

EMOTIONAL INTELLIGENCE: IMPLICATIONS ON IMPROVING TEAM PERFORMANCE AT EXACT HOLDINGS LOCATED IN KWAZULU-NATAL

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ABSTRACT

Historically it was believed that a high Intelligence Quotient (IQ) was solely required for optimum performance as a leader and thus organisations focused on recruiting and promoting individuals with this attribute. Literature shows that a high IQ does not guarantee success as a leader and some studies postulate that Emotional Intelligence (EI) could be the element missing in unsuccessful leaders. This research aimed to determine if improvements in EI lead to subsequent improvements in leader and team performance. Two phases were conducted in an organisation in which a team had poorly performed in 2014. The pilot phase used Action Research, an investigative tool, to establish issues/ concerns identified by leaders. The study was then scaled up to include 200 team members, each of whom answered a baseline survey with questions grounded in aspects of EI, linked to the causes of poor performance. A control and intervention group was established based on survey results, and interventions linked to the EI construct were then used accordingly to address identified issues concerning building EI within leaders. Pilot results showed poor team leadership. This was attributed to a failure in key aspects which could be linked to EI. Results from the second phase survey showed that there were elements of leader inadequacies throughout the organisation. It was found that the EI of the leader could be increased through interventions that focused on the five components of EI to solve problems through a structured methodology of diagnosis and identification of problems. The EI of leaders did improve and there was an associated increase from underperformance to acceptable performance in the leader and the team, whilst the control group showed no statistical difference. There was an increase in the exceeding performance categories of leaders and individuals, but the results were not statistically significant in this area.

Keywords: Emotional intelligence, leadership, team performance, performance management, action research.

INTRODUCTION

Shortcomings in leadership that inevitably have a negative impact on the leader and team performance are identified as related to aspects of emotional intelligence (EI). A department in Exact Holdings, a corporate organisation, (which for confidentiality purposes will be referred to as Exact Holdings), has an underperforming team. Exact Holdings is a large company which focuses on the production of several products sold both locally and internationally. A pilot study on a team of four people showed a hundred percent compliance to key issues relating to shortcomings in leadership. The wider organisation was drawn into the study through a baseline survey to understand the extent of the issues faced and to see if there was a similar trend. A

controlled intervention study was designed with EI in mind specifically aimed at addressing the issues trending in the baseline survey. The interventions worked to increase the performance of the leader and team through the improvement of EI using Action Research (AR) methods.

Background to the Problem/Opportunity

The extent to which EI accounts for effective leadership is currently unknown. Despite much interest in relating EI to effective leadership there is little research published that has explicitly examined this relationship. This section sets the context for this study in which dissatisfaction and poor performance is traced back to shortcomings in leadership within the organisation. The focus of recruitment and promotion of personnel into leadership positions in large organisations is based on the candidate's ability to effectively and efficiently analyse information and make decisions to get the job done timeously. Traditionally cognitive ability and IQ would be important. However, there is another element to the role of leadership that gets less focus as an element for recruitment and development. This element is the assessment of the EI of the leader (Palmer, B. Gardner, L. and Stough, C. 2003). Emotional intelligence is defined as the ability to reason emotions and to use these emotions to promote thought in order to enhance emotional and intellectual growth and problem solving abilities (Higgs, 2000; Mayer, Caruso and Salovey, 2000). Goleman, Boyatzis and McKee (2013) support this view of EI and further suggest that the EI attributes of self-awareness, empathy, and rapport with others directly impacts leadership performance.

Why Leaders Fail, Implication on Team Performance

Studies have shown that EI impacts a leader's ability to be effective (Rosete and Ciarrochi, 2005). Goleman (2002) stated that leaders who did not develop their EI would have difficulty in building good relationships with peers, subordinate superiors and clients. This emphasizes the need for EI in relationship development. Effective leaders, professionals, or persons, need to understand and skilfully manage their emotions appropriately, based on each person or situation and understand the emotional cues of others in order to effectively interact. (Goleman, *et al.* 2013). Leaders that do not actively pay attention to the motives, behaviours and interactions between their staff and themselves, either because they do not possess the skill to do so, or they do not recognise the importance of doing so, are unlikely to be in tune with the feelings of their employees and hence would be incapable of achieving mutual comfort in sharing ideas, knowledge and the creation of collaborative decisions.

Background to Exact Holdings and the Current Situation: New Leader Role with an Underperforming Team

A team leader has worked for Exact Holdings for four years. The leader was recently promoted into a leadership role in which he inherited four team members. Each of the four team members was hired in the capacity of process engineers. A process engineer in EH is a qualified chemical engineer, who works to increase laboratory formulations to factory scale in order to facilitate the commercial production and distribution of products. This team underperformed in 2014 and a focus group session was undertaken with this team in order to understand possible root causes. In terms of the organisational hierarchy, the new leader held a work level two (WL2) leadership

position, whilst his team held work level one (WL1) positions. The CEO holds a WL5 position. The company employs personnel across the divisions of Research and Development (R&D), Marketing, Finance, Human Resources and Supply Chain. In 2012 Exact Holdings underwent an organisational restructure in which more focus was placed on performance than was done in the past. As part of the change employees were rated on a performance scale of 1-5, and advised that they would be rewarded with a fourteenth cheque if they achieved a rating of 3 and above provided that the company made a profit. Every employee would be benchmarked against candidates in his/her level in order to identify high performers. The rating ranged from 1 Gross underperformance to 5 Outstanding performance with appropriate rewards at each level. Rewards such as a 14th cheque would start at level 3. Level 5 participants receive an automatic promotion without requiring application. The team's targets for 2014 were not achieved. Only one team member achieved a three rating indicating that he had met his targets and delivered them as expected. Two team members were put on performance review since they had not met their targets and had not displayed any leadership qualities, whilst one team member was given a two rating indicating borderline performance. In a focus group session with the team it was determined that the root cause of under performance in the team was the poor leadership from the previous team leader. This study will discuss methods utilised in order to understand and address the root causes of underperformance. It will also discuss methods and techniques which can be utilised to address or prevent similar issues in large companies/ organisations.

Problem Statement

Leaders may lack the skills or awareness to actively pay attention to the behaviours, motives and interactions of themselves and their teams (emotional intelligence). This could affect the proper functioning of teams and lead to:

- Poor communication within and between teams
- Misalignment of goals and roles and responsibilities between management and teams
- Lack of motivation in the team due to poor performance
- Lack of relevant skills sets within the team

Aim and Objectives of the Study

The aim of this study was to determine if leader and team performance can be improved through a positive difference in leader EI. The objectives of this study were to determine if:

- A leader's EI could be improved through a leader-led AR process aimed at improving team performance.
- A leader EI has an impact on the leader's performance.
- A leader EI has an impact on team performance.

Research Questions

The overall research question of this study was:

“Is the performance of a team affected by the EI of the leader in charge of that team?”

Associated research question one:

“Does the EI of the leader have an impact on the leader's performance?”

Associated research question two:

“Does AR based on EI principles impact leader EI?”

