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UNDERSTANDING THE USE OF EMOTIONAL INTELLIGENCE DURING THE PROJECT LEADERSHIP PROCESS: A CASE OF PROJECT MANAGERS

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ABSTRACT

The nature of construction projects present challenges as a result of dynamic changes and complexity of their technical and social aspect. Project managers are assigned with full responsibility to mitigate these problems by facilitating effective leadership. Such a leadership process involves formulation of close and healthy relationships, good communication and purposeful coordination and cooperation among others. However, construction projects have been reported with poor performance which somewhat emerge from dispute, inadequate cooperation and communication, ill-relationships and delays among others. Consequently, there is a concern about the use Emotional Intelligence by project managers when these challenges emerge. Evidence regarding the effective use of emotional intelligence and its benefits have been empirically documented. However, there is a lack of empirical research of this phenomenon within the construction industry in the South African context. This study reports two cases of project managers on how they utilised their emotional intelligence when leading in construction projects.

KEYWORDS: emotional intelligence, construction project managers, complex project and relationships.

1 INTRODUCTION

Construction projects have been globally criticized for poor performance due to projects failing to meet goals and targets (Love *et al.*, 2008), projects exposed to increasing risks as a result of complexity, globalization and technology. The problem of poor performance in construction projects have been reported to arise from issues such as disputes, inadequate cooperation and delays among others (Chen *et al.*, 2012). Other issues that contribute to the poor performance of projects include insufficient amount of contact with the client and inadequate communication between project participants (Loosemore *et al.*, 2010). However, communication plays a critical role in team operation and may result in uniformity and effectiveness of team members (Yang *et al.*, 2009). Effective communication and the ability to build sustainable relationships in construction are critical as this helps to make the teams more effective (Yang *et al.*, 2009;

Gadde and Håkansson, 2001). Advantages that can be tapped from close relationships can help improve performance in the construction industry (Gadde and Håkansson, 2001). The establishment of close relationships that contribute to the enhanced project performance might heavily depend on project managers in construction.

Project managers are often involved in leadership processes that are associated with complexity. This requires their competencies to develop teams that can work dynamically and creatively toward project objectives in the changing environments (Mengel, 2007). Leadership process in complex and ever changing environment like that of construction project might need emotional awareness and control. Furthermore, Mengel (2008) found that Emotional Intelligence (EI) was one of the most important traits in complex environment. However, there is a gap in knowledge that contributes to the development of emotionally intelligent project managers in construction (Love *et al.*, 2010). The aim of this study is to fill the gap in knowledge about the utilisation of EI by project managers during the leadership process in construction project.

2 NATURE OF CONSTRUCTION PROJECT ORGANISATION

Construction projects involve temporary organizations with self-directed capability that relies entirely on the consumption of resources supplied by the client and firms. Basically in just expanding the definition given above, the construction project is a collaborative venture that involves a number of different organizations brought together to form a construction project team. This team which is comprised of different participants (client, project manager, designers, constructors, suppliers and labourers etc.), that come together with an aim of achieving the common objective of delivering a project. In delivering this specific objective, a number of activities and tasks are involved (Kagioglou *et al.*, 2000). A common construction project comprises of two distinct phases; the pre-construction phase, which can be defined as “the period between the initial conception of the project and the signing of the contract” and the construction phase, defined as “the period after award of the contract when actual construction takes place” (Loosemore *et al.*, 2003). Projects are frequently bid on a fixed time, fixed cost basis, and their success can be defined as the achievement of contractual goals without sacrificing other objectives (Frimpong *et al.*, 2003). A building project is completed as results of a combination of many events, interactions between temporary and permanently located project participants and process which makes it difficult to manage (Chan and Chan, 2004). This specific characteristic demands bespoke management, organising and controlling mechanisms that are suitable for managing complex –base working environment (Daity *et al.*, 2010). Hence the project management discipline appears to have a room in overall construction project delivery process.

3 LEADERSHIP PROCESS IN CONSTRUCTION PROJECT

While construction projects have been referred to as dynamic, complex, unpredictable due to their changing nature and nonlinear routines of delivery process, the definition by Cole (1996)

that leadership is a dynamic process where one influences others in pursuit of achieving objectives becomes very relevant. The continuous engagement and disengagement of different service provider of supply chain and changing requirements within the construction project might challenge the attitude and behaviour of project managers. Acknowledging this notion, Chiang (2009) observes that project managers are tasked with responsibility to join different stakeholders with distinct desires which could conflict with others. Most likely, good relationship and communication facilitate the process of leadership in construction projects.

