methods were the following: ‘Collaborative Problem-Solving’, ‘Emotionally Supportive Respond’, ‘Direct and Decisive Action’, ‘Delegation and Team Involvement’ and ‘Avoid the Issue’. Such categories were established based on the emotional intelligence theory and available literature on team dynamics in high-pressure environments (Goleman, 1996; Hwang et al., 2017; Jehn & Mannix, 2001). While these particular categories do not directly imitate a specific source, they reflect common approaches for handling interpersonal challenges within teams, making them aptly suited to the purpose of the study. The strategy implemented also guaranteed the relevance of the response choices, that such choices were clear and comprehensive to the respondents and that such choices portrayed a realistic evaluation of how emotional intelligence and teamwork skills influence behaviour in common workplace scenarios.

3.4 Data Collection

The questionnaire was distributed to the candidates through various methods, including social media platforms such as ‘Facebook’, ‘LinkedIn’ and ‘Messenger’; through emails; and through the snowball sampling method, whereby respondents refer colleagues and peers to participate in the study.

3.5 Data Analysis

The respondents' data was inputted into IBM SPSS (Version 29) and analysed using quantitative statistical techniques. The data analysis process involved compiling responses, conducting screening analysis, examining respondents' demographics, conducting exploratory factor analyses (EFA) and performing multiple regression analyses.

Exploratory factor analysis (EFA) is a way of validating scales of items in a questionnaire (Centre for Academic Success, 2017). The purpose of an EFA is to explain a multidimensional data set with fewer variables (Centre for Academic Success, 2017). Two exploratory factor analyses were carried out, one for emotional intelligence (EFA 1) and another one for team dynamics (EFA 2).

After the exploratory factor analyses, multiple regression analyses were done to examine predictive relationships between the variables. The regression models were used to assess the influence of demographics on emotional intelligence and emotional intelligence in conflict application. The relationship between emotional intelligence and real-world workplace scenarios was also assessed.

3.6 Data Screening and Data Reliability

Prior to subjecting data to analysis, screening was conducted to identify possible missing values and to ensure that the questionnaire was completed by individuals within the designated research category. Cronbach's Alpha (α) was used to test the internal consistency of the items measuring the different variables. While there is no specific standard stating the acceptable level of alpha, Anderson and Gerbing (1998) and Saunders, Lewis and Thornhill (2019) suggest that the Cronbach's alpha value should exceed 0.7.

3.7 Ethical Considerations

In order to guarantee the project's integrity and the participants' welfare, various ethical considerations were taken into account. Before the commencement of data collection, the questionnaire was reviewed and endorsed by the Faculty Research Ethics Committee (FREC) of the Faculty for the Built Environment at the University of Malta.

The participants were presented with an information letter and an anonymous consent form when they were approached to participate in the questionnaire. The aforementioned sources portrayed the purposes of the project to the participants and delivered information about the investigator. The participants' consent was also obtained prior to data collection. The candidates' participation was completely voluntary and the participants could, at any point, chose to retreat from the questionnaire, without suffering repercussions. Such approach guaranteed authentic and impartial feedback from the participants. Moreover, anonymity and confidentiality were sustained throughout the data collection process. The candidates' names and other easily identifiable information was not needed nor requested during the questionnaire. Queries relating to the participants' age and profession were only mentioned in categories and given expansive definitions so as to guarantee anonymity.

The collected material is available to the researcher only. Such material will be securely saved for the next four years, following which, it will be permanently erased in line with institutional FREC guidelines. The aforementioned retention period permits ample time for a thorough examination, determination and any follow-ups needed whilst protecting the candidates' confidentiality.

3.8 Limitations of the Study

The project encountered a number of limitations which will be acknowledged. First, the lack of available information on emotional intelligence within the ambit of the construction sector is extremely evident. Such deficiency became further noticeable during the compilation of the literature review, which highlighted the lack of comparative studies available to the researcher.

Second, the project was based entirely on quantitative research methods in order to obtain the information required. Such approach is extremely beneficial for determining patterns and trends, for testing theories and for examining large quantities of information, however, this approach does not consider the subjective view of the participants. The lack of qualitative views hinders the researcher's capacity to investigate interpersonal interactions and conflict management in the construction industry.

Third, the study depended on Likert-scale factors to measure perceptions. Whilst this approach facilitates quantification of attitudes, it carries certain limitations. Likert data is numerical by

nature, however, it is often treated as an interval-level statistical factor, which may result in measurement bias (Jamieson, 2024). Respondents may exhibit acquiescence or central tendency biases, which may decrease the accuracy of the results (Joshi et al., 2015). Additionally, the adoption of an odd-numbered scale allowed for midpoint responses, may reflect indecision or avoidance rather than neutrality (Pornel & Saldaña, 2013; Garland, 1991).

Finally, the process of data compilation also proved to possess its own challenges. The distribution of the questionnaire and the accumulation of the data proved to be relatively challenging. The number of replies accumulated was less than that envisioned, which may have affected the final outcome.

CHAPTER 4: FINDINGS AND ANALYSIS

4.1 Participant Demographics

The questionnaire was circulated amongst a number of local architectural firms, contractors and organisations that form part of the target participant group. A total amount of ninety-five (95) responses were collected from the questionnaires circulated among professionals in the construction industry. The screening process determined that two responses were invalid due to incomplete data, resulting in a rejection rate of 2.11%. Thus, the final dataset that was employed for the purpose of reporting and analysis constituted of ninety-three (93) responses. Thorough demographic data gathered from the responses is illustrated in Table 1 and Figures 1-4.

Table 1: Respondent's demographics

Respondent's Demographics			
Characteristics	Category	Frequency	Percentage
Age	18-19	1	1.1%
	20-19	29	31.2%
	30-39	28	30.1%
	40-49	19	20.4%
	50-59	10	10.8%
	60+	6	6.5%
Gender	Male	65	69.9%
	Female	28	30.1%
Occupation	Architect	43	46.2%
	Structural Engineer	25	26.9%
	Civil Engineer	6	6.5%
	Project Manager	9	9.7%
	Construction Manager	3	3.2%
	Draughtman	3	3.2%
	Senior Manager	1	1.1%
	Stonemason	1	1.1%
	Quantity Surveyor	1	1.1%
	Electrical Engineer	1	1.1%

Working Experience	0-5 years	28	30.1%
	6-10 years	21	22.6%
	11-15 years	9	9.7%
	16-20 years	14	15.1%
	21-25 years	7	7.5%
	26+ years	14	15.1%
Works in a Team	Yes	90	96.8%
	No	3	3.2%

