THE INFLUENCE OF EMOTIONAL INTELLIGENCE OF MAIN CONTRACTOR PROJECT TEAM TOWARDS PROJECT PERFORMANCES FOR THE CONSTRUCTION INDUSTRY AT LOT 91 PROJECT, KUALA LUMPUR

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DEDICATION

In the name of Allah. Thanks to the Almighty for the guidance, strength, power of the mind, protection, and skills and for giving me a healthy life.

This study is wholeheartedly dedicated to the family, especially to my sons AL FATEH, husband, mum, late dad, and siblings who have been my source of inspiration and gave me strength when I thought of giving up, who continuously provide their moral, spiritual and emotional.

To my good friends, colleagues, and classmate who shared their words and time to advice and encouragement to finish my study.

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ABSTRACT

This study investigates Emotional Intelligence (EI) influences the main contractor project team in the organization towards project performances for the construction project in Kuala Lumpur. The quantitative approach uses a survey questionnaire to examine the relationship between the variables. The 60 numbers of respondents involved from the project team in the Lot 91 KLCC project in Kuala Lumpur consist of different departments engaged explicitly in the project. The Emotional Competency Inventory (ECI-2) was used to measure four (4) high-ordered quadrants: self-awareness, self-management, social awareness, and relationship management. While for project performances based on the project triangle consisting of time, cost, quality, and not compromised factor, it is safety. The data was analyzed using the Social Sciences Statistical Suite (SPSS) based on two (2) analysis methods using the descriptive and inferential analysis. The descriptive analysis provides a percentage, standard deviation, mean, and frequency. Meanwhile, the inferential statistic approach uses correlation coefficient and regression statistics to examine the relationship and the impact between variables. Findings show the high level of EI's of project team members and the high level of project performances. The correlation coefficient analysis showed EI has a significant relationship with project performances. While relationship management in social competency was the strongest predictor in contributing to the project performances, followed by social-awareness and self-management.

ABSTRAK

Kajian ini berkaitan dengan pengaruh Kecerdasan Emosi di kalangan ahli pasukan di organisasi kontraktor utama mempengaruhi Prestasi Projek bagi sektor pembinaan di Kuala Lumpur. Pendekatan kuantitatif adalah menggunakan kajian soal selidik bagi mengkaji hubungan antara pemboleh ubah. Terdapat 60 bilangan responden yang terlibat dengan projek Lot 91 KLCC di Kuala Lumpur yang terdiri daripada kontraktor utama yang melibatkan pelbagai jabatan yang terlibat secara langsung di dalam project tersebut. Inventori Kecekapan Emosi digunakan bagi mengukur empat (4) elemen mengikut tertib tertinggi iaitu kesedaran terhadap diri, pengurusan diri, kesedaran terhadap sosial dan pengurusan hubungan sosial. Manakala bagi Prestasi Projek pula, adalah berdasarkan segitiga projek yang terdiri daripada faktor masa, kos, kualiti dan tidak dilupakan adalah faktor keselamatan. Bagi analisis data perisian Social Science Statistical Suite (SPSS) digunakan berdasarkan dua (2) kaedah analisis iaitu deskriptif dan statistik inferensi. Pendekatan statistik inferensi menggunakan pekali korelasi dan statistik regresi bagi mengkaji hubungan dan kesan di antara pemboleh ubah yang digunakan. Berdasarkan hasil kajian ini menunjukkan pasukan projek mempunyai tahap kecerdasan emosi dan prestasi projek yang tinggi. Manakala analisis daripada pekali korelasi pula menunjukkan tahap kecerdasan emosi mempunyai hubungan dalam mempengaruhi prestasi projek. Justeru, hasil kajian ini juga menunjukkan pengurusan hubungan sosial yang merupakan di antara kecekapan sosial adalah peramal terkuat dalam menyumbang kepada prestasi projek, diikuti dengan kesedaran terhadap sosial dan pengurusan diri.

