Enhancing emotional competences in the context of unemployment: a longitudinal analysis of the effects on well-being and employability

Sabina Hodžic

To cite this version:

HAL Id: tel-01877128
https://tel.archives-ouvertes.fr/tel-01877128
Submitted on 19 Sep 2018

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L’archive ouverte pluridisciplinaire HAL, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d’enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.
ENHANCING EMOTIONAL COMPETENCES IN THE CONTEXT OF UNEMPLOYMENT. A LONGITUDINAL ANALYSIS OF THE EFFECTS ON WELL-BEING AND EMPLOYABILITY

DOCTORAL DISSERTATION

by Sabina Hodžić

Supervisors:
Pilar Ripoll Botella, PhD
Franck Zenasni, PhD

Valencia, 2015
First of all, I would like to thank my two supervisors, Pilar Ripoll and Franck Zenasni for their immense help and support for the elaboration of this doctoral thesis. Thank you for sharing your knowledge and experience with me and guiding me through this challenging process.

A big gratitude I owe to the people who participated in this research and who were willing to invest their time and energy to take part in the intervention process. Without them, it would be impossible to conduct this research.

I would also like to thank Jose María Peiró and all the members of the Research Institute of Personnel Psychology, Organizational Development and Quality of Working Life (IDOCAL), for providing the environment for young researchers to develop professionally and personally.

I thank my fellow PhD colleagues (some of them already doctors) for sharing with me the good and the bad moments and for letting me learn and grow with them.

A special thanks I owe to my mother, my family and my friends for their much needed support and encouragement to start and finish this journey. I would also like to thank Petar for his unconditional patience, help and support and for always motivating me to reach my goals.

Finally, I would like to dedicate this thesis to my father who, I know, would have been very proud of me.
### Contents

SUMMARY........................................................................................................... 1
RESUMEN ............................................................................................................. 7
RÉSUMÉ.............................................................................................................. 13

1. GENERAL INTRODUCTION ............................................................................. 19

2. EMOTIONAL INTELLIGENCE (EI): CONCEPTUAL DELIMITATION, THEORETICAL APPROACHES AND EVALUATION ................................................................. 25
   2.1 History of Emotional Intelligence ........................................................... 31
       2.1.1 From social to emotional intelligence ............................................ 32
       2.1.2 New Theories of intelligence of the 1980’s .................................... 35
       2.1.3 Inter-individual Variability in Emotions ....................................... 39
   2.2 Definition(s) and Description(s) of Emotional Intelligence ....... 40
       2.2.1 Theoretical approaches to EI ....................................................... 43
   2.3 Evaluation of Emotional Intelligence .................................................. 59
       2.3.1 Ability measures ....................................................................... 60
       2.3.2 Self-report measures .................................................................. 64
       2.3.3 Other-Report measures ............................................................... 66
   2.4 Discriminant validity of EI ................................................................. 71

3. THE EFFECTS OF EI ..................................................................................... 75
   3.1 Cognitive and performance-related outcomes ................................. 78
   3.2 Health and well-being ................................................................. 81
       3.2.1 Direct effects of EI on well-being ............................................ 81
       3.2.2 The moderating role of EI for well-being and health related outcomes ......................................................................................................................... 86
       3.2.3 Potential role of EI in the context of unemployment ............... 89

4. PLASTICITY OF EI ......................................................................................... 97
   4.1 Training programs in EC ................................................................. 101
       4.1.1 Increasing the level of EC ......................................................... 103
       4.1.2 Various Outcomes ................................................................. 106

5. SUMMARY AND AIMS OF THE STUDY ..................................................... 121
6. METHOD.............................................................................................................129
   6.1 Design........................................................................................................... 131
   6.2 Sample and Procedure ................................................................................ 131
   6.3 EC intervention .............................................................................................. 134
   6.4 Measurement instruments ............................................................................ 137
       6.4.1 Control Variables .................................................................................. 137
       6.4.2 Pre and post measures of EC ............................................................... 138
       6.4.3 Dependent variables ............................................................................ 138
   6.5 Data analysis .................................................................................................. 147

7. STUDY 1. THE EFFECTS OF EMOTIONAL COMPETENCES TRAINING AMONG UNEMPLOYED ADULTS: A LONGITUDINAL STUDY........................................149
   7.1 Abstract........................................................................................................... 151
   7.2 Introduction .................................................................................................... 153
   7.3 Method............................................................................................................ 156
   7.4 Results ............................................................................................................ 162
   7.5 Discussion....................................................................................................... 168

8. STUDY 2. CAN INTERVENTION IN EMOTIONAL COMPETENCES INCREASE EMPLOYABILITY PROSPECTS OF UNEMPLOYED ADULTS?........................................173
   8.1 Abstract........................................................................................................... 175
   8.2 Introduction .................................................................................................... 177
   8.3 Method............................................................................................................ 182
   8.4 Results ............................................................................................................ 186
   8.5 Discussion....................................................................................................... 195