Figure 1: Respondent's age

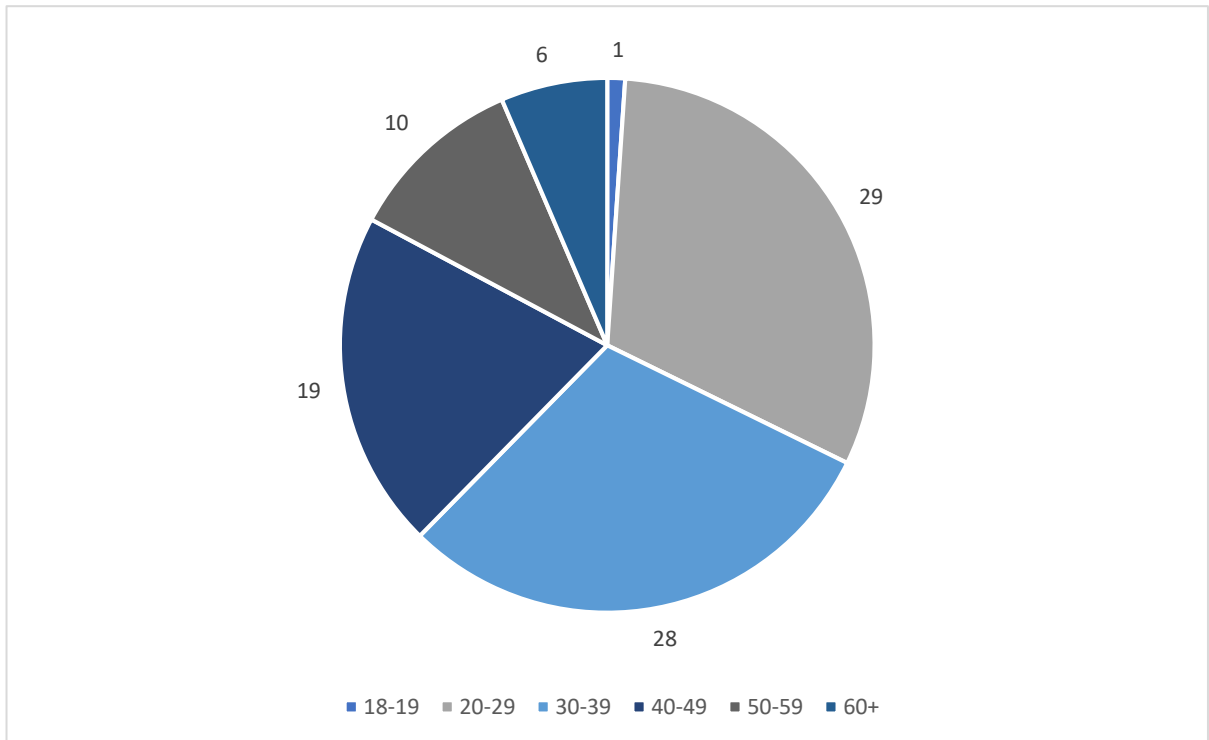


Figure 2: Respondent's gender

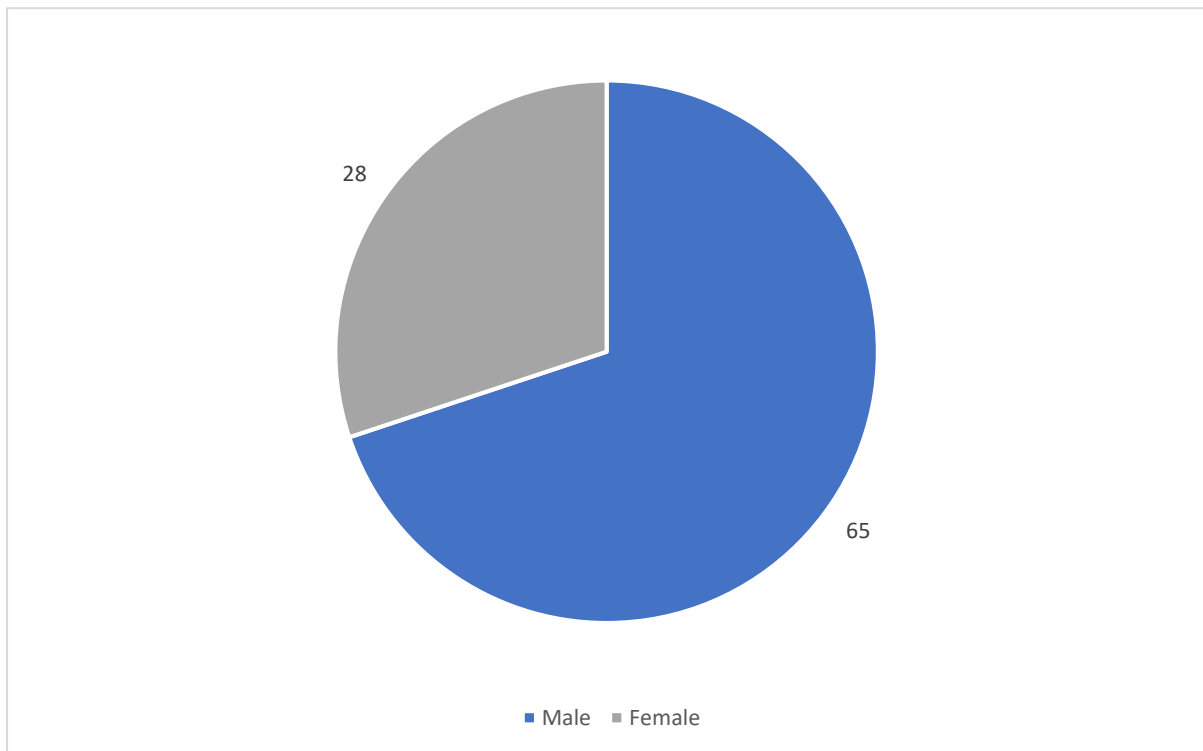


Figure 3: Respondent's years of experience

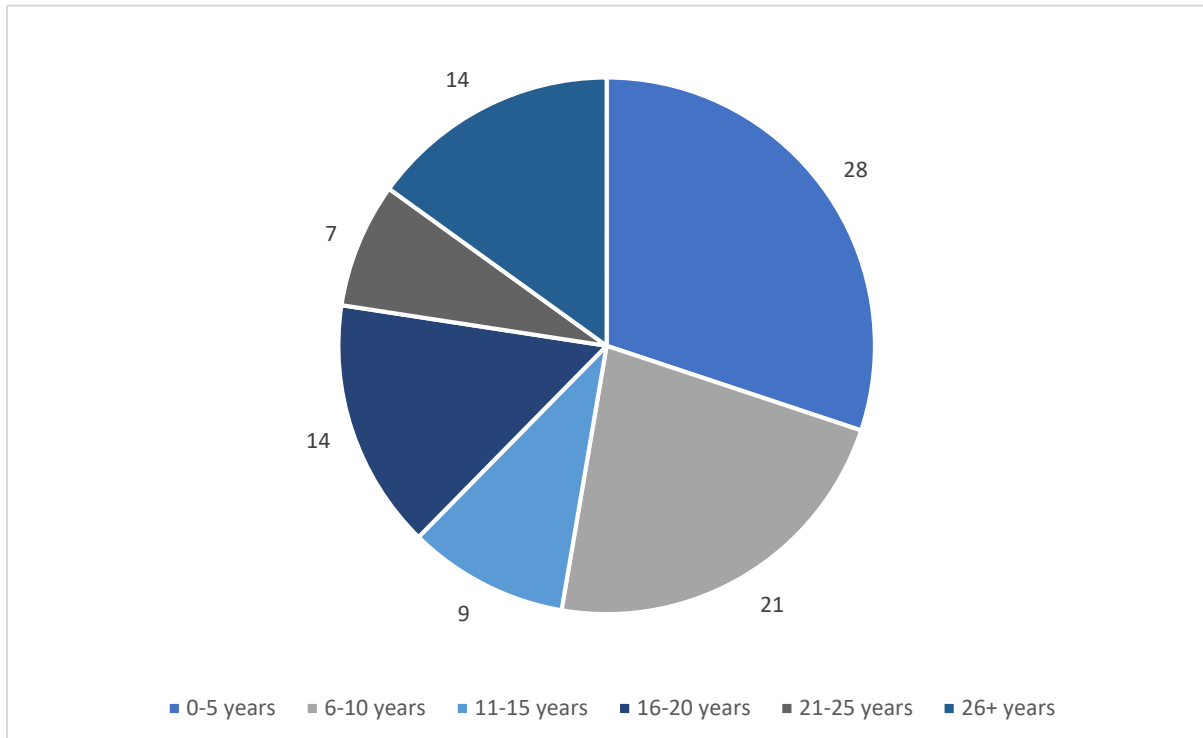
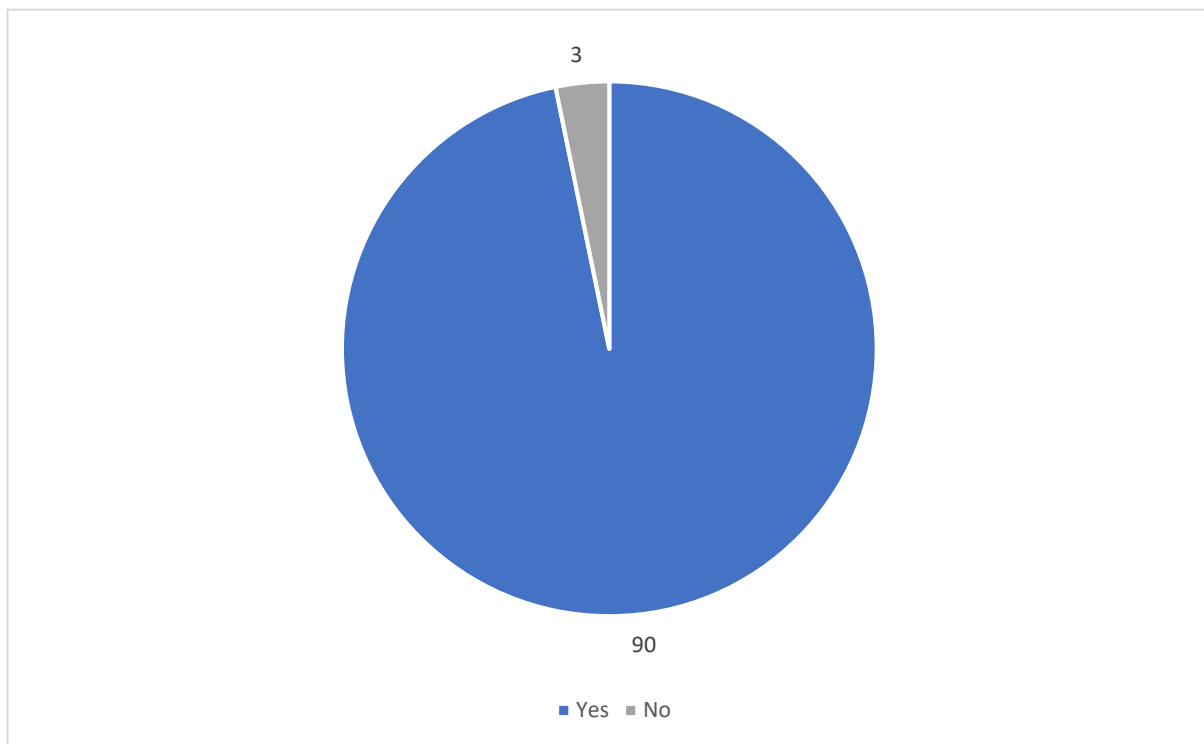


Figure 4: Respondents that work in a team



4.2 Exploratory Factor Analysis

4.2.1 EFA 1: Emotional Intelligence

As mentioned before, two exploratory factor analyses were done. This section delineates the findings of the exploratory factor analysis performed to ascertain the underlying dimensions of emotional intelligence among the respondents.

4.2.1.1 Data Suitability for Factor Analysis

Two diagnostic tests were performed to assess the suitability of the dataset for factor analysis. The Kaiser-Meyer-Olkin (KMO) statistic, which is a measure of sampling adequacy for the suitability of applying factor analysis, fell within the acceptable range (above 0.6), with a value of 0.828. This value indicates “meritorious” sampling adequacy, meaning that the intercorrelations among the items are strong to justify factor analysis. The Bartlett’s Test of Sphericity showed a statistically significant result ($\chi^2 = 613.03$, $p < 0.001$), indicating that the correlation matrix is not an identity matrix and that the dataset is suitable for factor extraction.

