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**IMPACT OF PROJECT MANAGERS EMOTIONAL INTELLIGENCE ON
PROJECT SUCCESS IN THE CASE OF ETHIOPIAN ENGINEERING
INVESTMENT GROUP (EEIG) CONSTRUCTION**

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June, 2024

Addis Ababa, Ethiopia

**Impact of Project Managers Emotional Intelligence on Project Success in The
Case of Ethiopian Engineering Investment Group (EEIG) Construction**

**By
Zinet Seid**

**A RESEARCH PROJECT SUBMITTED TO ADDIS ABABA UNIVERSITY
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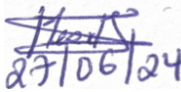
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Declaration

I, Zinet Seid, declare that this project work entitled “Impact of project managers emotional intelligence on project success in the case of EEIG construction” is carried out in partial fulfillment of the requirement for the awards of masters of arts degree in project management with the guidance and support of the research advisor Teklegiorgis Assefa (PhD). This project work is the outcome of my own effort and study. All sources of materials used for the study have been duly acknowledged and it is not submitted for any Degree or Master program in this or any other institutions.

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Letter of Certification

This is to certify that Zinet Seid has conducted this project work entitled “Impact of project managers emotional intelligence on project success in the case of EEIG construction”. This project work is original and suitable for the submission in partial fulfillment of the requirements for the award of Master of Arts Degree in project management.

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Signature: _____

Date: _____

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List of acronyms and abbreviation

AAGR: Average Annual Growth Rate

CSFs: Critical Success Factors

EEIG: Ethiopian Engineering Investment Group

EI: Emotional Intelligence

GDP: Gross Domestic Product

PMs: Project managers

PMI: Project Management Institute

PS: Project Success

RM: Relationship Management

SA: Self-Awareness

SM: Self-Management

SoA: Social-Awareness

SPSS: Statistical Package for Social Sciences

VIF: Variance Inflation Factor

Abstract

The main objective of the study is to investigate the impact of project managers emotional intelligence on project success in the case of EEIG construction. Quantitative research approach with cross-sectional survey design was applied for this study. Data were gathered from 45 participant (project managers, assistant project managers and project coordinators) through structured questionnaires and google form (online survey) by using census sampling techniques. The collected data were analyzed using descriptive statistics (mean and standard deviation) and inferential statistics (Pearson correlation and multiple linear regression) with the help of statistical software SPSS version 25. The finding of the study explains that three of the independent variables such as self-awareness, self-management and social-awareness of project manager have a positive, moderate and significant relationship with project success. Whereas relationship management of project managers have a positive but weak and insignificant impact for project success in EEIG construction. The researcher of the study strongly recommends that the organization should provide training that focuses on emotional intelligence skills for project managers as well as project teams. Further, a detailed investigation should be undertaken to see the impacts of emotional intelligence in a longitudinal manner. The study also recommends future studies to examine the impact of emotional intelligence other than construction sector.

Key words: Project manager, Emotional Intelligence, Project Success

Chapter one

1. Introduction

1.1. Background of the study

Projects are growing in various sectors, such as information technology, security and social sectors, construction, and other systems, due to the rapid growth and change of economic sectors (Yatim et al., 2009; Whitney and Daniels, 2013). Global economic data indicate that the number of project-based management systems has increased quickly worldwide. Project management practitioners require a higher level of expertise in reacting to opportunities or risks (Ahmad et al., 2022). The amount of money allocated to projects worldwide has grown significantly, from millions to billions, and this amount continues to rise annually (Anantatmula, 2008). According to Reich and Wee, (2006), the growing numbers are making project management challenging, as they place significant demands on the project manager for quicker and more efficient projects.

Literatures shows that research-based and well-organized project management does not guarantee project success (Hodgson and Cicmil, 2008; Ding et al., 2005; Papke-Shields et al., 2010). The high rate of project failure highlights the importance to understand the factors that lead to the project success. Project managers' roles are becoming more important as project-based management system methods become more widely used. For a project to be successful, the project manager is an essential resource. According to PMI (2008) a project is a temporary endeavor undertaken to create a unique product, services or result. As every project is unique, and every project team is different, there has to be a more focused analysis of how a project manager may work with a team to accomplish project goals successfully.

Researchers have extensively examined the competencies and skills of project managers that are essential for the successful completion of the project (Bashir, Sajjad et al. 2021). Among the most difficult tasks for a project manager in the 21st century is managing people who are involved to complete the project successfully (Verma, 1995). In light of this, many studies have been conducted to figure out how a project manager's skills affect the success of the project. Emotional intelligence is one metric that has been established recently to assess the competency of people management. Emotional intelligence can be described as the ability to recognize, analyze, and properly manage the emotions of oneself and others (Bourey and Miller, 2001). Since everyone

deals with both their own and other people's emotions, numerous studies have shown the value of emotional intelligence (EI) and how managers may use it to successfully complete projects (Crawford, 2007; Gehring, 2007; Siddiq et al., 2020). According to the finding of the studies, managers with high emotional intelligence levels are more likely to inspire and guide their employees in ways that contribute to project success.

Managers with good emotional intelligence who are able to communicate their feelings may engage in emotional impurity in order to convey positive emotions and enhance their team members' satisfaction (Ilies et al., 2013). A project manager with strong emotional intelligence wants to create a work atmosphere that values emotional intelligence and attracts and motivates team members with similar qualities (Rezvani et al., 2016). Emotional intelligence plays a major role in both personal and professional life, according to Goleman (1995), which also states that emotional intelligence (EI) accounts for 80% of human success in life. Managers with high emotional intelligence (EI) will ultimately have happy, productive staff members (Wong and Law, 2002). This is because emotionally intelligent managers foster a favorable work atmosphere where employees do well, which in turn leads to project success.

Since we are aware that the construction sector depends so much on both skilled and unskilled labor, individuals from all regions, backgrounds, and cultures, work together to complete projects. Therefore, it is quite challenging for project managers to successfully manage their emotions. To alleviate the challenges, it is believed that emotionally intelligent project managers are needed. This study is aimed to be made with the perspective that emotionally intelligent managers might do wonders for the success of projects. While informally checking the construction sectors in Ethiopia, it has been witnessed that there are almost no published researches made on the concept of project managers emotional intelligence on the context of project environment. Therefore, the current study is undertaken to check the impact of project manager 's emotional intelligence on the success of the construction projects, specifically in the context of EEIG construction.

1.2. Background of the company

EEIG (Ethiopian Engineering Investment Group) is a large government-owned grade one construction company based in Ethiopia. Before becoming an Engineering and Investment Group (EEIG) in 2010 E.C., it was known as Ethiopian Construction Design and Supervision Works Corporation (ECDSWCo.). This was achieved by creating two more business units that focused on construction and investment in addition to the company's already-existing consulting business. The Group comprise of three main operational business units i.e., Consultancy, Construction and Investment.

EEIG Construction was founded with the goal of becoming the best construction company in Ethiopia. The company aspires to be a competitive and preferred choice, able to replace the current reliance on foreign contractors while delivering excellence. EEIG Construction's core value will be courage, integrity, reliability, value for its people, and innovation.

The EEIG-Construction business unit's main activities are high-end complex construction projects, predominately high-rise commercial and residential buildings, real estate, infrastructure (roads, railways, and airports), and water and energy sector construction. Piling, underground and foundation works, Fit-Out, energy (solar solutions), electro-mechanical solutions, facility management, landscape and construction materials production, and other business units would all merge into EEIG-Construction alone. Currently, the company has more than 2300 employees. Some of the impressive current projects implemented under EEIG construction are listed in the Table 1.1.

Table 1. 1 Some projects under EEIG

No	Project name	Description	Client	Location
1	Addis Capital goods	Design & build 2B+G+10	Addis Capital Goods finance business S.C	Giorgis, Addis Ababa
2	Ministry of justice	Demolition, Block work, Waterproofing, Finishing, Carpentry & Joinery, Painting, Glazing	Commercial Bank of Ethiopia	Bambis, Addis Ababa

3	Debre Berhan University-water reservoir and main gate	Civil Works & Water Supply Related	Debre Berhan University	Debre Berhan, Ethiopia
4	MOF VIP Lounge	Demolition works, civil and finishing works	FDRE – Ministry of Finance	6-kilo, MOF head office
5	Foreign Relations Institute	Demolition works, HCB partition, Gypsum board partitions & ceilings, Glazed partitions, Flooring, Wall tiling, Wooden doors, and other related.	Foreign Relations Institute	Meskel Square, Addis Ababa
6	Ethio Engineering Group	Design-Build Head office renovation works	Ethio Engineering Group	AA-Mexico
7	Sendafa police university	Design-Build office renovation works	Sendafa police university	Sendafa
8	Ethiopian petroleum supply enterprise (EPSE)	2B+G+14 building and fuel retail station	Ethiopian petroleum supply enterprise	Akaki Kality, Addis Ababa
9	Addis Ababa Housing	Renovation work for the Deputy Mayor Office.	Addis Ababa Housing Development &	Near to Greek School, Addis Ababa
10	Ministry of Water & Energy	Preliminary works: dismantling & cleaning of existing blocks & finishing works	Ministry of Water & Energy	Addis Ababa, Ethiopia

Source: Company data (2024)

1.3. Statement of the problem

According to the study, the rate of low project success is higher in developing countries than in developed ones (Lepartobiko, 2012). The number of projects in Ethiopia that are stuck has dramatically increased due to insufficient project organization framework and poor leadership (GEBEYAW, 2022). Only 8.25 percent of Ethiopia's public building construction projects were finished by the original deadline, and the remaining 91.75 percent took 352 percent longer than anticipated to finish (Koshe et al., 2016). In a study on the reasons for failure in projects, (Kippenberger, 2000) found that inadequate definition, poor or no planning, inappropriate team, ineffective controls, poor communication, unrealistic time-scale and the wrong leader, were factors contributing to project failure. In addition according to (Alshurideh et al., 2022; Arshad et al., 2023), at least 80% of previously documented project failures can be attributed to the human aspects of project management, which primarily include weak interpersonal skills, low emotional intelligence, ineffective teamwork, inadequate communication, and poor leadership abilities. To deal with this failure, managers may have great professional and technical knowledge and skills; however, they may not be able to manage certain project aspects related to relationships and communication with team members if they lack sufficient emotional intelligence skills (El Khatib, 2015). Despite this, Goleman (1995) and Boyatzis et al., (2002) found that emotional intelligence is twice as significant as technical skills. This demonstrates the need for emotionally competent project managers to handle construction project failures.

All projects need both technical and human resources to be completed successfully. And people are also a necessity for technical resources. According to Ahmad et al., (2022) humans are the most crucial resource for effectively completing a project. As being widely accepted, humans are emotional beings, and the way in which these emotions affect a project manager may affect the success of the project (Ahmad et al., 2022). Therefore, emotions are among the most important factors that ultimately affect the project's success (Ahmad et al., 2022). According to Pinto et al., (1992), Ninety percent (90%) of the CSFs (Critical Success Factors) for a project's successful completion are directly related to emotional intelligence (EI). And also, the ability of a manager to quickly identify and control their emotions is critical to the success of managing a project (Ahmed et al., 2022). So, project managers require a high degree of EI skills to handle the various facets of the project (Druskat and Druskat, 2006; Rahim et al., 2010; Serrat et al., 2017)

The construction industry is a place where a diverse group of people with different skills, knowledge, as well as different behavior and working styles are brought together. It makes extremely challenging for project managers to appropriately handle the feelings and emotions of their team members. Since many projects these days require project managers to have the appropriate emotional intelligence skills, (Aziz et al., 2023; Farrukh et al., 2023). Additionally for any modern-day project success, emotional intelligence is critical skill, managers shall be equipped with in order to achieve organizational goal (O'Connor et al., 2019). On the other hand, literature hasn't emphasized much on the impact of project managers emotional intelligence on project success in the Ethiopian construction sectors. Furthermore, GEBEYAW, (2022) noted that a combination of technical and people skills leads to projects in Ethiopia's construction sector facing challenges connected to unachievable goals. Projects are dynamic by nature, and the harmony of human resources involved makes their successful completion challenging. So, project managers need to be prepared for dynamic organizational environments and complex projects (Thomas and Mengel, 2008). Therefore, this study is to assess the impact of emotional intelligence of project managers on the successful accomplishment of construction projects in the case of EEIG construction.

1.4. Research Questions

1. How does project managers self-awareness (emotional intelligence) impact the success of construction projects?
2. How does project managers self-management (emotional intelligence) impact the success of construction projects?
3. How does project managers social-awareness (emotional intelligence) impact the success of construction projects?
4. How does project managers relationship management (emotional intelligence) impact the success of construction projects?

1.5. Research Objectives

1.5.1 General Objective

The main objective of the study is to assess the impact of project managers 'emotional intelligence on project success in the case of EEIG construction.

1.5.2. Specific Objectives

- To investigate the impact of project managers self-awareness (emotional intelligence) on the success of construction projects in the case of EEIG construction.
- To investigate the impact of project managers self-management (emotional intelligence) on the success of construction projects in the case of EEIG Construction.
- To examine the impact of project managers social awareness (emotional intelligence) on the success of construction projects in the case of EEIG Construction.
- To examine the impact of project managers relationship management (emotional intelligence) on the success of construction projects in the case of EEIG Construction.

1.6. Significance of the Study

According to studies, emotional intelligence is a relatively new idea that is now crucial to both individual and organizational success. Furthermore, a lot of study is currently being done on this subject in Western and Asian countries, but relatively little of it has been done in Ethiopia. As a result, this study will contribute to the existing literature on emotional intelligence and project success in the case of EEIG construction. And adding significant value towards the current body of knowledge and can be helpful for academic purpose to increase the knowledge of project managers about the importance of emotional intelligence.