9. STUDY 3. CAN CHANGE IN EMOTIONAL COMPETENCES (EC) PREDICT CHANGES IN POSITIVE PSYCHOLOGY CONSTRUCTS? EVALUATING THE EFFECTS OF EC TRAINING ..............................................201
   9.1 Abstract........................................................................................................... 203
   9.2 Introduction .................................................................................................... 205
   9.3 Method............................................................................................................ 210
Since the first writings about Emotional Intelligence (EI) it was believed that EI is linked with and can predict important life outcomes (Salovey & Mayer, 1990). Evidence shows that EI is related to and can predict variety of cognitive and behavioural outcomes, such as academic and work performance, decision-making, career development, career adaptability and employability. (Di Fabio & Palazzeschi, 2009; Di Fabio, Palazzeschi, Asulin-Peretz & Gati, 2013; Fugate, Kinicki & Ashfort, 2004; Joseph & Newman, 2010; Van Rooy & Viswesvaran, 2004). Moreover, numerous studies showed that EI is positively related with psychological and physical well-being and mental health (Martins, Ramalho & Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar & Rooke, 2007).

Besides, recent years yielded numerous EI or Emotional Competences (EC) trainings and intervention programs aimed at increasing the level of EC among different target groups. The general conclusion is that EC interventions are promising and that EC is something that can be improved and developed (Schutte, Malouff & Thorsteinsson, 2013). Furthermore, different cognitive, behavioral and health-related aspects were also increased through EC interventions, proving that, besides EC, important life outcomes can also be successfully improved.

Although the predictive power of EC has been proved in many previous studies, and the results about EC development have been promising, these studies have mainly been focused on privileged populations and contexts. The focus of the present research is to study the effects of the EC intervention in a specific and different context, such as the unemployment context. In this line, the aim of the present study is to examine whether EC can be developed in an unprivileged context.

1 In the present research, the term emotional competences (EC) will be used to demark the individual differences in emotional perception, understanding, use and regulation and to highlight the potential for development and improvement of those competences. This will be explained with more detail in the section about the plasticity of EC.
SUMMARY

population, such as unemployed adults, and whether this improvement can predict improvements in different aspects of unemployed people’s lives. In order to reach this objective three empirical studies have been developed and conducted, following a longitudinal experimental design.

The aim of the first study is to examine whether the training in EC can increase the level of EC of the unemployed participants and if the training effects are moderated by the unemployment duration. Moreover, study 1 pretends to test if changes in EC can predict changes in indicators of physical and psychological well-being, such as perceived stress, somatic complaints, mental health and mood. In the second study, the focus is on employability prospects of unemployed adults and how the EC intervention might improve those prospects in short and long term. More precisely, study 2 examines whether the levels of employability, job search, entrepreneurial self-efficacy and entrepreneurial intention can be improved through the EC intervention and whether these improvements can be maintained six months after the intervention. Moreover, study 2 focuses on an objective indicator of employability as well, testing if the EC intervention affects the actual reemployment success. Finally, study 3 is dedicated to testing one more possible determinant of the intervention effects, job search behavior, and to examining whether changes in EC after the intervention can predict changes in satisfaction with life, optimism, interpersonal relationships and adaptive coping strategies.

In order to reach these research aims, a controlled experimental longitudinal design with one experimental and one control group and three data collection (before the intervention – T1, one month after – T2, and six months after T1 - T3) times was used. The control group completed all the same measures in the same periods as the experimental group. From 212 people who initially applied for the training, 75 were randomly assigned to either experimental (41 participants) or control group (34 participants) and the experimental group went through 2 and half day training. The control group was offered the training after the last data collection. The intervention that was used was a previously tested and validated
intervention by Kotsou and colleagues (Kotsou, Nelis, Gregoire & Mikolajczak, 2011) based on Mayer and Salovey’s four-branch model of emotional intelligence (Mayer & Salovey, 1997; Mayer, Caruso & Salovey, 1999). The general aim of the intervention was to improve emotional competencies and develop effective emotion regulation strategies.

In summary, the results showed a differential impact of the training depending on the unemployment duration and job search behavior. Significant differences were found between experimental and control group among the participants with shorter unemployment duration and more active job search. The results also showed that changes in EC significantly predicted changes in several indicators of physical and psychological well-being and positive psychological strengths - perceived stress, somatic complaints, mental health, two mood dimensions (vigor and confusion), satisfaction with life, optimism, two out of four indicators of the quality of social relationships, as well as problem oriented coping strategies. Furthermore, the intervention had positive effects on self-perceived employability, reemployment success and entrepreneurial self-efficacy, proving the beneficial effect of the EC intervention for employability prospects of unemployed individuals.