The Significance of the Study

- Performance culture is at the forefront of most international and national corporate organisations. The basis of which is to drive performance of workers to deliver their maximum potential to the business (growing themselves and growing the business) in order to ensure increased profitability of the business in a competitive business environment. In the instance when an employee underperforms it is imperative to isolate the root cause and to develop interventions or strategies to prevent further occurrences in order to drive employee morale and performance. Currently the most common methodology utilised to address underperformance is performance management.
- Performance management involves monitoring of the employee by his/her leader on a weekly basis in order to ensure that weekly targets are met as opposed to monthly or annual targets. The basis of performance management is time management of the employee which is controlled and monitored by his/her leader. Action Research and improvement in EI could offer an alternate to performance management since the root cause of underperformance may not always be time management or lack of skill of the employee, but could rather also include employee dissatisfaction and leadership inadequacies.
- An increase in EI obtained via the methodology of AR could be a very cost effective way to build EI in new and experienced leaders.
- Staff turnover could be reduced in organisations due to increased job satisfaction. This study fits into the existing body of knowledge of EI and supports the works of Rosete and Ciarrochi, (2005) and Goleman *et al.*, (2013) which concludes that EI has an impact on leader effectiveness and is therefore as important as IQ.
- This study also adds to the existing EI knowledge by correlating leader and team performance to an increase in leader EI ability. This provides a rationale for Human Resources department to look for EI qualities when recruiting.
- The study also supports Goleman *et al.*, (2013) claim that EI can be improved in an individual. It is apparent that poor leadership can have a negative effect on team performance and that EI could be the missing link to leaders becoming more successful.

The study now considers leadership and the evolution in current thinking on the topic. It also looks at the EI construct and if leadership requires EI. Literature on the implications of leadership incorporating EI on team performance and job satisfaction is presented.

LITERATURE REVIEW

Three broad themes are covered; the first being the definition of leadership and its appropriate theories which include the early trait theory to the more evolved dispersed leadership theory. The second theme is that of Emotional Intelligence where the EI construct is explored. The final theme is the link between EI and leadership and how EI is integrated into leadership. In this theme the research findings on topics of emotions and the leadership process, as well as influence of EI on team performance is explored.

Definition of Leadership

William (2009) describes leadership as a means of lifting a person's vision to higher sights and raising the performance of a person to an evaluated status, or in other words to build a personality beyond its normal limitations. Alvesson and Sveningsson (2003) raised some doubt whether a common definition of leadership is practically possible. They argued that a common definition of leadership would not be very helpful and may even obstruct new ideas and interesting ways of thinking of leadership. Northouse (2007) however argues that based on a review of various definitions of leadership common components do occur. A few aspects include that leadership is a process, leadership involves influence, leadership occurs in groups, and leadership involves common goals.

Leadership Theories

A review of the leadership literature has revealed an ever-evolving series of thought when it came to leadership from the "Great Man" and "Trait" theories, to "Transformational" leadership in recent years. This study reviews the evolutionary progression of the leadership theory from the trait to action-centred models with emphasis on the styles of servant to transformational leadership.

Trait Theory

Gordon Allport, an American psychologist considered a founding figure of personality psychology, pioneered what is considered to be the first academic theory on leadership. His theory described the various behaviour and personality tendencies associated with effective leadership. The trait approach was the idea of the existence of leadership qualities. The theory was based on certain identified personality traits or characteristics in an individual that would lead to effective leadership (Bligh, 2011). Bligh (2011) mentions that a common criticism to the trait theory was that there were far too many traits identified over the many years of research. These traits were criticized for their lack of explanatory power and because they could not be distinguished between leaders and non-leaders. An additional criticism of the trait theory was that it was difficult to measure traits such as honesty, integrity, loyalty or diligence.

Behaviour Theory

The behaviour theory was established following the development of the trait theory. It focused on what leaders actually did, instead of their qualities. Studies emphasising human relationships, along with output and performance, were conducted and various patterns of behaviour were observed. These observed patterns were then categorised as styles of leadership (Bolden, Gosling, Marturano and Dennison, 2003). It was the use of models such as the Leadership Grid Model and the Behavioural Leadership-Model, which suggested that there were five different leadership styles, upon which behaviour patterns are characterised. Leadership strategies during this time were influenced by a leader's assumptions about human nature/behaviour.

Blake and Mouton's Leadership Grid

This model developed by Robert Blake and Jane Mouton identified five different leadership styles based on either the concern for people (relationship), the concern for production (task), or a combination of both. Concern for People was understood to be the degree to which a leader considers the needs of team members, and areas of personal development when deciding how best to accomplish a task. Concern for Production is understood to be the degree to which a leader emphasizes concrete objectives, organisational efficiency, and high productivity, when deciding how best to accomplish a task.

The **Authoritarian Leader** identified by high task and low relationship concern, is very task oriented. This leader is hard on their workers (autocratic), has strict work rules, policies, procedures, and views punishment as the most effective means to motivate employees. There is little or no allowance for cooperation or collaboration between leaders and subordinates. When something goes wrong they tend to focus on who is to blame, rather than identifying the issue and developing a solution or preventative measure (Zeidan, 2009).

The **Team Leader** identified by high task and high relationship concerns is a type of leader that leads by positive example and endeavours to foster a team environment in which all team members can reach their highest potential, both as team members and as people. These leaders stress in equal measure the production needs and those needs of the people respectively. The premise here is that employees are involved in understanding organisational purpose and determining production needs (Zeidan, 2009).

The **Country Club Leader** identified by low task and high relationship concerns is a leader that predominantly uses reward power to maintain discipline and to encourage the team to accomplish its goals. These leaders stress production needs and the needs of the people equally highly. The premise here is that employees are involved in understanding organisational purpose and determining production needs (Zeidan, 2009).

The **Impoverished Leader** identified by low task and low relationship concerns is a leader who uses a "delegate and disappear" management style. This leader is mostly ineffective as there is no emphasis on creating systems to get the job done, or ensuring a satisfying and motivating work environment.(Zeidan, 2009).

The **Organisational Man Leadership** identified by medium task and relationship concerns is a style that is a balance between two competing concerns. It is said that leaders with this style settle for average performance and believe that this is the most anyone can expect (Zeidan, 2009).

Other leadership styles apart from the Organisational Man Leadership style may be required in various situations. For example, an Authoritarian Leadership style may be required to instil discipline in unmotivated workers and the Impoverished Leadership style would be required to enable self-reliance.

Situational Theory

The Situational Theory approach was the next stage in leadership thinking which sees leadership as being specific to the situation in which it is being exercised. Situational theories embodied the premise that the style of leadership used depended on factors such as the situation, people, task, organisation, and other environmental variables. Four of the well-known models in Situational Theory are presented below. These models include Fiedler's Contingency Model, The Hersey-Blanchard Model of leadership, and Adair's Action-Centered Leadership Model.

Fiedler's Contingency Model

Goleman, *et. al.*, (2002) proposed that there was no single best way for leaders to lead people. According to Fiedler's theory the situation would demand the type of leadership style required. Fiedler considered three situations that could define the condition of a leadership task. The first condition is the Leader Member Relations, concerning how well the leader and employee got along. This relationship amounts to loyalty, dependability, and support that the leader receives from employees. This style seeks to build interpersonal relations and extend extra help for the team development in the organisation. The second condition is a task structure in which the job can be highly structured, fairly unstructured, or somewhere in between. Leaders here take pride and satisfaction in the task accomplishment for the organisation. Task-motivated leaders are at their best when the group performs successfully such as achieving a new sales record or outperforming the major competitor. The third condition is the power of position i.e. how much authority the leader possesses. Fiedler believed that there was no good or bad leadership style as each person tends to have their own preferences for leadership.

The Hersey-Blanchard Model of Leadership

This model proposes that the developmental level of an employee plays the greatest role in determining which leadership style is most appropriate. The model is based on the amount of direction (task behaviour), and socio-emotional support (relationship behaviour), a leader must provide given the situation and the "level of maturity" of the followers/ team members (Bolden, *et al.*, 2003). The leadership behaviour will then follow one of two ways (directive behaviour or supportive behaviour). In the Directive Behaviour one-way communication is the norm with followers' roles clearly communicated and their performance closely supervised. In the Supportive Behaviour way there is two-way communication with listening, support and encouragement thereby facilitating decision-making by the follower. Source: Bolden, *et al.*, 2003, p.9

Adair's Action-Centered Leadership Model

Bolden *et al.*, (2003) explain that this model proposes the concept of an 'action-centered' leader who gets the job done through the work, team and relationships with fellow leaders and subordinates. According to Adair's explanation on action-centered leadership, leaders must:

- structure the **task** to be done
- support and review the individual **people** executing the task, and
- co-ordinate and foster the work **team** as a whole

Source: Adair, 1973 cited in Bolden, *et al.*, 2003, p.11

The conclusion of the situational leadership models is that each variety model proposes situational variables which are thought to have a higher weighting on the primary driving force for leadership style. The theory also proposes that there may be differences in required leadership styles at different levels in the same organisation.