Table 2: KMO and Bartlett's Test of Sphericity (EFA 1)

Test	Value
Kaiser-Meyer-Olkin (KMO)	0.828
Bartlett's Test of Sphericity	$\chi^2 (120) = 613.03, p < 0.001$

4.2.1.2 Factor Extraction and Total Variance

The exploratory factor analysis was carried out using Principal Components Analysis (PCA) with Oblimin Rotation, which is appropriate when assuming that factors may be correlated. Based on the Kaiser Criterion (eigenvalues >1), four components were extracted. These components collectively explained 63.27% of the total variance, which is acceptable for psychology constructs (Hair et al., 2010).

Table 3: Total Variance (EFA 1)

Component	Eigenvalue	% of Variance	Cumulative %
1	5.976	37.35%	37.35%
2	1.633	10.21%	47.56%
3	1.366	8.54%	56.09%
4	1.148	7.17%	63.27%

4.2.1.3 Factor Loadings and Interpretation

Factor analysis loaded best at four factors and sixteen statements, which in combination explained 63.27% of the total variance. Every item met the recommended threshold for factor loading (≥ 0.40) and was therefore kept for interpretation. The rotated pattern matrix revealed a clear and interpretable four-factor structure which aligned with Goleman's domains of Emotional Intelligence. These statements were grouped into four factors and are shown in table 4. Factor 1 is labelled "Social Awareness" and includes six items that reflect the ability to identify and understand other people's emotions and to foster inclusive social environments. High loading statements such as "I actively listen to coworkers" and "I value and embrace diversity" were observed. Factor 2 is termed "Self-Awareness" and consists of two items. This factor assesses a person's awareness of their own emotional states, as well as the impact of those emotions on behaviour and decision-making. Factor 3, labelled "Relationship Management" comprises four items and represents competencies that are related to group

dynamics, managing interactions and resolving conflicts. Finally, factor 4 which is termed “Self-Management” consists of four items that focus on emotional regulation, impulse control and resilience.

Table 4: Pattern Matrix (EFA 1)

Item	Item Description	Factors			
		1	2	3	4
14	I actively listen to what my coworkers have to say and consider their perspective.	0.863			
17	I value and embrace diversity within the team.	0.859			
16	I encourage the professional development of my team members.	0.705			
15	I am able to recognize other people’s emotions and respond appropriately.	0.638			
19	I encourage collaboration and cooperation with the team.	0.599			
12	I take responsibility for my actions and decisions.	0.426			
06	I am constantly conscious of my emotions and their underlying causes.		0.822		
07	I am aware of how my feelings affect my work performance.		0.810		
08	I reflect on my strengths and weaknesses to improve my performance.			0.712	
21	I take leadership role when necessary, even without a formal title.			0.686	
20	I help resolve conflicts within my team.			0.675	
18	I communicate clearly and effectively with my team.			0.555	
10	In stressful situations, I stay calm and collected.				0.808
11	I am able to control my impulsive reaction under pressure.				0.780

13	I can adjust to changes in project requirements.				0.562
09	I maintain my confidence in my skills even when faced with challenges at work.				0.408

4.2.1.4 Component Correlation Matrix

In the component correlation matrix, moderate relationships between some factors were revealed (e.g., F1 with F3: $r = 0.374$). This supports the assumption that the components of emotional intelligence are interrelated yet distinct which validates the use of an oblique rotation.

Table 5: Component Correlation Matrix (EFA 1)

Component	1	2	3	4
1	1.000	0.181	0.374	0.368
2	0.181	1.000	0.080	0.013
3	0.374	0.080	1.000	0.302
4	0.368	0.013	0.302	1.000

4.2.1.5 Reliability of Extracted Factors

Cronbach's Alpha was used to analyse the internal consistency of each factor. The four factors surpassed the commonly accepted threshold of 0.70, indicating good internal consistency (Hinton et al., 2014). Social Awareness showed the highest internal consistency (0.867) whilst Self-Management had the lowest value (0.708). These findings confirm the internal coherence of the four-factor structure of emotional intelligence in this sample.

Table 6: Cronbach's Alpha for Extracted Factors (EFA 1)

Factor	Cronbach's Alpha	No. of Items	Reliability Interpretation
Social Awareness	0.867	6	Excellent
Self-Awareness	0.711	2	Acceptable
Relationship Management	0.725	4	Acceptable
Self-Management	0.708	4	Acceptable

4.2.2 EFA 2: Team Dynamics

The second exploratory factor analysis that was done aimed at identifying the underlying dimensions of team dynamics among the participants.

4.2.2.1 Data Suitability for Factor Analysis

The Kaiser-Meyer-Olkin (KMO) measure was 0.849, suggesting very good sampling adequacy (Kaiser, 1974). Bartlett's Test of Sphericity was also significant ($\chi^2 = 789.11$, $p < 0.001$) which confirmed that the correlations among items were sufficiently strong for factor analysis.

Table 7: KMO and Bartlett's Test of Sphericity (EFA 2)

Test	Value
Kaiser-Meyer-Olkin (KMO)	0.849
Bartlett's Test of Sphericity	$\chi^2 (120) = 789.11$, $p < 0.001$

4.2.2.2 Factor Extraction and Total Variance

The factors were extracted using Principal Component Analysis (PCA) with Oblimin Rotation. Four components with eigenvalues greater than 1 were extracted, accounting for a total cumulative variance of 67.18%, which is appropriate for psychological constructs (Hair et al., 2010).

Table 8: Total Variance Explained (EFA 2)

Component	Eigenvalue	% of Variance	Cumulative %
1	7.068	44.17%	44.17%
2	1.547	9.67%	53.84%
3	1.122	7.02%	60.86%
4	1.012	6.32%	67.18%

4.2.2.3 Factor Loadings and Interpretation

Factor analysis loaded best on four factors and sixteen statements, which explained 67.18% of the total variance. Every item met the recommended threshold for factors loading (≥ 0.40) and

was therefore kept for interpretation. The rotated pattern matrix revealed a clear and interpretable four-factor structure that corresponded to known dimensions of team dynamics. The statements were grouped into the four factors and are shown in table 9. Factor 1 is labelled “Roles, Responsibilities and Team Recognition” and includes four items. These four items show how team roles are defined, how responsibilities are managed and how team efforts are recognised. Factor 2, termed “Adaptability and Problem-Solving”, consists of three items that are based on assessing the team’s ability to respond to challenges, adapt to changing conditions and solve problems effectively. Factor 3 is labelled “Communication and Collaboration” and comprises four items that describe the efficacy of communication and collaboration in a team. Finally, factor 4 which is termed “Conflict Resolution” and consists of five items describes how conflict is managed in a team and the extent to which leadership contributes to settling disputes and maintaining team harmony.