The present research provides some promising results about the potential for EC development and the effectiveness of the EC intervention for different life outcomes of unemployed people. Nevertheless, as it is described in the last chapter of the present work, certain limitations of the research need to be considered and addressed in future studies. Besides, the obtained results open the way for some practical implications that can bring some new insight in the area of EC and unemployment research.
RESUMEN
Ya en los primeros escritos sobre Inteligencia Emocional (IE) se creía que la IE está vinculada y que puede predecir resultados importantes de la vida (Salovey y Mayer, 1990). La evidencia muestra que la IE se relaciona y puede predecir resultados cognitivos y de comportamiento, tales como el rendimiento académico y laboral, la toma de decisiones, el desarrollo profesional, la adaptabilidad profesional y la empleabilidad. (Di Fabio y Palazzeschi, 2009; Di Fabio, Palazzeschi, Asulin-Peretz y Gati, 2013; Fugate, Kinicki y Ashfort, 2004; Joseph y Newman, 2010; Van Rooy y Viswesvaran, 2004). Por otra parte, numerosos estudios han demostrado que la IE está positivamente relacionada con el bienestar psicológico y físico y la salud mental (Martins, Ramalho y Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar y Roke, 2007).

Además, en los últimos años se han desarrollado numerosos entrenamientos y programas de intervención, basados en la IE o las Competencias Emocionales (CE), destinados a aumentar el nivel de las CE en diferentes grupos destinatarios. La conclusión general es que las intervenciones en CE son prometedoras y que las CE son algo que puede ser mejorado y desarrollado (Schutte, Malouff y Thorsteinsson, 2013). Por otra parte, diferentes aspectos cognitivos, conductuales y de salud también se incrementaron a través de las intervenciones en CE, lo que demuestra que, además de las CE, los resultados importantes de la vida también pueden ser mejorados con éxito.

Aunque el poder predictivo de las CE se ha demostrado en muchos estudios anteriores, y los resultados sobre el desarrollo de las CE han sido

2 En la presente investigación, el término Competencias Emocionales (CE) será utilizado para demarcar las diferencias individuales en la percepción emocional, la comprensión, uso y regulación emocional y poner de relieve el potencial de desarrollo y mejora de dichas competencias. Esto se explicará con más detalle en la sección sobre la plasticidad de las CE.
prometedores, estos estudios se han centrado principalmente en poblaciones y contextos “privilegiados”. El foco de la presente investigación es estudiar los efectos del entrenamiento en CE en un contexto específico y diferente, como es el contexto de desempleo. En esta línea, el objetivo del presente estudio es examinar si las CE se pueden desarrollar en una población no-privilegiada, como los adultos desempleados, y si esta mejora puede predecir mejoras en diferentes aspectos de la vida de las personas desempleadas. Para alcanzar este objetivo, tres estudios empíricos se han desarrollado y llevado a cabo, siguiendo un diseño experimental longitudinal.

El objetivo del primer estudio es examinar si el entrenamiento en CE puede aumentar el nivel de las CE de los participantes desempleados y si los efectos del entrenamiento son modulados por la duración del desempleo. Por otra parte, el Estudio 1 pretende comprobar si los cambios en las CE pueden predecir cambios en indicadores del bienestar físico y psicológico, como el estrés percibido, las quejas somáticas, la salud mental y el estado de ánimo. En el segundo estudio, la atención se centra en las perspectivas de empleabilidad de los adultos desempleados y en cómo la intervención en CE podría mejorar esas perspectivas a corto y largo plazo. Más precisamente, el estudio 2 examina si los niveles de empleabilidad, la búsqueda de empleo, la autoeficacia emprendedora y la intención emprendedora se pueden mejorar a través de la intervención en CE, y si estas mejoras se pueden mantener seis meses después de la intervención. Por otra parte, el estudio 2 se centra también en un indicador objetivo de la empleabilidad, analizando si la intervención en CE afecta el éxito real de encontrar empleo. Por último, el estudio 3 intenta analizar otro posible factor determinante de los efectos de la intervención, la búsqueda de empleo. Asimismo, el estudio 3 examina si los cambios en las CE después de la intervención pueden predecir cambios en la satisfacción con la vida, el optimismo, las relaciones interpersonales y las estrategias de afrontamiento adaptativas.
Para alcanzar estos objetivos de investigación, se utilizó un diseño longitudinal experimental controlado, con un grupo experimental y un grupo control, y tres periodos de recogida de datos (antes de la intervención – T1, un mes después - T2 y seis meses después de T1 – T3). El grupo control completó las mismas medidas en los mismos períodos que el grupo experimental. De las 212 personas que inicialmente se inscribieron al entrenamiento, 75 fueron aleatoriamente asignadas a uno de los dos grupos - grupo experimental (41 participantes) o grupo control (34 participantes). El grupo experimental completó un entrenamiento de 2 días y medio. Al grupo control se le ofreció el entrenamiento después de la última recogida de datos. La intervención que se utilizó fue previamente probada y validada por Kotsou y colaboradores (Kotsou, Nelis, Gregoire y Mikolajczak, 2011), y está basada en el modelo de cuatro ramas de la IE de Mayer y Salovey (Mayer y Salovey, 1997; Mayer, Caruso y Salovey, 1999). El objetivo general de la intervención era mejorar las competencias emocionales y desarrollar estrategias eficaces de regulación emocional.

