EMOTIONAL INTELLIGENCE & TEAM PERFORMANCE: DOES TRAINING MATTER?

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ABSTRACT

In recent years, significant research has been conducted exploring the outcomes of emotional intelligence for individuals, groups and organisations. The research presented in this paper adds to this growing body of knowledge by exploring whether emotional intelligence can be increased through training; what type of interventions increase emotional intelligence; and what performance benefits result. Utilising an experimental methodology, we studied the effects of an interpersonal skills training program and an emotions focussed intervention in a large public sector organisation. Results demonstrate that, while performance improved for both training interventions, only the emotions focussed training program increased emotional intelligence. We conclude with a discussion of the implications of our research for research and practice.

Key Words: Emotional Intelligence, Interpersonal Skills, Performance, Training

INTRODUCTION

Over the past decade, studies examining emotions in the workplace have become commonplace in organisational research (Ashkanasy & Daus, 2005). Leading organisational scholars now agree that research into emotions in the workplace is central to increasing our understanding of individual work motivation (George & Brief, 1996; Isen & Baron, 1991; Weiss & Cropanzano, 1996), organisational behaviour (Smith & Sharma, 2002), change (Carr, 2001), performance (Barsade, Ward, Turner, & Sonnenfeld, 2000), and stress (Styhre, Ingelgard, Beausang, Castenfors, & et al., 2002). In line with this general focus on emotions research, the relatively new construct of emotional intelligence has been proposed as a concept that may impact performance in organisations (Elfenbien, 2006; Jordan, Ashkanasy, Härtel, & Hooper, 2002).

In the workplace, a range of emotions including jealousy, happiness, love, hate, anger (Fitness, 2000; Marcic, 1997), shame (Bagozzi, Verbeke, & Gavino, 2003), envy (Patient, Lawrence, & Maitlis, 2003), enthusiasm (Lewis, 2000), and fear (Ashkanasy & Nicholson, 2003) are experienced. The presence of emotions can lead to various positive outcomes on work performance including: increased creativity; a focus on justified threats; and questioning of past assumptions (Caruso & Salovey, 2004). Negative consequences such as anger and rage can also impede performance (James, 2002), however. At present, there are few training interventions that deal specifically with how we engage with emotions at work and how emotions can improve performance (Day & Carroll, 2004).
Research conducted over the last decade has attempted to bridge this gap. Writers have predicted that individuals with high emotional intelligence perform better in all aspects of their work (Cherniss & Adler, 2000; Goleman, 1998; Mayer & Salovey, 1997). This in turn has increased organisational focus on emotions and, in particular, has led to a diverse range of training that has been defined as ‘emotional intelligence training’. The purpose of the present research is therefore threefold; to examine: (1) whether emotional intelligence can be improved through training; (2) what type of training increases emotional intelligence; and (3) to what extent can improvements in emotional intelligence lead to increased individual and team performance in the workplace? This research provides and important implications for research and practice and contributes to the growing body of literature in this area.

**EMOTIONAL INTELLIGENCE**

Emotional intelligence was first proposed in the management literature by Salovey and Mayer in 1990. Over the last fifteen years, the construct has become immensely popular, resulting in the construct being discussed in news magazines, (Goleman, 1998), professional magazines (Druskat & Wolff, 2001), books (Cherniss & Adler, 2000; Murphy, 2006), and academic journals (Ciarrochi, Chan, & Caputi, 2000; Côte & Miners, 2006). This interest has, however, led to a series of differing definitions of the construct being proposed (Ashkanasy & Daus, 2002; Mayer, Salovey & Caruso, 2000).

On the whole, however, the definition proposed by Mayer and Salovey (1997) is recognised as providing the definitive model of the emotional intelligence construct because it differentiates emotional intelligence from traits and focuses on a narrow set of emotional skills (Jordan, Ashkanasy, & Härtel, 2003; Ashkanasy & Daus, 2002). According to Mayer and Salovey (1997:5) emotional intelligence includes “the ability to perceive accurately, appraise, and express emotion; the ability to access and or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual...
growth”. This definition is now widely referred to as the Four-Branch Model of emotional intelligence (Mayer, Salovey, Caruso, & Sitarenios, 2001).