The findings of this study will help human resource department of EEIG construction companies to consider candidates' emotional intelligence when hiring project managers and will help them set up a training program to help project managers and team members to improve their emotional intelligence. Furthermore, it is anticipated that this thesis will provide insights for other researchers, who wish to undertake further information on similar area of researches.

1.7. Scope of the Study

The study focuses on one construction company called EEIG construction company.

The study examined only the four dimensions of emotional intelligence (self-awareness, self-management, social-awareness and relationship management) as proposed by (Goleman, 1998).

The study measured project success with four critical success factors such as communication, mission clarity, troubleshooting and top management support.

The study is cross-sectional in nature and collected at once.

1.8. Limitation of the Study

Due to time and financial constraints the study only assessed the impact of project managers emotional intelligence on the success of construction projects in EEIG construction.

The cross-sectional study was employed in the sense that it was carried out in a particular sector within an estimated time period. The study was unable to proceed longitudinally due to time constraints and cost consequences.

The participants in the study evaluated their own emotional intelligence; bias arising from their responses may affect the final result.

1.9. Definition of Terms

Emotional Intelligence: is the capacity to identify one's own feelings as well as those of others and use that awareness in making decisions (Salovey et al., 1990).

Project success: A project was considered successful when its goals and outcomes were met within the predefined parameters of schedule, budget, and performance.

Construction industry: is a place where different cultures, religions, nations, and educational backgrounds meet with one frequent target to achieve within a specified period.

Self-Awareness: as a dimension of emotional intelligence is to recognize and appreciate one's own feelings (Siddiq et al., 2020). According to Goleman and Intelligence, (1995) defines as having an in-depth awareness of one's feelings, motivations, needs, strengths and weaknesses.

Self-management: It refers to the capacity to suppress uncomfortable feelings and keep them in check (Siddiq et al., 2020). It refers to the capability to control moods and impulses.

Social-Awareness: is to be aware of the emotions and thoughts of others and to show concern for their issues.

Relationship Management: It refers to the capacity to affect the moods and emotions of others.

1.10. Structures of the Study

The study is organized into five chapters. The first chapters discuss the introduction, background of study, statement of the problem, research questions, research hypothesis, research objectives, significance, scope, limitations, definition of terms and organization of the study. Chapter two is concerned with the various literatures to be reviewed in order to enhance the knowledge about the area followed by empirical review, research gap and conceptual framework. Chapter three discusses the research approach, research design and methodologies adopted for this study. Chapter four is about Result, interpretation and discussion of results. And chapter five is about summary, conclusion and recommendation.

Chapter Two

Review of Related Literature

2.1. Introduction

This chapter contains the theoretical and empirical parts, which are used as the basis for the study. The first part is a theoretical review, which defines important concepts and models of the study. The second part is an empirical review; it has an overview of earlier studies conducted in the area of emotional intelligence and project success. In addition, the chapter presents the conceptual framework of the study and the gaps in the literature.

2.2. Theoretical Review

2.2. Concept and Definition of Emotional Intelligence

“Emotional intelligence is a different type of intelligence. It’s about being
heart smart, not just book smart”.

Jeanne Segal.

According to Matthews et al., (2004) the notion of emotional intelligence came into being in the final decade of the 20th century, and this led to a lot of debates among the scientific community. This was due to the combination of two seemingly mutually exclusive psychological concept intelligence and emotions. Before these Emotions were seen as impeding reason and making high-quality work more difficult. And the word ‘Intelligence’ according to Cambridge Language dictionary means ‘the ability to acquire and apply knowledge and skills.’

The initial concept of emotional intelligence was given by academics Peter Salovey and John Mayer in their 1990 article "Emotional Intelligence," which described emotional intelligence as “the ability to monitor one’s own and others’ feelings and emotions, to differentiate among them and to use this information to guide one’s thinking and actions” (Salovey et al., 1990). This definition demonstrates how emotions can affect logical thought processes and goal-oriented behaviors. Furthermore, it demonstrates how emotions can genuinely support rationality. Emotional intelligence describes the capacity to perceive and recognize the feelings and emotions of others, then apply this understanding to provide guidance or motivation for their behaviors (Salovey et al., 1990). Zhou and George, (2003) defined emotional intelligence as a leadership

quality that encourages and facilitates followers' inventiveness. Leaders possessing a higher emotional intelligence level are better equipped to encourage, support, and spark innovation in their team members. Thus, emotionally intelligent people are able to recognize their emotions with precision and control them using complex, integrated methods while working towards significant objectives. Emotionally intelligent individuals are able to identify and express their own emotions, control affect, identify the emotions of others, and use emotions to drive adaptive behaviors (Mayer et al., 2001).

According to Chris, (2009), a person with emotional intelligence possesses a range of competences that enable them to identify, comprehend, and regulate their own emotions as well as those of others, and they can also use this understanding to help others' and their own success. In addition Goleman, (1998) describes emotional intelligence as the capacity to recognize our own and other people's feelings as well as to control them in order to successfully communicate those feelings in order to achieve our own and other people's desired outcomes. This implies that employing both our mind and our heart is important. It used to be believed that in order to think properly, we needed to set aside our emotions, but now days, people argue that emotions are the source of information (Singer and Salovey, 2010). Taking emotions into consideration and emotional intelligence should not be misinterpreted as being sensitive and weak. As stated by Goleman, (1998), emotional intelligence is more than just being emotional; it's about managing your feelings properly. It is a collection of skills, mindsets, and behaviors that we may develop to improve our performance and connections with others. Emotional intelligence (EI) is ability to manage our personalities (Sparrow and Knight, 2006).

In addition, emotions are powerful things. Whether we like it or not, emotions play a role in each and every choice we make and action we take. According to Sparrow and Knight, (2006), "we're missing a trick" if we do not recognize their significance in ourselves and the people we work and live with. Emotional intelligence was well-known and frequently used in the workplace, as Goleman (1995) claimed that emotional intelligence accounts for 80% of success at work and ordinary intelligence for just 20%. Surprisingly, emotional intelligence grows over time and is obtained through the acquisition of adaptive emotional abilities (Goleman and Intelligence, 1995; Mayer et al., 1997). While some people are born with higher levels of emotional intelligence than others, everyone can acquire high levels of emotional intelligence even if they do not. Emotional

intelligence can be developed throughout a person's life and is not limited by gender or genetics (Goleman, 1998). In accordance with incremental theory, ability creation, development, and application need effort (Dweck et al., 1995). Therefore, as emotional intelligence is a type of intelligence (ability), it can be improved by training and learning.

2.3. Model of Emotional Intelligence

Researches has indicated that emotional intelligence models can be divided into three broad categories, including: trait approach, ability approach and mixed approach. These are the models proposed by Mayer and Salovey, Bar-on and Goleman respectively. Both of their theoretical models conceptualize emotional intelligence from two different angles: either as a mixed intelligence that includes both mental ability and personality traits or as a pure intelligence that consists only of mental ability (Salovey et al., 1990). In this study the Goleman Competencies Model was applied. Nevertheless, the researcher attempted to describe the other two models as follows.

2.3.1. Mayer-Salovey-Caruso ability model

The term "emotional intelligence" was initially used by Peter Salovey and John Mayer in 1990 (Salovey et al., 1990), and they have since carried out further study on the concept's significance. Gardner's work and theories about personal intelligence served as the foundation for their conceptualization of the Ability-Based Emotional Intelligence Model (Caruso et al., 2015). Their concept encompasses five main areas: understanding one's own emotions, managing one's own emotion, identifying others' emotions, managing relationships with others, and self-motivation. Additionally, Salovey, Mayer et al. (1997) offered four categories and described emotional intelligence as follow;

The first category, emotional perception, deals with the capacity to effectively communicate feelings and needs to others as well as to be aware of one's own emotions. The second category, Emotional integration, refers to the capacity to differentiate between the various emotions that a person is experiencing and to recognize which ones are impacting their cognitive processes by drawing attention to relevant information. Like this an individual's thinking style shifts from optimistic to pessimistic due to emotional mood changes, which encourages exploration of opposing viewpoints. Certain emotional states stimulate particular approaches to problem-solving; for example, being happy fosters creativity and logical thinking.

The third category, emotional understanding, refers to the comprehension of complicated emotions and the recognition of emotional transitions such as rage to satisfaction or from embarrassment to anger. Lastly, the fourth category, emotion management, encompasses the capacity to remain receptive to both positive and negative emotions, to connect or disassociate from an emotion introspectively based on whether it is seen useful or instructive, and to control emotions in both ourselves and others. According to Mayer et al., (2001), the four categories work in an orderly manner, of emotional management functioning as the most sophisticated or top category and emotion perception as the most fundamental or bottom category.

2.3.2. Bar-On's Mixed Model

Two major mixed models of emotional intelligence have been developed by (Bar-On, 1997) and (Goleman, 2001). In general, Bar-On's mixed model is more theoretical than Goleman's mixed model, which is more practical. Bar-On, (1988) model of emotional intelligence can be seen as a mixed intelligence that includes elements of personality, health, and well-being in addition to cognitive ability. It is thought to be more process-oriented than outcome-oriented and has to do with the possibility for success and performance (Bar-On, 2002). According to his definition, emotional intelligence is “an array of non-cognitive capabilities, competencies and skills that influence one's ability to succeed in coping with environmental demands and pressures” (Bar-On, 1997). The initial model consisted of 15 components and five dimensions. Intrapersonal skills comprise self-regard, emotional self-awareness, assertiveness, self-actualization, and independence, while interpersonal skills consist of empathy, interpersonal relationship, and social responsibility were explained in the first and second dimensions, respectively. The adaptability dimension, which encompasses problem-solving, flexibility, and reality testing, comes next. Stress management, which includes impulse control and stress tolerance, makes up the fourth dimension. General moods like optimism and cheerfulness were presented in the last dimension. Many concepts are covered by the definition, including emotional self-awareness, assertiveness, self-regard, self-actualization, independence, empathy, interpersonal relationships, social responsibility, problem solving, reality testing, flexibility, stress tolerance, impulse control, happiness, and optimism. Emotional difficulties and failure might be indicators of low emotional intelligence. (Bar-On, 2002), believes that a person's general intelligence, which ultimately determines their potential for success in life, is influenced equally by their emotional and cognitive intelligence.

According to Bar-On, emotional-social intelligence is a composite of interconnected emotional and social competencies, abilities, and enablers that impact our capacity to comprehend and communicate who we are, comprehend and interact with others, and manage everyday obligations (Bar-On, 2006). Furthermore, a model shares similarities with the Goleman model of emotional intelligence in that it emphasizes stress management and self- and other-awareness. However, the researcher was unable to determine how to control other people's emotions in this model. So that the competency-based model of emotional intelligence developed by Goleman is thus employed by the researcher.

Bar-On's mixed model of emotional intelligence, which has five main dimensions and components within each dimension, is seen in figure 2.1.

Intrapersonal Self-regard, emotional self-awareness, assertiveness, self-actualization; independence		Interpersonal Empathy, social responsibility, interpersonal relationships	
Adaptability Problem-solving, flexibility; reality testing	Stress Management Stress tolerance; impulse control		General Mood Happiness; optimism

Figure 2. 1 Components in Bar-On's mixed model of emotional (2006)

2.3.3. Goleman's Competency Model

Emotional intelligence became well known in 1995 after Daniel Goleman's famous book "Emotional Intelligence" was published. He defined emotional intelligence as "abilities of being able to motivate oneself and survive in the face of frustrations; to control impulse and delay gratification; to manage one's moods and keep distress from swamping the ability to think; to empathize and to hope" (Goleman, 1998). This concept employs 360° methodology or metrics based on external raters to assess social and emotional competences within the organization. According to Goleman, (1998), the first model consists of five dimensions and twenty-five emotional intelligence competencies. The first component is self-awareness, which refers to a person's capacity to identify their own feelings as well as their strengths, weaknesses, objectives, driving forces, and the effects of their emotions on other people. Second dimension involves self-regulation, which entails identifying, managing, and rerouting one's negative emotions towards a more constructive or good goal. Third dimension is social skills, which include managing

relationships with others and directing others. Fourth dimension is empathy, which involves taking other people's feelings into account when making judgements. The last dimension is motivation, or the desire or ambition to succeed.

Later in 1998, Goleman improved his model, based on the work of Boyatzis and Rhee, into four dimensions and twenty emotional intelligence competencies. The modified model comprises the following four dimensions, self-awareness, self-management, social-awareness; relationship management. These four dimensions fall into two major categories: personal competence (self-management) and social competence (managing others). Goleman created a model for emotional intelligence, which served as the foundation for this research.

Figure 2. 2 Daniel Goleman's simplified model (refinement of the model used in 1998) of four emotional intelligence dimensions

	Self (Personal Competence)	Other (Social Competence)
Recognition	Self-Awareness Emotional self-awareness Accurate self-awareness Self-Confidence	Social Awareness Empathy Service orientation Organizational Awareness
Regulation	Self-Management Emotional self-control Trustworthiness Conscientiousness Adaptability Achievement drive Initiative	Relationship Management Developing Others Influence Communication Conflict Management Visionary leadership Catalyzing change Building Bonds Teamwork and collaboration

Source: Adopted from (Goleman, 1998)

To clearly understand the study provided in this paper, which serves as the basis, one needs to be aware of the Goleman competency model of emotional intelligence's four dimensions presented below.

