

BENEFITS OF EMOTIONAL INTELLIGENCE TO CONSTRUCTION INDUSTRY: A CASE OF GAUTENG REGION, SOUTH AFRICA

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ABSTRACT

Emotional intelligence (EI) is concerned with personal and behavioural attributes that enable individuals or organisations to perform up to an acceptable standard. Construction industry is composed of stakeholders of individuals and organisations working towards a common purpose of providing value for clients' money. This study is designed to evaluate the benefit of EI to the performance of construction projects. Using survey approach, primary data was collected by the use of a well-structured questionnaire. Adopting convenience sampling method, copies of questionnaire were distributed to construction project managers (CPM), architects, quantity surveyors (QS), construction managers (CM), facility managers (FM) and engineers in the South African construction industry and the retrieved copies were analysed. From the findings, it can be concluded that EI does not only hold the key to overall improvement of the project, but will also improve communication among construction clients and the entire team members; this will result in improved relationships among construction professionals and other stakeholders for the achievement of better performance of construction projects. It is therefore necessary for professionals and other stakeholders in the construction industry to improve on their intelligence quota by taking intelligence test at various time. Materials such as books, articles and so on on EI should also be consulted for individual improvement.

Keywords: Behaviour, empathy, labour productivity, project performance, psychology.

INTRODUCTION

The South African construction industry has been viewed and criticized for its deprived performance and low success rates compared to other industrial sectors (Love, Edwards and Woods, 2011). The existing problems in the industry led to various efforts geared towards addressing them which include extensive transfer of innovative and advanced management tools and procedures from more technically advanced industries to construction. In addressing the challenges of project performance for better improvement, the requirement for the exchanging of lenses from the dominant procedures pattern to one that focuses on organizational behaviour is proliferated in organisations to improve projects and contribute to project success. With regards to improving organization's effectiveness, it is important to study organizational behaviour which aims to investigate the effect that individuals, gatherings and structure have on conduct inside organizations with the end goal of applying Emotional Intelligence (EI) knowledge (Abraham and Yitzhak-Halevy, 2009). It was proposed by Love, et al (2011) that with a greater investigation and study of EI, understanding how individuals and teams behave will lead to improvements in project performance and improvement on the construction industry as a whole. The examination of EI can also contribute to the growth and development of the construction industry because emotional behaviour has been found to influence the intention to behave in both productive and unproductive ways. However, fitting emotions in the construction industry is rather complex, but the concept of EI can rather be

adopted in improving project performance, thereby contributing to the growth and development of the industry.

EI should be considered and executed to develop skills of human engineering as various studies have confirmed the relevance and great importance of the concept *emotions* at work. The impacts of using intelligence quotient (IQ) together with EI have a long-term improvement on programme quality, monetary incentives and also a greater working relationship with stakeholders (Butler and Chinowsky, 2006). With concrete evidence, Erkutlu and Chafra (2012) concluded that demonstrating interpersonal skills has shown a great success over technical and intellectual competencies. Emotional intelligence is defined as a form of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action (Mengel, 2008). EI has been identified as a major factor that influences contractual achievements, the potential of improving construction projects and their potentials to succeed.

The importance of balancing emotions with professionalism has become increasingly inevitable, EI has, thus, become a necessary attribute to sustain some of the pressures that come with being a professional. Goleman (1998) also provided a similar definition by stating that EI is the capacity for organising our own feelings and those of others for motivating ourselves and for managing emotions well in ourselves and in our relationships. This study evaluates the advantages of incorporating EI into construction for all stakeholders. The research stands to awaken and enhance the knowledge and importance of EI among the professionals, clients and other stakeholders in the South African construction industry; thus, improving construction project management and the facilitation of the professional practice.

Emotional intelligence and construction industry

Emotional intelligence is a psychological term that was presented initially in the field of psychology (Porter, 2015); it describes a form of social skill or ability that people acquire with time and experience. This psychological approach shows a fundamental understanding of barriers and challenges that affect interaction among project teams and necessitating social skills for creating a collaborative construction project team. According to Azad (2011), EI was engrained in early works on emotions and social intelligence. However, the emotional intelligence foundation can be traced back to Thorndike (1920). The developed model of intelligence included the customary intellectual elements as well as social elements to act intelligently in human relations. According to Riggio and Reichard (2008), the construct and concept of EI was initially conceptualized and introduced in order to understand people and how they deal with their emotions. Goleman (2006) further conceptualized EI at a general level, referring to EI as the ability to regulate emotions in ourselves and others. It was further hypothesized as the ability to handle emotions in an organizational atmosphere. EI has been implemented in various sectors of the economy but the application and understanding of the importance has been challenging due to misconceptions of the practice and concept of the term. Goleman (2004), however, noted that more construction companies have realised and encouraged the importance and relevance of EI skills as a management philosophy.