The first branch of the Four-Branch Model is the accurate appraisal and expression of emotion or emotional awareness. This includes both emotional self-appraisal as well as the ability to perceive the emotions of others (Caruso & Salovey, 2004). Emotional assimilation, otherwise known as facilitation of emotion, is the second branch, and describes an individual’s ability to generate emotions appropriate to completing tasks; for instance generating enthusiasm during a brainstorming session (Mayer, 2001). The third branch is understanding emotions (or emotional knowledge). This factor highlights an individual’s ability to understand emotions that aid intellectual and interpersonal growth (Mayer & Salovey, 1997). The fourth branch pertains to regulating or managing emotions to assist with problem solving. Clearly, unmanaged emotions can compromise effective decision-making (Zhou & George, 2003). This ability includes the control of own emotions, as well as the ability to regulate the emotions of others (Mayer & Salovey, 1997).

**Emotional Intelligence Training Research**

To date, little research has been undertaken to investigate the impact of emotional intelligence training on performance. Two pieces of research however, that move us closer to understanding this association are the work conducted by Jordan et al. (2002) and Slaski and Cartwright (2002, 2003). In the Jordan et al. (2002) study, 448 undergraduate students took part in an interpersonal skills program conducted over a fourteen-week period. The results of this study showed that teams with the lowest average emotional intelligence significantly improved their process effectiveness and their goal focus over the training period. There were no significant changes in performance for the high emotional intelligence teams (Jordan et al., 2002).

Slaski and Cartwright (2002, 2003) studied 120 retail managers from one retail chain. The managers were divided into a control group of 60 and a training group of 60 who were provided with an intervention that was framed upon Cherniss and Adler’s suggestion for training emotional intelligence
Results indicated that the emotional intelligence scores of the training group increased significantly from pre- to post-training. In terms of performance however, there were no significant increases in performance between the training and control group. The researchers attribute this result to the organisational measure of performance used, which focused more on the cognitive competencies, rather than emotional competencies (Slaski & Cartwright, 2003).

Jordan and his colleagues’ (2002) study demonstrates that low emotional intelligence teams increased their performance through training in interpersonal skills; performance in teams with higher emotional intelligence remained constant, however. What is particularly important about this study is that the training interventions were simple interpersonal skills with no emotional intelligence skills included. The results of the Slaski and Cartwright (2003) study provides evidence to support the idea that emotional intelligence can be improved through training interventions; their study revealed no improvement in performance, however. The research we report here will extend and combine the research conducted by Jordan et al (2002) and Slaski and Cartwright (2002, 2003) by examining the impact of interpersonal skills (Study 1) on the emotional intelligence and performance of organisational work teams; and examining whether emotional intelligence training (Study 2) can lead to increases in both task and contextual performance and emotional intelligence.

**Performance**

As more organisations look to make use of work teams to meet organisational outcomes (Beyerlein, Freedman, McGee, & Moran, 2003) managers are constantly looking for ways to improve team performance. Authors have argued that there is a link between emotional intelligence and work team performance should be explored in depth (Druskat & Pescolido, 2002). Within this study, two aspects of job performance will be examined. These are task performance and contextual performance (Borman & Motowidlo, 1993). Task performance involves activities that enable organisations to run efficiently and effectively (Motowidlo & Van Scotter, 1994; Van Scotter, Motowidlo, & Cross, 2000). On the other hand, contextual performance comprises interpersonal facilitation and job dedication (Van Scotter & Motowidlo, 1996). Interpersonal facilitation is defined as “deliberate acts that improve
morale, encourage cooperation, remove barriers to performance, or help co-workers perform their task-oriented job activities” (Van Scotter & Motowidlo, 1996: 526). Job dedication is concerned with behaviours related to self-discipline, and includes following organisational regulations and using initiative to solve work related problems (Van Scotter & Motowidlo, 1996).