Leaders and Followers

All models discussed thus far have shown the leader to be a frontline figure that stands out from the rest of the crowd, as being somehow different (in terms of behaviours and character traits) and capable of “leading” people. The school of thought had then shifted in a different direction in recognition of the importance of the leaders’ relationship with his/her followers and an awareness of the interdependency of the two roles. The view of leadership shifted from a hero-like figure who is always in the frontline, to the leader who has the capacity to follow. Some models that are well known and based on the leader and follower theory is that of Servant Leadership, Team Leadership and Transactional leadership.

Servant Leadership

Carol (2005) explains that the notion of “Servant Leadership” is purposefully oxymoronic and therefore makes people pause for thought, and to “challenge any long-standing assumptions that might be held about the relationship between leaders and followers in an organisation”. It also emphasises the leader’s duty to serve his/her followers. Leadership thus arises out of a desire to serve rather than to be dominating.

Dispersed Leadership

According to Politis (2005) ‘dispersed’ or ‘emergent’ leadership found its roots in the realisation of the importance of social relationships and the need for a leader to be accepted by his followers, as well as the argument that no single individual can be the ideal leader in all circumstances. Dispersed leadership is therefore a less formalised model for leadership. The theory proposes that the role of the leader is dissociated from the organisational hierarchy. The dispersed leadership model proposed that individuals at all levels of the organisation can exert leadership influence on their colleagues and management of the organisation. The dissociating of leadership from formal organisational power roles was supported by Western (2013) who argues for and against some of the parallels drawn by Heifetz (1994) when he distinguished between the exercise of “leadership” and the exercise of “authority” in his work. Western (2013) mentions that the key notion to this model is the distinction between “leader” and “leadership”. The leader in this case is seen as only being identifiable on the basis of his/her relationship with others in the social group who are behaving as followers. The leader can therefore conceive to be emergent rather than predefined and their role cannot be understood by their personal characteristics or traits, but examining their relationships within the group. Leadership is seen as a process of sense-making and direction-giving within a group.

Emotional Intelligence and Factors Associated with Failure in Leadership

It can be seen from the evolutionary progress of theories on leadership that earlier theories focused on the characteristics and behaviours of successful leaders, while the theories that

emerged later on were focused on the role of followers and the contextual nature of leadership. The latest body of research brings to realisation the importance of social relationships and the need for a leader to be accepted by his followers. Studies have shown that Emotional Intelligence (EI) impacts a leader's ability to be effective (Goleman, 1998). Goleman (2002) stated that leaders who did not develop their EI would have difficulty in building good relationships with peers, subordinate superiors and clients. This emphasizes the need for EI in relationship development. The idea of leadership involving the emotions of followers/team members and those emotional abilities are associated with effective leadership is evident to some extent in all of the major theories on leadership (George, 2000). Dasborough (2006) has empirically demonstrated that leaders evoke emotional responses in employees in workplace settings. Goleman *et al.*, (2002) has argued that EI is a critical component of leadership, in order for leadership to be effective. It is now widely accepted that leadership is an emotion-laden process, and a leader who can manage his/her own emotions and have empathy for others will be more effective in the workplace.

Emotional Intelligence

Mayer, Caruso and Salovey (1999) defines EI as being the ability to monitor one's own emotions and the emotions of others, to discriminate among these emotions and use this information to guide one's thinking and actions. Emotional intelligence is also understood to be a person's ability to manage their own emotions through commitment, integrity, self-awareness, self-confidence and self-control; to initiate change, influence, communicate and accept change (Goleman, 2002). Saklofske, Austin and Minski, (2003) support the view of Mayer *et al.*, (1999) who view EI as being a "subset of social intelligence". Increased evidence in recent years seem to support the view that since EI is a subset of social intelligence and it has since emerged that EI is one of the most notable social effectiveness constructs in modern literature. The emotional intelligence construct was proposed by Goleman (2002). This framework illustrates that EI consists of two major pillars. The first pillar being personal competence and the second being social competence. The first pillar of personal competence is further broken down into Self-Awareness and Self-Regulation, these two abilities are fundamental to the emotional intelligence construct. Self-Awareness is the aspect of EI that allows individuals to show awareness of how they behave and how they are perceived in a public space. Self-awareness allows one to recognise a feeling/ emotion when it occurs. Accurately reading one's own emotions is a basic aspect of EI and helps guide the decision-making process. It underlies all other processing of emotional information. Emotions include areas of beliefs and core values, as well as preferences, goals, strengths, weaknesses, and intuition. Gonzalez (2012) supports Scheff's (1997) description of how emotions tend to be culturally specific. She explained that all individuals, irrespective of culture, are required to interpret and conform to cultural expectations of emotional displays and acts. According to George (2000) Self-Awareness allows the individual to prioritise deeper and more pressing issues instead of inconsequential problems. This is very applicable to the interactions of teams in the team context. The second pillar is Social Competence consisting of the fundamental abilities of Social Awareness and Relationship Management. For true effectiveness in leadership, self-awareness and control is not enough. The social competence of social awareness is also essential for leaders. Awareness of social surroundings can be built through empathising, and taking an interest in other peoples' emotions and perceptions. Empathy has components that are both cognitive and emotional. A high level view allows one to

see the reality of things, and not just how one would like them to be. Saklofske *et al.*, (2003) identified social awareness and relationship management as being the fundamental ability of social identification and feedback.

The Emotional Intelligence Construct



Source: Goleman, *et al.*, 2002

Goleman *et al.*, (2002) explained that relationship management involves how people develop and maintain good relationships, communicate clearly, inspire and influence others, work well in a team, and manage conflict. Casting a shadow over the concept of EI are concerns about its meaningfulness and the construct and predictive validity of its various measures and whether EI is theoretically needed for leadership. According to Antonakis, Ashkanasy and Dasborough (2009) the data showing that EI matters for leadership is non-existent for either of the following reasons;

- EI researchers are using the wrong measures or the wrong methodology;
- EI does not matter for leadership.

Antonakis *et al.*,(2009) mention that they did not find a single well-designed strong study that showed that EI matters for leadership. They also criticized researchers in this field for not testing their theories appropriately. Some reviewers and editors also picked up criticism from Antonakis *et al.*, (2009) for not judging validation studies appropriately, before publishing their work. Dasborough (2006) in Antonakis *et al.*, (2009) agreed with Antonakis that there were flaws in the studies; particularly in the way in which EI is measured in various studies and that there is room for improvement. However, she does make reference to Schmidt and Hunter (2002) with respect to the “myth of the perfect study,” and concludes that, “In fact, there are no perfect studies”. Overall, what makes leaders good depends on:

- How intelligent they are (important for many processes, e.g. identifying weaknesses in the status quo, formulating strategic and tactical plans and communicating company vision and mission);

- Their personality characteristics (which should include high extraversion and openness, and low neuroticism) and
- How they use these individual differences to mobilize their followers.

Since 1994, there is an overwhelming volume of evidence, especially in neuroscience, that support the idea that emotional awareness and understanding is separate from intellectual intelligence, and these abilities directly impact human decision-making capabilities (LeBlanc, V.R. McConnell, M.M. and Monteiro, S.D. 2014).