Table 9: Pattern Matrix (EFA 2)

Item	Item Description	Factors			
		1	2	3	4
33	My team fosters a culture where individuals efforts are acknowledged and teamwork is celebrated.	0.741			
32	I feel valued and recognized as part of my team and my contributions are acknowledged and appreciated by colleagues and supervisors	0.705			
31	Team members are willing to provide constructive feedback to each other to enhance overall performance.	0.564			
28	Our team regularly engages in discussions to improve teamwork and performance on construction projects.	0.638			
26	My team quickly adapts to changes in project scope, deadlines or unexpected obstacles, ensuring minimal disruptions to workflow.		0.881		
27	Team members proactively address challenges to maintain		0.741		

	productivity and efficiency in project execution.				
29	My team is able to think critically and problem-solve effectively when facing unexpected challenges on-site.		0.698		
24	Team members collaborate efficiently to solve project challenges by sharing their expertise, knowledge and resources.			0.738	
23	There is a strong sense of trust and respect within my team, allowing us to work efficiently and support each other during difficult tasks.			0.712	
22	My team communicates effectively, ensuring that all members are informed about the project updates, expectations and potential challenges.			0.597	
25	Leadership within my team promotes a culture of open communication and collaboration.			0.514	
36	Leadership within my team plays an active role in mediating disputes and fostering a positive team environment.				0.804
37	My team has established clear processes and strategies for resolving conflicts effectively while maintaining good working relationships.				0.714
34	Conflicts within my team are addressed and resolved in a timely and constructive manner.				0.632
30	My team has well-defined roles and responsibilities, ensuring clarity and accountability in project tasks.				0.594
35	My team handles disagreement professionally, ensuring that all viewpoints are considered before making decisions.				0.501

4.2.2.4 Component Correlation Matrix

In the component correlation matrix, moderate relationships between the four factors were revealed (e.g., $r = 0.351$ between Factors 1 and 2). This supports the assumption that the components of team dynamics are interrelated yet distinct, which validates the use of an oblique rotation.

Table 10: Component Correlation Matrix (EFA 2)

Component	1	2	3	4
1	1.000	0.351	0.334	0.360
2	0.351	1.000	0.278	0.238
3	0.334	0.278	1.000	0.399
4	0.360	0.238	0.399	1.000

4.2.2.5 Reliability of Extracted Factors

Cronbach's Alpha was used to analyse the internal consistency of each factor. The four factors exceeded the commonly accepted threshold of 0.70, indicating good internal consistency (Hinton et al., 2014). Conflict Resolution demonstrated the highest internal consistency (0.836), while Adaptability and Problem-Solving showed the lowest (0.773). These findings confirm the internal coherence of the four-factor structure of team dynamics in this sample.

Table 11: Cronbach's Alpha for Extracted Factors (EFA 2)

Factor	Cronbach's Alpha	No. of Items	Reliability Interpretation
Roles, Responsibilities & Team Recognition	0.801	4	Good
Adaptability & Problem-Solving	0.773	3	Acceptable
Communication & Collaboration	0.822	4	Good
Conflict Resolution	0.836	5	Excellent

4.3 Regression Analysis

A number of regression analyses were done to investigate the predictive relationships between emotional intelligence, demographic variables and workplace scenarios. Six models were tested to assess whether demographics predict emotional intelligence and Emotional Intelligence in Conflict application (EICa), whether emotional intelligence predicts EICa and whether emotional intelligence predict scenario-based behaviours. Table 12 shows the results of each model.

4.3.1 Model 1: Predicting EICa from Demographics

The first multiple regression model tested whether demographic variables, such as age, gender, occupation, time in the industry and team settings could predict Emotional Intelligence in Conflict application (EICa). The ANOVA test determined that the overall model was not statistically significant, $F(5,87) = 1.845$, $p = 0.112$, with an R^2 value of 0.096, suggesting that 9.6% of the variance in EICa was explained by the model. Among the predictors, only “Team” status conveying whether the participants worked in a team or not, approached significance ($B = -0.566$, $p = 0.112$). Although the relationship was not conclusive this hinted that individuals that work in a team may have lower conflict-related emotional intelligence.

4.3.2 Model 2: Predicting General EI from Demographics

This model tested whether the same demographic variables could predict general emotional intelligence. The regression was statistically significant, $F(5, 87) = 3.177$, $p = 0.011$, with an R^2 value of 0.154, indicating that 15.4% of the variance in general emotional intelligence could be explained by demographics. Among the predictions, “Team” status was found to be statistically significant ($B = -0.881$, $p = 0.005$), suggesting that individuals who work in a team reported lower levels of emotional intelligence.

4.3.3 Model 3: Predicting EICa from Emotional Intelligence

A simple linear regression was performed to see if emotional intelligence could predict EICa. The model was highly significant, $F(1,91) = 23.123$, $p < 0.001$, with an R^2 value of 0.203, indicating that approximately 20% of the variance in EICa can be explained by Emotional

Intelligence. Emotional intelligence was a strong positive predictor of EICa ($B = 0.532$, $\beta = 0.450$), meaning that individuals that have higher levels of emotional intelligence are more likely to apply it effectively in conflict-related situations.

4.3.4 Models 4-6: Predicting Scenario-Based Behaviour from Emotional Intelligence

Models 4, 5 and 6 investigated whether general emotional intelligence could predict the responses of the participants to scenario-based workplace situations. However, none of the models produced a statistically significant result. Scenario 1 showed that $F(1, 91) = 1.895$, $p = .0172$, $R^2 = 0.020$, Scenario 2 yielded $F(1, 91) = 1.600$, $p = 0.209$, $R^2 = 0.017$ and Scenario 3 resulted in $F(1, 91) = 0.378$, $p = 0.542$, $R^2 = 0.004$, making the three models not significant. These results indicate that general emotional intelligence does not significantly predict how the participants responded to specific workplace situations, suggesting that situational behaviour may depend on additional contextual or behavioural factors beyond general emotional intelligence.

Table 12: Summary of Regression Models

Model	Dependent Variable	R ²	F-value	p-value	Significant Predictors
1	EICa (from demographics)	0.096	1.845	0.112	None
2	General EI (from demographics)	0.154	3.177	0.011	Team ($p = 0.005$)
3	EICa (from EI)	0.203	23.123	< 0.001	EI ($p < 0.001$)
4	Scenario 1 (from EI)	0.021	1.895	0.172	None
5	Scenario 2 (from EI)	0.017	1.600	0.209	None
6	Scenario 3 (from EI)	0.004	0.378	0.542	None

4.4 Discussion

This study aimed to investigate how emotional intelligence influences team dynamics within the construction industry, in terms of communication, adaptability, roles and responsibilities and conflict resolution. The results obtained from the exploratory factor analyses and regression models support and limit these assumptions, providing nuanced understanding of the relationship between emotional intelligence and team dynamics.