En resumen, los resultados mostraron un impacto diferencial del entrenamiento en función de la duración del desempleo y de la búsqueda de trabajo. Se encontraron diferencias significativas entre el grupo experimental y control entre los participantes con menor duración del desempleo y búsqueda de empleo más activa. Los resultados también mostraron que los cambios en las CE predijeron significativamente cambios en varios indicadores de bienestar físico y psicológico y fortalezas psicológicas positivas - estrés percibido, quejas somáticas, salud mental, dos dimensiones del estado de ánimo (vigor y confusión), satisfacción con la vida, optimismo, dos de los cuatro indicadores de la calidad de las relaciones sociales, así como las estrategias de afrontamiento orientadas al problema. Por otra parte, la intervención tuvo efectos positivos en la percepción subjetiva de la empleabilidad, el éxito real en encontrar empleo y en la autoeficacia emprendedora, lo que demuestra el efecto beneficioso de la intervención en CE sobre las perspectivas de empleabilidad de las personas desempleadas.
La presente investigación proporciona algunos resultados prometedores sobre el potencial de desarrollo de las CE y de la eficacia de la intervención en CE para diferentes resultados de la vida de las personas desempleadas. Sin embargo, tal como se describe en el último capítulo de este trabajo, ciertas limitaciones de la investigación deben ser consideradas y abordadas en futuros estudios. Además, los resultados obtenidos abren el camino para algunas implicaciones prácticas que puedan aportar nuevos puntos de vista en el ámbito de investigación sobre las CE y la investigación sobre el desempleo.
RÉSUMÉ
De nombreuses recherches montrent que l'intelligence émotionnelle (IE) permet de prédire différents comportements cognitifs émotionnels et sociaux (Salovey et Mayer, 1990). Ainsi les recherches montrent que l'IE prédit les performances académiques et professionnelles, la prise de décision, le développement de carrière, l'adaptabilité de carrière et l'employabilité (Di Fabio & Palazzeschi, 2009; Di Fabio, Palazzeschi, Asulin-Peretz et Gati, 2013; Fugate, Kinicki & Ashfort, 2004; Joseph & Newman, 2010; Van Rooy et Viswesvaran, 2004). En outre, de nombreuses études montrent que l'IE est positivement liée au bien-être psychologique et physique ainsi que la santé mentale (Martins, Ramalho & Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar & Rooke, 2007).

En outre, de nombreuses formations en IE et des programmes d'intervention impliquant celle-ci ou bien encore les Compétences Émotionnelles (CE) visent à accroître le niveau de CE des différents groupes cibles. Les résultats des études menées montrent que les interventions en CE sont au moins en partie efficaces et que les compétences peuvent être améliorées et développées (Schutte, Malouff & Thorsteinsson, 2013). En outre, les formations en compétences émotionnelles favorisent le développement des composantes cognitives, émotionnelles et comportementales liées à la santé.

Bien que le pouvoir prédictif des CE ait été démontré dans de nombreuses études, ces dernières restent limitées à des populations d’adolescents et étudiants. Notre recherche a pour objectif d’étudier l’impact d’une formation en CE sur une population adulte de personnes en recherche d’emploi. L’objectif est de tester si les

1 Dans la présente recherche, les le terme compétences émotionnelles (CE) sera utilisés pour dénommer les différences individuelles dans la perception, la compréhension, l'utilisation et la régulation émotionnelle et de mettre en évidence le potentiel de développement et l'amélioration de ces compétences. Ceci sera expliqué plus en détail dans la section relative à la plasticité des CE.
compétences émotionnelles peuvent être développées dans une population de non privilégiés, telle que les chômeurs adultes. Par ailleurs nous souhaitons observer si cette amélioration des CE est associée à l'amélioration des différents aspects de la vie des chômeurs. Afin d'atteindre ces objectifs, trois études empiriques ont été développées et menées, basées sur un design d'étude expérimentale et longitudinale.