Relationships and communication

Construction projects are temporary, therefore trust and commitment ought to be established as quick as possible (Clarke, 2010). These stem from good working relationship which according to Ng *et al.*, (2005) may develop over long period of time and contribute to achievement of project goals. As part of relationships, the adoption of supply chain collaboration and partnering helps to solve performance problems in construction (Meng, 2011). In construction project, relationship develops from mutual understanding and experience between parties on previous collaborative projects. However, Songer *et al.*, (2004) revealed that close, comfortable and intimate relationships were not typical between construction participants. The study found that relationships were based on pricing and “getting the job done” thus leaving little room for empathy. Arguably, in their leadership process, if project managers do not show empathy towards project team member, it is likely individual participants will be stressed by the environment which somehow influence their performance. Consequently, Ng *et al.*, (2005) believes that stress within construction projects and other organisational structures could emerge from relationships and communication. As this weakens the relationship, Meng (2011) reported that a weak relationship among project participants increases the likelihood of poor project performance. This could stem from inadequate communication during the project delivery.

According to Cheung *et al.*, (2010) one of the major challenges affecting work and social relations on construction sites is language barriers which can cause extra communication problems. Inadequate communication between the client and the design team could cause problems for professionals in construction project teams. Communication problems would somewhat be one of the most noteworthy “contemporary” challenges facing PMs in construction (Loosemore and Muslmani, 1999). Assaf and Al-Hejji (2006) identified some communication problems that contribute to project delays in construction. However, Yang *et al.*, (2009) stated that communication plays a critical role in team operation and may result in consistency of team members. Project managers use communication to coordinate teams such that there can be a result in uniformity and cooperation between the team members, hence the team could be led towards increased effectiveness (Yang *et al.*, 2009). To this end, an emphasis on communication and relationships aims to raise emphasis to the fact that the primary EI weaknesses found in construction leaders is in interpersonal skills (Songer *et al.*, 2004). Since EI facilitates interpersonal relationships, it should be able to equip project managers on how to lead in each unique and challenging project (Clarke, 2010). E2702197

4 DIMENSIONS OF EMOTIONAL INTELLIGENCE

Goleman (1995) defined EI in two competences: personal competence, which is the ability to use one's own emotions and social competence is how one handles personal relationships. "Being emotionally intelligent involves being actively able to identify, understand, process and influence one's own emotions and those of others to guide feelings, thinking and action" (Mayer and Salovey, 2002). Studies developed from Mayer et al., (1990) have indicated that there are four main dimensions to emotional intelligence that are mostly recognized in studies (Burke and Barron, 2007; Lindebaum and Jordan, 2012):

Self-awareness: This is the ability to understand and recognize one's own emotions, and the ability to express them naturally. The ability for a person to evaluate their strengths and weaknesses can prove to be a positive step in realization of self-awareness.

Self-management/ regulation of emotions on oneself: This is the ability to manage, utilise and control emotions, such may be used in negotiations to achieve desired outcomes (Lindebaum and Jordan, 2012). This may also be described as personal competence, it involves how a person controls their actions and also how they go about in managing themselves in business and their personal lives.

Social awareness: Social awareness is used to produce leadership results which may stem from communication, team development, conflict resolution and effective negotiations. It is also the ability to communicate positive emotions to inspire and motivate others.

Relationship management: The ability to manage relationships authentically, being friendly and being unselfishly devoted to the welfare of others. It is also means understanding of how people respond emotionally to different situations, that is, to see things from their point of view. Relationship management involves having empathy towards others and being attentive.

Converse to Mayor, Salovey and Caruso Emotional Intelligence Test (MSCEIT), the Trait-Meta Mood Scale (TMMS) was introduced in 1995 by Salovey *et al.*, (1995) to measure Emotional Intelligence using three key aspects which are (Salovey *et al.*, 2002; Extremera and Fernandez-Berrocal, 2005):

Attention – perceived ability to listen to moods and emotions, it evaluates how people attend to and how much they value their feelings.

Clarity – perceived ability to distinguish clearly among feelings. Salovey *et al.*, (1995) established that those individuals with high scores on Clarity showed a better ability to bounce back from negative moods, this is also associated with being able to positively interpret events.