The exploratory factor analyses (EFA) validated a clear and interpretable structure for both emotional intelligence and team dynamics. Originally, the emotional intelligence scale was based on Daniel Goleman's (1996) four domains of self-awareness, self-management, social awareness (empathy) and relationship management (social skills). Although the extracted factors retained these conceptual terms, the distribution of the items across the factors slightly changed from the groupings of the questionnaire. This reflected natural adjustments through the data-driven analysis. For team dynamics, which focused on four key parameters identified from the literature review: communication and collaboration, adaptability and problem-solving, roles, responsibilities and team recognition and conflict resolution, there was a similar outcome. These extracted factors retained these conceptual terms but the distribution of the items across the factors slightly changed from the groupings of the questionnaire. Both exploratory factor analyses showed acceptable to excellent internal consistency across all factors, with Cronbach alpha values ranging from 0.708 to 0.867. These findings suggest that the constructs assessed were conceptually grounded and statistically valid for assessing emotional intelligence competencies and team behaviours in the construction industry.

Mixed outcomes were produced from the regression analyses. Model 3 found that general emotional intelligence significantly predicts Emotional Intelligence in Conflict Application (EICa), accounting for ($R^2 = 0.203$, $p < 0.001$). This means that people who score high in emotional intelligence are more likely to handle conflict situations effectively by applying their emotional intelligence skills well in practice. This finding shows that emotional intelligence plays an important role in conflict resolution which is a key component of the research question. In Model 1, which examined if EICa is predicted by demographic variables, the results were not statistically significant ($p = 0.122$). However, the variable "Team", which meant if the participants worked in a team or not, approached significance ($p = 0.122$, $B = -0.599$).

Model 2, which examined whether demographic factors predicted general emotional intelligence, was statistically significant ($p = 0.011$). The variable "Team" showed a significant negative relationship ($B = -0.881$, $p = 0.005$), which indicated that the participants that work in teams reported a lower overall emotional intelligence score. Although counterintuitive, this could explain that emotionally demanding team settings may expose more interpersonal difficulties, leading to lower self-ratings. Contrarily, those who do not work in a team may perceive themselves as more emotionally competent due to less interpersonal challenges.

Models 4, 5 and 6 investigated whether emotional intelligence could predict responses in specific workplace scenarios. The three models were not statistically significant, which meant that emotional intelligence does not predict how individuals behave in specific situations. This limitation shows that while emotional intelligence is an important construct for understanding emotional functioning and conflict resolution, the behaviour of individuals in real-world specific scenarios is shaped by other variables.

As a conclusion, with reference to the research question: ‘How does emotional intelligence influence team dynamics in terms of (a) communication; (b) adaptability; (c) roles and responsibilities; and (d) conflict resolution within the construction industry?’; the results showed that while emotional intelligence plays an important role in conflict resolution, its correlation with the other three dimensions of team dynamics was non-significant or limited. Additionally, the influence of demographic variables, specifically team status, was shown to be complex and contrary to expectations.

CHAPTER 5: CONCLUSION

5.1 Summary of Findings

This research project examined how the concept of emotional intelligence affects team dynamics within the construction industry, specifically concentrating on the notions of communication, adaptability, conflict resolution as well as roles and responsibilities. The main results were determined through exploratory factor analysis (EFA) and multiple regression analysis.

The EFA affirmed that the scales for emotional intelligence and team dynamics were both theoretically and analytically accurate. The pillars of emotional intelligence were established on Daniel Goleman's Four-Domain Framework, comprising self-awareness, self-management, social awareness (empathy) and relationship management (social skills). The pillars of team dynamics were formulated on four components extracted from the literature review itself, which are comprised of communication and collaboration; roles, responsibilities and recognition; adaptability and problem-solving; and conflict resolution. The aforementioned analyses confirmed the dimensions for both concepts and they also confirmed that the internal consistency within the established factors varied from acceptable to excellent. Such evaluation further validated the reliability of the mechanisms used to measure the constructs.

The multiple regression analysis determined that emotional intelligence is a crucial and statistic predictor of Emotional Intelligence in Conflict Application (EICA), confirming that individuals who endorse increased levels of emotional intelligence are more susceptible to the successful handling of interpersonal conflicts. Demographic variables, particularly team status, affected overall emotional intelligence, however, they did not manage to predict Emotional Intelligence in Conflict Application (EICA). Moreover, the candidates who operate within a team disclosed lower scores of general Emotional Intelligence.

Ultimately, the multiple regression analysis determined that emotional intelligence does not necessarily predict individuals' behaviours in particular workplace environments. Thus, this proves that the responses which are specific to a team or conflict scenarios are most likely influenced by external factors rather than by general emotional intelligence.

5.2 Contributions to Knowledge

This research project accords fresh and practical information to the limited body of literature that exists on Emotional Intelligence within the construction industry. Through the quantitative analysis of how emotional intelligence affects the principal factors of team dynamics, especially conflict resolution, this study accentuates the significance of emotional abilities in an environment which is traditionally focused on technical abilities. This study also establishes an authentic framework for measuring the concepts of emotional intelligence and team dynamics amongst construction specialists and as such, providing a basis for future research and investigation. Moreover, this research project bridges the gap between theory and practice by proving that Emotional Intelligence is an instrument equipped with both potential as well as limitations for enhancing team performance in the construction industry. It focused on professional individuals in the construction industry such as architects, structural engineers and civil engineers and it sought to give insight on interpersonal interaction, group collaboration and decision-making. As a result, this professional sector is able to improve its performance by comprehending team dynamics, with the objective of strengthening expertise in its most critical area.

5.3 Future Research

This research project determined that emotional intelligence, despite its significance in conflict resolution, did not exhibit a robust correlation with other team dynamics characteristics, including communication, adaptability, and roles and responsibilities. Future research may benefit from expanding the definition and measurement of team dynamics in relation to emotional intelligence, as the absence of such a relationship indicates.

Moreover, future research can also consider refining the measurement instruments utilised to evaluate such dimensions. By formulating the questions to be more rigid and precise as an alternative method, future research models could potentially establish more concise information. In future studies, the researcher could seek additional information by formulating the questionnaire inquiries to add validity and strength, by expanding the overall sample size and including a more diverse range of construction professionals.