Le but de la première étude est de tester l’efficacité de la formation en CE en démontrant que celle-ci augmente le niveau de compétence émotionnelle des personnes à la recherche d’emploi et en testant si les effets de la formation sont modérés par la durée du chômage. En outre, l'étude 1 a pour objectif de vérifier que les changements en CE contribuent aux changements des indicateurs de bien-être physique et psychologique, tels que le stress perçu, les plaintes somatiques, la santé mentale et l'humeur. Dans la seconde étude, l'accent est mis sur les perspectives d'employabilité des chômeurs adultes afin de montrer comment l'intervention en CE peut améliorer les perspectives à court et à long terme des personnes sans emploi. Plus précisément, l'étude 2 examine si les niveaux d'employabilité, de recherche d'emploi, d’auto-efficacité entrepreneuriale et d’intention entrepreneuriale peuvent être améliorés et si ces améliorations peuvent être maintenues six mois après la formation. En outre, l'étude 2 se concentre sur un indicateur objectif de l'employabilité et elle permet d'examiner si l'intervention en CE affecte le succès réel de réemploi. Enfin, l'étude 3 a pour objectif de tester si les changements en CE peuvent prédire les changements de satisfaction avec la vie, d'optimisme, des relations interpersonnelles et des stratégies d'adaptation.

Afin d'atteindre ces objectifs de recherche, nous avons conduit une étude longitudinale expérimentale contrôlée avec un groupe expérimental et un groupe contrôle et impliquant trois temps de collecte de données (avant l'intervention - T1, un mois après - T2 et six mois après T1 - T3). Le groupe contrôle a complété les mêmes mesures que le groupe expérimental et ce durant les mêmes périodes. Des 212 personnes qui ont initialement postulés pour faire la formation, 75 ont été
retenues et assignées, aléatoirement, au groupe expérimental (41 participants) ou au
groupe de contrôle (34 participants). Les participants du groupe expérimental ont
donc reçu une formation de 2 jours et demie. Les personnes du groupe contrôle ont
reçu la formation seulement après la dernière collecte de données. La formation qui
a été utilisée était une intervention préalablement testé et validé par Kotsou et ses
collègues (Kotsou, Nelis, Grégoire & Mikolajczak, 2011) sur la base de modèle à
quatre branches de l'intelligence émotionnelle de Mayer et Salovey (Mayer et
Salovey, 1997; Mayer, Caruso et Salovey, 1999). L'objectif général de
l'intervention était d'améliorer les compétences émotionnelles et d’élaborer des
stratégies efficaces de régulation des émotions.

Les résultats ont montré des effets différentiels de la formation en fonction
de la durée du chômage et de recherche d'emploi. Des différences significatives ont
été trouvées entre le groupe expérimental et de contrôle parmi les participants
présentant les durées de chômage les plus courtes et une recherche d'emploi plus
active. Les résultats ont également montré que les changements en CE prédisent de
façon significative les changements dans plusieurs indicateurs de bien-être
physiques et psychologiques - le stress perçu, les plaintes somatiques, la santé
mentale, les deux dimensions de l'humeur (de vigueur et de confusion), la
satisfaction avec la vie, l'optimisme, deux des quatre indicateurs de la qualité des
relations sociales, ainsi que des stratégies d'adaptation orientées vers les problèmes.
En outre, l'intervention a eu des effets positifs sur l'employabilité perçue,
l'employabilité réelle et l'auto-efficacité entrepreneuriale, prouvant l'effet
bénéfique de l'intervention en CE sur les perspectives d'employabilité des
personnes sans emploi.

Notre travail de thèse fournit des résultats prometteurs sur le potentiel
développement des CE et de l'efficacité de l'intervention en CE pour les chômeurs.
Néanmoins, certaines limites de notre recherche doivent être considérées et traitées
afin d’affiner les futurs travaux. En outre, les résultats obtenus ouvrent la voie à des
implications pratiques qui peuvent apporter une vision éclairée dans le domaine de recherche sur les CE et de recherche sur le chômage.
1. GENERAL INTRODUCTION
“People who have developed skills related to emotional intelligence understand and express their own emotions, recognize emotions in others, regulate affect, and use moods and emotions to motivate adaptive behaviors. Is this just another definition of a healthy, self-actualized individual?” (Salovey & Mayer, 1990, p. 200).

Since this writing of the pioneers of emotional intelligence (EI), it has become clear that the answer to their question is affirmative. Research on EI yielded significant evidence that EI plays an important role in all domains of life - in school and education, family and partner life and even in organizations. More than 2-decade long investigation in the area of EI has shown that individual differences in the way people perceive, express, use, understand and manage emotions and emotion-related information determine important cognitive, behavioural and emotional responses. Therefore, if EI can have positive effects and bring benefits for variety of life outcomes, it is important to explore to what extent is it possible to develop and enhance this important human strength.

