Impact of the Intensive Program of Emotional Intelligence (IPEI) on work supervisors

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Abstract

Background: This study aimed to evaluate the effect of the Intensive Program of Emotional Intelligence (IPEI; Fernández, 2016; Férreo, 2016) on middle managers’ emotional intelligence, as this variable may have a significant impact on personal satisfaction, task performance, and the work environment. Method: The intervention was applied to work team supervisors in a large call center, as it is an overlooked sector in this topic. Two-hundred and eighty-two supervisors from a Madrid-based, Spanish multinational (51.4% men and 48.6% women) participated in this study. Participants were assigned to the experimental group (n = 190) or the control group (n = 282) by availability, according to management decision. All supervisors filled in two questionnaires to evaluate the different components of emotional intelligence intrapersonal (i.e., attention, clarity, and repair; TMMS-24; Fernández-Berrocal, Extremera, & Ramos, 2004) and cognitive and affective empathy (i.e., perspective taking, emotion understanding, empathic joy, and personal distress; TECA; López-Pérez, Fernández, & Abad, 2008). Results: The findings showed an increase in the studied variables for the experimental group. Conclusions: The results obtained support middle managers’ training in emotional competences through short, efficient programs. Potential limitations and implications of the results are discussed.

Keywords: Emotional intelligence, empathy, educational intervention program, management training, work psychology.

General intelligence is a good predictor of job performance and it has been widely used in personnel selection (Schmidt & Hunter, 1998; 2004). However, it is not a strong predictor of other key variables such as successful and effective leadership (Lappalainen, 2015; Rosete & Ciarrochi, 2005) and appropriate stress coping skills (Singh & Sharma, 2012). In fact, general intelligence only accounts for 25% of the variance in job performance (Goldstein, Zedeck, & Goldstein, 2002), leaving a high percentage of variance unexplained. This led researchers to consider other potential variables that may account for the remaining variance, such as emotional intelligence (EI). Lam and Kirby (2002) conducted one of the first systematic studies to compare the variance explained by both general intelligence and EI, finding that EI accounted for an additional percentage of variance not explained by general intelligence. This is further supported by a meta-analysis conducted by Joseph, Jin, Newman and O’Boyle (2015) who showed that EI was a strong predictor of job satisfaction, and performance and successful leadership. These results indicated not only the important role of EI as a predictor of job performance but also the independence between general intelligence and EI (MacCann, Joseph, Newman, & Roberts, 2014).

Despite the existence of different theoretical models (Fernández-Berrocal & Extremera, 2006), EI can be defined as...
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different abilities to perceive, understand, and regulate one’s own and others’ emotions (Mayer & Salovey, 1997; Mayer, Salovey, & Caruso, 2001). Emotion perception consists of being able to accurately decode one’s own and others’ emotions through facial and body expressions, as well as emotions that may be present in different stimuli (i.e., paintings evoking different emotional states in the viewer) (Mayer et al., 2001). Emotion understanding consists of comprehending how basic emotions can evolve into complex emotions by blending, how emotions may be affected by different contextual factors, and what emotions may be more prototypical depending on the context (Mayer & Salovey, 1997). In addition, emotion regulation encompasses modifying one’s own and others’ emotions (Salovey & Mayer, 1990).

From this theoretical perspective, EI can be modified with the appropriate training to enhance individuals’ emotional skills (Caruso, Salovey, Brackett, & Mayer, 2015). In fact, higher scores on emotion regulation have been linked to high quality social relationships and subjective well-being (John & Gross, 2004). Furthermore, emotion perception, understanding, and regulation have been described as important predictors of personal and social adjustment (Sánchez-García, Extremera, & Fernández-Berrocal, 2016).

Multiple studies have shown how EI and its different components may predict significantly efficient performance at work. For instance, different authors highlighted the need to improve emotional skills in organizations not only to increase job performance but also to improve affect and attitudes at work (Lopes, Grewal, Kadis, Gall, & Salovey, 2006), and to create a more pleasant work environment (Cooper & Sawaf, 1997). Further studies supported this by showing how EI not only had a positive impact at a personal and interpersonal level but also in the individuals’ job performance (Landy & Conte, 2016). Furthermore, higher levels of EI have been linked to better mental health, more engagement, less stress, less aggressive behavior and higher work satisfaction in employees (Harvey & Dashborough, 2006; Schute & Loi, 2014), and better attitudes to work and better performance in middle managers (Sinha & Kumar, 2016). The beneficial role of EI in the work environment has been explained due to the moderating role of EI in buffering the effect of job-related stressors (Guy & Lee, 2015).