Emotions and the Leadership Process

George (2000) emphasizes the connection between the emotional abilities and effective leadership behaviours, and identifies four basic abilities of an EI leader that result in leadership effectiveness:

- The ability to accurately appraise the emotions of others and effectively portray personal emotion. This ability can be traced to the level of self-awareness of the leader.
- The ability to predict the emotional reaction of others in various scenarios. This ability helps the leader to regulate and manage the emotions of his team members.
- To be able to use emotion to influence behaviour and cognition of others. George (2000) mentions that regulating emotions has a positive effect on performance and general interactions.
- The ability to manage the emotions of themselves and others. This contributes to the leader being able to manage emotions and create more effective teams.

Dasborough (2006) found that high EI individuals reported less intense emotional responses to leader–follower interactions. While highly emotionally intelligent individuals may be more aware of their emotional states, and have a better understanding of why they were experiencing those emotions, they were also able to manage them better than those low on EI. It could then be argued that “relationship approaches to leadership are inherently emotional” and that the impact of emotional and general intelligence in leadership is context-dependent where some leadership situations demand high IQ, while others require high EI or a balance of both EI and IQ. By leaders becoming more aware of their social surroundings they build their ability to identify and meet the needs of others. Leaders are therefore able to become more influential by inspiring or leading others into actions or words by tactics (Goleman, *et al.*, 2013).

Charismatic and Transformational Leadership through Emotional Intelligence

Channer and Hope (2001) have defined transformational and charismatic leadership as leading through raw enthusiasm, inspiring, facilitating intellectual and emotional stimulation, and processing and infecting others with a strong vision. This type of leader was associated with having high EI through which idealised influence, individualised focus, and inspirational motivation is delivered. The impact of this is felt in terms of charisma and empowerment. Cavazotte, Moreno and Hickmann (2012) allude to the idea that the adherence of standards of professional behaviour and interaction is linked to demonstrations of charisma. DeCremer and Knippenberg (2002) stated that leader charisma tends to be more important than subordinate perceptions of procedural fairness when it comes to co-operation and fairness. George (2000)

stated that the emotionally intelligent leader could accurately assess the emotions of others and constructively influence these emotions to embrace change. The leader's influence involved the use of emotional appeals to idealise team identity and establish team pride.

Influence of Emotional Intelligence on Team Performance

Teams are an important composition of organisations and therefore the influence of EI on team performance is important. The topics below consider how teams affect organisational performance and how EI affect teams.

How Work Teams Affect Organisational Performance

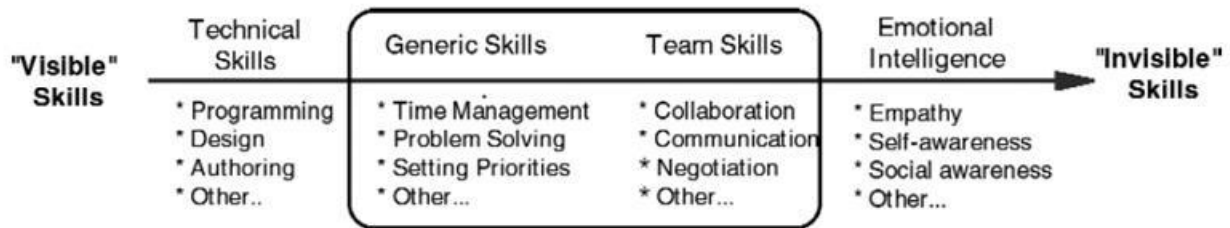
Belbin (2010) is aligned with earlier thoughts from Cohen and Bailey (1997) that the work team is now the most common form of organisation within the organisation. There is a growing use of teams in the workplace by organisations. Teams are now considered to be the building blocks of flexible organisations. The underlying belief is that by bringing together a range of different individuals (diversity of perspective), teams will achieve higher levels of creativity. This belief is reflected in the current interest in promoting diversity in teams that is seen across many organisations. Team members must share and integrate their different perspectives to reach creative decisions. If this cannot be achieved, the benefit of the depth and breadth of experience and knowledge of the individuals in the team is lost. Organisations can have strong performing teams and poor performing teams. Teams capable of outstanding performance generally become the primary unit of performance for increasing numbers of organisations. Belbin (2010) mentioned that poor performing teams are to be avoided within organisations because of their negative effect on performance. The reason for this is the varying types of conflict that arise and impact team performance, both in terms of the task and individual attitudes. Van Rooy and Viswesvaran (2004) focused on general performance, such as job performance and academic success, and showed that the closer one gets to relationship type outcomes, such as the relationship between a leader and follower, the more relevant emotions and EI become. Dasborough and Ashkanasy (2002) have argued that leader-team member exchange and relationship quality is enhanced through the EI of leaders. Zhou and George (2003) have argued along similar lines that EI can enhance leadership within team settings.

Emotional Intelligence and Teams

Henttonen, Johanson, and Janhonen (2014) cited Lembke and Wilson (1998) for noting factors such as team design, purpose, task requirements, and membership characteristics as being determinants of team norms and interactions. Henttonen *et al.*, (2014) also concluded that the composition of the team will affect its social structure. The social structure is responsible for shaping the actions of team members in accordance with the established norms. The more emotionally intelligent an individual within a team is, the more likely they are not to violate team norms. The reason for this lies in an emotionally intelligent individual's ability to use feedback from interactions with other members as being a primary source from which to judge if their emotional expressions should be continued or not. This then characterizes the way in which established team norms are reinforced and learning is facilitated amongst new team members. The figure below describes the spectrum of skills required for a team to work cohesively and

effectively. This model includes aspects of both IQ (visible skills) and EI (invisible skills). Visible skills include; technical skills, generic skills and team skills. These form a skill set which are tangible and measurable. Invisible skills comprise of EI which is a skill that is less tangible and more difficult to measure (Luca and Tarricone, 2001). A combination of “visible” and “invisible” skills is required for the development and maintenance of a high performing team, according to this model.

A spectrum of skills needed for Team Work



Source: Luca, J. and Tarricone, P., 2001, p. 368

Luca and Tarricone (2001) proposed that there are five components from the EI construct that work together to facilitate the successful functioning of a team. These five components are Self-awareness, Self-regulation, Motivation, Empathy and Social skills. The way in which these five components of EI contribute to team success and performance is shown below.

How the EI components are linked to successful Team Work

Self-awareness: The ability to recognise and understand your moods, emotions and drivers, as well as their effect on others.

- Having positive and productive teamwork skills
- Controlling emotions and understand the impact of emotions on the team
- Being self-confident, high self-esteem and a coherent and integrated self-identity
- Promoting psychological health including a happy disposition

Self-regulation: The ability to control or redirect disruptive impulses and moods. The propensity to suspend judgment – to think before acting

- Being self-aware of emotions to enable self-regulation
- Handling emotions and putting the team task first
- Using emotions to facilitate the progress of the project
- Regulating emotions during conflict, pressure, stress and deadlines
- Coping with stress, frustrations through creating and contributing to caring, supportive relationships

Motivation: A passion to work for reasons that go beyond money or status. A propensity to pursue goals with energy and persistence.