In an attempt to validate the concept of EI, researchers have linked it to numerous cognitive, behavioural and health-related outcomes. At first place, research interest was focused on finding evidence that higher EI was related to better academic performance and work-related outcomes (job performance, job satisfaction, work engagement etc.). Two comprehensive meta-analyses showed that EI is directly related with academic performance (Perera & DiGiacomo, 2013; Van Rooy & Viswesvaran, 2004). Numerous studies have explored links between EI and work performance as well, showing that EI can predict job performance beyond personality traits and cognitive ability (Joseph & Newman, 2010; O’Boyle, Humphrey, Pollack, Hawver & Story, 2011).

Besides academic and work performance, much research effort has been invested in studying the links between EI and decision making, especially in the career development context. Numerous studies have highlighted the role that EI
plays for career decisiveness, career decision-making process and career decision-making self-efficacy (Di Fabio & Kenny, 2011; Di Fabio & Palazzeschi, 2009; Di Fabio et al., 2013; Jiang, 2014). Moreover, EI has been found to contribute to employability and career development in general (Brown, George-Curran & Smith, 2003; Coetzee & Harry, 2014; Dahl, Austin, Wagner & Lukas, 2008; Puffer, 2011).

Perhaps the most abundant evidence in the literature can be found for health and well-being outcomes of EI. Numerous studies have shown that EI is positively related with various health-related outcomes and that EI can predict these outcomes above and beyond some well-established constructs such as personality dispositions and general intelligence (Burrus et al., 2012; Di Fabio & Kenny, 2012; Martins et al., 2010; Schutte, et al., 2007; Zeidner, Matthews & Roberts, 2009).

However, when it comes to the effects of EI, there are two main limitations. First, the majority of the studies on the beneficial role of EI use cross-sectional designs. This limits any conclusion on causal relationships between EI and different outcomes. And second, the effects of EI on variety of outcomes have rarely been examined in less privileged groups. In the majority of the previous studies, the effects of EI are tested on students, employees or general population.

Recent years have moved the research focus from examining the effects of EI to exploring the possibility of increasing the level of EI among various target groups. Interventions conducted in different contexts (educational, clinical, organizational) yielded promising results regarding the potential for EI development. Training programs designed to enhance EI proved to be beneficial for children, students, managers and general population. Furthermore, these programs proved to be beneficial for other health-related outcomes as well – stress reduction, anger management, satisfaction with life, physical and psychological well-being etc. (Schutte, Malouff & Thorsteinsson, 2013).
However, studies on EI interventions also assume two main limitations that have not been addressed. At first place, many of these interventions do not lean on theoretically sound concepts and backgrounds and include other non-EI related constructs. At second place, almost all of the interventions use privileged populations as target groups (students, workers or general population).

One of those unprivileged groups that might benefit from an EI intervention are unemployed adults. Research on unemployment brought abundant amount of evidence that unemployment is linked with impaired physical, psychological and social well-being and that there are certain aspects that can moderate these negative effects of unemployment (McKee-Ryan, Song, Wanberg & Kinicki, 2005; Paul & Moser, 2009). Moreover, recent years brought important advance in research on factors that determine and influence the reemployment success and employability (Fugate et al., 2004; Kanfer, Wanberg & Kantrowitz, 2001; Wanberg, 2012). However, studies that explored the links between EI and well-being during unemployment or the role of EI for reemployment have been scarce. On the other hand, numerous interventions for unemployed people demonstrated that participating in those interventions can help them not only improve their employability prospects and job search skills, but also reduce the negative emotion-related effects of unemployment (Machin & Creed, 2003; Vinokur, Schul, Viori & Price, 2000; Vuori, Price, Mutanen & Malmberg-Heimonen, 2005; Vuori & Vinokur, 2005; Wanberg, 2012). Nevertheless, the main goal of most of the previous interventions for unemployed is reemployment, and therefore they are usually oriented towards enhancing job search skills and other job search related aspects. Using the potential of EI in the context of unemployment has not yet been the subject of any intervention. Besides, not many previous studies focused on factors that might determine the effects of the interventions, although several factors have been identified as moderators of the effects of unemployment on well-being and employability (McKee-Ryan et al., 2005; Paul & Moser, 2009).
GENERAL INTRODUCTION

Summarizing the main findings of the relevant EI and unemployment research (that will be described in more detail in the rest of the present research) several research gaps are being imposed:

- Previous studies showed that EI can be increased in different populations, but can it be in the sample of unemployed adults?
- Unemployed individuals benefitted from variety of interventions in the past but can they benefit from an EI intervention?
- Results from the previous research demonstrated that EI predicts variety of cognitive, behavioural and health-related outcomes among different target groups (children, students, adults, employed individuals), but can it predict these outcomes in an unprivileged population such as unemployed individuals?