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LIST OF ABBREVIATIONS

EI	-	Emotional Intelligence
EQ	-	Emotional Quotient
EQ-i	-	Emotional Quotient Inventory
ECI	-	Emotional Competence Inventory
ECI-2	-	Emotional Competence Inventory 2
IQ	-	Intelligence Quotient
GEI	-	Group Level EI
ECGN	-	Emotionally Competent Group Norms
MAMPU	-	Malaysian Administration Modernisation and Management Planning Unit
MSCEIT	-	Mayer, Salovey, Caruso Emotional Intelligence Test
MEIS	-	Multi-factor Emotional Intelligence Scale
SPSS	-	Social Sciences Statistical Suite
KPI	-	Key Performance Index
11MP	-	Eleventh Malaysia Plan
12MP	-	Twelfth Malaysia Plan

LIST OF SYMBOLS

r	-	Coefficient Correlation
R	-	Multiple R
R^2	-	R square
F	-	F value
sig	-	significance
ß	-	Standardized Coefficients Beta
H1	-	Hypotheses 1
H2	-	Hypotheses 2
H3	-	Hypotheses 3
H4	-	Hypotheses 4
H5	-	Hypotheses 5

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter discovers the study background and elaboration on the problem statement to show the research gap on the project team organization's emotional dimension with the project performances. Consequently, this statement will assess the aim and objective to fill the gap between these two variables.

This study's scope is also essential for this study's limitation to include the dimension and justification relevant to the task. Further, to elaborate the term appropriate to this study related to the term's definition for a clear understanding of both variables.

This first chapter will explain research variables related to emotional intelligence (EI) of main contractor project teams and the project performances in the construction industries.

1.2 Background of Study

The year 2020 sees the achievement of 2016 to 2020, Vision 2020, and Eleventh Malaysia Plan (11MP). The main objective of Vision 2020 is to turn Malaysia into a stable, prosperous, diverse, robust, and resilient nation. Former Prime Minister Tun Dr. Mahathir Mohamad laid down a blueprint for a strong industrial economy and modernized Malaysia in February 1990. He laid out a simple path to make Malaysia a developing country, not only in an economic sense but also

in social justice, political peace, governance, quality of life, social and spiritual values, national pride, and confidence (Khan, Liew, & Ghazali, 2014)

As a move forward, the post-2020 growth plan lays out a clear policy direction to smooth the way ahead for the national development plan and the next decade's transition process. The Shared Prosperity Vision 2030 of Malaysia promises to make Malaysia a nation that achieves inclusive progress, equal and equal representation across age categories, ethnic groups, regions, and supply chains. (Malaysia, 2019).

The Twelfth Malaysia Plan (12MP) would connect economic empowerment, environmental sustainability, and social re-engineering to a three-dimensional mutual prosperity strategy. New growth sources, including the Industrial Revolution 4.0, the digital economy, the aerospace industry, integrated regional production, and growth drivers such as green energy sources and access to infrastructure, will be included in the economic empowerment component ((MAMPU), 2019).

In this regard, the construction sector plays a significant and successful role because of its competitive existence, expanding backward and forward-looking ties with other economic sectors. The construction sector plays a significant role in creating wealth and enhancing its quality of life, which is essential for its growth (Khan, Liew, & Ghazali, 2014).

Construction sector organization is a project-based industry requiring different people by their knowledge, expertise, competence, and experience (Dhurup, Surujlal, & Kabongo, 2016). For instance, in Malaysia, the most prestigious building, Petronas Twin Tower KLCC, involves two (2) international companies as main contractors, such as Hazama Corporation for Tower 1 and Samsung Engineering & Construction for Tower 2.

Given the circumstances, this proved that the project management's larger scale has a complex and involved combination of specialized skills. The team is large and multidisciplinary and has several different construction disciplines (Liphadzi, Aigbavboa, & Thwala, 2015).