Conventionally, an individual's probability to succeed is typically assessed by intellectual intelligence which can be dictated by the intelligence quotient (IQ). Nonetheless, literature on intelligence has made it clear that one's achievement in one's profession and individual life does

not exclusively rely only on IQ but rather additionally on other individual elements (Porter, 2015). Other factors concerning emotional, social, creative and practical ability also affect an individual's or organisation's potential to succeed. Love et al (2011) claimed that EI contributes to an individual's success and work performance. While only 20% individual success is directly linked to IQ, the remaining 80% is an attribution from EI (Porter, 2015). The venture based industry includes uniting distinctive stakeholders, clients, designers and contractors in short periods of time as they get involved in construction projects. Dainty, Cheng and Moore (2006) noted that with a specific end goal to enhance and extend execution and accomplishment of the construction industry, it is urgent to expand the context of EI. Quite a bit of this exploration have concentrated on how it can be identified with working environment achievement and execution. However, there are studies which have demonstrated the valuable effect of emotional intelligence on people's leadership and administration capacities (Butler and Chinowsky, 2006; Lopes, 2006). EI has been found to have two unique broad effects; first effect is the ability to distinguish, adapt, comprehend, and control or manage one's emotions while the second effect is the ability to distinguish, conform, understand and manage others' emotions. With the construction project based industry, it is important for construction professionals to lead and motivate team members involved in the project. Cote (2014) noted that EI affects job attitudes such as job fulfilment, revenue intention and job results which affect overall job performance.

The construction industry is project-based and manages large number of people to deliver quality projects and provide organizational success (Schmidt and Hunter, 1998). In order to effectively undertake projects in such a dynamic industry, Mo, Dainty and Price (2007) concluded that good interaction and communication between project participants is required. Love et al (2011) reiterated that, in construction, there is a need to examine how individuals, teams and the structure of projects influence behaviour if the improvements being sought within the industry are to be realistically achieved. Potentially, EI in conjunction with other assessment tools could be used by construction organizations to significantly improve the performance of construction managers and their teams.

Love et al (2011) identified key tasks, skills and personal characteristics expected of construction professional team, which are concerned with the role and need for EI. The responsibilities include: discussing with managerial employees, owners, contractors and design team to deliberate and resolve matters concerned with work procedures, grievances and construction difficulties. Second is when procuring the construction project and contracts, negotiating revisions, variations and additions to contractual provisions with clients, suppliers and sub-contractors. The last set of activities involves day to day site instructions and supervision of workers on site.

The construction industry has been alluded to as a standout among the most intriguing and project based ventures that involve managing a large number of people and ensuring performance of construction project (Mo et al, 2007). Love et al (2011) agreed that construction projects have been globally criticized for deprived performance due to project failures and failing to meet goals and targets at specified time-frames which result in cost overruns and variations. Several studies have been conducted on the concept, awareness and willingness of stakeholders to adopt EI in the construction industry (Love et al, 2011; Clarke, 2010; Weise and Zietsman, 2011). It has been demonstrated that EI may hold the way to the major challenges facing construction projects and the industry as a whole. EI will not only hold the key to overall improvement of construction project, but will also ensure overall improvement of construction

cost and employees involved in the projects. Review of previous studies revealed that there are minimal research works on EI in the construction industry, and this may be due to the limited number of psychological research in the industry as noted by Love et al (2011). Lindebaum (2010) marked construction projects as emotionally charged as connections inside such projects are overwhelmed by decisive individuals. Further studies by Goleman (1998) as well as Simpeh, Ndiokubwayo and Love (2011) revealed that the more multifaceted the construction project is, the more the importance of EI with a greater need for leadership, co-ordination and communication among the construction professionals. Jensen (2012) argued that the effects of EI can be exaggerated in the construction industry since not every aspect of a construction project will require a certain level of EI to bring about performance improvement and success. For example, one does not require a high level of EI when producing a bill of quantities and ordering material. However, Songer and Walker (2006) concluded that the most successful construction professionals have placed high emphasis on the importance of mentoring and coaching.