2.3.3.1. Self-Awareness

Self-Awareness as a dimension of emotional intelligence is the ability to recognize and value one's own feelings (Siddiq et al., 2020). Additionally, self-awareness, the ability to continuously recognize one's inner states, is a key element of emotional intelligence Goleman, (1995). Self-Awareness is also the fundamental and essential set of skills required to succeed in the emotional intelligence domains of self-management, social awareness, and relationship management (Goleman et al., 2002; Bradberry and Greaves, 2009; Okpara and Sciences, 2015).

Self-Awareness can be defined as knowing our feelings as well as our thoughts about the feeling (Singh, 2006). Understanding your values, your perspective on the world, your desires, your feelings, and how other people see you are all considered aspects of self-awareness (Krause et al., 2003). Emotional self-awareness as per Goleman, (2017) is being aware of the emotions you are experiencing, why they are occurring, and how your feelings and behaviors are related.

Goleman, (1998) defines it as "It means having a deep understanding of one's emotions, strengths, weaknesses, needs, and drives. People with strong self-awareness are neither overly critical nor unrealistically hopeful. Rather, they are honest with themselves and with others. According to Shahzad et al., (2010) self-awareness deals with the person's emotions and work performance in order to pinpoint his or her advantages and disadvantages. Furthermore, according to Bradberry and Greaves, (2009), self-awareness is the capacity to recognize one's own feelings in the present and comprehend one's own patterns in various contexts. A person with this acute awareness of their tendencies is better able to grasp their emotions and knows how they respond to different situations, people, and problems. In order to emphasize the significance of self-awareness, (Okpara and Sciences, 2015) assert that "self-awareness would be the talent of map reading if emotional intelligence were a journey. It provides you with information about where you are now as well as any feelings or moods you may be sensing. Additionally, it displays your desired path towards a goal as well as any feelings or attitudes that might support you in achieving it".

Self-awareness is related to emotional self-conscious, it implies that skilled project managers are conscious of their strengths and weaknesses as well as their feelings (Obradovic et al., 2013). He

also states that a self-aware project manager is conscious of how emotions affect not just their own views and decision-making process but also those of other team members. Self-awareness of own emotions is a need for leading and managing a project team. Skilled project managers possess the capacity to accurately evaluate themselves, and their strong sense of self-worth stems from their dignity, which enables them to lead effectively (Obradovic et al., 2013).

According to Goleman, (1998), Three competences skills make up self-awareness. One of these is emotional self-awareness, which emphasizes the importance of comprehending one's own emotions and how they affect performance. The second competence is accurate self-assessment, which is essential for determining one's own weaknesses and strengths. Finally, self-confidence is having a strong sense of one's own value and competence.

2.3.3.2. Self-Management

Self-management is described by Goleman et al. (2002) as an outcome of self-awareness. This domain places a strong emphasis on having emotional control. This ability comes from having the capacity for self-awareness and recognizing possible problems or behaviors (George, 2000). The capacity to identify, control, and direct one's negative feelings towards a more positive or good goal is known as self-management (Goleman, 2001). It is the ability to suppress emotional urges and regulate uncomfortable emotions like rage and fear and the ability to control one's emotions and desires. Emotionally stable people typically don't experience excessive levels of anxiety, tension, boredom, or envy. Additionally, they usually consider their options before behaving quickly (Malekar, 2007).

One of Goleman's dimensions of emotional intelligence, self-regulation or self-management, is the capacity to control one's own emotions and impulses, to maintain composure in uncomfortable circumstances, and to do so regardless of a one's emotions. It focuses on the capacity for self-monitoring, adaptability, or changing behaviors in response to external stimuli. Having this crucial emotional intelligence enables people in leadership roles to restrain their emotions and impulses rather than giving in to them. The core components of self-management include emotional control, goal-achievement motivation, adaptability, and frequent initiative use (Ikpesu and Practice, 2017). Additionally, according to DeWall et al., (2011), self-management is controlling one's reaction to unfavorable situations in order to create room for another. It is essential for controlling impulses, time, and sentiments and emotions.

The Collaborative for Academic, Social, and Emotional Learning (CASEL, 2015) defines self-management as the capacity to effectively control one's emotions, thoughts, and behaviors in a variety of contexts. They state that this entails stress management, impulse control, self-motivation, and setting and pursuing academic and personal goals. Self-regulation is usually required when motivational conflicts arise. It is also primarily employed to resolve these intrapersonal conflicts in favor of long-term social responsibility and enlightened rationality rather than short-term self-centeredness or giving in to seductive pleasures. Given that our "emotions," "impulses," and "internal states" are biological in nature and that we are unable to completely eradicate them, it is imperative that we learn how to manage and control them (Goleman, 2001). He contends that self-management which is akin to a constant inner dialogue, The part of emotional intelligence that releases us from being prisoners of our own emotions. He claims that although those having these kinds of conversations experience negative emotions and impulsive behaviors just like everyone else, they manage how to handle them in productive ways.

Goleman et al. (2004) states that emotional intelligence greatly depends on the ability to control one's feelings and emotions. First of all, leaders cannot effectively manage the emotions of anyone else without managing their own. This is especially true when it comes to leaders and the other members of the organization. According to Nwabali and Ordua, (2023), there is a significant belief that a leader's emotions have public implications, as emotional leaking is a real concern.

According to Goleman, (1998), there are six competences that make up the self-management cluster of EI abilities. The first competency is emotional self-control, which is mostly demonstrated by the lack of distress and disruptive emotions. Being calm under pressure or interacting with an aggressive individual without responding violently are indications of this competency. The other is being competent in terms of trustworthiness, which means communicating with people's intentions, feelings, and values while also acting in a way that is in accordance with them. People who are trustworthy confront others about their shortcomings and are honest about their own errors. According to Goleman, (1998), a lack of this skill can be a profession killer. The third set of self-management skills are competencies related to conscientiousness, including being cautious, disciplined, and serious in fulfilling obligations. The fourth competency is adaptability, which enables a person to think "outside the box," exhibit creativity on the job, and use fresh ideas to produce achievements while remaining at ease with

the worry that frequently accompanies uncertainty. Achievement Drive, the fifth competency, is the hopeful pursuit of continuous performance improvement. The initiative competency is the final one, which must be completed before being compelled to do so by outside circumstances. Often, this entails acting proactively to prevent issues before they arise or taking opportunities before others can see them. People who lack initiative are more likely to be reactive than proactive, and they lack the foresight necessary to distinguish between a smart and a poor decision.

2.3.3.3. Social-Awareness

Developing social awareness entails broadening your perspective to encompass the feelings of others who surround you (Goleman, 2006a). It includes being able to empathize with others and being aware of how the organization that you are working in affects them. Goleman et al (2002) describe social-awareness as empathy, a person's skill to attune themselves with how another person is feeling. Empathy is regarded as the fundamental component of social awareness (Bradberry and Greaves, 2009; Goleman, 2002). Empathy is the ability to identify and understand the wants, needs, and perspectives of those around you. Goleman (1995), indicated that people with empathy are good at recognizing the feelings of others, even when those feelings may not be obvious. As a result, empathetic people are usually excellent at managing relationships, listening, and relating to others.

In addition, "Social-Awareness is your ability to accurately pick up on emotion in other people and understand what is really going on with them. This often means perceiving what other people are thinking and feeling even if you do not feel the same way" (Bradberry and Greaves, 2009). A socially aware person can accurately read situations and people because he is able to understand and empathize with their emotions (Nwabali and Ordua, 2023). Social awareness enables a manager to stay focused and absorb critical information (Bradberry and Greaves, 2009). According to Obradovic et al., (2013), for project managers social self-awareness is important to be able to understand and guide the project team in order to achieve best results. They also say that besides being empathic, project managers should be attentive. They must be capable of recognizing and satisfying team members and client's needs. Finally, they must be aware and be capable of recognizing political relations in organization.

According to Goleman, (1998), there are three competencies that make up the social awareness cluster. Firstly, empathy competence enables individuals to have a keen understanding of the

feelings, worries, and wants of others. By observing nonverbal indicators like voice inflection or facial expression, the empathetic person is able to read emotional currents. Self-awareness is a prerequisite for empathy; knowing how we feel about ourselves helps us understand the emotions and worries of others. When the emphasis is on interpersonal relationships, paying attention to others is essential for excellent performance at work. Service orientation competence, or the capacity to recognize and link someone's frequently unsaid wants and worries to appropriate products or services, is the second competency in the social awareness dimension of emotional intelligence. The final set of competencies is organizational awareness, which is the capacity to identify the political and emotional currents within a group. This skill is essential to the kind of behind-the-scenes networking and coalition building that enable people to have influence regardless of their line of work.

2.3.3.4. Relationship Management

Relationship management is another social competence; a highly competent leader-follower cannot become competent if they are not adept at relationship-management (Bradberry and Greaves, 2009). Relationship management means using an awareness of your own emotions and those of others to build strong relationships. It includes the identification, analysis and management of relationships with people inside and outside of your team as well as their development through feedback and coaching. It also incorporates your skill to communicate, persuade, and lead others, whilst being direct and honest without alienating people (Turner, 2003; Partington, 2003).

Emotional intelligence skill of relationship management includes the behavioral competencies of developing others, influence, communication, conflict management, leadership, change catalyst, social relationships and teamwork and collaboration (Goleman, 2004). According to Obradovic et al., (2013), "Emotionally intelligent managers successfully manage conflicts within the organization. Thus relationship management entails the ability to inspire, influence, and develop others while managing conflict (Goleman, 1998). They succeed to understand different opinions, emotions and affections of conflicting parties and find common ground on which the conflicting parties are in agreement. These managers direct the energy of the conflicting parties towards a common ideal. Managers capable of teamwork create flexible, friendly and collegial atmosphere. They elicit among employees' preference for team work. Successfully promote the strengthening of close interpersonal relationships of employees."

“Relationship management is your ability to use your awareness of your own emotion and those of others to manage interactions successfully. This ensures clear communication and effective handling of conflict. Relationship management is also the bond you build with others over time” (Bradberry and Greaves, 2009). Relationship management is extremely important competency for project managers, that enable project managers to quickly earn respect and trust among team members (Obradovic et al., 2013). These emotional skills of relationship management are good communication skills, listening and reassurance ability. One more aspect of efficient management refers to inspiring and guiding team members. It is very important for project managers to assist their team members in training.

According to Goleman, (1998), relationship management includes eight different sets of competencies. The first competency is developing others, which entails identifying and enhancing people's developmental needs and skills. The second competency is influencing, or persuasively handling and managing others' emotions. The most successful people are able to gauge the emotions of others and adjust their own behavior accordingly, resulting in more positive interactions. The third is communication, which is essential to the success of every organization. Individuals with communication competency are adept at exchanging emotional information, handling challenging situations with openness, listening intently and enthusiastically, promoting open communication, and remaining open to both good and negative news. The fourth competency, conflict management, deals with identifying problems before they become serious and taking action to reduce conflicts between parties. The competency that makes up the fifth category are visionary leadership that depends on a variety of personal abilities, capable of inspiring others to collaborate towards shared objectives. They have the capacity to clearly communicate and drive excitement for a common goal and vision, to take the initiative, when necessary, to mentor and hold others accountable for their actions, and to lead by example. The sixth competency is called change catalyst, and it requires highly valued leaders to be able to see when change is needed, break down barriers, challenge the status quo, and unite others behind new initiatives. The seventh competency is called building bonds, and it refers to forging strong or positive relationships with others. The final competencies in the relationship management dimension of emotional intelligence are teamwork and collaboration, which means collaborating with others to achieve common objectives and creating group cohesion in pursuit of those objectives.

2.4. Project Success

Project success is achieving the goals and anticipated outcomes in accordance with predefined parameters of schedule, budget, and performance (Beleiu et al., 2015). With the advancement of knowledge in the field of project management, the "golden triangle" was deemed insufficient in defining project success. It was acknowledged that project success was a multidimensional, complex idea that involved numerous factors (Mir and Pinnington, 2014). Due to the unique nature of each project, different projects have different success criteria (Müller and Turner, 2007). Determining project success in complex projects has always been challenging because of their larger scopes and longer completion timeframes (Ogunlana, 2010; Wong and Law, 2017). However, the researchers defined project success (PS) in relation to project management and took into consideration two crucial elements, such as success criteria and critical success factors that are required to define project success (Jugdev and Müller, 2005; Turner and Zolin, 2012). According to Pinto and Slevin, (1987), the main emphasis of success criteria is on objective indicators such as project completion on schedule, quality, and cost. However, there has been opposition to these objective standards, especially when it comes to determining the successful completion of complex projects. This is a result of the fact that they frequently employ extremely basic models that don't accurately reflect the realities of managing large, complex projects (Ogunlana, 2010). Furthermore, it has been noted by (Jugdev and Müller, 2005) that these objective measures do not account for other, broader components, including behavioral skills and project strategic management.

On the other hand, critical success factors place greater emphasis on soft issues, such as the behavioral skills of the project teams and the skills of the stakeholders and customers. For this reason, this approach is thought to be more realistic when assessing the success of complex project (Jugdev and Muller, 2005; Pinto, 1990). Success factors, as noted by Turner and Zolin, (2012), can be measured before the project is completed, in contrast to success criteria like time, money, and quality. This kind of measurement is helpful in evaluating a project's progress because complex projects sometimes have lengthy timelines. This study employed (Pinto, 1990) approach, which uses project managers' assessments of "critical success factors." According to Jugdev and Müller, (2005), these are the factors that are most commonly acknowledged and applied as success factors.