The links between emotional intelligence and both contextual and task performance emerge from the relational nature of working in teams (Jordan et al., 2002). If teams rely on personal interactions to achieve goals (West, 1994), then variables that contribute to better relationship skills will enhance their performance. Mayer and Salovey (1997) note that the abilities linked to emotional intelligence contribute to enhanced relational skills.

**Control Group Study**

To ensure that any changes found in the Study 1 or Study 2 were the result of training rather than any other issue, we conducted a control group study. Control group (no training) data were collected at three points in time at approx. 6-month intervals. At Time 1, there were 327 respondents (response rate = 58.39%), at Time 2, 263 respondents (46.96%), and at Time 3, 227 respondents (40.54%). Across all three survey periods, the age range of participants was from 17 to 63, with a mean age of 39.43 years. In each survey, approximately 60% were male. Ninety-nine surveys were matched to participants across the three collections. The measures used were the Workgroup Emotional Intelligence Profile (Jordan et al., 2002) as described in Study 1 and a self reported measure of performance. Analysis of these data revealed no significant changes in emotional intelligence or self reported contextual performance measures over this time period.

**STUDY 1: INTERPERSONAL SKILLS TRAINING**

Research demonstrates that teams outperform individuals (West, 1994). Improvements in team performance are of great interest to managers, and there is evidence that organisations are moving to more team based structures (Beyerlein, Freedman, McGee, & Moran, 2003). Interpersonal skills such as supportive communication, conflict resolution, and goal setting have been shown to assist
individuals in teams to overcome interpersonal barriers to performance (Brannick, Salas, & Prince, 1997). Therefore, if interpersonal skills training improves these skills, then this training should also enhance the task and contextual performance skills of work teams. If this is the case then:

*Hypothesis 1: Training work teams in basic interpersonal skills will lead to increases in task and contextual performance.*

Interpersonal skills training can be utilised to improve skills in basic communication, conflict resolution, and goal setting skills (Dick, 1991). Although these skills do have emotional elements, training in interpersonal skills does not focus on emotions per se but rather on practical training of skills. This type of training, however, is often offered to increase individual and team emotional intelligence (Clarke, Callister & Wallace, 2003). If interpersonal skills training does not involve specific emotional ability training, then it should not increase emotional intelligence, because these interventions do not specifically focus upon increasing awareness, facilitation, understanding, and management of emotions (Mayer & Salovey, 1997). We therefore propose a null hypothesis that:

*Hypothesis 2: Training in basic interpersonal skills will not lead to increases in the emotional intelligence of work teams.*

Despite some researchers opposing the acceptance the null hypothesis (see Greenwald, 1993), Frick (1995) contends that the null hypothesis should in some cases be accepted. This study is one particular case where accepting the null hypothesis is justified. Frick (1995) argues the null hypothesis is appropriate to disprove commonly held beliefs that may not be true. Testing the null hypothesis enables researchers the opportunity to ensure resources are not wasted on non-effective activities (Cortina & Folger, 1998; Frick, 1995).

**Method**

**Sample**

The sample for Study 1 was drawn from a single large public sector organisation and consists of management, administration and professional teams. Over a two year period, 108 employees were randomly allocated into 21 work teams that participated in the training program. Eighty-one of these
participants then returned to the half-day follow up with 81 participants completing a pre- and post-
training survey. The age of participants ranged from 18 to 61, with a mean age of 40 years, and 55.6% of participants being male.