Mood Repair – perceived ability to have authority over one own moods. Goldman, Kraemer, and Salovey (1996) found that individuals with low emotional repair were more likely to visit a health centre when stress was high.

The TMMS is mentioned to be one of the most broadly used self-report measure that is developed to measure stable individual differences in the qualities of the reflective mood

experience (Extremete and Berrocal, 2005; Salovey and Mayer model, 1990). Ray et al., (2012) described the TMMS as a measure that assesses how different people reflect upon their moods and the extent to which their emotions are important source of information.

Higher scores on Clarity and Repair positively with life satisfaction and the handling of tasks (Salovey *et al.*, 2002). The study will also use a quantitative instrument to measure EI, a questionnaire adapted from the Trait Meta-Mood scale (TMMS).

4.1 EMOTIONAL INTELLIGENCE IN CONSTRUCTION

Different authors have done research on EI within construction and have indicated that EI may hold the key to the overall improvement of construction projects (Coa and Fu, 2011; Love et al., 2008, Love *et al.*, 2010, Weise and Zietsman, 2011, Clarke, 2010). Research revealed that there are few studies on the topic of EI within the construction context, perhaps due to the lack of psychological research in construction (Coa and Fu, 2011; Love *et al.*,2008). Lindebaum and Fielden (2010) described construction projects as “emotionally charged” as relationships within such projects are dominated by assertive individuals. An EI supporting study by Toole (2011) citing Goleman (1998) explained that the more complex the job is, the more EI matters as there is a need for co-ordination and communication.

Lindebaum and Jordan (2012); Lindebaum and Cassell (2012) however, disputed the EI supporting studies that were done in the context of construction. Lindebaum and Jordan (2012) argued that the effects of EI in construction are exaggerated as not all construction tasks that require EI, the context and nature of tasks need to be focused upon in order to make an appropriate link between EI and performance, e.g., one does not require a high level of EI when ordering building materials. Nevertheless, Skipper and Bell (2012) did a study that found that the top performing PMs placed high emphasis on the importance of mentoring and coaching.

4.2 EMOTIONAL INTELLIGENCE OF CONSTRUCTION PROJECT MANAGERS

A major challenge facing construction PMs is to encourage team participants throughout the project process to ensure that all problems are easily identified (Simpeh *et al.*, 2011). For construction PMs who are constantly confronted with solving disputes and general problems during pre and post construction, an ability to come up with solutions is crucial (Love et al., 2010). Mengel (2008) suggested that project leaders that are involved in complex projects should be “emotionally and spiritually intelligent.” Lindebaum (2010), unfortunately found that construction PMs experience so much pressure and stress such they easily and quickly resort to anger irrespective of age, to resolve an arguments or disputes. Lindebaum and Casell (2012) found that many PMs View construction projects as male dominated, making the use of emotions mostly inappropriate, other PMs opined that the use of emotions may be valuable for future projects, the PMs however provided there is slow adaptation of new managing methods in construction. “The ability to be aware of, to understand and to appreciate the feelings of others is not necessarily something practiced often in the construction industry” (Songer *et al.*, 2006).The achievement of desirable outcomes through the use of anger

is significantly brief, as individuals may suffer physiologically when anger becomes part a consistent characteristic of a construction PM (Lindebaum 2010).

Mengel (2008) revealed that emotional competence accounts for 36% of leadership. Research findings by Songer *et al.*, (2006) showed that construction PMs actually do possess some EI strengths, as they are confident in their abilities and optimistic, being able to come up with suitable methods to deal with difficulties and ways to implement plans that may alleviate stress. Additionally, it was found that PMs are confident in their ability to face and handle stressful situations, those who have positive moods toward problem solving will generally have a more positive outlook on situations as compared to those who have negative moods (Mayer *et al.*, 1992; Brotheridge and Lee, 2008). Construction PMs who are deemed to be emotionally intelligent should be able to tap into all four dimensions in order to keep themselves and their followers motivated and productive (Love *et al.*, 2010). Lindebaum and Jordan (2010) speculated that the demands, high-pressure and the involvement of numerous subcontractors may imply that construction PMs have less time to attend to emotional issues, and may attach less importance to them as the project is time limited. Research results by Nelis *et al.*, (2009) found that with a proper methodology, some facets of EI can be enhanced, but not all of them.