These are the main research questions that the present investigation intents to answer using a longitudinal experimental design and an empirically tested and theoretically sound intervention program. In order to answer these research questions, three empirical studies have been conducted following the experimental procedure and using a sample of unemployed adults.

Therefore the general aims of the present research are, at first place, to examine whether the training in EI can increase the level of EI of unemployed participants and if changes in EI can predict changes in physical and psychological well-being. Second, to examine whether the EI intervention can improve employability prospects of unemployed adults in short and long term. Finally, to test what factors might determine the effects of the intervention and whether changes in EI after the intervention can predict changes in several positive psychology constructs.
2. EMOTIONAL INTELLIGENCE (EI): CONCEPTUAL DELIMITATION, THEORETICAL APPROACHES AND EVALUATION
“It is our belief that the adaptive use of emotion-laden information is a significant aspect of what is meant by anyone’s definition of intelligence, yet it is not studied systematically by investigators of intelligence nor included in traditional school curricula. As we have argued, using the emotions as one basis of thinking, and thinking with emotions themselves, may be related to important social competencies and adaptive behaviour.” (Mayer & Salovey, 1997, p. 22).

Emotions have usually been opposed to cognition or ratio and have been studied separately in both philosophy and early psychology studies\textsuperscript{4}. The importance of rationality and reason has been emphasized and glorified since Ancient Greek Philosophers. The dominance of reason over emotions has been present in early psychological writings as well. Emotions have long been considered as inferior to rationality and a part of human nature that undermines development of the mind and cognitive abilities. “Being emotional was not considered smart” (Salovey et al., 2008, p. 534).

However, the view on emotions radically changed after Charles Darwin revealed the functional purpose of emotions in his book The Expression of Emotions in Man and Animals (1872/1965). Darwin argued that human adaptive behavior is stimulated by emotions and that emotions helped build a specific communication system that augmented the survival probabilities of entire species.

\textsuperscript{4} Salovey, Detweiler-Bedell, Detweiler-Bedell and Mayer (2008) mention that Woodworth in his book from 1940 considered intellect and emotions to have different purposes. Terman (1921) is also considered to be one of the early psychologists who considered that emotions do not have place in the conceptualizations of intelligence.
Analyzing expression of different emotions in humans (as well as in some animals), Darwin concluded that different emotions contributed to different adaptive behaviors and actions in the course of many generations (e.g. fear - run away from danger; love and lust – procreation) and became habitual after frequent repetition. This adaptive role of emotions that Darwin described so many years ago can be found in various contemporary models and theories of Emotional Intelligence (EI):

…movements which are serviceable in gratifying some desire, or in relieving some sensation, if often repeated, become so habitual that they are performed, whether or not of any service, whenever the same desire or sensation is felt, even in a very weak degree. (Darwin, 1872, p. 347).

Apart from the adaptive and functional role emotions had through evolution, Darwin emphasized the role of emotions in developing human communication system. Many years after Darwin first recognized the importance of emotions and emotional expression for human communication, researchers and psychologists confirmed and keep confirming this belief:

The power of communication between the members of the same tribe by means of language has been of paramount importance in the development of man; and the force of language is much aided by the expressive movements of the face and body. (Darwin, 1872, p. 354).

We have also seen that expression in itself, or the language of the emotions, as it has sometimes been called, is certainly of importance for the welfare of mankind. (Darwin, 1872, p. 366).
Following the Darwinian Theory, evolutionary psychologists have emphasized the functionality of emotions and their role in human adaptation. This idea contributed to the slow disappearing of the well-known division between emotion and reason. Authors like Ekman (1984), Plutchik (1980) and Izard (1984) supported the evolutionary view on emotions and developed the views on emotions based on Darwin’s original principles. Ekman recognized that some emotional expressions and the antecedents of emotions are basic and universal across cultures (Ekman, 1984). Authors like Plutchik and Izard also considered emotions to have biological and social function in human development. Plutchik’s (1980) functional approach to emotions contemplates emotions as adaptive and complex ensemble of reactions that include the cognitive evaluation of the stimulus and the feeling followed by appropriate reaction. Izard’s differential emotions theory (DET) also supported the idea of innate basic emotions that serve as the motivational force for adaptive development (Izard, 1984; 1992; Izard & Buechler, 1980). Independently of differences in their theoretical conceptualizations of emotions, all of these authors saw emotions as an indispensable tool for adaptation.

Evolutionary or “natural kinds” approach to emotions has been questioned in various modern theories of emotions from Lazarus’s appraisal model to constructivist theory of emotions, which is probably the dominant view on emotions nowadays (Barrett, 2012; Lindquist, 2013).