**Procedure**

Prior to attending the training intervention, participants were asked to complete a self-report measure of emotional intelligence entitled the “Emotions in the Workplace Survey”. This measure was then repeated after participants had attended a half day follow-up training session. At the beginning of each training session, participants were asked to complete a decision making task first as individuals and then as teams. Scores were obtained from the outcome of the task as well as observer ratings of performance. The training interventions undertaken in study 1 comprise of a range of interpersonal skills as prescribed by (Dick, 1991). Specifically, the three areas of supportive communication, conflict resolution, and goal setting (Carlopio, Andrewartha, & Armstrong, 1997; Locke & Latham, 1990; Ruble & Thomas, 1976) form the basis of the training intervention. The interpersonal skills were outlined and imparted through participative interventions to work teams through one full day of training, followed two weeks later by a half-day follow up training session.

**Measures**

*Emotional intelligence*. This was assessed across both studies using the Workgroup Emotional Intelligence Profile – Version 6 (WEIP-6: Jordan, 2000). This measure was chosen because it is validated and widely published, and is the only available measure to examine emotional intelligence in teams. The WEIP-6 consists of 36 items ($\alpha = .93$) and employs a 7-point Likert-type response format that ranges from 1 (strongly disagree) to 7 (strongly agree) for items that encourage individuals to reflect on their own and others’ behaviours within a work team environment. The measure captures emotional intelligence within two scales that conform to Mayer and Salovey’s (1997) definition of the emotional intelligence construct, designed for specific use in a workplace setting (Jordan et al., 2002). The first scale is entitled ‘Ability to Deal with Own Emotions’ (Scale 1) and contains nineteen items ($\alpha = 0.90$). ‘Ability to Deal with Others’ Emotions’ (Scale 2) is the second scale and contains
seventeen items ($\alpha = 0.86$). The two scales were significantly correlated at $r = .81$, $p < .01$. The WEIP-6 measure has a test retest reliability of 0.87 over two weeks.

Scale 1 (Ability to Deal with Own Emotions) is further delineated into 3 sub-scales. Subscale 1, entitled ‘Awareness of Own Emotions’ (Perception, $\alpha = .81$), measures an individual’s emotional awareness. ‘Ability to Discuss Own Emotions’ is a five item subscale that measures how an individual articulate the emotions they experience (Knowledge/Assimilation $\alpha = .86$). ‘Application of Own Emotions to Facilitate Thinking’ (Facilitation, 9 items, $\alpha = .81$) is the third subscale contained within Scale 1.

Scale 2 (Ability to Deal with Others’ Emotions) can also be delineated into 3 further sub-scales. Subscale 4 is entitled ‘Ability to Recognise Others’ Emotions’ (Perception, 4 items, $\alpha = .77$). ‘Ability to Detect False Displays of Emotion’ (perception $\alpha = .77$) is the fifth subscale and contains five items. Finally, Subscale 6 is entitled ‘Ability to Manage Others’ Emotions’ (regulation/management $\alpha = .81$) and comprises of eight items.

Based on an examination of the inter-item correlations and the Cronbach alphas in each of the studies, the measure of emotional intelligence was deemed to be both valid and reliable for this study and consistent with previous findings. Subscales were then summed to provide mean composite scores for each of the scales and subscales measured.

**Task performance.** In Study 1, individuals and teams completed a survival exercise (Human Synergistics, 2004) at pre-training and further survival exercise (National Aeronautics & Space Administration, 2004) post-training. Such performance activities have been shown in previous research to be both valid and reliable measures of individual and team performance (e.g. Jordan & Troth, 2004). For each activity, individual and team actual task performance scores were collected on a scoring sheet and compared to determine performance improvements.
Observed Performance. During the performance exercise, teams were observed by trained observers to assess task and contextual performance. For each performance activity in Study 1, 3 observers spent 5 minutes observing and rating each team as they completed the exercise. Observers completed a common instrument ($\alpha = .75$) using a 5-point Likert-type scale response format to assess both task (Sample Item –“This team developed goals early”) and contextual performance (Sample item “The members of this team listened to others opinions”) of teams.

