

Introduction

Emotional Intelligence: An introduction

The characteristics of managers are evolving constantly to respond to intensive research serving the environmental requirements of effective workplaces. Recently, the demands of workplace effectiveness seemed to rely more on managers' skills derived from organizational behavior concepts. Organizational behavior seeks to study the influence people have on behavior within the organization in order to use this influence to increase the organization's effectiveness. However, despite the beneficial effects of organizational behavior concepts which were proved by research, practitioners especially engineering practitioners, regarded these concepts irrelevant and difficult to implement. Therefore, in order to convince those practitioners of these concepts, researchers sought to relate them to other factors that practitioners regarded as essential for the workflow such as effective performance and workplace productivity.

One of the most researched terms in organizational behavior studies is emotional intelligence, given that it showed positive effects in various workplace settings. In its simplest form, emotional intelligence is the person's capability of understanding, using and managing his/her own emotions, in addition to other's emotions, and reflect this capability into guided behavior. Latest research on emotional intelligence argued that emotional intelligence is made up of four dimensions: self-awareness, self-management, others-awareness and others-management. In other words, emotional intelligence is the meeting point between cognition and emotion. Due to its ability to manage behavior, emotional intelligence becomes especially important for people who are in the position of leaders.

The importance of emotional intelligence goes beyond creating positive workplace environment. There is mounting evidence in research that emotional intelligence has direct impact with doubled sales revenue, increased productivity and decreased turnover (Poskey, 2011). Another study in Korean hotels proved that emotionally intelligent employees possessed skills of service recovery performance which converts a dissatisfied customer into a loyal one (Kim *et al.*, 2012). In a meta-analysis that researched the relationship between emotional intelligence and job performance, all three different measures of emotional intelligence correlated significantly with job performance and predicting it (O'Boyle Jr. *et al.*, 2011). The effect of emotional intelligence spread to involve the construction industry, though little research has been made regarding the topic, because the

main focuses of the construction industry regarding delivering projects successfully is operations management (Koskela,2000). Unfortunately, the extensive reliance on operations management and technical aspects of the work can't guarantee the success of projects (Koskela and Howell, 2002). Sunindijo and Zou (2013) proved that emotional intelligence fortifies the presence of a safe construction environment through influencing the application of safety management tasks. Another interesting finding was in Thailand, researchers concluded that (Sunindijo and Hadikusumo, 2014, p.16) “project managers and engineers with high emotional intelligence are more flexible in adjusting their conflict resolution styles depending on the situation”. Despite the aforementioned studies, most studies concerning emotional intelligence in the construction industry are solely review papers or meta-analysis, and information regarding the topic are minimal (Lawani and Moore, 2021). Since the nature of the construction industry necessitates the presence of a diversified workforce (Lawani and Moore, 2021), it becomes particularly important for managers and engineers to possess people skills represented by emotional intelligence to unite this diversity for fulfilling the project's objectives.

According to the researcher's knowledge, no studies had researched the concept of emotional intelligence in the Jordanian construction industry which is the targeted population in this study. The importance of this research is not only benefiting from what emotional intelligence can add to the Jordanian construction industry, instead, the findings and results of this research will enrich the limited body of knowledge regarding emotional intelligence in the construction industry. Current research on emotional intelligence in the construction industry focuses on its relationship with leadership styles, regarding that emotional intelligence would make significant effect if possessed by leaders and project managers. However, civil site engineers, mechanical engineers, electrical engineers who are not necessarily managers deal with other site workers more frequently than project managers, they also deal with each other on a daily basis and hence the type and quality of their communication is what really affects the progress of projects. For this reason, this study targeted the exploration of emotional intelligence not only in engineers who are project managers, but it included all engineers who work in the construction industry regardless of their positions.

The goal of this thesis is to introduce and familiarize the concept of emotional intelligence in the Jordanian construction industry by fulfilling the following objectives:

1. Investigate the demographic characteristics in construction engineers that mostly influence emotional intelligence.
2. Determine which leadership style from the ones selected in this thesis influence emotional intelligence in construction project managers.
3. Explore if previous knowledge of the concept of emotional intelligence impacted the response of construction engineers to the emotional intelligence measure.
4. Investigate if emotional intelligence levels in construction engineers influences their performance.