The current study focuses on the four human factors of critical success factors that determine a project's success: (a) good communication (b) troubleshooting, or managing the unforeseen uncertainties that arise during a crisis; (c) a clear project mission; and (d) support from top management (Pinto, 1990). Afterwards, Davis, (2014) and Mazur et al., (2014) discovered in their research that these four characteristics are excellent indicators of project success, particularly in complex projects. For complex and high-risk projects, (Couillard, 1995) found that troubleshooting and communication were key success factors. On the other hand, (Belout and Gauvreau, 2004) discovered that troubleshooting and well-defined project mission objectives are crucial for project success during the execution phase. Following in the footsteps of (Mazur et al., 2014), (Khan et al., 2021), (Rezvani et al., 2016) and (Montenegro et al., 2021), the current study focuses on the four primary project success factors that have a strong connection to humans.

2.4.1. Communication

According to (Pinto and Slevin, 1989), communication is defined as "the provision of an appropriate network and necessary data to all key actors in the project." This shows how well project managers are able to interact with both internal and external stakeholders in order to find the most suitable mix of expertise and knowledge for the project. One key managerial skill that affects project success is communication.

2.4.2. Troubleshooting

According to Pinto and Slevin, (1989), troubleshooting is having the capacity to "deal with unexpected crises and changes from the plan." Because of the interdependency and complexity of tasks in complex projects, project managers are exposed to unforeseen issues and difficulties (Pich et al., 2002, Sun and Meng, 2009). For the project to succeed, these issues must be resolved.

2.4.3. Mission clarity

Mission clarity refers to "initial clarity of goals and general directions" (Pinto and Slevin, 1989). According to (Dvir et al., 2006), complex projects are defined by high degrees of ambiguity and complexity. In addition, (Chang et al., 2013) have noted that it is typical for large-scale defense programs with complex objectives to start off with ambiguous aims like "increase defense capability." Project success is higher when goals are clearly defined.

2.4.4. Top management support

According to (Pinto and Slevin, 1989), top management support is the readiness of top management to supply the tools and authority/power required for project success. Particularly, (Mazur et al., 2014) have highlighted the need for senior management assistance in the planning and implementation of projects at every stage.

2.5. Emotional Intelligence and Project Success

Prior studies have largely focused on the technical skills of project managers. Moreover, project management was once considered a technical area, but most academics now recognize the behavioral aspect of project managers (Jugdev and Müller, 2005). According to Joseph and Newman, (2010), in order for a manager to be effective in project management, they must possess both emotional intelligence and technical skills. Emotional intelligence plays a major role in the success of a project. Goleman (1995) and Boyatzis et al., (2002) found that for employment at all levels, emotional intelligence is twice as significant as technical skills and cognitive quotient. In addition, as noted by Asare, (2016), project managers who possess emotional intelligence have a unique viewpoint on their management responsibilities compared to those who lack this skill. Emotional intelligence skills are closely linked to how work is done, as demonstrated by (Müller and Turner, 2010), and they are crucial for raising project managers' effectiveness. Additionally, project managers with high emotional intelligence can motivate team members to work harder and show more dedication to the project (Clarke, 2010).

Project managers with emotional intelligence are highly driven and have a favorable influence on their team members, leading to the project success (Rezvani et al., 2016). They possess the innovative problem-solving skills to address upcoming challenges and concerns that impact a project's success (Mount et al., 2006). Müller and Turner, (2007) determined that emotional intelligence is a critical requirement for project success. They also observed that emotionally competent project managers could be able to manage unfavorable feelings and situations. According to studies Thomas and Mengel, (2008), in the context of complex projects, project managers without emotional intelligence will increase stress, sadness, and annoyance. These studies also demonstrated that emotional intelligence plays a crucial role in project success and contributes to it. Weiss and Cropanzano, (1996) proposed that awareness of and understanding of emotions and moods such as pride, enthusiasm, annoyance, humiliation, blame, worry, defeat, and

jealousy have an impact on emotions and behaviors in the workplace. These emotions are a result of the events and activities that further generate emotional reactions in the context of the project's working environment.

Studies have revealed that not only team members but even upper management practice emotions while on the job (Ashkanasy et al., 2005). They also came to the conclusion that there is a legitimate connection between the emotions and feelings that project managers use in reaction to activities taken in the workplace and strategic decision-making processes. According to Jamli et al., (2019), emotional intelligence is necessary to improve the success of a project. They also concentrate on how a person describes themselves as inspired under stress, motivates other team members in stressful situations, manages complicated interpersonal relationships, and creates better working environments to achieve excellent results. Khan et al., (2021) also urged that project managers who possess emotional intelligence are superior to managers and team members who lack emotional intelligence. Because of this, managers who possess high emotional intelligence value the emotions and feelings of themselves and their team, which improves productivity and leads to project success.

The following hypotheses are developed for the study and can be seen in the theoretical model of the study (Fig 2.3).

H1: Project managers self-awareness is positively related with the project success in EEIG construction projects.

H2: Project managers self-management is positively related with the project success in EEIG construction projects.

H3: Project managers social-awareness is positively related with the project success in EEIG construction projects.

H4: Project managers relationship management is positively related with the project success in EEIG construction projects.

2.6. Significance of Emotional Intelligence for Project Managers

Emotional intelligence involves a combination of competencies which allow a person to be aware of, to understand and to be in control of their own emotions, to recognize and understand the

emotions of others and to use this knowledge to foster their success and the success of others (Chris, 2009). According to Goleman (1995), emotional intelligence has a very huge effect on both job performance and personal life and also urges that human's life success is 80% depended upon emotional intelligence. When managers possess a high degree of emotional intelligence, their staff members perform better and work more voluntarily (Wong and Law, 2002).

Additionally, Wall (2007) notes that emotionally intelligent managers assess their staff members' emotional competencies and potential before assigning work to them based on particular job categories. This is advantageous to the company as well as the individual. According to Goleman, (2006b), managers and supervisors need to be aware of the strong correlation between a few specific emotional intelligence traits and positive workplace outcomes in order to attain high levels of employee commitment and satisfaction. Moreover Ahmad et al., (2022) say that PMs possess emotional intelligence (EI) that enables them to manage team members' negative emotions and stress. Additionally, because complexity makes emotions complex, emotionally powerful leaders are able to control their emotions. Moreover, emotionally intelligent managers should be conscious of how to enhance group members' negative emotions and communication so that members can express their negative emotions with one another (Mount et al., 2006). As a result, emotionally intelligent managers are able to resolve conflicts among team members and foster a healthy work environment (Mount et al., 2006). And emotional appearance facilitates easy communication between PMs and team members. The PMs' emotional approach encourages team bonding, which encourages project success (Stephens and Carmeli, 2016).

2.7. Construction Industry

The construction industry encompasses all activities associated to the engineering design and building of infrastructure (Aremu and Adeyemi, 2011). In the construction sector, a varied range of individuals with varying backgrounds and specializations, as well as different behaviors and working styles, come together for a short period of time with the expectation that they will develop cooperative working relationships (Hanafi et al., 2019). According to Ibrahim et al., (2010), these teams are expected to complete projects with ever-increasing complexity under ever-tighter time and budget limitations. Furthermore, the construction business is widely recognized for its 4D work environment, which stands for "Difficult," "Dangerous," "Dirty," and "Demeaning" (Davis, 2017).

Construction is one of the most expansive, complex project based, and labor-intensive industries (Hanafi et al., 2019). Building new structures is one type of construction work; other tasks include dividing land for sale as building sites or preparing existing sites for new construction; renovations include adding on or changing existing structures; and engineering tasks include creating highways and utility systems (Behm, 2008). In the modern world, the construction sector is thought to be the basis of national development and is crucial to the socioeconomic advancement of all countries. It constitutes the bulk of the economy, contributes between 5% and 10% of global GDP, employs up to 10% of the labor force, and accounts for half of fixed capital output (Lopes, 2012). Globally, construction investment is expected to reach US\$12.4 trillion by 2022 (Paliza et al., 2022). And according to Ethiopia Construction Market Report Overview, “the Ethiopia construction market size was \$54.8 billion in 2022. the market is expected to increase at an average annual growth rate (AAGR) of more than 8% during 2024-2027”.

Nevertheless, the construction sector has not yet attained the ideal levels of overall performance in terms of meeting deadlines and budgets while upholding strict standards for sustainability, quality, and safety (Alsharef et al.). Okoye et al., (2015), on the other hand argue that construction projects are somewhat difficult to manage and meet the requirements of success due to the nature of the industry; such as complex and unique nature, mobile workforce, ingrained culture, working conditions, and project-based setup, diverse sub-contractors and suppliers. So that focus has been given to the construction sector since it contributes a lot to a country's economic development.

2.8. Empirical Review

Emotional intelligence refers to the ability to recognize and control one's own feelings as well as those of others who interact on a daily or professional basis (Salovey et al., 1990; Goleman, 1998). A study on the relationship between project success and manager emotional intelligence was carried out by (Rezvani et al., 2016). They used a self-report EI 16-item scale measurement of (Salovey et al., 1990) to gather data from 373 project managers in the Australian defense industry. They also utilized a 20-item Pinto's (1990) questionnaire to quantify project success. And their result demonstrates that emotional intelligence (EI), along with other factors, positively impacts trust, job satisfaction, and project success. Further research on the impact of emotional intelligence on organizational performance was done by (Chamanifard et al., 2014) in the international division

of Tejarat Bank in Iran. Their study was descriptive and correlational in nature and revealed a strong link between emotional intelligence and organizational success.

The study conducted by (Mohammad et al., 2018) examined the possible connection between emotional intelligence and job satisfaction in Pakistan's banking sector. And their results indicated that emotional intelligence significantly correlated with job satisfaction. Likewise, (Zhang et al., 2023) carried out a meta-analysis of 5,229 observations from 24 different studies between 1990 and 2021 in order to better understand the impact of project managers' emotional intelligence on project success. And they discovered that the emotional intelligence of project managers significantly improves the success of projects and helps construction projects succeed. Another study conducted by Müller and Turner, (2007) examined the effect of a project manager's leadership style on project success. Their study looked at the emotional, intellectual, and managerial leadership competencies in order to assess the project manager's leadership style. And after they analyzed the responses of 400 usable results using quantitative multivariate methodologies, their study concluded that emotional competence is nearly always an important component of project success. Moreover (Cavaletti et al., 2021) conducted a quantitative study on the role of emotional intelligence on project success in Brazilian projects. The researchers used EI measurement of Goleman (1998) to measure emotional intelligence using four dimensions (self-awareness, self-management, social awareness and relationship management) and project success was measured by adopting the questionnaire from Müller and Turner (2010b). The finding of their study indicated that project success was statistically significant relationship with the dimensions of the EI construct, of which self-awareness had a strength of 0.5971 ($r=0.5971$, $t=13.218$, $p<0.05$), self-management had the strength of 0.801 ($r=0.801$, $t=27.278$, $p<0.05$), social awareness presented a strength of 0.7213 ($r=0.7213$, $t=19.864$, $p<0.05$) and their study concluded that EI has a positive and significant impact for project success.

(Khan et al., 2021) examined the relationship between project managers' emotional intelligence and project success in Pakistani construction companies. The results of their study, which involved 218 project managers and project workers, demonstrated that emotional intelligence of project managers had a major positive impact on project success in the construction industry. Additionally, (Druskat and Druskat, 2006) assessed the skills associated with project managers' success in 74 international petroleum companies. They discovered that, 69% of all the abilities linked to project

managers' success were emotional competencies, 31% were business-related skills, and 0% were cognitive skills like conceptual or analytical thinking. Another quantitative study by Geoghegan and Dulewicz, (2008) was carried out to determine whether emotional intelligence dimensions had an impact on project success. After they examined the information provided by fifty-two project managers and sponsors from a UK financial services organization, the researchers discovered a strong correlation between the EI aspects and project success. Moreover Turner and Lloyd-Walker, (2008) carried out a qualitative case study in the US defense contracting sector and found that emotional intelligence abilities are crucial to the success of projects. Additionally, Sunindijo, (2015) reported that emotional intelligence has a major impact on project quality and cost performance.

A cross-sectional study on the impact of emotional intelligence and other aspects on project success was carried out by (Afzal et al., 2018) in the information technology industry of Rawalpindi/Islamabad, Pakistan. Data were collected from 250 respondents, including project managers and project leaders, project directors, functional managers, and project sponsor board members working in the information technology (IT) sector. And their results showed that emotional intelligence and project success were strongly correlated. And project managers' emotional intelligence has a 13.8% impact on a project's success. Montenegro et al., (2021) also gathered information from 110 project managers with varying degrees of experience and looked at the connection between project success and the emotional intelligence of construction project managers in the 30 most successful businesses on the Serbian market. Their study adopted Wong and Law scale (WLEIS) of four EI dimension to measure emotional intelligence. They also used Pinto and Slevin's four factors (the project mission, top management support, project communication, and troubleshooting) for measuring project success. Thus, the majority of the results supported the concept that construction project managers' emotional intelligence and project success are positively correlated.

Maqbool et al., (2017) conducted a study on the impact of emotional intelligence and other aspects on project success. The researchers used Goleman, (1998) emotional competency inventory to measure emotional intelligence among 345 valid responses throughout 107 Pakistani construction industries and used nine item questionnaire based on the work of (Müller and Turner, 2010) to measure project success. And their findings showed a strong positive correlation between project

success and emotional intelligence. Moreover, the emotional intelligence measures of self-awareness and relationship management are significantly correlated with project success (0.192, g, 0.244), as indicated by their beta value of 0.285, which indicates that one unit change in emotional intelligence has a 28.5% impact on project success. In other words, project managers who possess self-awareness (the emotional intelligence dimension) are also excellent at relationship management (the emotional intelligence dimension); in the end, this positively impacts the project's success. Moreover (Ahmad et al., 2022) conducted cross-sectional study on emotional intelligence and project success in Peshawa construction projects. And they collected a data from 356 employees in construction companies of Peshawa by using structured questionnaire. They adopted the 16-items scale of (Jordan & Lawrence, 2009) instruments to measure EI and 20 item scale of (Aga et al., 2016) to measure the PS, and their study findings showed a significant relationship between EI and PS.