Many authors have suggested that EI can be improved through appropriate training (Bar-On & Parker, 2000; Bisquerra, 2011). However, despite the important role of EI in job satisfaction and performance, most intervention programs in the organizational setting have been developed without a solid theoretical background and only few have been tested (Nellis, Quoidbach, Mikolajczak, & Hansenne, 2009). For instance, Sluski and Cartwright (2003) conducted an intervention program showing that an improvement in EI had a positive effect in employees’ well-being, performance, and stress levels. Eichmann (2009) developed and evaluated a training program for managers with a 10-week duration showing a significant increase in the levels of EI. Groves, McEnrue, and Shen (2008) found out similar results with an 11-week EI training program. In Spain, most intervention programs have been developed in the educational setting (Blanco, 2007). To the best of our knowledge, so far there is not a single program available developed, applied, and evaluated in Spain in the organizational domain. Although the previously mentioned programs could be translated into Spanish, most of them involve training during an extended period, making the application difficult and more importantly less efficient (i.e., with employees and managers leaving their job to take part in the intervention), and therefore costlier (Cherniss & Goleman, 2003). Short intervention programs have proved successful in the educational domain (Ambrosa, López-Pérez, & Márquez-González, 2012; Pool & Quilter, 2012), suggesting that the same principle may apply to intervention programs carried out in organizations. In fact, a 32-hour program applied in Romania to improve IT engineers’ socio-emotional skills has proved successful showing an improvement in the levels of EI in the experimental group (Vaida, 2015).

The present research aimed to test and evaluate the Intensive Program of Emotional Intelligence (IPEI). The IPEI aimed to enhance intrapersonal emotion perception, understanding, and regulation and interpersonal understanding (i.e., empathy and its different components) in a short time framework (i.e., 16 hours in three consecutive days). The program meets the standards of the Servicio Público de Empleo Estatal (2016) and the Consortium for Research on Emotional Intelligence in Organizations (2015). When developing the program, we also considered the following criteria suggested by Álvarez (2001): theoretical background, intervention targets, needs assessment, definition of intervention strategies, aim and objectives, trainers, content, time sequence for implementing the training, activities, and sources for evaluation. The program consisted of 32 eminently practical exercises, grouped into three modules. All the exercises were explicitly or implicitly aimed at promoting the skills proposed by Mayer and Salovey (1997): perception, understanding, and emotional self-regulation, both at an intrapersonal (module 1) and interpersonal level (modules 2 and 3). The first module, entitled “Emotional Intelligence” was aimed at raising awareness of the importance of the emotions and their appropriate regulation in professional contexts. The second module, entitled “Empathy”, addressed the most interpersonal aspect of EI and it is intended to facilitate learning on how to handle situations with others, giving importance to the others’ points of view. The goal of the third module, entitled “Relational Skills”, was to reduce emotional barriers to communication and facilitate understanding of successful social interactions. To standardize program implementation and ensure replicability, each exercise was described in every detail with specific application guidelines (Fernández, 2016; Férez, 2016).

The IPEI was administered to middle managers in a big call center to test whether there may be an increase in the intrapersonal emotion perception and regulation, and intra- and interpersonal emotional understanding of those middle-managers who participated in the intervention program (i.e., experimental group) compared to those who did not take part (i.e., control group).

Method

Participants

A total of 282 supervisors (51.4% men and 48.6% women) participated in this study, of whom 52.1% were aged over 35 years old, 50.7% had received a university education, 53.3% had been working in their post for over 4 years, and 56.5% had been working in the sector for over 8 years. This group was recruited in a multinational company with headquarters and various call center facilities located in Madrid (Spain).

The initial group comprised 300 participants, all middle managers working as supervisors in the company, and responsible

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for teams of eight to ten professional operators. Participants were divided into two groups: an experimental group, composed of supervisors who took part in the intervention program (the Intensive Program of Emotional Intelligence, IPEI), and a control group which did not participate in the program. Selection and formation of the control (92) and experimental (190) groups was decided by senior managers in the company. Both groups completed all the questionnaires in the pretest and 3-month follow-up phases of the study.

**Instruments**

**Trait Meta-Mood Scale - 24** (TMMS-24; Fernández-Berrocal et al., 2004). This 24-item questionnaire was used to evaluate the different components of intrapersonal EI [i.e., attention (α = 0.90), clarity (α = 0.90), and mood repair (α = 0.86)] in a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

**Cognitive and Affective Empathy Test** (TECA; López-Pérez et al., 2008). This 33-item questionnaire was used to assess empathy (α = 0.86) and its different components [i.e., perspective taking (α = 0.70), emotion understanding (α = 0.74), personal distress (α = 0.78), and empathic joy (α = 0.75)] in a 5-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

**Procedure**

First, approval was obtained from senior managers in the company, who were informed of the protocol. Supervisors in the experimental group were divided into 10 intervention groups with about 20 participants each. Each intervention lasted 16 hours spread over three workshops, which were held on three consecutive days. Workshops 1 and 2 lasted 4 hours each, delivered on separate, consecutive days. Workshop 3 lasted 8 hours and was delivered on the third day. All workshops were led by two trainers (university specialists in EI). The IPEI intervention sessions were delivered over a total period of six months between late 2013 and early 2014. Data collection was conducted with a three-month interval between the pre-test and the follow-up phases. The trainers received a three-days training before implementing the program.