Project management begins in organizations as a simple concept to place people in charge and focus on the project, free from interference from other organizational activities (Wang & Huang, 2006). It knows the central concept of project management, which defines it as a particular set of structured tasks carried out by an entity or organization with typical beginning and stopping points to achieve specific targets under specified timeframes, costs, and performance criteria (Lester A.,2007), (Wang & Huang, 2006).

To accomplish the aims of project performances, recognizing the human traits and how emotional perception, comprehension, and usage are essential in assessing performance in life rely on the person's capacity to perceive emotional issues and use emotion to improve their cognitive abilities (Rapisarda, 2002)**.**

Specifically, it claimed that individual personality applications could contribute to EI's improvement and affect the project's performance. Personalities interrelate with our attitudes, motivation, and emotions to shape behavior that range of practices to create an effective organization in which how we act and cognitive skills refer to how we think (Pardey, 2007). The importance of technological expertise, intelligence quotient (IQ), and EI to overall performances have shown EI to be twice as important as the others based on the follow-up study. (Zhang & Fan, 2013).

1.3 Problem Statement

Project failure in the construction industry is the biggest challenge that happens not only in Malaysia but also involves global problems. According to (Othman & Ismail, 2014), in Malaysia, 70 percent of the public sector construction industry facing delays in completion. According to (Shehu, Endut, Akintoye, & Holt, 2014), half of Malaysia's construction project experiences cost overruns of 0.03 percent to 72.88 percent and is therefore not very different from other countries.

Although just 70 percent of the project was not finished on schedule in the global phenomenon in Saudi Arabia (Assaf and Al-Hejji, 2006), the time spent was between 10 percent and 30 percent (Sambasivan & Soon, 2007). Ajanlekoko, 1987, noted that Nigeria's performance performed seriously in terms of timetable and revealed that seven (7) out of ten (10) projects assessed delay in completion. (Sambasivan & Soon, 2007).

While the study of (Senouci et al. 2016) revealed, Qatar facing 72 percent of the public construction project had a delay (Ullah, Khan, Lakhiar, Vighio, & Sohu, 2018). When the project is a delay, they will have an impact. Not only the building cannot be operating, but it will also cost overruns.

Delay in the construction industry will lead to sour relations between stakeholders and the main contractor project team. To ensure excellent project performance, the project's need to drive the objective towards success (Ahmad Hisham & Yahya, 2016). Performances in the construction project rely on various professional teams' successful coordination, bringing their expertise, experience, knowledge, and abilities to completing the project.

Project performance is examined based on a traditional measure in budget, schedule, and specifications (Wang & Huang, 2006). The construction project and its progress are closely connected to contractors, and various studies have all found out that human factors have played a significant role in assessing progress (Gudienė, Banaitis, Banaitienė, & Lopes, 2013).

A project will not be successful when all participants are qualified and driven to achieve a satisfactory outcome through general management and people's skills in developing strategies, processes, and techniques (Lester, 2017).

Hard and soft skills are involved in the skills needed in project management. Hard skills include business case, cost planning, management of transitions, life cycles of projects, work breakdown methods, project management, value-added analysis, risk management, quality management, forecasting, tender analysis, sourcing, etc. Meanwhile, health and welfare, stakeholder analysis, team development, partnership, networking, information processing, negotiating, crisis management, dispute settlement, value management, design management, financial management, marketing and sales, and law are soft skills. (Lester, 2017).

The study of Hans J. Thamhain explored the top thirty (30) possible factors in failed ventures in 1992. The thirty (30) challenges are divided into five (5) groups: problems with the project team structure, poor project leadership; difficulties with communication; disagreement and confusion; and inadequate participation of top management, which is the soft skills category of all five (5) issues.

Recent research has shown that the construction industry is beginning to understand the crucial effect on project success of soft skills, especially for alternative project delivery systems (Thamhain 1992; Pocock, Liu, et al. 1997; Johnson and Singh 1998; Loosemore 1998; Thomas, Tucker, et al. 1998; Black, Akintoye et al. 2000; Bresnen and Malouff 2000; Bresnen and Marshall 2000; Cheng and Li 2001; Carr, M. de la Garza, et al. 2002; Ling 2002; Singh 2002). Measuring project participants' level of EI expertise would help grasp the obstacles and hurdles that hinder successful cooperation in the construction industry.