- Motivating other team members to contributing their best
- Openness, flexibility and motivation to change, innovation, creativity and collaborative problem solving
- Creating an environment that stimulates, enhances and empowers team members to become motivated and apply themselves fully
- Showing initiative, perseverance and dedication, goal orientation and focus

- Placing team or common goals ahead of individual goals and pursue these with determination and perseverance
 - Having a sincere interest and motivation for the group and individual's achievements and goals
 - Considering team morale and aiming to maintain a positive productive work environment
- Empathy: The ability to understand the emotional make up of other people. Skill in treating people according to their emotional reactions.
- Understanding, interpreting and identifying with colleagues' feelings
 - Cultivating rapport with people from different 'walks of life'
 - Having the potential to turn adversarial relationships into collaborative alliances
 - Showing emotional concern including reassurance and caring for other team members
 - Helping to create a team environment where members can express their feelings
- Social Skills: Proficiency in managing relationships and building networks. An ability to find common ground and build rapport.
- Creating a team culture which is supportive, informal, comfortable, and non-judgmental
 - Developing professional as well as positive personal relationships with other team members
 - Developing intense, short-term relationships and being able to disconnect and work in another team environment with the same sincerity and motivation
 - Being able to stimulate cooperation, collaboration and teamwork through well-developed communication and social skills
 - Developing positive, effective relationships with colleagues through fostering trust, confidence and commitment
 - Helping to establish a positive team climate and promoting support and respect for one another
 - Having the ability to interact with team members and deter conflict, be aware of, ease and dissipate underlying tensions. (Source: Luca, J. and Tarricone, P., 2001)

Transformational leadership can be seen as an ability to create a vision, communicate this vision, and build commitment amongst employees to the vision so that the vision is executed successfully. There has been research that suggests that the transformational style of leadership is linked to EI. The assumption is that transformational leaders are effective and increase the performance of a team due to their ability to deal with strategic matters and build commitment from employees. Transformational leaders also link job performance to rewards and ensure that subordinates have the resources to execute their roles (McShane and Von Glinow, 2000). The performance management system is seen as a good indicator of an individual's leadership effectiveness. It asks: Does an individual meet business outcomes in such a manner that they not only achieve results but also build effective working relationships? The findings suggest that executives higher on EI are more likely to achieve business outcomes and be considered as effective leaders by their teams and direct line leader. Exactly how and to what extent EI accounts for effective leadership is currently unknown. Despite much interest in relating EI to effective leadership there is little research published that has explicitly examined this relationship.

Leaders Impact on Motivation

Goleman *et al.*, (2013) mentioned that motivation is a basic psychological process. Their study showed that data based on comprehensive analysis concluded that problems with competitiveness appeared to be largely motivational in nature, and argued that team members could also be motivated psychologically by the positive effect of the leader. The positive effect can be felt through positive emotions, enthusiasm or cheerfulness. Just how this emotional contagion occurs is not fully understood by researchers. However, one postulation is that emotional contagion happens via empathy. The members in the team mimic the leader's emotions, or develop similar emotions through empathy. Emotional intelligent leaders tend to initiate positive emotions more frequently. The positive emotions of the leader elevates the emotional state of the team to perform with enthusiasm. The other advantage of having a leader and team display positive emotions and moods is that these emotions can facilitate innovative thinking, contribute to a supportive environment, or assist in establishing priorities.

Increasing Emotional Intelligence

Goleman *et al.*, (2013) stated that emotional intelligence can be developed over time, and that this has also come to be known as maturity. Nelis, Quoidbach, Mikolajczak and Hansenne (2009) conducted a study that investigated the possibility to increase / improve EI. Results from the study showed a significant increase in emotion identification and emotion management abilities in a group of ten people that underwent emotional intelligence training versus a controlled group of nine people that continued with daily activities without emotional intelligence training. Follow-up measures after six months revealed that these changes were persistent, whilst there were no significant changes observed in the control group. These findings suggested that EI in individuals can be improved. The aspects of personal growth and team development considered by the various authors and theorists have provided the groundwork for the validation of this study.

METHODOLOGY

Action Research (AR) was utilized in this study using both the quantitative and qualitative methodology tactics. The relevance of using both quantitative and qualitative approaches is discussed. The study participants were based in Durban South Africa and were provided with two questionnaires (i.e. a 360-degree feedback questionnaire and a baseline survey), to fulfil the requirements of this study. The use of focus group sessions to establish root causes of poor performance were utilized and the development of interventions based on principles of EI are explained.

The Research Design

The methodology of AR was used to investigate the objectives of the study. Reason and McArdle (2005) mentions the design of AR to be an approach that looks at the impact of introducing innovative ideas (interventions) to address the root causes of the problem being

investigated. The success of the interventions is then evaluated. McKay (1992) describes AR as a methodology used to improve the working environment of an organisation and performance of an individual and team. This methodology was chosen since the researcher was part of the population involved in the study. O'Brien (2001) supports the use of AR in studies in which circumstances require flexibility and involvement of the researcher in the research. Mertler (2011) distinguishes four phases to be conducted within each AR cycle. In the initial phase the problem is identified and data is collected for a diagnosis. This is then followed by a collective postulation of possible solutions, from which a single plan of action is chosen and implemented. The results from the intervention are then collected and analysed/ observed, and the findings are interpreted in light of how successful the action had been. The problem is then re-assessed and another cycle begins in the process until the problem is resolved. The implementation of AR that was applied within this study is described below. The first action of diagnosing the problem was done via a focus group session involving a group of four participants. This was treated as a pilot session to determine root causes of poor performance. A baseline survey was developed based on findings from the focus group session. Several questions in the survey were designed from literature on EI pertaining to root causes identified in the focus group session. This baseline survey was then distributed to a population of two hundred Work Level 1s' to determine the extent that the same issues prevailed in the company. During the action planning phase, six interventions were established to deal with the root causes. The six interventions were EI training for the leader of the team, weekly team meetings, informal team bonding sessions, journal clubs, team role profile and mission statement and team rewards and initiatives. Each of six interventions mentioned would target one of the issues raised during the focus group sessions and/ or help to build up skill in one of the five areas that form part of the EI construct. A 360-degree survey was circulated for feedback from cross-functional teams on the performance of the population and control group. The 2014 ratings were noted. The baseline survey feedback provided the data to allow for the establishment of a control group and a study group. Any deviation from the baseline results would then be due to the impact of imposing the interventions. The third step in the AR process was the implementation of the interventions. The fourth process of evaluating the interventions were done by circulating the baseline survey and 360-degree questionnaires at the end of the study to the same group of people. The population was also rated as per the performance scale of the company that was used in the 2014 ratings. There was enough progress seen after the first iteration of the AR process to infer success and a second iteration was not required. The AR cycle went through 4 steps which started at defining a problem, the action planning when one considered various courses of action, taking action, and lastly the evaluation of progress. During the various steps focus group sessions took place, as well as team meetings, and even informal bonding sessions.

Quantitative Research

Muijs (2011) defines quantitative research as a systematic empirical investigation of social phenomena by asking people for their opinions in a structured way such that the use of mathematical techniques could be employed. Quantitative research is used to test hypothesis by looking at the cause and effect of the research. The researcher and subject biases tend to not be known in the study. In the case of this study questionnaires rated responses on the five point Likert scale on the baseline survey questionnaire and the 360-degree feedback survey.