5 RESEARCH METHODOLOGY

The purpose of this study was to investigate the use of emotional intelligence by project managers when leading in construction projects. This was achieved by looking at how project managers understand and apply their emotional competencies during their leadership process (during their communication and relational activities). This study was done to fulfill the requirements of Honours Degree Research Discourse. Two case studies were purposely selected (an on-going and almost completed construction projects) conveniently around Johannesburg. The study will use semi-structured interviews one section being open-ended questions and another section being close-ended questions. Closed-ended questions consisted of 5-point likert scale (5 = strongly agree, 4 = somewhat agree, 3 = neither agree nor, 2 = disapprove, 1 = strongly disapprove) statements coined from TMMS as part of measuring the emotional intelligence of construction project managers. The measurement tool was Spanish version, which consisted of Attention (8 items), Clarity (8 items) and Repair (8 items). According to Fernandez-Berrocal, Extremera and Ramos (2004), the Spanish version of the TMMS scale is valid which consist of 28 items and reliable as the original version of 48-item English version. Two project managers were each given their own 28 questionnaire items which required a response to any five response alternatives. For each sub-scale the highest score that can be achieved is 40, average being 20 and below average the score will be below 20. The direction of scoring some questions (labelled reverse scores on the questionnaire) are reversed so that items phrased positively would have positive loadings and questions phrased negatively will have negative loadings (Salovey *et al.*, 1995). Open-ended questions seek to find out the perception about relationships and communication to assess the experience of interactions during their leadership process. These were the most critical problems identified in the literature.

6 FINDINGS

6.1 CASE STUDY 1 (ONGOING PROJECT)

Interview with Project Manager

When asked what is the main driver of good relationship and communication during his leadership process, the project manager stated that “*strong leadership to guide the project participants towards the objectives through effective communication channels to influence the performance of the overall project*”. The project manager also indicated that “*having a joint understanding of how different people function as human beings is the key factor in facilitating good relationships*”. These could indicate that this project manager was well determine and focused during his leadership process in the project. When the project manager was asked about his understanding on the use and application of emotional intelligence at work, he stated that as project manager one must poses a skill to be able to analysed individuals in order to have a better understanding of how people behave and react under different conditions since people react differently to authority.

Project Manager Number 1 Scores:

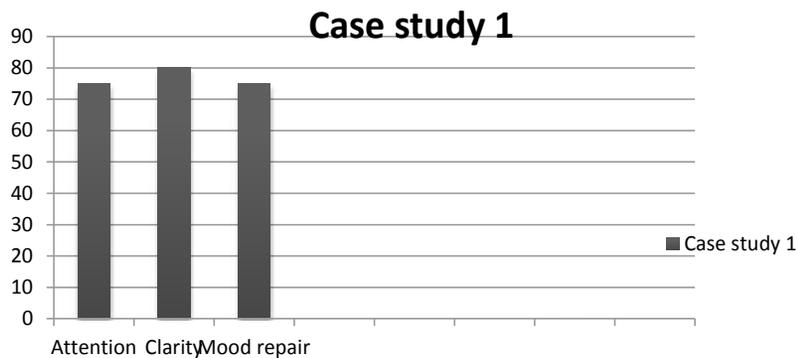
Sub section 1-Attention: 30/40 = 75 %

Sub-section 2-Clarity: 32/40= 80%

Sub-section 3-Mood repair: 30/40 = 75%

Total average score= 76.6%

FIGURE 1 Emotional awareness of project managers



Source: Results from the research

Project Manager number one is still working on a project that is to be completed next year. From the results, it is evident that Project Manager Number 1 scored above average using the TMMS adapted questionnaire, he has high levels of clarity, and high but equal levels of mood repair and attention. According to the literature in the methodology section, this shows that the individual has a good ability to bounce back from negative moods and is able to think clearly and interpret events in a positive manner.

Scores on attention and mood repair are 5% lower than the clarity sub-section. However, the equal and high scores on attention and mood repair show that the individual pays attention to their feelings and have a positive outlook towards life satisfaction and the handling of tasks.

6.2 CASE STUDY (ALMOST COMPLETED PROJECT)

Interview with project manager

When asked what is the main driver of good relationship and communication during his leadership process, the project manager stated a well planned, rationalized, considered, reviewed, and constantly steered and directed strategy facilitate good relationship and communication. The project manager also informed that these cannot perform well without the input and collaborative involvement of the entire project team. This could indicate that even a well planned strategy by project manager would also require collaborative efforts to reach the objective of the project. It was reported that the process of leading the team is grounded on close monitoring. He emphasized a huge collaborative effort among managers, supervisors, workers and subcontractors played a big role on the success of the project since ultimately a project is built by a by this team. On the understanding and the application of emotional intelligence at work the project manager seem to know very little about it, though he believes in using your emotions in a way that will affect the project positively.