Besides, as a function of many factors influencing the project's performance, this study's preference is its team trait. People form their actions and relationships with others through many distinct yet interrelated facets, such as personality, perceptions, personal inspiration, and EI (Pardey, 2007). As a result, in numerous

industries such as business, nursing, law, medicine, engineering, sport, and construction, EI is increasingly becoming a vital success factor (Zhang & Fan, 2013).

Based on (Wong & Law, 2002), several scholars have argued that EI can affect leaders' performance. The EI principle's proponent claims that EI impacts physical, mental health, and job achievement. Some new leadership theories also indicate that emotional and social intelligence is much more important to leaders and sub-ordinate since cognitive and behavioral sophistication and versatility are essential characteristics of successful leaders. One of the reasons for this disagreement could be the lack of an expressively good but technically short measure of the EI used in management studies for a leader but the whole organization.

Based on (Zhang, Cao & Wang, 2018), construction companies have recently begun to understand that operational management is not the only solution; the EI is a vital collection of management skills that contribute to its achievement. In this case, due to unique characteristics, such as temporary, unique, and progressive, project management can benefit more from positive EI (Zhang & Fan, 2013).

Based on (Khosravi, Rezvani, & Ashkanasy, 2020), a few researchers have found that effective project execution largely relies on the human capital, personal qualities, and expertise of project management rather than technological skills. More precisely, researchers who researched the impact of the EI (Clarke, 2010; Mazur et al., 2014; Rezvani et al., 2016; Stephens & Carmeli, 2016) maintain that this design is a central determinant of the team members' efficient functioning in large-scale projects of innovation and rationale. Stephen & Carmeli (2016) suggests that people with a high degree of EI are growing their knowledge base and abilities to develop their capacity to communicate and digitally strive towards better project performance.

Therefore, insufficient knowledge of EI's influenced its connection with project performance and successful effects (Khosravi, Rezvani, & Ashkanasy, 2020). Previous research has neglected to catch EI's development among project team members working in a thriving project environment, which is likely to understate

EI's positive impact on project results. But recent research by (Khosravi, Rezvani, & Ashkanasy, 2020) demonstrates that among project members, the EI (ability to perceive and regulate emotions) improves their ability to strengthen the focus of their team on crucial tasks and problems that maximize project performance and cooperation.

Because limited research shows EI of the main contractor project team with the project performance, this study explores the EI dimension level influences the time, cost, quality, and safety of the projects.

1.4 Aim of Objective

Thus, this study will investigate the EI influences of the main contractor project team in the organization towards project performances for the construction project in Lot 91, Kuala Lumpur. To achieve the aim, this is a three-pronged objective as set out below;

a) To determine the level of EI dimension in the Lot 91, Kuala Lumpur Project;

b) To determine the level of project performance in the Lot 91, Kuala Lumpur Project;

c) To examine the influences of the EI dimension towards project performances.

The research questions for this study will be, 'what is the level of EI dimensions among the project team in a construction project?', 'what is the level of performances for this project?' and 'Is that relationship between EI main contractor project team with the project performances?'. While the research hypothesis as below:

H1 : Relationship between EI and project performances
H2 : Relationship between Self-awareness and project performances
H3 : Relationship between Self-Management and project performances
H4 : Relationship between Social-awareness and project performances
H5 : Relationship between Relationship Management and project performances

1.5 Scope of Study

This study scope is specifically the construction of mixed commercial and office tower development in Kuala Lumpur City Center. The main contractor organization, managed by an International company with a construction background and company successfully handing over the sectional completion in May 2019 and constructing towards overall completion 2020.