Castro et al., (2022) conducted a study on the impacts of the project manager's emotional intelligence and other aspects on project success among Brazilian projects. They collected data from 101 project team members. Furthermore, their study adopted the Jordan and Lawrence (2009) emotional intelligence (EI) evaluation method to measure EI, and they adopted Castro et al. (2021) measuring instruments to measure PS. Their findings showed that trust among team members of the projects and the emotional intelligence of project managers have a major impact on project success. Siddiq et al., (2020) conducted a study on the direct correlation between emotional intelligence and construction projects. In particular, they looked at the impact of project managers' emotional intelligence on project success in the Pakistani construction sector. They performed a causal cross-sectional study. They used the EI measuring instruments of Wong and Law (2002) and Shenhar et al. (2002) to measure project success. And they collected data from 250 project managers from Pakistani construction firms. Additionally, their research shows that project managers' emotional intelligence has a positive and significant impact on the success of construction projects, especially when it comes to self-awareness and self-regulation. However, their research's key finding is that societal awareness has little impact on the success of projects.

2.9. Research Gap

There is a growing body of research on the impact of emotional intelligence on project environments, as well as the relationship between emotional intelligence and project success across a range of industries and nations. However, the majority of these studies have been conducted in Western and Asian countries, and they may not have taken into account the cultural, social, and economic aspects that affect Ethiopian project management practices. In Ethiopia, prior studies have explored the relationship between emotional intelligence and employee satisfaction, as noted by (Ayele, 2015). Furthermore, Tekle et al., (2018) investigated emotional intelligence in educational leaders. These studies contribute to our understanding of how emotional intelligence influences various aspects of work and leadership. However, there is a lack of research that particularly looks at the connection between project success and emotional intelligence in the particular setting of Ethiopia's construction sector. This gap emphasizes the need for more study on the relationship between emotional intelligence and project successes so that the results help managers in overcoming the challenges brought about by a lack of emotional intelligence and to support future researchers in the field, it will serve as a basis for their works.

2.10. Conceptual Framework

Independent variable

Dependent Variable

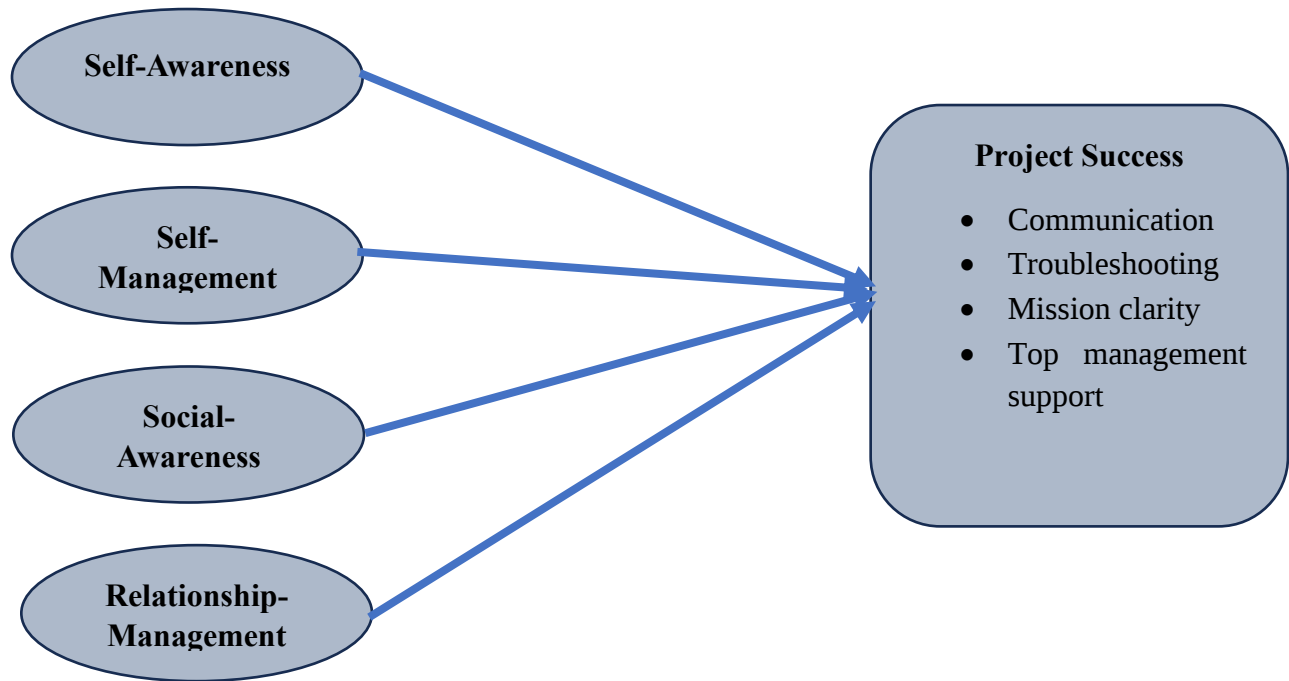


figure 2. 3 Conceptual framework of the study

Developed by the researcher (2024)

Chapter Three

Research Methodology

3.1 Introduction

This chapter encompasses the methods and procedures the researcher employed to conduct the study, including the study area, sampling technique and data collection procedures. The tools and procedures for processing data are also covered in this chapter. These include the research design, which provides an explanation and justification for the design choice; data collection; data analysis; reliability and validity; as well as ethical considerations.

3.2. The Study Area

Ethiopian Engineering investment group (EEIG) is government-owned grade one contractor with full design and build capacity, operating under the Ethiopian Investment Holding. As a member of the prestigious EEIG Construction, which has expertise in successfully completing projects throughout Ethiopia and focuses on complex, high-end construction projects. EEIG construction expertise lies in constructing high-rise commercial and residential buildings, as well as infrastructure projects such as roads, railways, and airports and also involved in projects in the real estate, water, and energy sectors.

3.3. Research Approach

A research approach is a strategy used in research work (Saunders et al., 2009). There are three kinds of research approach, qualitative, quantitative and mixed approach. The researcher used a quantitative research approach whereby a quantitative research method is based in statistics and numbers. Quantitative research is able to convert data into clearly quantifiable charts and graphs. Moreover, outcomes from quantitative research can be more accurate and objective, because they are mostly independent of the idea of the researcher. The researcher was able to employ a number of strategies that produce data that can be projected to larger numbers by using the quantitative method (Creswell, 2009). This approach is better suited to provide more objective answers to research questions without being influenced by the researcher's personal viewpoint in depicting the phenomenon.

3.4. Research Design

Research design refers to the plans and procedures for conducting research that include anything from broad assumptions to specific methods of gathering and analyzing data (Creswell, 2009). The purpose of this study is to assess the impact of project managers emotional intelligence on the success of construction projects in the case of EEIG construction. Hence, explanatory research design was used to see the impact of emotional intelligence of project managers on project success. Explanatory studies look for explanations of the nature of certain relationships (Das, 2016). The nature of the data was cross-sectional and was collected at once. In this research, the unit of analysis was distinct project managers, assistant project managers and project coordinators of EEIG construction company.

3.5. Population and Sampling

3.5.1 Target Population

The target population is the particular group from which information is gathered (Cooper and Schindler, 2006). For this study the target population is EEIG construction. The target populations are the experts at the project i.e. project managers, assistant project managers, and project coordinators from EEIG construction would comprise the sample of respondents in order to get relevant information for the study on impact of project managers emotional intelligence on the success of construction project in the case of EEIG construction.

3.5.2. Sampling Technique

Sampling is the process of selecting a subset of a population or a sampling frame. According to Taherdoost, (2016), sampling can be used to generalize data in light of preexisting theories or draw conclusions about the population. As population size of this study is found to be small, census inquiry is used. Kothari, (2004) states that when the universe is small, census inquiries must be employed; sample surveys are useless in this situation. Census is a complete enumeration of all items in the 'population'. Presumably, maximum precision is achieved in such an investigation and no chance is left when all things are covered (Kothari, 2004). A census eliminates sampling error and provides data on all the individuals in the population (Singh et al., 2014).

3.5.3. Sample Size

A sample size is a subset of the population with characteristics similar to those of the total population (Elias et al., 2001). According to the information gathered from the administration and human resource department of EEIG construction company, there are 12 project managers, 21 assistant project managers and 15 project coordinators and a total of 48 target sample were used in this study. The target sample for the study were determined by a census inquiry.

3.6. Data Collection Method

Primary sources are used to gather the necessary information. The primary data were gathered from Project managers, assistant project managers and project coordinators using a self-administered questionnaire and google form (online survey). The questionnaire has three sections: the respondents' demographic profile, such as their sexual orientation, age, educational background, position, and years of experience, were taken into account and covered in part one; emotional intelligence was covered in part two; and project success was covered in part three. Each item on the questionnaires, were adopted after studying the literature, was scored on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Before the actual administration of the questionnaire, it will pre-test for reliability and validity issue. Respondents were assured the confidentiality to guarantee the fairness of responses. Respondents were also provided with full explanation of the questionnaire.

3.7. Data Instrumentation

Following the same preset guidelines, the necessary data were collected, revised, coded, and categorized. In this research, all of the 40 measurement items were adopted from existing research. For emotional intelligence, 20 item scales were adopted from the Goleman competency model (Goleman, 1998) in which Emotional intelligence has four dimension such as (1) Self-Awareness, (2) Self-management, (3) Social-Awareness, and (4) Relationship management. And the use of this scale was consistent with previous studies such as (Cavaletti et al., 2021), (Maqbool et al., 2017) and (Afzal et al., 2018). To measure project success, the study adopted Pinto's (1990) 20-item 7-point Likert scale. And the use of this instrument was consistent with previous studies, such as (Khan et al., 2021), (Rezvani et al., 2016), (Mazur et al., 2014) and (Montenegro et al., 2021). All questionnaires employed a seven-point Likert scale ranging from “1” meaning “Strongly Disagree” to “7” meaning “Strongly Agree.”

3.8. Method of Data analysis

To analyze the valuable information in the questionnaire, the researcher used SPSS (Statistical Package for Social Sciences) software version 25. Both descriptive (mean and standard deviation) and inferential (Pearson correlation and multiple linear regression) statistics were used to achieve the study's objective. To determine the strength of the relationship between independent variable and dependent variable Pearson correlation analysis were done. The impact of independent variables over dependent variable was analyzed by using multiple linear regression analysis.

The regression model of the study was:

$$PS = \beta^{\circ} + \beta_1 SA + \beta_2 SM + \beta_3 SoA + \beta_4 RM + \varepsilon$$

Where: PS=Project success

SA= Self-Awareness, SM= Self-Management, SoA=Social-Awareness &
RM=Relationship management

β° = Constant or intercept

$\beta_1 - \beta_4$ = Regression Coefficient for each independent variable

ε = error term

3.9. Scale Reliability and Validity

3.9.1. Validity

Validity is often defined as the extent to which an instrument measures what it asserts to measure (Blumberg et al., 2014). Validity of a research instrument assesses the extent to which the instrument measures what it is designed to measure (Robson and McCartan, 2016). The questionnaires were adopted directly from the analysis of relevant literature to ensure topic validity. There are several methods used to demonstrate validity such as content validity, convergent validity, concurrent validity, and construct validity.

The measuring instrument for emotional intelligence used in this study has already tested for validity by previous researchers (Maqbool et al., 2017) in the context of construction sector. And the result was found to be valid.

The measuring instrument for project success used in this study has already been tested for convergent validity by previous researchers (Khan et al., 2021) in the context of construction sector. Therefore, this research relied on the validity of Khan et al. (2021), finding that the average

variance extracted (AVE) for project success was found to be 0.525. The result indicates that the AVE for project success was greater than 0.50, indicating the presence of convergent validity (Fornell and Larcker, 1981).

3.9.2. Reliability

When a measurement is made again on the same item, reliability is the degree of confidence we may have in the measuring device to provide us with the same numerical number. If a measurement can be made again on the same subject with the same equipment and yield similar findings, it is considered reliable. They recommend that, in order to increase dependability, the time between tests be extended (Gaur and Gaur, 2006). It is necessary to assess the scale's internal consistency and determine whether it will measure the objectives. An indication of the scale's internal consistency that were employed is the Cronbach alpha coefficient. Appropriate test of scale reliability will be one with a Cronbach alpha value greater than 0.70 (Gaur and Gaur, 2006).

In this study the values of Cronbach's Alpha for each variable are shown in the Table 3.1. Values of Cronbach's Alpha were in the range from 0.721 and 0.808 for each variable and; 0.824 for overall. for this research, all the data were within acceptable ranges. Therefore, the level of Cronbach's alpha was considered to be consistent and reliable enough to proceed with the data analysis.

Table 3. 1 Cronbach's alpha output summary

S. No	Variables	Cronbach's Alpha value	No of items
1	Self-Awareness (Emotional intelligence)	0.767	3
2	Self-Management (Emotional Intelligence)	0.764	6
3	Social-Awareness (Emotional Intelligence)	0.721	3
4	Relationship Management (Emotional intelligence)	0.776	8
5	Project success	0.808	20
6	Overall	0.824	40

Survey data result (2024)

3.10. Ethical Consideration

Ethics are the moral principles that guide officials in all aspects of their employment. Ethical behavior encompasses the values of truthfulness, morality, honesty, caution, equity, trust, respect, and constancy (Wee, 2002). This is an explanation of how study participants are not in danger and the measures being taken to protect their rights. In order to complete the data collection task as quickly as possible, some preparations were taken beforehand by getting in touch with relevant officials of the EEIG construction company. The researcher was discussed with the research participants to set up programs convenient to them. Supported by volunteers from the company, the researcher conducted the data collection process in person and using online survey (google form). All ethical aspect were properly taken into account during the data collection activities. Each participant was provided with enough information to ensure that the researcher complies with ethical standards, maintains confidentiality throughout the collaboration, and gains their consent. Confidentiality and privacy were preserved by omitting their names and keeping their responses.