Results

The purpose of Study 1 was to determine whether training in basic interpersonal skills increased the performance and emotional intelligence of participants. Table 1 provides the results of paired samples t-tests of differences in emotional intelligence from pre to post-training. This table reveals no significant change between the pre-test and post-test for total emotional intelligence and the two scales ‘Ability to Deal with Own Emotions’ and ‘Ability to Deal with Others’ Emotions’. In addition, there were no changes in all of the remaining subscales except for the subscale ‘Ability to Discuss own Emotions’. A calculation of effect size using Cohen’s d (1988) calculation was also undertaken to provide a further measure of the practical and theoretical significance (Pallant, 2005). When calculating Cohen’s d an effect size of greater than 0.2 is small, 0.5 is medium, and 0.8 a large effect size (Cohen, 1988). As can be seen in Table 1, all effect sizes were less than the minimum cut off for a small effect size except for ‘Ability to Discuss own Emotions’ (d = 0.36).

Measures of performance were also incorporated pre and post training. The actual task performance of both individuals and teams was captured by way of simple calculations of individual and team errors when compared to expert ratings of performance. Analysis showed that teams ($M = 41.09; S.D. = 9.49$) performed at a significantly higher level than individuals ($M = 55.02; S.D. = 9.42$; $t = 9.08, p < 0.01; d = 1.12$) at pre-test (note lower means indicate a score closer to the expert performance rating and therefore, higher performance). The results at post test showed similar results with team ($M = 31.29; S.D. = 6.81$) performing significantly better than individuals ($M = 39.69; S.D. = 7.25; t = 7.50, p < 0.01; d = 1.08$). Finally, the results of the team observations of task and contextual performance
are also presented in Table 1. These results demonstrate significant improvements in both aspects of team performance from pre to post training.

Table 1

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean Pre-training</th>
<th>Mean Post-training</th>
<th>Mean Diff.</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dealing with Own Emotions</td>
<td>4.98</td>
<td>4.88</td>
<td>0.10</td>
<td>1.76</td>
<td>0.08</td>
<td>0.20</td>
</tr>
<tr>
<td>Awareness of Own Emotions</td>
<td>5.20</td>
<td>5.19</td>
<td>0.01</td>
<td>0.13</td>
<td>0.90</td>
<td>0.01</td>
</tr>
<tr>
<td>Discuss Emotions</td>
<td>4.46</td>
<td>4.10</td>
<td>0.36</td>
<td>3.25</td>
<td>0.01</td>
<td>0.36</td>
</tr>
<tr>
<td>Facilitate Emotions</td>
<td>5.16</td>
<td>5.14</td>
<td>0.02</td>
<td>0.27</td>
<td>0.79</td>
<td>0.03</td>
</tr>
<tr>
<td>Dealing with Others’ Emotions</td>
<td>4.74</td>
<td>4.65</td>
<td>0.09</td>
<td>1.55</td>
<td>0.12</td>
<td>0.17</td>
</tr>
<tr>
<td>Recognise Others’ Emotions</td>
<td>4.86</td>
<td>4.86</td>
<td>0.00</td>
<td>0.03</td>
<td>0.98</td>
<td>0.00</td>
</tr>
<tr>
<td>Detect False Emotions</td>
<td>4.60</td>
<td>4.46</td>
<td>0.14</td>
<td>1.91</td>
<td>0.06</td>
<td>0.20</td>
</tr>
<tr>
<td>Manage Emotions</td>
<td>4.76</td>
<td>4.65</td>
<td>0.11</td>
<td>1.53</td>
<td>0.13</td>
<td>0.17</td>
</tr>
<tr>
<td>WEIP-6 Total</td>
<td>4.84</td>
<td>4.88</td>
<td>0.10</td>
<td>1.84</td>
<td>0.07</td>
<td>0.20</td>
</tr>
<tr>
<td>Observed Task Performance</td>
<td>3.58</td>
<td>2.63</td>
<td>0.96</td>
<td>10.81</td>
<td>&lt;0.01</td>
<td>1.58</td>
</tr>
<tr>
<td>Observed Contextual Performance</td>
<td>3.93</td>
<td>3.11</td>
<td>0.82</td>
<td>10.60</td>
<td>&lt;0.01</td>
<td>1.55</td>
</tr>
</tbody>
</table>