The respondents' selection will be the main contractor project's team members from all position levels with different background knowledge, experience, age, and expertise. The roles and responsibilities depend on team capability, including civil engineering in design, structure, architecture, administration, safety, health, quality assurance and control, commercial, contract and procurement, mechanical and electrical engineering.

The independent variables are the main variables in this study which dimension of EI divide into four high-ordered quadrants and have ten (10) dimensions such as;

a. Self-awareness
   - Emotional self-awareness and Self-confidence

b. Self-management
   - Adaptability, Emotional self-control, and Optimism

c. Social-awareness
   - Empathy, Organizational Awareness, and Service Orientation

d. Relationship management
   - Conflict management and Teamwork and Collaboration

Further, this study's dependent variables are project performances, including four (4) measurements, such as time, cost, quality, and safety. The analysis will describe the independent variables that the EI of the main contractor project team members will influence the dependent variables' project performances.

1.6 Significance of Study

This study aimed to determine the EI's influences of the main contractor project team in a large construction project. In the construction sector, the skills required people to deal with all the project sector issues. In project management, focusing more on hard skills rather than soft skills includes people's feelings. Besides, demonstrating the consequence and role of the EI in the long-term successful interpersonal relationship within organizations will improve innovation, solve problems and help affect the organizations' overall productivity and performance.

Research about EI and project performances of project teams in the construction industry is lacking. Some studies mostly related the EI with the Leadership among high-level positions such as project manager and construction manager. Besides, EI among team members depends on the background, such as education, administration, tourism, and many more. Construction industries show that unique personal characteristics compare to other sectors will impact the EI. This study will see the EI dimension level of project team members influences the construction context's project performances.

Based on numerous research related to EI and project performances, there is a lack of study related to the EI with project performances for constructions in Malaysia in a group team context. The previous research also shows that different sectors and countries will significantly impact their workplace nature. It shows from military, education, and IT examples give which EI cluster influences job performances. This study will consider the main contractor project team's EI influence the project performance to fill the research gap.

1.7 Definition of Terms

1.7.1 Emotional Intelligence

Emotional Intelligence (EI) started in the early 1990s when Salovery and Mayer (1990) initially described EI as (Hur, Berg, & Wilderom, 2011);

> *"a subset of social intelligence that includes the ability to track one's own and others' feelings and emotions, to differentiate between them, and to use this knowledge to direct one's thought and acting."*

Reuven Bar-on (1997), EI is defined as a group of non-cognitive skills, competencies, and abilities that influence an individual's degree of adaptability to the demands and pressures (Petrovici & Dobrescu, 2014).

In Goleman's (1998) view, self-awareness (knowing personal emotions), self-control (managing feelings), inspiration (self-motivation), empathy (knowledge and comprehension of other emotions), and social skills (interpersonal relationships) link to the EI. The five (5) components, including self-confident diligence and a drive for personal accomplishment, are divided into twenty-five (25) distinct emotional competencies. (Carvalho & Jr, 2017).

1.7.2 Project Performances

Project performance is related to efficiency and multidimensional construction use in various approaches to ensure the project productivity, the team, the client, the company, and overall progress and future planning (Carvalho & Jr, 2017).

They will be varied and modification to suit the particular project and management styles. Project performances were once described as project progress and indicator explicitly for the organizational contingencies of scope, schedule, and budget relating to the Iron Golden Triangle (Mazur, Pisarski, Chang, & Ashkanasy, 2014).

According to (Wang & Huang, 2006), they are justified the project performances using a micro and macro viewpoint. Time, cost, efficiency, performance, and safety are micro criteria, while macro metrics include micro criteria plus the real benefits of the project product in the operational process. When all parties are knowledgeable and driven to achieve a successful result, the project will not succeed. (Lester, 2017).

Based on (Lester, 2017) also identifies project performance related to time, cost, and quality/performance. The project's operational requirements must be considered and met safely. The safety indicates that the middle of the triangle shows that the project's safety is equally critical and cannot be compromised under any circumstances.

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