Chapter four

Data Analysis and Interpretation

This chapter consists of three sections. The first section presents the demographic characteristics of respondents. Section two presents the analysis and interpretation of data directly related to this study and section three present the discussion of the results.

4.1. Response Rate

A total of 48 questionnaires were distributed to project managers, assistant project managers and project coordinators of EEIG construction. The study managed to receive a total of 45 filled questionnaires which constituted a response rate of 93.8%. According to (Edwards et al., 2002), a response rate of 80% and above is viewed as sufficient to enable the researcher to draw adequate conclusions.

Table 4. 1 Response rate

Response rate	Frequency rate	Percentage (%)
Questionnaire distributed	48	100
Questionnaire Returned	45	93.8
Not returned	3	6.2
Discarded	0	0
Valid	45	93.8

Source: Survey questionnaire (2024)

4.2. Demographic Characteristics of Respondents

4.2.1. Gender

The study asked respondents' gender orientation-related questions. From the Table 4.2, among the total number of respondents, 86.7% were males while 13.3% were female. This implies that majority of the respondents were male.

Table 4. 2 Respondent gender orientation

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	39	86.7	86.7	86.7
Valid Female	6	13.3	13.3	100.0
Total	45	100.0	100.0	

Survey data result (2024)

4.2.2. Respondent age percentage

The Table 4.3 shows the age groups where 57.8% of respondents age were 25-35, 28.9% respondents age were between 35-45, and 13.3% of respondent age were between 45-55. This implies that the percentage of respondents age of 25-30 were high.

Table 4. 3 Respondent age percentage

	Frequency	Percent	Valid Percent	Cumulative Percent
25-35	26	57.8	57.8	57.8
Valid between 35-45	13	28.9	28.9	86.7
between 45-55	6	13.3	13.3	100.0
Total	45	100.0	100.0	

Survey data result (2024)

4.2.3. Level of Education

According to the findings shown in Table 4.4, 53.3% of respondents were master's degree holder and 46.7% of the respondents were bachelor's degree holders. This implies that majority of respondents were master's degree holders.

Table 4. 4 Respondent level of education

	Frequency	Percent	Valid Percent	Cumulative Percent
bachelor degree	21	46.7	46.7	46.7
Valid master's degree	24	53.3	53.3	100.0
Total	45	100.0	100.0	

Survey data result (2024)

4.2.4. Position

The Table 4.5 shows the respondent job position. According to the findings 26.7% were project managers, 44.4% were assistant project managers and 28.9% were project coordinators.

Table 4. 5 Respondent job position

	Frequency	Percent	Valid Percent	Cumulative Percent
project manager	12	26.7	26.7	26.7
Assistant project manager	20	44.4	44.4	71.1
Valid Project coordinator	13	28.9	28.9	100.0
Total	45	100.0	100.0	

Survey data result (2024)

4.2.5. Years of Experience

As indicated in Table 4.6, 62.2% of the respondents had 5-10 years of experience, 20.0% were between 10-15 years of experience and 11.1% were less, equal to 5 years of experience and 6.7% of respondent are above 15 years of experience. A high percentage of respondent's work experience is 62.2% in the range between 5-10.

Table 4. 6 Respondent years of experience

	Frequency	Percent	Valid Percent	Cumulative Percent
less and equal 5	5	11.1	11.1	11.1
between 5-10	28	62.2	62.2	73.3
Valid between 10-15	9	20.0	20.0	93.3
above 15	3	6.7	6.7	100.0
Total	45	100.0	100.0	

Survey data result (2024)

4.3. Descriptive Statistics

In this analysis the mean and standard deviation of all variables were computed and interpreted based on (Pimentel, 2019) presented in the Table 4.7.

Table 4. 7 Scoring range of Likert scale

	Value	Mean Range
Strongly agree	7	6.16-7.00
Agree	6	6.15-5.30
Somewhat agree	5	5.29-4.44
Neither agree nor disagree	4	4.43-3.58
Somewhat disagree	3	3.57-2.72
Disagree	2	2.71-1.86
Strongly disagree	1	1.85-1.00

(Pimentel, 2019)

4.3.1. Descriptive Statistics for Self-awareness

The Table 4.8 shows the respondents mean and standard deviation of self-awareness emotional intelligence. The degree of agreement among respondents regarding “I recognize my own emotions and their effects” gave a mean score of 5.87 and a standard deviation of 1.120, implying respondents’ agreement with slight variation in responses. A mean value of 5.76 and a standard deviation of 0.933 was recorded concerning “I know my strengths and weaknesses”, implying respondents’ agreement with homogeneity in their response. Regarding “I have a strong sense of self-worth and capabilities”, a mean value of 5.71 and a standard deviation of 1.121, implying that respondent’s agreement with slight variation in response. Generally the overall mean response of self-awareness emotional intelligence was rated as overall mean value of 5.78 which is in the range of “agree” based on (Pimentel, 2019) scaling mentioned in the Table 4.7. This implies that the respondents are self-aware and they are good in their self-awareness emotional intelligent skill. The average standard deviation value was 0.788, suggests that the respondents' standard deviation value was not significantly dispersed from the mean value, indicating that the responses are homogeneous or the data were clustered closely around the mean.

Table 4. 8 Descriptive statistics for self-awareness

	N	Mean	Std. Deviation
I recognize my own emotions and their effects.	45	5.87	1.120
I know my strengths and weaknesses.	45	5.76	.933
I have a strong sense of self-worth and capabilities.	45	5.71	1.121
Self-Awareness	45	5.78	.788
Valid N (listwise)	45		

Survey data result (2024)

4.3.2. Descriptive Statistics for Self-management

The Table 4.9 shows the respondents mean and standard deviation of self-management emotional intelligence. The degree of agreement among respondents regarding “I keep disruptive emotions and impulses in check”, was recorded a mean value of 5.40 and a standard deviation of 1.195, and regarding “I exercise flexibility in handling change” with a mean value of 5.58 and a standard deviation of 1.033, regarding “I strive for improvement or meeting a standard of excellence”, a mean value of 5.98 and a standard deviation of 1.196 were recorded and all implying that respondent’s agreement with slight variation in responses. Regarding “I maintain integrity and act congruently with my values”, a mean value of 5.38 and a standard deviation of 0.936, and regarding “I am persistent in pursuing my goals despite obstacles and setbacks” with a mean of 5.87 and standard deviation of 0.968, both implying respondent agreement with homogeneity in response. Generally, from the result the average mean response of self-management emotional intelligence was rated as overall mean value of 5.65 which is in the range of “Agree” as (Pimentel, 2019) scaling mentioned in the Table 4.7. This implies that the respondent has good self-management skill and they are able to manage their emotion. The standard deviation value was 0.764, suggests that the respondents' standard deviation value was not significantly dispersed from the mean value, indicating that the responses are homogeneous or the data were clustered closely around the mean.

Table 4. 9 Descriptive statistics for self-management

	N	Mean	Std. Deviation
I keep disruptive emotions and impulses in check.	45	5.40	1.195
I maintain integrity and act congruently with my values.	45	5.38	.936
I am persistent in pursuing my goals despite obstacles and setbacks.	45	5.87	.968
I exercise flexibility in handling change	45	5.58	1.033
I strive for improvement or meeting a standard of excellence.	45	5.98	1.196
I am always ready to act on opportunities.	45	5.71	1.079
Self-Management	45	5.65	.764
Valid N (listwise)	45		

Survey data result (2024)

4.3.3. Descriptive Statistics for Social-awareness

The Table 4.10 shows the respondents mean and standard deviation of social-awareness emotional intelligence. The degree of agreement among respondents regarding “I sense others’ feelings and perspectives and take an active interest in their concerns” gave a mean score of 5.44 and a standard deviation of 1.013, implying respondents’ agreement with slight variation in responses. A mean value of 5.76 and a standard deviation of 0.933 were recorded concerning “I read/understand my group’s emotional currents and power relationships”, implying respondents’ agreement with homogeneity in their response. Regarding “I anticipate, recognize, and meet my customers’ needs”, was recorded mean value of 5.80 and a standard deviation of 0.919, implying that respondent’s agreement with homogeneity in their response. Generally from the result the average mean response of social-awareness emotional intelligence was rated as overall mean value of 5.67 which is in the range of “agree” based on (Pimentel, 2019) scaling mentioned in the Table 4.7. This implies that the respondents believe they have a good social awareness skill. The standard deviation value, $SD = 0.693$, suggests that the respondents' standard deviation value was not

significantly dispersed from the mean value, indicating that the responses are homogeneous or the data were clustered closely around the mean.

Table 4. 10 Descriptive statistics for social-awareness

	N	Mean	Std. Deviation
I sense others' feelings and perspectives and take an active interest in their concerns.	45	5.44	1.013
I read/understand my group's emotional currents and power relationships.	45	5.76	.933
I anticipate, recognize, and meet my customers' needs.	45	5.80	.919
Social-Awareness	45	5.67	.693
Valid N (listwise)	45		

Survey data result (2024)

4.3.4. Descriptive Statistics for Relationship-management

The Table 4.11 shows the respondents mean and standard deviation values of relationship management emotional intelligence. The degree of agreement among respondents regarding "I sense others' developmental needs and bolster their abilities" with a mean of 5.51 and standard deviation of 1.141, regarding "I inspire and guide individuals and groups" with a mean of 5.67 and a standard deviation of 1.066, regarding "I use effective tactics for persuasion" with a mean of 5.40 and a standard deviation of 1.232, regarding "I initiate or manage change" with a mean of 5.44 and a standard deviation of 1.013, regarding "I listen openly and sending convincing message" with a mean value of 5.44 and a standard deviation of 1.013, all above items implying respondent agreement with slight variation in their response. And regarding "I negotiate and resolve disagreements" with a mean of 5.76 and a standard deviation of 0.933, regarding "I work with others toward shared goals and create group synergy in pursuing collective goals" with a mean of 5.80 and a standard deviation of 0.919, regarding "I build strong or positive relationship with others" with a mean of 6.00 and a standard deviation of 0.929, all implying respondent agreement with homogeneity in their response. Generally from the result the average mean response of relationship management emotional intelligence was rated as overall mean value of

5.63 which is in the range of “agree” based on (Pimentel, 2019) scaling mentioned in the Table 4.7. This implies that the respondents are good in their capacity to manage relationships with others. The standard deviation value, SD = 0.609, suggests that the respondents' standard deviation value was not significantly dispersed from the mean value, indicating that the responses are homogeneous.

Table 4. 11 Descriptive statistics for relationship management

	N	Mean	Std. Deviation
I sense others' developmental needs and bolster their abilities.	45	5.51	1.141
I inspire and guide individuals and groups.	45	5.67	1.066
I use effective tactics for persuasion.	45	5.40	1.232
I initiate or manage change.	45	5.44	1.013
I negotiate and resolve disagreements.	45	5.76	.933
I work with others toward shared goals and create group synergy in pursuing collective goals.	45	5.80	.919
I listen openly and sending convincing message	45	5.44	1.013
I build strong or positive relationship with others	45	6.00	.929
Relationship-Management	45	5.63	.609
Valid N (listwise)	45		

Survey data result (2024)

4.3.5. Descriptive Statistics for Project Success

The Table 4.12 shows the respondents mean and standard deviation values of project success. Project success has 20 item and the mean and standard deviation value of each item was listed in the Table 4.12. The degree of agreement among respondents regarding all item of project success were recorded in the ranges of 5.31-5.98, this ranges falls under agreement as mention by (Pimentel, 2019) scaling in the Table 4.7. Generally, from the result the average mean response of project success was rated as overall mean value of 5.56 which is in the range of “agree”. This

implies a high probability of project success. The standard deviation value of 0.472, suggests that the respondents' standard deviation value was not significantly dispersed from the mean value.

Table 4. 12 Descriptive statistics for project success

	N	Mean	Std. Deviation
The goals of the project are in line with the general goals of the organization	45	5.42	1.177
The basic goals of the project are made clear to the project team	45	5.62	1.114
The results of the project will benefit the parent organization	45	5.67	1.187
I am enthusiastic about the chances for success of this project.	45	5.58	1.196
I am aware of and can identify the beneficial consequences to the organization of the success of this project.	45	5.56	1.078
Upper management is responsive to our requests for additional resources, if the need arises.	45	5.60	0.963
Upper management shares responsibility with the project team for ensuring the project's success.	45	5.27	1.116
I agree with upper management on the degree of my authority and responsibility for the project.	45	5.40	1.116
Upper management will support me in a crisis.	45	5.31	0.973
Upper management has granted us the necessary authority and will support our decisions concerning the project.	45	5.56	1.035
The results (decisions made, information received and needed, etc.) of planning meetings are published and distributed to applicable personnel.	45	5.58	1.138
Individuals/groups supplying input have received feedback on the acceptance or rejection of their input.	45	5.56	0.943
When the budget or schedule is revised, the changes and the reasons for the changes are communicated to all members of the project team.	45	5.40	1.195

The reasons for the changes to existing policies/procedures have been explained to members of the project team, other groups affected by the changes, and upper management.	45	5.38	0.936
All groups affected by the project know how to make problems known to the project team.	45	5.87	0.968
The project leader is not hesitant to enlist the aid of personnel not involved in the project in the event of problems	45	5.58	1.033
‘Brainstorming ‘sessions are held to determine where problems are most likely to occur.	45	5.98	1.196
In case of project difficulties, project team members know exactly where to go for assistance.	45	5.71	1.079
I am confident that problems that arise can be solved completely.	45	5.71	1.121
Immediate action is taken when problems come to the project team’s attention.	45	5.53	1.254
Project-Success	45	5.56	0.432
Valid N (listwise)	45		

Survey data result (2024)

4.4. Inferential Statistics

4.4.1. Correlation Analysis

Correlation analysis measure the relationship between dependent and independent variable. The correlation coefficient take value from -1 through 0 to 1. if the sign of correlation coefficient was negative then a negative correlation would have existed. If the sign is positive then positive correlation existed and if it is 0 then no relation existed between the variables. The interdependency is measured according to the scale recommended by (Schober et al., 2018) and presented in the Table 4.13.