**Discussion**

Hypothesis 1 explored whether interpersonal skills interventions improve the task and contextual performance of work teams. In the case of both tasks, teams performed the decision-making task significantly better than individuals working alone and teams improved from pre- to post-training. Task performance and contextual performance observations also improved significantly. These results suggest that training in interpersonal skills increases the task and contextual performance of teams. Thus, Hypothesis 1 was supported.

While the results of Study 1 showed that interpersonal skills training resulted in increases in actual task as well as observed task and contextual performance, there were no changes in overall emotional intelligence, although there was a significant increase in one sub-construct, “Ability to Discuss Emotions”. We note that this may have been due to the fact that all activities within the training focussed on team discussion of issues, which included consideration of feelings. Based on these findings, Hypothesis 2 was also supported.

**STUDY 2: EMOTIONAL INTELLIGENCE SKILLS TRAINING**

Whereas the first study focused on interpersonal skills, the aim of Study 2 was to test the efficacy of training emotional intelligence its impact on team performance. If teams rely on relational interactions
to achieve goals (West, 1991), then variables that contribute to improved relational skills should enhance the performance of teams. Mayer and Salovey (1997) argue that the set of abilities linked to emotional intelligence contribute to enhanced relational skills. If a training program focussed on these specific abilities, we hypothesise that:

\[ H3: \text{Training in specific emotional skills and abilities will increase emotional intelligence.} \]

According to Conway (1999), task performance behaviours centre around ability and experience; when this performance is team based performance, however, the extent to which these abilities and experience emerge are a product of how well the team interacts together (Brannick et al., 1997). Jordan and Troth (2004) found that emotional intelligence contributed to the performance of teams in decision-making tasks. Contextual performance is also dependent these working relationships (West, 1991) and improved working relationships have been shown to be an outcome of high emotional intelligence (Mayer & Salovey, 1997). Thus, or final hypothesis is:

\[ H4: \text{Training emotional intelligence skills and abilities will improve the task and contextual performance of work teams.} \]

Method
Sample
The sample for Study 2 consisted of 264 employees who, over a period of eighteen months, attended a two day emotional intelligence skills training program. Individuals were randomly allocated into 44 work teams and had an average age of 42.6 years (ranging from 19 to 63 years) with 44.9% being female. One hundred and eighty-eight employees returned to the half day follow-up training and 161 participants completed a pre and post training survey. The average age of this group was 43 years (ranging from 19 to 61 years) with 42.9% being female.

Procedure
Prior to attending either training intervention participants were asked to complete a self-report measure of emotional intelligence entitled the “Emotions in the Workplace Survey”. This measure was then repeated after participants had attended a half day follow-up training session. At the beginning of
each training session, participants were asked to complete a decision making task first as individuals and then as teams. Scores were obtained from the outcome of the task as well as observer ratings of performance. The framework for the emotional intelligence training program was based upon Mayer and Salovey’s (1997) four branch model of emotional intelligence. First, the trainers identified specific work skills and abilities that relate to the four branch model. Once this was achieved a two-day training intervention was constructed, incorporating a selection of work related emotional intelligence skills. A range of skills were facilitated including: emotional disclosure (Ekman, 2004); emotional contagion (Barsade, 2002; Kelly & Barsade, 2001); emotional progressions (Mayer et al., 2001); and emotional resiliency (Bagshaw, 2000). The training intervention comprised two full training days, followed two weeks later with a half day refresher session. Details of training intervention have been reported previously (Murray & Jordan, 2004).

Measures

*Emotional intelligence*. This was again assessed using the Workgroup Emotional Intelligence Profile – Version 6 (WEIP-6: Jordan, 2000). The measure performed as described in Study 1.