The present thesis proceeds as follows. A detailed literature review is described in the following section, including definitions and measures of emotional intelligence and its relation to leadership styles and performance. Next, the research method is presented along with the samples, the analysis procedure and the results of the analysis. The analysis procedure will include a confirmatory factor analysis of the questionnaire used (WEIP-S) using AMOS, the hypothesis will be tested using regression analysis using MIMIC in AMOS, some comparison of results will be carried between SPSS and AMOS. The analysis will be followed by a detailed discussion of the analysis to compare the results with other researchers' results.

Literature Review

History of emotional intelligence

The emotional intelligence concept is relatively new, it came to light in the late 1900s. A review of literature revealed that the scientists who first spoke about emotional intelligence were Salovey and Mayer in 1990, later in 1995, Goleman introduced his own thoughts of emotional intelligence (Lawani and Moore, 2021). However, since emotional intelligence is under the umbrella of social intelligence; it could be valid to root it back to 1920 (Lawani and Moore, 2021).

Definitions of emotional intelligence

Emotional intelligence belongs to the social intelligence category, which does not depend solely on an individual's behavior or personality, rather it originates from neural connections in the human brain according to neuroscientists (Goleman and Boyatzis, 2008). There are plenty of definitions to the emotional intelligence concept and these definitions are usually accompanied by models. The reason for this variety comes from the different perceptions that accompanied the

researchers who sought to present it and explain it. The first definition that existed is from Salovey and Mayer in 1990, who proposed that personal intelligence is not limited to intellectual intelligence and that some problems can be solved if individuals have had an ability of understanding emotions and how to deal with them (Mayer *et al.*, 2016). Salovey and Mayer (1990, p.190) defined emotional intelligence as the: “ability to monitor one’s own and other’s feelings, to discriminate among them, and to use this information to guide one’s thinking and action”.

However, in 1997, Salovey and Mayer decided that dividing the emotional intelligence concept into sections (Rezvani *et al.*, 2020; Mayer and Salovey, 1997) will promote a better understanding of it. Throughout their research, Salovey and Mayer referred to emotional intelligence as an ability, even after categorizing its definition to form the ability model. Salovey and Mayer interpreted emotional intelligence as first being able to recognize information characterized as emotional ones (Rezvani *et al.*, 2020; Mayer and Salovey, 1997), this is also known as emotional awareness, in which an individual always knows what he/she is feeling and always knows what others are feeling and why they are feeling this way, represented by “people’s ability to read faces and body language” (Jordan and Lawrence, 2009, p.455). The second part of the emotional intelligence definition is to be able to classify and distinguish the emotional knowledge that has been perceived, through assessing it (Rezvani *et al.*, 2020; Mayer and Salovey, 1997). The third part of the emotional intelligence definition is the ability to understand the emotions that had been evaluated (Rezvani *et al.*, 2020; Mayer and Salovey, 1997). The fourth part of the emotional intelligence definition is to be able to make use of the previous three steps, represented by regulating these emotional information (Rezvani *et al.*, 2020; Mayer and Salovey, 1997), this is referred to as emotional management. Emotions’ regulation or emotions’ management is when the emotional cognition and awareness is applied and being acted upon it in an appropriate manner (Jordan and Lawrence, 2009) by translating them into behavior, this behavior is especially important for leaders or team managers as their behaviors will reflect on the overall atmosphere of the workplace. It is worth mentioning that some individuals might possess the emotional awareness ability but have no ability in regulating these emotions, but the contrary is not right, as Goleman (1998) described awareness as the foundation of emotional intelligence. Later in 2016, Mayer et al. (2016) revised their thoughts and studies of emotional intelligence and complemented these studies through establishing seven principles serving as guidelines to a robust understanding of the emotional intelligence concept.