Project Manager Scores:

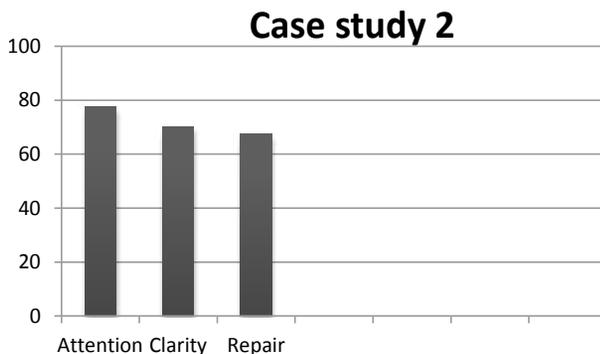
Sub section 1- Attention: $31/40 = 77.5\%$

Sub-section 2- Clarity: $28/40 = 70\%$

Sub-section 3- Mood Repair: $27/40 = 67.5\%$

Total average score= 73.2%

FIGURE 2 Emotional awareness of project managers



Source: Analysis from research data

Project manager number two is working in a project that is almost completed. He has scored above average for attention clarity and repair (above 50%). The results show that the Project

Manager is most able to pay attention to his inner feelings and attention, secondly he is able to understand and distinguish feelings, last and least of all, he is able to regulate and recover from negative emotional experiences.

7 COMPARING CASE 1 AND CASE 2

Project manager number 1 has an average score of 76.6% and Project Manager number 2 and an average score of 73.2%, this difference shows that the individuals have differences in the regulation of their moods, i.e. they are different in the manner in which they respond to feelings. PM number two scores higher in the attention sub-scales, meaning he is more aware of his emotions than PM number one. PM number two scores higher in the clarity and mood repair as compared to PM number one showing a better understanding of feelings and a better ability to recover from negative experiences. It has been noted in literature that TMMS scores and results may be affected by age, as emotional states evolve as a person grows, it may be noted that PM number 2 is younger than PM number 2.

8 CONCLUSION

The literature sources such as Love *et al.*, (2010) revealed that there are few studies done on emotional intelligence in construction projects, which may be due to the lack of physiological research in construction. According to the findings project manager number one understands EI as the ability to read and understand how people react emotionally, hence as a leader one may be able delegate duties in a way that motivates people. The PM seemed to be aware of this trait of leadership and acknowledged the fact that every project manager needs to know about it. He further revealed that he has been attending emotional intelligence seminars where he is taught about the use and the application of emotional intelligence at work. His average total score according to the TMMS adapted questionnaire was = 76.6%, which shows that the project manager possesses some characteristics of emotional intelligence and is aware of the importance of emotional intelligence in construction projects.

The other project manager has little understanding of what EI is and elaborated no further, but his responses towards the handling of communication and relationship problems in conjunction with his TMMS questionnaire results show that he is emotionally aware. He also stated that through experiences one can get an understanding on what works and what doesn't work. The project manager is aware that he works with a variety of participants and it is obvious that communication and collaborative skills are important in this type of an environment. though he doesn't know more about emotional intelligence he suggested that it will be of benefits especially in construction to go in depth about this topic to be able to help project managers in their work.

Both participants in the study work with participants with different cultures, backgrounds and personalities, thus language barriers pose as a challenge amongst the project team. Wong *et al.*, (2010) and Kivrak *et al.*, (2009) provided some benefits in working in culturally

diversified projects (both projects are culturally diversified). The Project managers provided that communicating efficiently and understanding how different people function was recognized as one of the ways to combat potential misunderstandings and disputes between project participants, this is in agreement with Kivrak, (2009) who outlined that importance of understanding cultural differences in the construction industry. Findings further revealed that the key factor is having a joint understanding with the workforce. The construction project managers suggested that sometimes one has to have an ability to consciously put aside any issues and focus on the fact that all participants have a common goal and form part of the team. Communicating well with these individuals (and all individuals) and makes it clear as to what is required from them, reaching an understanding is sought to be the main key factors in avoiding disputes.

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