*Task Performance*. The performance exercises in Study 2 comprised a managerial in-box task (Leigh & Kinder, 2001) at pre-training, and an organisational downsizing exercise (Harvey & Brown, 1996) post-training. Each performance task contained an individual and team component. For each activity, individual and team actual task performance scores were collected on a scoring sheet and compared to determine performance improvements.

*Observed Performance*. During the performance exercise, teams were observed by trained observers to assess task and contextual performance. The observers completed the same performance measure outlined in Study 1.

Results

Table 2 presents the results of the paired-samples t-tests for the pre- and post-measures of emotional intelligence as measured by the WEIP-6. Significant increases were found in the overall WEIP-6, the
two subscales and the sub-constructs of ‘Ability to Discuss Emotions’, ‘Ability to Recognise Others’ Emotions’, ‘Ability to Detect False Displays of Emotion’ and ‘Ability to Manage Others’ Emotions’. A measurement of Cohen’s $d$ also provided evidence of the magnitude of change which occurred from pre to post training. Small effect sizes were calculated for overall emotional intelligence ($d = 0.24$), the subscale of ‘Ability to Deal with Others’ Emotions’ ($d = 0.27$), and the sub constructs ‘Ability to Discuss Emotions’ ($d = 0.30$), ‘Ability to Recognise Others’ Emotions’ ($d = 0.20$), and ‘Ability to Manage Others’ Emotions’ ($d = 0.26$).

### Table 2

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Mean Post-training</th>
<th>Mean Pre-training</th>
<th>Mean Diff.</th>
<th>t</th>
<th>p</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deals with Own Emotions</td>
<td>5.10</td>
<td>5.01</td>
<td>0.09</td>
<td>2.15</td>
<td>0.03</td>
<td>0.17</td>
</tr>
<tr>
<td>Awareness of Own Emotions</td>
<td>5.33</td>
<td>5.22</td>
<td>0.11</td>
<td>1.68</td>
<td>0.09</td>
<td>0.13</td>
</tr>
<tr>
<td>Discuss Emotions</td>
<td>4.57</td>
<td>4.33</td>
<td>0.25</td>
<td>3.82</td>
<td>0.00</td>
<td>0.30</td>
</tr>
<tr>
<td>Facilitate Emotions</td>
<td>5.27</td>
<td>5.28</td>
<td>-0.01</td>
<td>-0.16</td>
<td>0.89</td>
<td>-0.01</td>
</tr>
<tr>
<td>Deals with Others’ Emotions</td>
<td>4.85</td>
<td>4.70</td>
<td>0.15</td>
<td>3.43</td>
<td>0.01</td>
<td>0.27</td>
</tr>
<tr>
<td>Recognise Others’ Emotions</td>
<td>5.00</td>
<td>4.84</td>
<td>0.17</td>
<td>2.48</td>
<td>0.01</td>
<td>0.20</td>
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<tr>
<td>Detect False Emotions</td>
<td>4.58</td>
<td>4.45</td>
<td>0.13</td>
<td>2.14</td>
<td>0.03</td>
<td>0.17</td>
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<td>Manage Emotions</td>
<td>4.93</td>
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<td>0.15</td>
<td>3.27</td>
<td>0.01</td>
<td>0.26</td>
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<td>WEIP-6 Total</td>
<td>4.98</td>
<td>4.86</td>
<td>0.12</td>
<td>3.07</td>
<td>0.01</td>
<td>0.24</td>
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<td>Observed Task Performance</td>
<td>3.18</td>
<td>2.61</td>
<td>0.57</td>
<td>6.56</td>
<td>&lt;0.01</td>
<td>1.04</td>
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<tr>
<td>Observed Contextual Performance</td>
<td>3.61</td>
<td>3.06</td>
<td>0.55</td>
<td>7.38</td>
<td>&lt;0.00</td>
<td>1.07</td>
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</tbody>
</table>