Finally, further studies could also highly benefit from implementing a qualitative research method. For instance, interviews or focus groups may contribute additional perceptions on how emotional intelligence establishes itself in current team scenarios and as such, contributing crucial information which a structured questionnaire may miss. Future research may also investigate further how emotional intelligence and team dynamics develop with time, especially with different project phases, stress levels and team structures.

5.4 Conclusion

This research project has established that emotional intelligence performs an indispensable and complicated role in developing team dynamics in the Maltese construction industry. It was proven that emotional intelligence successfully improves individuals' conflict resolution skills, thereby supporting this aspect of the research question. However, its effect on other sectors such as communication and adaptability was found to be less compelling, indicating that such relationships are shaped by wider contextual factors.

The study's literature review determined that emotional intelligence has been frequently associated with successful conflict resolution. Goleman (1996), Druskat and Wolff (2001) and Lopes et al. (2003) all claimed that individuals who endorsed increased emotional intelligence are more capable of controlling interpersonal tension, regulating emotional responses and constructively resolving disputes. In fact, this research project backs such assertions with empirical evidence, further proving that emotional intelligence is a reliable predictor of conflict resolution capabilities amongst individuals.

Such results are especially relevant due to the collaborative and often fragmented nature of construction teams, where emotional mismanagement can undermine performance. Thus, by strengthening the link between emotional intelligence and conflict resolution, this study attempts to boost a sector that has traditionally valued technical skills over emotional competence.

In conclusion, this research project provides new insights into the under-examined connection of emotional intelligence and team dynamics in the construction sector, thereby establishing a foundation for future research in this high-demand industry.

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APPENDIX A

Appendix A contains a copy of the items that were submitted to the research ethics board for approval prior to data collection. These items include the information letter, anonymous questionnaire consent form and the questionnaire questions. After the ethics boards approved these items, the questionnaire was distributed.

Information letter

24th March, 2025;

Dear Sir/Madam,

My name is Rebecca Grech Lateo and I am a student at the University of Malta, presently reading for a Master of Engineering in Engineering with Management. I am conducting a research study for my dissertation titled 'The Influence of Emotional Intelligence on Team Dynamics in the Construction Industry'; this is being supervised by Prof. Rebecca Dalli Gonzi and Perit Charlene Jo Darmanin. This letter is an invitation to participate in this study. Below you will find information about the study and about what your involvement would entail, should you decide to take part.

The aim of my study is to evaluate the influence of emotional intelligence on team dynamics within the construction industry, with a specific focus on communication, collaboration and conflict resolution amongst team members. This study aims to assess the levels of emotional intelligence of people working in the construction sector and analyse how these levels affect team dynamics and overall performance. Your participation in this study would help contribute to a better understanding of the role emotional intelligence plays in fostering better communication, improving teamwork and enhancing the overall efficiency of a project. Any data collected from this research will be used solely for purposes of this study.

Should you choose to participate, you will be asked to answer a questionnaire. The questionnaire is divided into four sections: the first covers demographic information, the second focuses on emotional intelligence, the third explored team dynamics within the construction industry and the final section presents real-life scenarios to assess emotional intelligence in action. Sections 2 and 3 will be answered through a Likert Scale. For Section 4, possible approaches are presented and the participants will be asked to choose their preferred approach. This will take you approximately 10 minutes to complete.

Data collected will be anonymised. Any data that may lead to the identification of research participants will be stored in an anonymized form offline on an encrypted external hard drive or flash drive and kept in a locked secure place when not in use.

Any material in hard copy form will be placed in a locked cupboard. Only my supervisor and myself (and in exceptional cases, examiners) will have access to this data.

The findings which emerge from this research may be published (e.g., in a dissertation, academic journals) and/or presented (e.g., during conferences, meetings). Your name (or any other identifying information) will not appear when the findings are reported.

Participation in this study is entirely voluntary; in other words, you are free to accept or refuse to participate, without needing to give a reason. You are also free to withdraw from the study at any time, without needing to provide any explanation and without any negative repercussions

for you. Should you choose to withdraw, any data collected from your interview will be erased as long as this is technically possible (for example, before it is anonymised or published), unless erasure of data would render impossible or seriously impair achievement of the research objectives, in which case it shall be retained in an anonymised form.

If you choose to participate, please note that there are no direct benefits to you. Your participation does not entail any known or anticipated risks.

Please note also that, as a participant, you have the right under the General Data Protection Regulation (GDPR) and national legislation to access, rectify and where applicable ask for the data concerning you to be erased.

All data collected will be stored in an anonymised form and erased after four years of completion of the study.

A copy of this information sheet is being provided for you to keep and for future reference.

Thank you for your time and consideration. Should you have any questions or concerns, you may contact myself or my supervisor on the details provided below.

Yours Sincerely,

Rebecca Grech Lateo

Prof. Rebecca Dalli Gonzi

Perit Charlene Jo Darmanin

QUESTIONNAIRE CONSENT – ANONYMOUS DATA COLLECTION

24th March, 2025;

My name is Rebecca Grech Lateo and I am currently reading for a Master of Engineering (Engineering with Management) at the University of Malta.

I am currently conducting research that aims to evaluate the influence of emotional intelligence on team dynamics in the construction industry. The survey that you have been invited to complete forms part of this study. This will take you approximately 10 minutes to complete. Any data collected from this survey will be used solely for the purposes of this study.

If you choose to participate, please note that there are no direct benefits to you.

Your participation does not entail any known or anticipated risks.

Participation is entirely voluntary, i.e., you are free to accept or refuse to participate.

At no point will you be asked to provide your name or any other personal data that may lead to you being identified¹. Furthermore, you may skip any questions that you do not wish to answer.

The findings which emerge from this research may be published (e.g., in a dissertation, academic journals) and/or presented (e.g., during conferences, meetings).

If you wish to participate in this study, please click the button that says: “I agree to participate”. If not, please close the browser window, or click “I do not wish to participate”.

Should you have any questions or concerns, you may contact myself or my supervisor on the details provided below

Yours Sincerely,

Rebecca Grech Lateo

Prof. Rebecca Dalli Gonzi

¹ If collecting data anonymously, the survey instrument used should NOT collect IP addresses, which may constitute personal data.

Perit Charlene Jo Darmanin

DECLARATION BY RESPONDENT:

I hereby confirm that I am 18 years of age or older. I am aware that completing and submitting this questionnaire implies that I am participating voluntarily and with full informed consent on the conditions listed above.