Qualitative Research

Qualitative research is a method of inquiry and is used by researchers with the aim of gathering an in-depth understanding of human behaviour and the reasons that govern such behaviour. Shank (2002) defines qualitative research as “a form of systematic empirical inquiry into meaning”. Lincoln and Guba (2000) claim that qualitative research involves researchers studying things in their natural settings, attempting to make sense of, or interpret the phenomena. Qualitative research involves the analysis of any unstructured data, including open-ended survey responses as well as literature reviews. Researchers may use different approaches in collecting data such as focus group sessions and interviews. A focus group technique, as used in this study, involves a moderator facilitating a small group discussion between selected individuals on a particular topic. The advantages of doing qualitative research include:

- flexibility to follow unexpected ideas during research and explore processes effectively
- sensitivity to contextual factors and
- ability to study symbolic dimensions and social meaning. (Source: Conger, 1998)

The Research Philosophy

A focus group session was held with a pilot population of four participants from the process engineering team. The purpose of the focus group was to establish the root causes of underperformance in the team in 2014. The focus group is a technique for collecting qualitative data. Morgan (1997) mentions that there are two major strengths to a focus group session and that these two advantages could also be disadvantages. The first strength of a focus group is that it relies on the researcher’s focus and ability to produce concentrated amounts of data on precisely the topic of interest. The disadvantage is that the researcher’s interest could be a source of weakness, since the researcher creates and directs the group conversation, making them less naturalistic than participant observation. This may lead to residual uncertainty about the accuracy of what the participants convey. The second source of strength of focus groups is its reliance on the interactions within the group to produce the data. The discussion between participants to share their experiences and opinions is a source of insight into complex behaviours. This also produces a corresponding weakness in that the group itself may influence the nature of data it produces. A baseline survey, designed based on feedback from the focus group, was utilised to determine if the same trend observed in the pilot population (four participants) was seen in a larger population. The survey consisted of fourteen questions of which ten were closed questions and could be evaluated quantitatively, and four questions were open-ended and provided qualitative data. The results from the baseline survey were compared before and after the study. A 360-degree feedback questionnaire, designed to investigate performance of leaders, and comprised of four open-ended questions and eleven close-ended questions which could be related to the dimensional construct of EI. This provided quantitative data. This questionnaire was administered at the beginning and end of the study. The company performance management system provided quantitative data for comparison of performance post the study against pre-study results.

Target Population

The pilot study comprised of four participants. All four participants belonged to the same team that was identified for underperformance. The study questionnaires developed on the feedback

from the pilot group was then circulated randomly within the organisation and two hundred participants provided feedback. This feedback was used to develop interventions for the study. The study was to be done on the leadership of the organisation and included individuals that lead big projects. The population for this study was finalised using one hundred and sixty willing participants that fitted the leadership criteria of having a team reporting to them, or be in a project related leadership role or functional leadership role. The hundred and sixty participants were randomly divided into two groups of eighty. The first group was known as the control group and the second group was known as the intervention group. The focus of the interventions of the study was on the intervention group. The control group was used for comparative purposes. The expectation was for this study to generate a reasonable view on the impact of AR and EI based intervention in improving leader and team performance.

Focus Group Session

A focus group session was conducted with the pilot team (four participants). The pilot study was conducted on this group due to them performing below the department average in 2014, and below the performance expectations of the company. The focus group session allowed the facilitator to listen to the teams' perspective on their poor 2014 performance, and extract key issues identified for poor individual and team performances.

Methodology: A face-to-face interactive session was held for duration of three hours. During this time the facilitator directed staff (WL1) in a discussion to gather information on the challenges they faced and their views on any dissatisfaction and reasons behind poor performance. The focus group method was chosen due to the need to gather information of great depth through open-ended questions and for the facilitator to explain questions which the population may not understand. Constantinou, Bloch, and Seale (2011) mentions that the problem with face-to-face approaches like the one used in the focus group session was:

- The cost associated with face-to-face interviews could limit the size and geographical coverage of the method, and
- Facilitators could introduce bias, which would affect the reliability of responses. Such bias could emerge from the way in which questions were asked, or in the personal characteristics of the interviewer, or of the respondents who could also give socially desirable responses instead of honest responses.

The entire population was located in the same set of offices with meeting rooms freely available, therefore the cost associated with the interview process was negligible. Care was taken to address the second concern of Constantinou *et al.*, (2011) through careful direction of conversation and the facilitator having neutral emotions during the discussions to reduce the risk of introduction of bias into the study. The process team was made aware of the confidentiality of the forum to encourage open expression. The ethical aspects were mentioned and each person was assured that there would be no victimisation as a result of the discussions, and that there would be no naming of individuals.

Baseline Survey

The baseline survey was developed to establish if the issues faced by the processing team were localized to the team, or if it was issues that were being experienced by the broader teams in the

organisation and to what extent. This allowed validation of information from the focus group since all surveys were anonymous and placed in a box within the team area after completion, such that scripts could not be traced back to the respective team members.

Methodology

Surveys of fifteen questions were diagnosed, each consisting of eleven multiple choice questions and four open-ended questions. The survey was answered by 200 individuals. The questions in the survey were rooted in the critical issues identified in the focus group sessions. A session was held during a town hall meeting post the pilot study to introduce all staff to the concept of AR and to inform all staff on the self-improvement AR project that the process team was embarking on. The baseline survey questionnaire was then emailed to all staff. Electronic surveys were used in order to make staff confident that nobody would be identified through their handwriting. The baseline survey was administered to all in the study.

Emotional Intelligence Workshop

The pilot focus group session and baseline survey identified poor communication, lack of clarity of roles and responsibilities, and a lack of relationship between the previous leader and his team, as key aspects relating to underperformance in 2014. All these aspects, amongst many others, are addressed in the EI construct. Emotional intelligence training was therefore chosen as a key tool to develop leadership skills, in order to ensure that the same mistakes were avoided with the new leader. Emotional intelligence training was also seen as a key developmental tool to assist in developing skills to become more aware of the behaviours, motives and emotions of the team (and of the team leader) in order to identify issues faced and to develop and implement effective interventions at an early stage.

Method: Leaders attended a two day workshop. Prior to the workshop the following pre-work courses were completed

- Leadership essentials – Leading with emotional intelligence (e-learning)
- Leadership essentials – Building your influence as a leader (e-learning)
- Leadership essentials – Leading Business Execution (e-learning)

The actual workshop content consisted of the use of reflection by using a personal diary, role plays, and homework. The four sessions included understanding emotions, identifying emotions, expressing and using emotions, and the management of emotions.

Weekly Team Meeting

Weekly team meetings were introduced to address the following issues:

Poor performance of team on delivery of annual targets;

- Lack of engagement between leadership and the team;
- Lack of direction of the team and
- Lack of engagement and cohesive functioning between team members.

The main aim of these weekly meetings was to drive performance of the team. This was done through the weekly tracking of progress made on annual targets. Since the issue of a lack of direction was one of the outcomes from the focus group session, this was done to ensure that

every team member was clear on their targets for the week. These targets were discussed to ensure each team member was confident that they could conduct their tasks effectively and efficiently. During the following weekly meeting the progress of these targets were discussed and noted in meeting minutes and new targets were set for that week. This was a cyclic process for the duration of this intervention. It served to ensure that the team was clear on their roles and responsibilities on their projects and that the team was capable of delivering timorously.

Method: Weekly team meetings were held in a meeting room on a Monday morning each week. Every team member had at least a half hour slot to discuss their project progress, wins, challenges and concerns. During this time the team brainstormed on how to address certain challenges and concerns. Weekly progress was tracked on an Excel document (i.e. target tracker) which was updated each week to include targets that a team member needed to achieve for that week. This was distributed to the team as meeting minutes and was used as a guide to deliver targets on a weekly basis.

Journal Clubs

The idea of a journal club was influenced by findings from the baseline survey and focus group sessions in which team members indicated that they felt stagnant and would like to learn new things within their fields of expertise. It served to improve the knowledge of the team on existing developments and new innovations and the development of production methods which could reduce costs and thus provide a savings to the business. Journal club involved the sharing of a journal article on a bi-monthly basis. During this time an article was discussed and its application to an array of innovations were also discussed. This helped to encourage team discussion and improve knowledge within the team to drive motivation and confidence in target delivery.

Method: A journal article obtained from either the company report database or from an external journal article database was distributed to every member of the team a week in advance. The team was given one week to read the article and to identify questions or suggestions on how this article could be adapted for use within the company. The person who then distributed the article was responsible for providing a brief overview of the article and also led the discussion of the article. During these sessions all team members provided insight into how they thought the article could be used to influence methods/ techniques currently used in the business. The responsibility of article distributor and leader of discussion were rotated amongst the team for the duration of this intervention. The purpose of such rotation was to enable the team to conduct journal article searches and to encourage them to read several journal articles before choosing a particular one to share with the team. Each session was at least 60 minutes. This was a technique utilised to disseminate information/ knowledge which each person thought to be applicable to their role.