Performance data collected during the emotional intelligence training were analysed in the same way as the interpersonal skills data. Paired-samples t-tests were conducted on the overall task performance scores to determine by how much actual individual and team performance differed. As with the interpersonal skills group, teams ($M = 38.10; S.D. = 11.07$) performed the actual task at a significantly higher level than individuals ($M = 43.66; S.D. = 12.18; t = 6.09, p = 0.00: d = 0.48$) at pre-test (note lower means demonstrates a score closer to the expert rating). The post-test results showed that teams ($M = 7.55; S.D. = 3.89$) performed the task significantly better than individuals ($M = 10.99; S.D. = 5.69; t = 7.71, p = 0.00: d = 0.71$). In addition, the team observations of task and contextual performance presented in Table 2 also show a statistically significant increase and effect sizes in observer rated team task and contextual performance from pre-training to post-training.
**Discussion**

In Hypotheses 3, we proposed that emotional intelligence training interventions would increase the overall emotional intelligence of Study 2 participants. Our results indicate significant increases in overall emotional intelligence and specifically in the subscale ‘Ability to Deal with Others’ Emotions’. Although only small effects were indicated, this outcome is still meaningful in light of the fact that after only two and a half days of training, the teams reported changes in their emotional intelligence skills and abilities. Additionally, when the results are compared to the control group sample (no change in this period), it is likely that the changes in emotional intelligence reported for the intervention occurred as a result of the training intervention and not because of other organisational factors. Therefore, Hypothesis 3 was supported.

Finally, in Hypothesis 4 we proposed that emotional intelligence training improves actual task performance and observational ratings of task and contextual performance of work teams. Average scores for the pre- and post-training performance activities were calculated to determine actual task performance scores of individuals and teams. These scores were then compared to expert ratings of task performance. In both instances, teams performed significantly better than individuals working alone. While this was expected, we note that the effect size was far greater post-training than pre-training. While there are a number of interpretations for this result, we argue that the effect was greater post-training because of the effect emotional intelligence training had on team interactions. Indeed, the results of observational ratings of task and contextual performance (Table 4) show that observed task performance and contextual performance increased significantly from pre- to post-training. Based on this evidence, the data also support Hypothesis 4.

**LIMITATIONS**

We acknowledge that there are a number of limitations to our study, and in particular, the use of a self-report measure of emotional intelligence. While we have provided a rationale for the use of the WEIP in this study, there remains a possibility that the increase in emotional intelligence may have occurred towing to a ‘feel good’ factor. While we acknowledge this possibility we also note that in examining
all of the data for both studies – including the independent observer ratings and the control group results – we are confident of a positive effect from the emotional intelligence training. A further area that we plan to improve upon in the future is in the observational ratings of task performance. While we gained fair agreement between observers, we would seek in future studies to make sure that observers are clear about the rating scales prior to assessing performance tasks.

Finally, while we have been able to determine that an overall set of training interventions increases the emotional intelligence of individuals and the performance of teams within organisations, we have not been able to identify which of these individual interventions provide the greatest impact. Therefore, training in specific abilities to partial out the effect of these specific abilities on each of the four branches of emotional intelligence would be beneficial.

IMPLICATIONS AND CONCLUSION

There are several implications for the results of this study. Firstly, this study provides evidence that improvements in emotional intelligence can be achieved through specific emotions focused training interventions developed around Mayer and Salovey’s (1997) four branch model of emotional intelligence and not from basic interpersonal skills training. These findings contribute to the current emotional intelligence training efficacy debate. This has important implications for both organisations and our understanding of emotional intelligence.

Our study also demonstrates that performance can be improved through the provision of interpersonal skills and emotional intelligence interventions. These results have significant implications for practice, especially when organisations are increasingly using training packages to improve performance. As organisations come to realise that increasing emotional intelligence not only improves the relational and behavioural aspects of work, but is also a predictor of performance, the presence of these types of training interventions will continue to increase.
REFERENCES