Table 4. 13 Correlation coefficient interpretation

Correlation Coefficient	Interpretation
0.00–0.10	Negligible correlation
0.10–0.39	Weak correlation
0.40–0.69	Moderate correlation
0.70–0.89	Strong correlation
0.90–1.00	Very strong correlation

Source: (Schober et al., 2018)

The Table 4.14 shows the strength of the relationship between independent variable of project managers emotional intelligence (self-awareness, self-management, social awareness and relationship management) and dependent variable of project success.

The Pearson correlation value ($r=0.580$, $p=0.000$) between project success and PMs' self-awareness (SA) shows that significantly positive and moderate relationship, based on (Schober et al., 2018) interpretation. The Pearson correlation value ($r=0.603$, $p=0.000$) between PMs' self-management and project success has significant, positive and moderate relationship. The correlation between social awareness and project success has a significantly positive and moderate relationship with a Pearson value of ($r=0.572$, $p=0.000$). This explain that self-aware, self-managed and socially aware managers have important role for project success. Whereas project success has a positive but weak relationship ($r=0.328$, $p=0.028$) with relationship management.

Table 4. 14 Pearson correlation result

		Self-Awareness	Self-Management	Social-Awareness	Relationship-Management	Project-Success
Self-Awareness	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	45				
Self-Management	Pearson Correlation	.317*	1			
	Sig. (2-tailed)	.034				
	N	45	45			
Social-Awareness	Pearson Correlation	.447**	.415**	1		
	Sig. (2-tailed)	.002	.005			
	N	45	45	45		
Relationship-Management	Pearson Correlation	.356*	.232	.364*	1	
	Sig. (2-tailed)	.016	.124	.014		
	N	45	45	45	45	
Project-Success	Pearson Correlation	.580**	.603**	.572**	.328*	1
	Sig. (2-tailed)	.000	.000	.000	.028	
	N	45	45	45	45	45

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Survey data result (2024)

4.4.2. Multiple Linear Regression Analysis

The impact of independent variables (i.e. self-awareness, self-management, social awareness and relationship management) over dependent variable (project success) was analyzed by using multiple linear regression. Regression analysis is used to estimate the correlations between a dependent variable and independent variables referred to as "predictors" (Seber and Lee, 2012). Multiple regression analysis is a statistical tool for understanding the relationship between two or more variables (Rubinfeld, 2000). According to Kothari (2004), multiple linear regression analysis

is applicable if there are several independent variables. Therefore, in order to examine the cumulative impact of independent variables over the dependent variable, multiple linear regression analysis was used in this study. Before doing the multiple linear regression analysis, the assumptions were checked to make sure they were in the acceptable range. The multiple linear regression analysis's assumptions are listed below.

4.4.2.1 Normality Test

Normally distributed data means that most of the values would be in the range of the mean value, with a small number of extreme values that are too high or too low (Othman Talib, 2013). At the first step, data normality was tested by using skewness and kurtosis test to check whether the data are normally distributed or not. According to Hahs-Vaughn and Lomax, (2020), skewness and kurtosis value of ± 2 ranges are considered normal. Thus, the Table 4.15 shows that almost all values are in the defined ranges of skewness and kurtosis. Therefore, the data in the study were normally distributed.

Table 4. 15 Normality skewness-kurtosis test

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Self-Awareness	45	5.7778	.78817	.110	.354	-.982	.695
Self-Management	45	5.6519	.76362	-.586	.354	-.998	.695
Social-Awareness	45	5.6519	.69977	-.479	.354	-.702	.695
Relationship- Management	45	5.6333	.61434	-.142	.354	-.838	.695
Project-Success	45	5.5633	.43175	-.028	.354	.207	.695
Valid N (listwise)	45						

Survey data result (2024)

4.4.2.2. Multi-collinearity Test

Multicollinearity occurs when independent variables in a regression model are correlated. The high correlation between independent variables were a problem because independent variables should be independent. Problems with model fitting and result interpretation may arise if the degree of correlation between independent variables is sufficiently high. For a multi-collinearity test to be applicable to multiple regression analysis, the results should indicate either no multi-collinearity at all or very little multi-collinearity among the independent variables. To determine the presence

of multicollinearity, one way is to measure it using VIF. Variance Inflation Factor (VIF) is a tool used to test the assumption of non-multicollinearity in regression analysis. According to Hair et al., (2010), a multicollinearity problem exists, if the tolerance value is less than 0.10 and the variance inflation factor (VIF) is greater than 10.

From the Table 4.16, the results of the VIF value show there are no independent variables that have a VIF value of more than 10 and the tolerance values less than 0.1. Therefore, it is concluded that there is no multicollinearity problem exists in the independent variables in this regression model.

Table 4. 16 multi-collinearity test

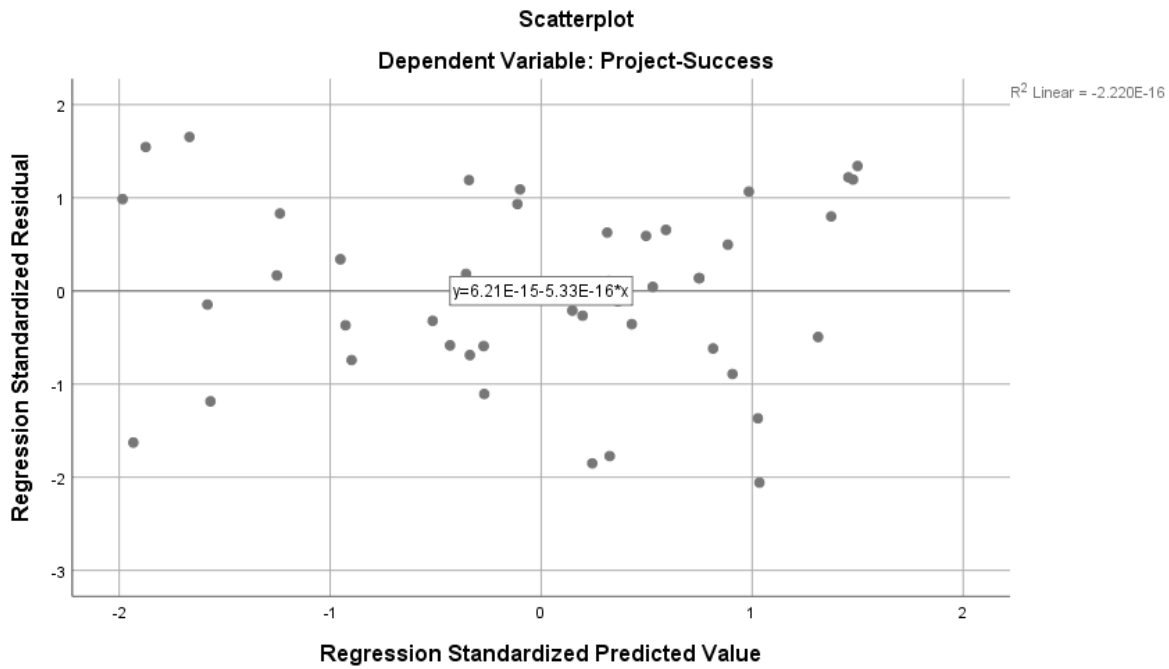
Model		Collinearity Statistics	
		Tolerance	VIF
1	Self-Awareness	.741	1.349
	Self-Management	.803	1.246
	Social-Awareness	.684	1.462
	Relationship-Management	.818	1.223

a. Dependent Variable: Project-Success
Survey data result (2024)

4.4.2.3. Homoscedasticity

Homoscedasticity is the assumption of equal variance. According to Hair et al. (2010), the assumption of homoscedasticity necessitates that the variance of the dependent variable be constant or the same for all values of the independent variable. A scatterplot of residuals versus predicted values is good way to check homoscedasticity. All levels of the independent variables should have the same variance of the error terms (residuals). When the homoscedasticity assumption is met, residual will form a pattern less cloud of dots (Garson, 2012). If the plot shows random scatter, the assumption of homoscedasticity is met. However, if the scatter has a cone shape, then the assumption is not met.

Figure 4. 1 scatter plot Homoscedasticity



From the Figure 4.1 the scatterplot shows random scatter so that the assumption of homoscedasticity is met.

4.4.2.4. Model Summary

Regression model summary is the output of multiple regression analysis, the cumulative impact of dependent variable due to independent variable. The Table 4.17 shows the R, R^2 , adjusted R^2 and the standard error of the estimate which can be used to determine how well a regression model fits the data.

Table 4. 17 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.762 ^a	.580	.538	.29336

a. Predictors: Relationship-Management, Self-Management, Self-Awareness, Social-Awareness

Survey data result (2024)

The Table 4.16 shows the R-squared value of ($R^2=0.580$) indicate that 58 % of the overall variation in the dependent variables (project success) is due to independent variables (emotional

intelligence). In other words, emotional intelligence accounts for 58% of project success, and the remaining 42% variation occurs due to other factors that were not addressed in this study.

4.4.2.5 Anova Test

Analysis of variance (ANOVA) was done to verify the goodness of fit of the regression model. If the F ratio is large and the probability is less than 0.05 then it is termed statistically significant (Saunders, 2012). From regression analysis in the table 4.18 the significance level is 0.000. This implies that the model had goodness of fit and was very ideal for determining how emotional intelligence of managers affect project success in EEIG construction company. From the Table 4.18 shows that the model (which includes both dependent and independent variables) is statistically significant ($F=13.827$, $p=.000$), as the p-value is less than 0.05. The regression in the model was statistically acceptable and the value of the variation explained by the model is not due to chance.

Table 4. 18 Anova Test

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	4.760	4	1.190	13.827	.000 ^b
	Residual	3.442	40	.086		
	Total	8.202	44			

a. Dependent Variable: Project-Success

b. Predictors: Relationship-Management, Self-Management, Self-Awareness, Social-Awareness

Survey data result (2024)

4.4.2.6. Regression Coefficients

The regression coefficient, or β , is the amount that must be multiplied by the change in the independent variable to obtain the corresponding average change in the dependent variable. In other words, it indicates how much the dependent variable increases for every unit increase in the independent variable.

Table 4. 19 Regression coefficient

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	2.283	.505		4.524	.000
Self-Awareness	.183	.065	.335	2.815	.008
Self-Management	.218	.065	.386	3.373	.002
Social-Awareness	.156	.076	.253	2.038	.048
Relationship-Management	.019	.080	.027	.240	.812

a. Dependent Variable: Project-Success

Survey data result (2024)

From the regression coefficient shown in the Table 4.19 positive relation exists between independent variables (SA, SM, SoA and RM) and project success (PS). Self-awareness emotional intelligence was found to be significant and positively correlated with project success. One unit change in self-awareness (SA), will bring 0.183 units change in project success (PS). The value of $\beta_1=0.183$, ($t=2.815$, $p=0.008$), as the p-value is less than 0.05 so the null hypothesis is rejected, and alternate hypothesis is accepted. This implies 18.3% variation in project success is due to self-awareness of project managers in EEIG construction company.

Self-management emotional intelligence was found to be significant and positively correlated with project success. Its beta value $\beta_2=0.218$, ($t=3.373$, $p=0.002$) shows that one unit change in self-management emotional intelligence will bring 0.218-unit change in project success. As the p-value is less than 0.05, the null hypothesis is rejected, and alternate hypothesis is accepted. This implies a 21.8% variation in project success is due to self-management of project managers in EEIG construction company.

Social awareness emotional intelligence has a positive and significantly correlated with project success. Its beta value $\beta_3=0.156$ ($t=2.038$, $p=0.048$), indicate that one unit change in social-awareness emotional intelligence will bring 0.156-unit change in project success. The p value is less than 0.05, the null hypothesis is rejected, and alternative hypothesis is accepted. This implies that 15.5% variation in project success is due to social awareness of project manager in EEIG construction.

Relationship management emotional intelligence has positively but has no or least statistically significant impact on project success. Its beta value is 0.019 (t=0.240, p=0.812) shows that one unit change in relationship management will bring 0.019-unit change in project success. The p value is greater than 0.05 thus the null hypothesis is accepted and the alternate hypothesis is rejected.

From the regression coefficient in the Table 4.19, regression equation becomes

$$PS = \beta^{\circ} + \beta_1 SA + \beta_2 SM + \beta_3 SoA + \beta_4 RM + \varepsilon \dots \dots \dots \text{eq. (1)}$$

$$PS = 2.283 + 0.183SA + 0.218SM + 0.156SoA + 0.019RM \dots \dots \text{eq. (2)}$$

Where: PS=Project success

SA= Self-Awareness

SM= Self-Management

SoA=Social-Awareness

RM=Relationship management

4.5. Hypothesis Testing Result

The Table 4.20 shows the hypothesis test summary.