Overview of methodology utilised for Journal Club Sessions

A topic that examines several engineering aspects is selected and the article disseminated. A leader is designated who should schedule meetings and lead the discussion. Biweekly meetings are arranged with the objective of critiquing the selected article. A debate-team format is used at the meetings.

Team Role Profile

The purpose of developing a team role profile was to address the concern of the team regarding their lack of clarity of roles and responsibilities which hindered their ability to work with other teams effectively and efficiently. It also served to provide a clear overview of each person's role in the team in order for each person to understand their responsibilities within the team. To further address the concern of lack of clarity, a mission statement was developed which along with the team role profile served to provide clarity on the purpose of the team and the scope of work expected from each team member.

Method: A mission statement development session was arranged. The learnings, as well as existing roles and responsibilities of each team member, was noted. These notes were then utilised to develop a mission statement that described the teams' role in the business.

Team Rewards and Initiatives

A rewards and recognition initiative was developed to address the issue of the team feeling a lack of rewards and recognition for a job well done. The team was asked for suggestions on how they would like to be rewarded and recognised. They had mentioned that they would prefer monetary rewards, days of leave and verbal acknowledgement. The belief was that by introducing rewards and recognition within the team, individual team members would be encouraged to strive for improved performance and delivery of targets.

Method

During weekly meeting sessions there was a slot which was included for:

- Team members to nominate each other for rewards or recognition;
- Nomination of an individual to nominate themselves for rewards and recognition and
- Nomination of a team member for a reward or recognition by the leader.

The Four Performance Culture Themes that would be open to Rewards

Building an external mind-set: New ideas and concepts to challenge and enhance thinking.

Building a passion for winning: Developing a healthy obsession about winning and ways to measure and monitor it with religious zeal and showing a passion for constantly setting the bar higher. Building trust in each other: A focus of energies in delivering impact through our own roles and responsibilities and our own key performance indicators. Building a no excuses culture: Finding different ways of delivering on our commitments and targets, rather than expecting failure. Rating categories started from 0 where participants did not meet expectations to rating 3 where they went beyond what was thought possible. Rewards ranged from verbal acknowledgement, public recognition, half a day's leave, and a R500 shopping voucher. Once an individual was nominated for a two or three rating, their nomination was reviewed and they received their reward within one week. If a rating of one was achieved then the subordinate was commended for their good work and was encouraged to perform.

Informal Team Bonding Sessions

Informal team bonding sessions served to assist in building trust and relationships between team members outside of the office in order to cultivate a team which not only functioned well at work but could also function well socially. It was a platform to get to know team mates on a social basis and was utilised as informal team building sessions. This intervention was implemented to address the concern of a lack of team connection or unity due to overworking of team mates and a lack of time to “get to know each other”.

Method: After a brief discussion we found that all team members enjoyed playing tennis. The team decided to have a once a one hour a week tennis game, which promoted exercise and stress relief at the same time and was cost-effective.

The Research Instrument

Two questionnaires were developed and used in this study. The baseline survey questionnaire used a combination of multiple choice questions for a quantitative analysis and open-ended questions for in-depth insights. The second questionnaire was the 360-degree feedback questionnaire that made use of the Likert five point scale range for quantitative analysis.

Baseline Survey Questionnaire

This questionnaire was constructed such that ten questions in the survey were multiple choice requiring a yes, no, or sometimes, answer. This was done so that the answers given by the respondents could be quantified and analysed to make definitive conclusions on whether the issues identified in the focus group session were experienced by the broader population. The questions in the questionnaire were all related to the output from the focus group session, the purpose of which was to validate the outcomes from the focus group session. There were six main themes: lack of leadership engagement, lack of personal growth, understanding roles and responsibility, having a cohesive team, reward and recognition and lastly job satisfaction.

360-Degree Feedback Questionnaire

A 360-degree evaluation form was constructed to validate the impact of EI and AR-based interventions on performance displayed by team members. Three-sixty degree surveys were conducted pre and post the study to establish if there were improvements in performance in the intervention group. The construct validity of this questionnaire was according to the convergent criterion. The idea was that different questions leading to the same EI component should correlate with each other to indicate the reliability of the data. This questionnaire route was chosen to establish the team dynamic because it was a cheap, quick and less time consuming way of assessing the AR and EI impact on a person’s colleagues and team, when compared to other more expensive tests like the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT™). Three-sixty degree forms were electronic documents that were stored on a portal database. An individual wishing to be rated selects people who he/she wishes to complete this document and invites these people to enter the database and provide feedback. The form was electronic and did

not reveal who had provided particular pieces of feedback, as such each team member was free to provide any rating they thought suitable. A Likert scale was used since it was a good method of rating a person's attitude and responses towards the questions asked. There were three options to the rating scale. The five point, seven point and ten point options. For the purpose of quantifying the data on the survey statistically, ratings of one and two were deemed unacceptable and ratings from three to five were deemed acceptable so that the Fischer's exact test and the Chi-square test could be used for statistical analysis. This questionnaire was structured with the aim of getting feedback on the five components of EI to establish if EI in the population had shown some sort of increase. In the questionnaire, questions included the following aspects of EI: self-awareness, self-regulation, motivation, empathy, and social skills. The focus group sessions covered areas such as leadership engagement, roles and responsibilities and personal growth.

Ethical Issues

Various ethical issues and confidentiality considerations were look into, and are detailed below.

Ensuring that participants have given informed consent: All participants in the study were briefed about the study before taking part in the study and they were assured of confidentiality. Participants were not bound by contract to be involved in this study for the duration stipulated, not obligated to the study and could leave at any time of the study.

Ensuring no harm comes to participants: Each person was assured that there would be no victimisation as a result of the discussions, and that there would be no naming of individuals. No disciplinary action will be brought onto any staff member for their candid replies on questionnaires. The director verbally supported that this study was not initiated by the organisation but was conducted in the researcher's independent capacity. No confidential data was shared with the director. Should any participants wish to resign from the study, it would have no bearing on the relationship between the employee and Exact Holdings.

Ensuring confidentiality and anonymity: All information collected from the research participants would remain strictly confidential. Where the information implicates other staff members or addresses the behaviour of other staff members, information would still remain confidential. Issues identified in the AR process that is not linked to this study would still be treated in a confidential manner. Answering of questionnaires were done by electronic means. Staff filled in the surveys electronically and placed printed copies in a sealed box. This was done to address concerns of participants being identified through their handwriting.

Ensuring that permission is obtained: A discussion was held with the director of the organisation regarding the concept of AR and the interventions that were to be implemented as part of this study. The director supported this research and gave permission to include all staff in the assessment but did not want the company name, and participant names to be disclosed in the study.

Validity and Reliability: It was the responsibility of the researcher to ensure that credible work was done and that the presentation of the research method and results were done honestly.

Lincoln and Guba (1981) stated that all research must have “truth value”, “applicability”, “consistency” and “neutrality” in order to be considered worthwhile. Morse, J. M., Barrett, M., Mayan, M., Olson, K. and Jude, S. (2002) mentioned that “rigor” is needed to ensure validity and reliability of the quantitative and qualitative analysis and “trustworthiness” of results is assured. The reliability of the questionnaires and interviews results depends on the repeatability of the study with a low degree of variability. The study is said to be valid if measurements or results are in line with the objectives. The focus group method was chosen for the group session due to the need to gather information of great depth through open-ended questions.