Sessions with the 10 experimental groups were held in a previously agreed room that offered all the necessary material conditions, on three consecutive days in a week and with an approximately 15-day interval between one intervention group and another. Before starting the first workshop, questionnaires were administered as a pretest measure in the experimental and control groups. After the final workshop participants were administered a questionnaire on the perceived quality of the program and its delivery. The control group consisted of about 10 participants for each intervention group. At all times, the confidential and voluntary nature of participation was respected, and the study adhered to the criteria of the ethics committee of the company and the Complutense University of Madrid.

**Data analysis**

Data analysis was performed using SPSS v.19. Statistical hypothesis testing was performed by an Analysis of Covariance (ANCOVA).

**Results**

Before running the main and specific statistical analyses, we checked for possible age and gender differences between the groups. The results showed that the experimental (Mage = 37.19; 97 men and 93 women) and the control (Mage = 37.55; 48 men and 44 women) groups did not differ in age (?2(282) = .29, p = .77) or gender (¿2(1, N = 282) = .03, p = .86).

A one-way ANCOVA was conducted to test a statistically significant difference between the intervention and control groups on the follow-up scores of attention, clarity, and repair, after controlling for the pre-test scores in attention, clarity, and repair, respectively. For attention, the results showed a significant effect of the covariate pre-test score in attention (F(1, 278) = 4.17, p = .01, \( \eta^2 = .02 \)) and more importantly, and effect of the group condition on the follow-up score in attention after controlling for the pre-test score in attention (F(1, 278) = 16.54, p ≪ .01, \( \eta^2 = .06 \)). For clarity, the results showed a significant effect of the covariate (F(1, 278) = 10.57, p = .001, \( \eta^2 = .04 \)) and an effect of the group condition on the follow-up score in clarity after controlling for the pre-test score (F(1, 278) = 14.61, p = .01, \( \eta^2 = .05 \)). Finally, for clarity, the results showed a significant effect of the covariate (F(1, 278) = 27.57, p = .001, \( \eta^2 = .09 \)) and an effect of the group condition on the follow-up score in repair after controlling for the pre-test score (F(1, 278) = 15.43, p ≪ .01, \( \eta^2 = .05 \)).

A one-way ANCOVA was conducted to test a statistically significant difference between the intervention and control groups on the follow-up scores of perspective taking, emotion understanding, empathic joy, and personal distress, after controlling for the pre-test scores in perspective taking, emotion understanding, empathic joy, and personal distress, respectively. For perspective taking, the results showed a significant effect of the covariate pre-test score in perspective taking (F(1, 278) = 109.71, p = .001, \( \eta^2 = .28 \)) and more importantly, and effect of the group condition on the follow-up score in perspective taking after controlling for the pre-test score (F(1, 278) = 17.85, p ≪ .01, \( \eta^2 = .06 \)). For emotion understanding, the results showed a significant effect of the covariate (F(1, 278) = 320.99, p < .001, \( \eta^2 = .54 \)) and the group condition after controlling for the covariate (F(1, 278) = 6.12, p = .01, \( \eta^2 = .02 \)). For empathic joy, the results showed a significant effect of the covariate (F(1, 278) = 172.81, p < .001, \( \eta^2 = .38 \)) and the group condition after controlling for the covariate (F(1, 278) = 23.28, p = .001, \( \eta^2 = .08 \)). And for personal distress, the results showed a significant effect of the covariate (F(1, 278) = 306.84, p < .001, \( \eta^2 = .52 \)) and the group condition after controlling for the covariate (F(1, 278) = 43.6, p = .04, \( \eta^2 = .02 \)).

Finally, the data about participants’ satisfaction showed that participants were very satisfied with both the program (M = 4.32, SD = 0.51) and the trainers (M = 4.45, SD = 0.53), in a 5-point Likert scale ranging from 1 = not satisfied at all to 5 = extremely satisfied.

**Discussion**

The present study aimed to evaluate the efficacy of the IPEI program to enhance middle managers’ intrapersonal emotion perception and regulation and intra- and interpersonal emotion understanding. It is important to acknowledge that the program was carried out as initially planned and it was positively perceived by those who took part as well as by senior managers. This is
key, as previous research has shown the importance of having a positive perception of the training program as this may affect the program efficacy (Baldwin & Ford, 1988; Lim & Morris, 2006).