RESEARCH METHODOLOGY

Using survey approach, data for the study were obtained through the distribution of well-structured close-ended questionnaires that were designed based on the relevant literature reviewed. The questionnaires were circulated among construction professionals including construction project managers (CPM), architects, quantity surveyors (QS), construction managers (CM), facility managers (FM), and engineers in the construction industry located in the Gauteng region, South Africa. The investigation or analyses of the research were constructed based on the 50 questionnaires that were returned from the 70 that were distributed using convenience sampling method. Section A of the questionnaire focussed on the demographics of the respondents, that is, gender, age group, profession, and so on while the other part focused on the main objective of the study, which was concerned with the benefits of EI to the construction industry.

For ethical consideration, transparency was ensured with regards to what was being investigated and how the data would be used. The responses from the questionnaires were made private and confidential and respondents had the right not to respond to certain questions if found offensive. A composed introductory cover letter that provide necessary information for the study was attached to the questionnaire. A 5-point Likert scale was used to evaluate the data and the scales adopted were as follows: 1 = Strongly Disagree (SD); 2 = Disagree (D); 3 = Neutral (N); 4 = Agree (A); and 5 = Strongly Agree (SA).

The Mean Item Score (MIS) was used to convert the responses from the Likert Scales into easily analysable data. The values from the MIS were then ranked in a chronological order; this made it simple for a comparison to be made of how participants responded to EI in the construction industry. The index of MIS of a particular factor is the sum of the respondents' actual scores given by all the respondents as an extent of the entirety of all most extreme conceivable scores on the point scale that every one of the respondents could provide for that model. The mean item score (MIS) was calculated for each item as follows:

respondents were interested in the concept and practice of EI as all of them indicated a level of interest.

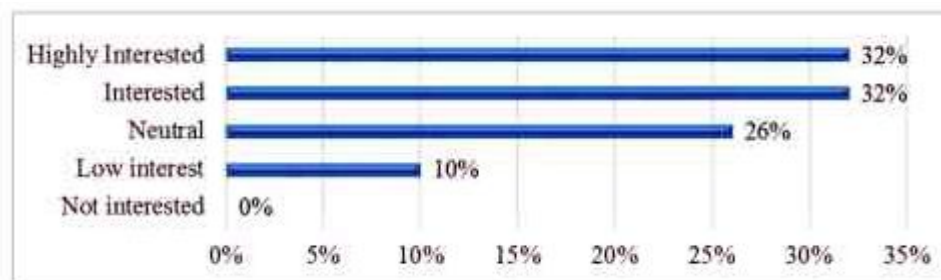


Figure 1: Respondents interest in EI.

Figure 2 shows the five major areas of EI as indicated in various existing literature materials on the practice of EI. It could be observed that motivation has the highest percentage of 23, followed by social skills at 22%, self-management at 21%, self-awareness at 20% and weakest quadrant is empathy with just 14% of the respondents.

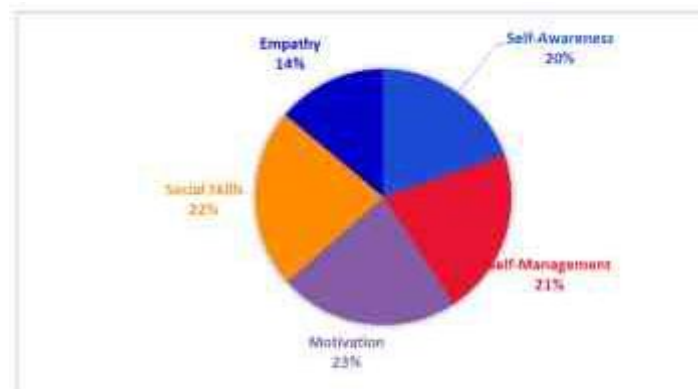


Figure 2: Respondent's levels of EI

Table 1 explains the benefits of an emotionally intelligent organisation with emphasis on the construction industry. Using a 5-point Likert scale of strongly disagree to strongly agree, the respondents were requested to indicate their extent of agreement with each of the benefits of an emotionally intelligent construction organisation. The results were ranked from 1 to 15 from the highly important benefits to the least ones based on MIS value. However, where two factors are of the same MIS, the SD was adopted as the means of judgement as the one with the lower SD is ranked higher.