- **I agree to participate – begin survey.**
- **I do not wish to participate – exit the survey.**

QUESTIONNAIRE QUESTIONS

Section 1: General Questions

Which range best represents your age?

Answer: 16-19, 20-29, 30-39, 40-49, 50-59, 60+

What is your gender?

Answer: Male, Female, Other

What is your occupation within the construction sector?

Answer: (Please specify)

How long have you been working within the construction sector?

Answer: 1-5 years, 5-10 years, 11-15 years, 16-20 years, 21-25 years, 26+ years

Do you work in a team?

Answer: Yes/No

Section 2: Emotional Intelligence

This section will focus on questions related to emotional intelligence. The questions are divided into different categories, following Daniel Goleman's four emotional intelligence domains.

The following questions will be answered using a Likert scale ranging between 1 and 5, where:

- 5 = Always
- 4 = Often
- 3 = Sometimes
- 2 = Rarely
- 1 = Never

Self-Awareness

1. I am constantly conscious of my emotions and their underlying causes.
2. I am aware of how my feelings affect my work performance.
3. I reflect on my strengths and weaknesses to improve my performance.
4. I maintain my confidence in my skills even when faced with challenges at work.

Self-Management

5. In stressful situations, I stay calm and collected.
6. I am able to control my impulsive reaction under pressure.
7. I take responsibility for my actions and decisions.
8. I can adjust to changes in project requirements.

Social Awareness (Empathy)

9. I actively listen to what my coworkers have to say and consider their perspective.
10. I am able to recognize other people's emotions and respond appropriately.
11. I encourage the professional development of my team members.
12. I value and embrace diversity within the team.

Relationship Management (Social Skills)

13. I communicate clearly and effectively with my team.
14. I encourage collaboration and cooperation with the team.

15. I help resolve conflicts within my team.

16. I take leadership role when necessary, even without a formal title.

Section 3: Team Dynamics in the Construction Industry

This section will focus on questions related to team dynamics within the construction industry, focusing on Communication, Adaptability, Roles and Responsibilities and Conflict Resolution.

The following questions will be answered using a Likert scale ranging between 1 and 5, where:

- 5 = Always
- 4 = Often
- 3 = Sometimes
- 2 = Rarely
- 1 = Never

Communication and Collaboration

1. My team communicates effectively, ensuring that all members are informed about the project updates, expectations and potential challenges.
2. There is a strong sense of trust and respect within my team, allowing us to work efficiently and support each other during difficult tasks.
3. Team members collaborate efficiently to solve project challenges by sharing their expertise, knowledge and resources.
4. Leadership within my team promotes a culture of open communication and collaboration.

Adaptability and Problem-Solving

5. My team quickly adapts to changes in project scope, deadlines or unexpected obstacles, ensuring minimal disruptions to workflow.
6. Team members proactively address challenges to maintain productivity and efficiency in project execution.
7. Our team regularly engages in discussions to improve teamwork and performance on construction projects.
8. My team is able to think critically and problem-solve effectively when facing unexpected challenges on-site.

Roles, Responsibilities and Team Recognition

9. My team has well-defined roles and responsibilities, ensuring clarity and accountability in project tasks.
10. Team members are willing to provide constructive feedback to each other to enhance overall performance.
11. I feel valued and recognized as part of my team and my contributions are acknowledged and appreciated by colleagues and supervisors.
12. My team fosters a culture where individual efforts are acknowledged and teamwork is celebrated.

Conflict Resolution

13. Conflicts within my team are addressed and resolved in a timely and constructive manner.
14. My team handles disagreement professionally, ensuring that all viewpoints are considered before making decisions.
15. Leadership within my team plays an active role in mediating disputes and fostering a positive team environment.
16. My team has established clear processes and strategies for resolving conflicts effectively while maintaining good working relationships.

Section 4: Case Scenario - Emotional Intelligence in Action

This section presents three case scenarios where emotional intelligence influences team dynamics in the construction industry. Respondents will select their preferred way of handling the situation in each case, choosing from the following approaches:

- **Collaborative Problem-Solving:** I would talk with the team to find a solution together, making sure everyone has a say and feels involved.
- **Emotionally Supportive Respond:** I would focus on how people are feeling and try to support the team emotionally so we can move forward together.
- **Direct and Decisive Action:** I would take quick, clear action to solve the problem, without letting emotions get in the way.
- **Delegation and Team Involvement:** I would encourage others to take part in solving the problem and give them space to take responsibility.
- **Avoid the Issue:** I would step back and let someone else handle it, or wait to see if it works itself out.

Scenario 1: Handling Disagreements in a High-Pressure Situation

A major construction project is underway when unexpected design changes are introduced by the client. Two senior engineers on-site strongly disagree on how to proceed. One insists on sticking to the original plan to avoid budget complications, while the other believes that adjusting the design will save time, even though it requires additional resources. Their disagreement is creating visible tension within the team, slowing decision-making and increasing stress on-site. Project timelines are at risk, and team members are unsure how to move forward while the conflict continues.

How would you respond to help move this situation forward?

Preferred Approach: Collaborative Problem-Solving / Emotionally Supportive Respond / Direct and Decisive Action / Delegation and Team Involvement / Avoid the Issue

Scenario 2: Responding to a Team in Crisis

A serious accident occurs on-site, resulting in injury to a worker and emotional impact on the rest of the crew. Although safety measures are reviewed and work resumes, morale is low. Team members are distracted, anxious and concerned about their safety. Productivity has

dropped and small mistakes are beginning to affect project quality. The site manager is focused on maintaining the schedule and getting the job done but is not acknowledging the emotional impact of the accident on the team.

How would you respond to support the team during this time?

Preferred Approach: Collaborative Problem-Solving / Emotionally Supportive Respond / Direct and Decisive Action / Delegation and Team Involvement / Avoid the Issue

Scenario 3: Managing a Difficult Client with Emotional Intelligence

Due to unexpected delays, a high-profile client becomes frustrated and starts demanding faster progress from the project team. Their communication becomes increasingly aggressive, with daily pressure on deadlines and outcomes. This tension is filtering down to the site, where team members feel overwhelmed and demoralized. Stress is rising, mistakes are becoming more frequent, and communication among colleagues is breaking down. While the client's expectations are valid, the team's capacity is being stretched thin.

How would you respond to help manage both the team and the situation?

Preferred Approach: Collaborative Problem-Solving / Emotionally Supportive Respond / Direct and Decisive Action / Delegation and Team Involvement / Avoid the Issue