Table 4. 20 Hypothesis testing result

S No	Hypothesis	Decision
H1	self-awareness emotional intelligence is positively related with project success	Hypothesis Accepted
H1	self-management emotional intelligence is positively related with project success	Hypothesis Accepted
H3	social-awareness emotional intelligence is positively related with project success	Hypothesis Accepted
H4	relationship management emotional intelligence is positively related with project success	Hypothesis rejected

Survey data result (2024)

4.6. Discussion of the Results

This study was conducted with the aim of assessing the impact of project managers emotional intelligence on project success in the case of EEIG construction company. Project success is the dependent variable whereas emotional intelligence is the independent variable of the study which is measured by four dimensions (self-awareness, self-management, social-awareness and

relationship management). Descriptive and inferential statistics were conducted to analyze the collected data. Descriptive analysis was computed based on the mean and standard deviation for the average values of each variable. The arithmetic mean values for all the variables fall in the ranges of agreement. The standard deviation results for all variables are uniform having a result which is not widely dispersed from the mean. Inferential analysis was also computed using Pearson correlation analysis to evaluate the strength of relationship between the dependent and independent variables and the multiple linear regression analysis is to evaluate the linear relationship between the dependent and independent variables. The results and its findings are discussed as follows;

The value of Pearson correlation coefficient for one of emotional intelligence dimensions such as self-awareness is $r=0.580$ with $p<0.05$. These result shows that there is a positive, moderate and significant relationship with project success at the level of 0.000. And the correlation result was in line with researcher (Cavaletti et al., 2021), they found that self-awareness had a strength of 0.5971 at $p<0.05$ thus positive, moderate and significant relationship exist between self-awareness emotional intelligence and project success. In addition, the regression analysis result shows that self-awareness have statistically significant values ($p<0.05$, i.e. $p=0.008$) with a positive beta value of 0.183. Which show that one unit change in self-awareness will bring 0.183 units change in project success (PS) and the result of the study was supported by the work of (Siddiq et al., 2020) and (Maqbool et al., 2017) who found out that self-awareness emotional intelligence has a positive and significant relation with project success.

The value of Pearson correlation coefficient for project managers self-management emotional intelligence is $r=0.603$, has a moderate, positive and significant relationship with project success ($r=0.603$, $p=0.000$). And this result is in line with the researcher (Cavaletti et al., 2021), who found that a positive and significant relationship exist between self-management and project success. In addition, the regression analysis result shows that self-management is statistically significant values ($p<0.05$, i.e. $p=0.002$) with a positive beta value of 0.218. Which show that one unit change in self-management will bring 0.218 units change in project success (PS) and the result of the study was supported by the work of (Siddiq et al., 2020) and (Cavaletti et al., 2021), who found out that self-management emotional intelligence has a positive and significant relation with project success. And the highest rate of change 21.8% also found in self-management that explains the significance of managing self-emotions in the work place is important for successful accomplishment of projects as of (Rahim et al., 2010).

The value of Pearson correlation coefficient for Social-awareness emotional intelligence is $r=0.572$ has a moderate, positive and significant relationship with project success ($r=0.572$, $p=0.000$). This result was in line with the researcher (Cavaletti et al., 2021) who found that social awareness emotional intelligence dimension has a positive and significant relationship with project success. In addition, the regression analysis shows that social awareness has statistically significant values ($p<0.05$, i.e. $p=0.048$) with a positive beta value of 0.156, which show that one unit change in social awareness will bring 0.156 units change in project success (PS). And the results of the study is in line with the researchers (Cavaletti et al., 2021) they said that positive and significant relation exist between social awareness and project success. On the other hand researchers (Siddiq et al., 2020), said that social-awareness emotional intelligence has insignificant relation with project success.

The value of Pearson correlation coefficient for relationship management emotional intelligence is $r=0.328$ has a weak, positive and significant relationship with project success ($r=0.328$, $p=0.028$). In addition, the regression analysis shows that relationship management has statistically insignificant values ($p<0.05$, i.e. $p=0.812$) with a positive beta value of 0.019. Which show that one unit change in relationship management will bring 0.019 units change in project success (PS). And the results of the study in line with the researchers (Maqbool et al., 2017) they said that relationship management has weak positive relationship with project success.

In general, from the regression analysis the R^2 value of 0.580 which shows that 58% of the overall variation in the dependent variables (project success) was due to independent variables (emotional intelligence). In other words, emotional intelligence accounts for 58% of project success. From the regression coefficient all beta value is positive this indicate that emotional intelligence has a positive impact for project success. And emotionally intelligent managers have a significant impact on project success because they can motivate their team members to work hard and find solutions to new issues and challenges (Mazur et al., 2014). In a similar vein, numerous other studies such as (Cavaletti et al., 2021), (Maqbool et al., 2017) and Mazur et al., 2014) have demonstrated the positive correlation between emotional intelligence and project success. (Mazur et al., 2014), for example, discovered that, when analyzing the emotional intelligence of project managers in connection to project success, this mechanism demonstrates that the positive emotions of project managers have a positive impact on project success.

Chapter five

Summary, Conclusion and Recommendation

This chapter present the summary, conclusion and recommendation drawn from the finding of the study in line with the study objectives. The chapter also recommends areas that will require further research.

5.1. Summary

The general objective of this study was to assess the impact of project managers emotional intelligence on project success. Four independent variables such as (self-awareness, self-management, social awareness, and relationship management) were used as a dimension to measure emotional intelligence. Whereas communication, mission clarity, top management support, and troubleshooting are used as critical success factors for a measurement tool of the dependent variable (i.e., project success).

The four dimensions of emotional intelligence were used to check the impact on project success. The descriptive statistics result shows that respondents agree on their self-awareness, self-management, social awareness and relationship management emotional intelligence. From Pearson correlation analysis result, project managers self-awareness, self-management and social-awareness emotional intelligence has a significant, positive and moderate relationship with project success. Whereas relationship management has positive but weak relationship with project success. All the independent variables have an impact on project success in their own way. The multiple linear regression results shows that all independent variables have statistically significant value ($p < 0.05$) except relationship management. As per the model summary the cumulative impact of independent variable account for 58% of the total variance in project success. This means that emotional intelligence accounts for 58% impact on project success in EEIG construction, and the remaining 42% variation occurs due to other factors that were not addressed in this study.

5.2. Conclusion

This research aimed to assess the impact of project managers emotional intelligence on project success in the case of EEIG construction. The study empirically supported the hypotheses that project managers self-awareness, self-management, social awareness has direct, positive and statistically significant impacts on project success. The result of the study supports the hypothesis that emotionally intelligent project managers outperform those who are not because they are self-aware and able to appropriately manage their own emotions as well as those of others, this fosters a favorable work atmosphere that eventually helps the organization by enabling successful execution of tasks that are allocated. Since the construction sector is reliant on both skilled and unskilled labor and needs team members collaborations to complete a project, project managers must be more interactive with all team members and stakeholders to increase the likelihood of project success. Emotionally intelligent construction managers can better manage the emotions of themselves as well as others involved in the project, which fosters a positive atmosphere among all project participants and enhances project efficiency. Thus, the study concluded that three of emotional intelligence dimension such as project managers self-awareness, self-management and social-awareness has a positive and significant impact on the project success of EEIG construction company.

5.3. Recommendation

Based on the findings of the study, the researcher made the following recommendations:

- The EEIG construction company should consider emotional intelligence skill while selecting and recruiting project managers professionals. Hiring project managers with strong emotional intelligence skills is crucial for the organizations to increase the likelihood of project success.
- The company should arrange and provide training program that focuses on emotional intelligence skill such as self-awareness, self-management, social-awareness and relationship management since emotional intelligence is a type of intelligence (ability), it can be improved by training and learning. By providing training, the company can create a more positive and cohesive work environment.
- The EEIG construction company should include an emotional intelligence assessment and feedback, along with the performance assessment of the core project team. By recognizing

and valuing the importance of emotional intelligence, project managers can enhance their skills, which ultimately leads to greater project success and a more positive work environment.

5.4. Future area of research

The generalizability of the outcomes may be inadequate as the data was only collected from one government owned construction company based in Ethiopia. Therefore, future researcher should attempt to see the impact in more than one company with large sample size as well as other than construction sector.

In order to see the impact of EI on project success, future studies may therefore take into account additional mechanisms, including mediating and moderating variables.

Due to the limited time frame, a cross-sectional study design was used in this study. Thus, it is advised that future researchers examine the impact in a longitudinal manner.

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ANNEX-I

Questionnaire



ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE

Department of Project management

Dear Sir/ Madam,

This questionnaire was designed to collect data for the research project titled "Impact of project managers emotional intelligence on project success in the case of EEIG construction." as a partial fulfilment of the requirements for the award of Master of Arts degree in project management. The success of the study depends greatly on your participation. Your provided information will only be used for academic purposes and will remain completely confidential. To the best of your knowledge, kindly don't hesitate to offer the necessary data. Writing your name is not necessary. Additionally, it will take just a few minutes to fill out this questionnaire as well.

The questionnaire is organized in three parts with 4 pages, part I demographic information of respondents and part II and part III are emotional intelligence and project success related questions respectively. Please do not hesitate to contact the undersigned with any inquiries, and I thank you in advance for giving me your valuable time to answer the questions.

Zinet Seid Ali

Email: zinetseid16@gmail.com

Phone number: +251931585798

Part I

Demographic Information

Kindly tick (✓) the boxes corresponding to your appropriate answers to the following demographic questions.

1. Gender: ☐ Male ☐ Female
2. Age (years): ☐ 25 – 35 ☐ Between 35 – 45 ☐ Between 45 - 55 ☐ above 55
3. Education: ☐ Diploma or less ☐ Bachelor degree ☐ Master's degree ☐ Doctorate
4. Position: ☐ project manager ☐ Assistant project manager ☐ project coordinator
5. Years of experience: ☐ Less or equal 5 ☐ Between 5 – 10 ☐ Between 10 – 15
☐ Above 15

Part II

Some Components of Emotional Intelligence Questions

Instruction two: The following questions are designed to explore the level Emotional intelligence of personnel (project managers, section managers and site managers). Please read carefully and indicate your answer in the box by putting a tick '✓' mark to indicate the extent to which you agree or disagree on each statement based on how you feel.

[1=Strongly Disagree; 2= Disagree; 3= Somewhat Disagree; 4= Neither Agree nor Disagree; 5= Somewhat Agree; 6= Agree; 7= Strongly Agree].

No	Self-Awareness	1	2	3	4	5	6	7
1	I recognize my own emotions and their effects.							
2	I know my strengths and weaknesses.							
3	I have a strong sense of self-worth and capabilities.							
Self-Management		1	2	3	4	5	6	7
1	I keep disruptive emotions and impulses in check.							

2	I maintain integrity and act congruently with my values.							
3	I am persistent in pursuing my goals despite obstacles and setbacks.							
4	I exercise flexibility in handling change							
5	I strive for improvement or meeting a standard of excellence.							
6	I am always ready to act on opportunities.							
Social-Awareness		1	2	3	4	5	6	7
1	I sense others' feelings and perspectives and take an active interest in their concerns.							
2	I read/understand my group's emotional currents and power relationships.							
3	I anticipate, recognize, and meet my customers' needs.							
Relationship-Management		1	2	3	4	5	6	7
1	I sense others' developmental needs and bolster their abilities.							
2	I inspire and guide individuals and groups.							
3	I use effective tactics for persuasion.							
4	I initiate or manage change.							
5	I negotiate and resolve disagreements.							
6	I work with others toward shared goals and create group synergy in pursuing collective goals.							
7	I listen openly and sending convincing message							
8	I build strong or positive relationship with others							

Part III

Project Success

Kindly select a recently finished project. Within the context of this project, please rate the degree to which the project achieved the objectives stated below. Please tick (✓) the appropriate place to indicate the extent to which you agree or disagree on each.

[1=Strongly Disagree; 2= Disagree; 3= Somewhat Disagree; 4= Neither Agree nor Disagree; 5= Somewhat Agree; 6= Agree; 7= Strongly Agree] based on how you feel about the statement.

No	Clear Project Mission	1	2	3	4	5	6	7
1	The goals of the project are in line with the general goals of the organization							
2	The basic goals of the project are made clear to the project team							
3	The results of the project will benefit the parent organization							
4	I am enthusiastic about the chances for success of this project.							
5	I am aware of and can identify the beneficial consequences to the organization of the success of this project.							
Top management support		1	2	3	4	5	6	7
1	Upper management is responsive to our requests for additional resources, if the need arises.							
2	Upper management shares responsibility with the project team for ensuring the project's success.							

3	I agree with upper management on the degree of my authority and responsibility for the project.							
4	Upper management will support me in a crisis.							
5	Upper management has granted us the necessary authority and will support our decisions concerning the project.							
Communication		1	2	3	4	5	6	7
1	The results (decisions made, information received and needed, etc.) of planning meetings are published and distributed to applicable personnel.							
2	Individuals/groups supplying input have received feedback on the acceptance or rejection of their input.							
3	When the budget or schedule is revised, the changes and the reasons for the changes are communicated to all members of the project team.							
4	The reasons for the changes to existing policies/procedures have been explained to members of the project team, other groups affected by the changes, and upper management.							
5	All groups affected by the project know how to make problems known to the project team.							

Trouble-shooting		1	2	3	4	5	6	7
1	The project leader is not hesitant to enlist the aid of personnel not involved in the project in the event of problems							
2	‘Brainstorming ‘sessions are held to determine where problems are most likely to occur.							
3	In case of project difficulties, project team members know exactly where to go for assistance.							
4	I am confident that problems that arise can be solved completely.							
5	Immediate action is taken when problems come to the project team’s attention.							