To evaluate the program's efficacy we compared whether there were differences in the follow-up scores between the experimental and the control groups, controlling for the pre-test scores. Results showed a significant difference between the experimental and the control groups for all the variables, such that middle managers who participated in the program reported higher levels of intrapersonal emotion perception, understanding, and regulation, as well as higher perspective taking, interpersonal emotion understanding, empathic joy, and personal distress. The effect sizes were mostly satisfactory (medium and large), and only in a few cases were small.

It is important to bear in mind that high levels of emotion perception (Extremera & Fernández-Berrocal, 2005) and personal distress (Batson, 2011) may not always be beneficial as they have been linked with tension and neuroticism (Extremera & Fernández-Berrocal, 2005) and emotional rumination (López-Pérez & Ambra, 2015), respectively. Thus, future research may need to investigate whether the increase in the levels emotion perception and personal distress entail positive personal and interpersonal consequences. Despite this, the results are similar to the ones obtained by Fernández (2015) who previously applied the program to undergraduate students, showing an enhancement in the students' levels of intrapersonal emotion perception, understanding, and regulation. Thus, the obtained results support Bisquerra's (2011) and Salovey's and Mayer's (see Caruso et al., 2015) approaches to the study of EI as they indicated that EI can be improved through training programs.

The obtained results have important implications for training emotional competences in the organizational domain as previous research has shown that higher levels of interpersonal EI are positively related to better job performance, higher job satisfaction, better mental health, and more engagement (Schutte & Loy, 2014; Sinha & Kumar, 2016; Slaski & Cartwright, 2003), whereas higher levels of interpersonal EI are positively related to a more pleasant work environment and a highly effective leadership (Joseph et al., 2015). Therefore, we could expect that our program may have a positive impact not only at an individual level but also at a wider level. This idea is supported in previous research which has shown how at an individual level, employees with higher EI are easier to work with and create a more positive environment (Salovey & Grewal, 2005). At an interpersonal level, previous research has found that higher EI scores are related to more cooperation, and more positive relationships (Schutte et al., 2001), as well as better team work (Druskat & Wolff, 2001).

We only evaluated the obtained effects three months after the application of the program. Therefore, we cannot assume whether the effects will hold for longer. Therefore, future research should be conducted from a longitudinal approach to assess whether the obtained effects are present in the long-term. Furthermore, the assignment to the different groups was not random and therefore, the obtained results may be due to other variables. Future research should be conducted by making a random allocation to the different groups.

The evaluation was conducted relying on self-report measures (e.g., TMMS-24) rather than on ability measures (Mayer-Salovey-Caruso Emotional Intelligence Test, Mayer et al., 2001). Given that self-reports may present different biases such as social desirability, future research should consider the inclusion of performance measures. Besides, future research may benefit by considering other variables related to job performance such as job satisfaction to evaluate whether the effects of the program may have an effect in other relevant variables in the organizational domain. Finally, a main limitation of the study is that the control group was passive, whereas the experimental group engaged in different activities. Therefore, the obtained effects may be explained by the Hawthorne effect (e.g., Adair, 1984) or the experimental group knowing they were part of the program. Therefore, we cannot assume whether the effects will hold for longer. Therefore, future research should be conducted from a longitudinal approach to assess whether the obtained effects will last it seems a promising step in the development and evaluation of short EI intervention programs in the organizational domain.

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<table>
<thead>
<tr>
<th>Variable</th>
<th>CG Pretest</th>
<th>CG Follow-up</th>
<th>EG Pretest</th>
<th>EG Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>TMMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention</td>
<td>24.73</td>
<td>25.34</td>
<td>25.13</td>
<td>25.79</td>
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<tr>
<td>Clarity</td>
<td>29.52</td>
<td>30.01</td>
<td>29.10</td>
<td>30.13</td>
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<td>Repair</td>
<td>31.41</td>
<td>31.76</td>
<td>31.42</td>
<td>31.65</td>
</tr>
<tr>
<td>TECA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perspective Taking</td>
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<td>29.21</td>
<td>29.33</td>
<td>29.80</td>
</tr>
<tr>
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<td>30.19</td>
<td>30.78</td>
<td>31.11</td>
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<tr>
<td>Personal Distress</td>
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<td>21.88</td>
<td>22.46</td>
<td>22.92</td>
</tr>
</tbody>
</table>

Note: CG = Control Group; EG = Experimental Group

Table 1
Mean and standard deviation of the different TMMS and TECA scales in the pretest and follow-up phases

The IPEI has shown a significant improvement in middle-managers’ intrapersonal emotion perception and regulation and intra- and interpersonal emotion understanding in a short period. Although it is still early to know for how long the obtained effects may last it seems a promising step in the development and evaluation of short EI intervention programs in the organizational domain.