RESULTS

Data Analysis

The analysis of the data were done using the Fischer’s exact test. Positive and negative responses to two factors (before and after interventions) were tabulated in contingency tables using GraphPad Prism V5.0. The confidence level which sets the boundaries of a confidence interval, was set at 95% to coincide with the 5% convention of statistical significance in hypothesis testing. The resulting P values were then obtained. A significant difference was indicated if $P < 0.05$. The Chi-square test was used for an expanded view of the data in figures 4.1 and 4.2. It was used for the comparison of four factors (result of the intervention group before and after interventions and results of the control group before and after the study). The 95% confidence interval was used and resulting P values were obtained using the software. A significant difference was indicated if $P < 0.05$.

Challenges and Limitations

The following limitations were applicable to the study:

- Whilst a population size of one hundred and sixty WL2 (lowest level of leadership in the organisation) and two hundred WL1 (lowest level of workers in the organisation) used in the study is viewed as reasonable, the population was restricted by the size of the organisation.
- There are limited cost effective quantitative measurement techniques available for EI; as such this study looked at the quantitative response in questionnaires to infer an improvement in EI.
- Quantifying the amount of EI a person possesses or improves by is not possible, however it was enough to see a movement in scores from the 360-degree questionnaires to indicate a perceived increase of EI in this study.
- There was challenge in having only one trained researcher carrying out the field work. There were occasions when dates had to be rescheduled due to the unavailability of the researcher. There were no problems experienced whilst administering questionnaires or conducting the interviews. It is recommended that for a small additional fee, another trained researcher could be employed to help with the field work and ensure that timings are adhered to.

This study was self-funded and did not exceed the budget of five hundred Rands. Recommendations were made to address the research issue of changing timings and dates during the course of the study through using additional resources.

Findings for Question One

Does Action Research based on Emotional Intelligence principles affect Leader EI?

In order to determine if the intervention impacted individual improvement, control and intervention data was compared using the Fischer's exact test. A significant difference was indicated if $P < 0.05$. A total of 4 comparisons were made:

1. Intervention group before versus intervention group after – in order to determine if the intervention caused a change in outcomes.
2. Control group before versus control group after – in order to determine if outcomes changed without an intervention.
3. Control group before versus intervention group before – In order to show similarity in outcomes between both control groups. This assisted in eliminating bias when distributing groups into the control and intervention arm of the study.
4. Control group after versus intervention group after – In order to determine if the outcome of the intervention was due to chance, or if it was as a result of the actual interventions.

All questions showed a positive difference. This result supports the work of Goleman *et al.*, (2013) and Nelis *et al.*, (2009) whom found that EI ability can be improved through training. This result also alludes to the success of the interventions employed in the study. Therefore AR works well to deliver EI training. Retrospectively this seems almost intuitive when looking at the EI constructs and taking into account McArdle's (2005) view of AR being an interactive, explorative and engaging process.

Findings for Question Two

Does a leader's EI ability affect a leader's performance?

A combination of the Fischer's exact test and the Chi-square test was used to establish differences in performance of leaders between the control and intervention groups in 2014 and 2015. Comparisons were made between:

- Baseline performance ratings for members of the intervention group (IG) prior to the implementation of the intervention in 2014. Performance ratings of members in the intervention group following completion of the intervention in 2015.
- Baseline performance ratings of members from the control group (CG) in 2014 and
- Performance ratings of members from the control group in 2015.
- Overall, there was a significant decrease in the number of participants rated as a 2 ($p=0.0110$) in the IG 2015 in comparison to all other groups rated as a 2. The IG also saw a decrease in the number of participant's rated as 3a. Subsequently there was a significant increase in the number of participants rated as 3b ($p=0.0348$) and a borderline significant increase in participants rated as a 3c ($p=0.08$) in the IG 2015. This indicates an overall decrease in lower ratings (i.e. 1, 2 and 3a ratings) and an increase in higher ratings (3b and 3c) for the intervention group. The intervention group also had a slight increase in participants rated as 4 and 5, this however was not significant. The control group however, showed no significant change in ratings in 2015.

This could imply that the intervention was associated with an improvement of performance. There has been an associated increase in EI of the leader due to the same interventions. It is

likely that improved EI in the leader contributes to increased performance. This finding is in alignment with the work of Rosete *et al.*, 2005 and Goleman *et al.*, (2013).

Findings for Question Three

Does the EI ability of a team leader affect team performance?

An average team performance result was obtained by averaging the sum of all individual performance results from within the team. Team performance results were associated with leader performance result of the team in the control and intervention groups. The Chi-square test was utilized to measure differences in performance between the following groups:

- Control group 2014,
- Control group 2015,
- Intervention group 2014 (prior to the implementation of the intervention) and
- Intervention group 2015 (after completion of the intervention).

Analysis showed that the performance of the intervention group in 2015 improved in comparison to the control group in 2014 and 2015 and the intervention group in 2014. This is evidenced by the statistically significant decrease in the number of participants receiving a 2 rating ($p = 0.0006$) and a statistically significant increase in participants receiving a rating of 3b in the 2015 intervention group in 2015 when compared to all other groups in the 2 rating category ($p=0.0273$). No other significant differences were noted between other groups, indicating no change in ratings in the control group in 2014 and 2015. This could imply that a lack of intervention is likely associated with a lack of improvement in performance and vice versa. Therefore it is concluded that there was a shift in team performance. This difference is considered to be a result of the improvement of the EI ability of the leader since this was the variable under study. This finding builds on the work of Van Rooy *et al.*, (2004), Dasborough *et al.*, (2002) and Zhou and George (2003) who linked EI as being important to team effectiveness with positive implications on performance. This also extends on the work of Rosete *et al.*, (2005) and Goleman *et al.*, (2013) in showing that EI ability of the leader can not only influence leader performance but also team performance without any direct interventions being applied to the team. This study showed that improving the EI of a leader through EI training and allowing the leader to design and work through the AR process can improve team performance. It also showed that a combination of EI and AR within a team improves motivation, confidence and enthusiasm, without the need for investment in more expensive techniques. Therefore it is recommended that future leaders be knowledgeable in EI and AR process. Collectively EI and AR are invaluable tools that are easy to utilise to drive team performance in a cost effective manner. With AR the team inputs their thoughts and concerns when engaging with leaders and hence they have a feeling of contributing to their own development and key issues and they feel more empowered and involved.

The key objectives of this study are summarised as follows:

Objective One: Could a Leader's Emotional Intelligence be improved through a Leader-Lead AR Process Aimed at Improving Team Performance?

This study frames the AR process in the context of EI. This is evident in the establishment of EI awareness in the Leader as part of the study and the continuation of this awareness in the

interventions as part of the AR process. Whether the same or similar increase in EI can be achieved with the AR process without the focus on EI awareness is unknown. There is not a wealth of information on this specific topic, linking EI and the AR process. It is therefore recommended that further work be done into the relationship between EI and AR, specifically into the manner in which the AR process is conducted and its implications on the EI of the person leading the process.

Objective Two: Could a Leader's EI have an Impact on a Leader's Performance?

This objective considered whether there would be an impact in leader performance with any increase in leader EI from those who participated in the AR process. More work is needed to determine if the resultant increase in EI is dependent on the interventions of the AR process, or just the AR process itself.

Objective Three: Could a Leader's EI Ability have an Impact on Team Performance?

This study is based on the perceived increase in each of the five abilities that make up EI. The weighting of the five abilities to understand an overall EI score was outside the scope and was not clearly defined in this study. Further work is required to understand if a specific level of performance could be correlated to a specific EI rating.

CONCLUSIONS

It is suggested that an intensive, study be conducted into understanding what causes varying degrees of improvement in EI of participants when exposed to the same AR interventions. Understanding the limiting factors and catalysts would create the optimum condition to ensure maximum benefit in EI of any person subjected to the AR process with the hopes of increasing EI and deriving the associated benefits of improved performance. While the study could show that there was a change in EI ability, quantifying a person's EI ability was not possible. Further research into the possibility of quantifying EI ability is recommended.

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