Improved communication among construction stakeholders (MIS=4.66, SD=0.626) was ranked as the most important benefit of EI in the construction. This is followed by improvement of leadership capabilities with MIS of 4.58 and SD of 0.702 as well as improvement of thinking skills with MIS of 4.50 and SD of 0.707. Other important benefits include increase in personal effectiveness (MIS=4.44, SD=0.733), improve team management (MIS=4.40, SD=0.808), enhancement of project performance and success (MIS=4.38, SD=0.725), greater productivity of professionals and workmen (MIS=4.24, SD=0.960), improvement of professional relationship (MIS=4.24, SD=0.771), improvement of risk management practices (MIS=4.16, SD=0.817), improvement of self-management (MIS=4.14, SD=1.088), stability of construction professionals (MIS=4.12, SD=0.982) and satisfaction of workers and team (MIS=4.06, SD=0.998).

The least important benefits include better delivery of clients' projects with MIS of 3.98 and SD of 0.937, reduction of cost over-runs with MIS of 3.90 and SD of 1.015 as well as greater sales of products and services with MIS of 3.88 and SD of 0.849. It could be deduced that the least important benefit has an MIS value of 4.06 which is not considered to be of high importance. More so, the low value of SD indicates that there is consistency and agreement among respondents in responding to the identified benefits of EI in the construction industry.

Table 1: Benefits of an emotionally intelligent construction industry.

Variables	Mean	Standard Deviation	Rank
Improved communication	4.66	0.626	1
Improved leadership capability	4.58	0.702	2
Improved thinking skills	4.50	0.707	3
Increased personal effectiveness	4.44	0.733	4
Improved team management	4.40	0.808	5
Project performance and success	4.38	0.725	6
Greater Productivity	4.24	0.771	7
Improved professional relationship	4.24	0.960	8
Improved risk management	4.16	0.817	9
Improved self-management	4.14	1.088	10
Stability of construction professionals	4.12	0.982	11
Worker and team satisfaction	4.06	0.998	12
Better delivery of clients' projects	3.98	0.937	13
Reduction of cost over-runs	3.90	1.015	14
Greater sales of products and services	3.88	0.849	15

Results of the analysed data for this study revealed that increase in the level of usage and adoption of EI in the construction industry will help in the improvement of communication skills and also improve leadership capabilities. This is in accordance with findings of Butler and Chinowsky (2006) as well as Mengel (2008). The effects of these findings, according to Erkutlu and Chafra (2012), is that organisations with increased levels of EI can improve productivity, leadership skills, client relationships and stabilize construction professionals in terms of balancing work and life.

Jensen (2012) noted that not every construction related activities and processes requires emotional intelligence for improvement and greater performance. For instance, Simpehet al (2011) noted that EI is not required to place orders or receive order, hence greater sales of construction products and services were rated as the least benefit of EI. However, the ability to communicate with professionals and professional relationship created with clients can increase sales and reduce cost overruns due to improved communication.

CONCLUSION AND RECOMMENDATIONS

In this study, various benefits of emotional intelligence in the construction industry were examined from the perspective of various construction professionals. Data from primary and

secondary sources revealed that an emotionally intelligent organisation will bring fourth organisational success in terms of improved communication, improve construction professional's leadership skills, improve productivity, improve client relationships and other professionals in the South African construction industry. EI will also help in ensuring stability and good interpersonal relationships among construction professionals.

EI will not only hold the key to overall performance of the project in term of improvements on project delays, cost overruns, and other measures of project success but also aid communication between clients and teams. The project-based nature of the construction industry and management of large numbers of people with diverse interest makes EI an important factor to deliver quality projects, enhance personnel productivity and ensure organizational success. Key personal characteristics among construction professionals, such as dependability, leadership, self-control, stress tolerance, innovation and adaptability are also important for an emotionally intelligent construction organisation and industry as a whole. This implies that the higher the level of emotional intelligence of stakeholders involved in construction projects, the better the ability of such project to be successful. EI is the key to both personal and professional success, and it should be emphasized among stakeholders as a major contributing factor to success of the construction industry. It is therefore necessary for agencies and stakeholders tasked with the responsibilities of managing and regulating the construction industry such as Construction Education Training and Agencies (CETA), Construction Industry Development Board (CIDB), professional bodies, and so on to create awareness of EI among construction stakeholders. There is also a need to continuously organise various training and development programmes such as seminars, workshops and conferences that will be geared towards the improvement of EI among stakeholders.

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