Lazarus, Kanner and Folkman (1980) argue that emotions are conceived through cognitive appraisal of the stimuli from the environment and that cognitive processes (learning, memory, perception and thought) determine the outline of emotional responses. On the other hand, Averill (1980) supported the functional role of emotions, but another type of functions – social functions. Averill (1980) defined emotions as social constructions that can be understood only including a social level of analysis (besides the psychological and physiological).

Nevertheless, the change of paradigm about emotions as negative and dysfunctional to emotions as intelligent and functional brought by evolutionary
EI: THEORETICAL APPROACHES

Psychology, in a certain way helped to develop the concept of EI and to put it in the center of rigorous scientific research.

Still, the popular and commercial interest in EI and great disagreement in defining the concept, in a certain way, negatively influenced the scientific development of the concept and caused harsh criticism among the researchers in the area. Rapid popularization of the concept among lay people and popular psychology authors enabled the development of a large EI market (tests, courses, books, networks etc.). This made it difficult for the researchers on EI to position it as an important aspect of human functioning in the psychological research.

An additional (and maybe necessary) impetus to EI research was given with the development and popularization of positive psychology and the new wave of psychology of positive human functioning (Nelson & Simmons, 2004). The interest in EI became greater partially due to increased investigative curiosity for relating different personality traits and other psychological characteristics to health and well-being. Defined as “a science of positive subjective experiences that focuses on positive individual characteristics and positive institutions” (Nelson, & Simmons, 2004), positive psychology was a fertile research framework for EI concept to be investigated and validated.

Nevertheless, there are two main influences on the development and establishment of EI in psychology literature. At first place, it is the concept of social intelligence, and at second place, the empirical and clinical findings about inter-individual differences in the way people appraise and express emotions (e.g., alexithymia5) (Parker, Taylor & Bagby, 2001; Taylor & Bagby, 2004). These “historical roots” of EI will be described with more detail in the following sections.

---

5 Alexithymia (in Greek “without words for emotions”) refers to difficulties in understanding, appraising, or verbally describing emotions (Martínez-Sánchez, Ato-García & Ortiz-Soria, 2003; Bagby, Taylor, Parker & Dickens, 2006).
2.1 History of Emotional Intelligence

The concept of Emotional Intelligence (EI) has been a subject of disagreement and discussion among researchers about variety of issues from its distinctiveness and validity to its utility (Mayer, Roberts & Barsade, 2008). Even the first mention of the term and its historical background is being disputed (Landy, 2005; Joseph & Newman, 2010; Mayer et al., 2008). In the literature, the history of EI is usually associated with the concept of social intelligence as it is a common opinion that EI represents a kind of a sequel to social intelligence (Joseph & Newman, 2010). However, as previously mentioned, clinical research on the difficulties in identifying and describing emotions has clearly contributed to clarifying the concept and has influenced the development of the first definitions of EI. The concept of EI became important partially because researchers in the field started observing the individual differences in the way people treat emotions and emotional information.

Some authors argue that EI became a very interesting and popular topic among researchers due to the fact that scientific public was tired with glorification of abstract intelligence (Landy, 2005) and EI was a good way of contradicting a common belief that cognition is exclusively responsible for success and effective behavior (Perloff, 1997). The search for more predictors to better explain human behavior opened a way for more research on EI (Landy, 2005). In this line, interest in finding the factors that determine success in personal and professional life, inspired Daniel Goleman to write a widely popular book *Emotional intelligence* (1995). The increasing investigative interest for EI among both, academic and lay people, began with the popularization of the concept through this book during the 90’s. Some even think that the popular and commercial interest for EI has overcome the academic one (Landy, 2005). Goleman’s model of EI, although widely popular, is also greatly criticized. The main critique refers to the overall importance given to EI in comparison to IQ in determining success in life and
History of Emotional Intelligence

workplace. Goleman’s approach to EI is often called “pseudo-scientific” with much more commercial interest than scientific (Fernandez-Berrocal & Extremera, 2006). However, the concept of EI has a true scientific value and it was developed first through social intelligence concept and then through the empirical observation of the inter-individual differences in the treatment of emotions.

2.1.1 From social to emotional intelligence

As already mentioned, the origins of EI are typically linked to social intelligence. Although some authors suggest that the concept was first introduced by American philosopher John Dewey in the beginning of the 20th century (Landy, 2006; Joseph & Newman, 2010), the first mention of social intelligence is usually attributed to Thorndike (1920). Thorndike distinguished between mechanical, social and abstract intelligence and defined social intelligence as “the ability to understand and manage men and women, boys and girls – to act wisely in human relations” (Thorndike, 1920, p. 228). Still, some authors disagree about rooting EI in Thorndike’s social intelligence (Landy, 2005). Landy (2005) suggests that the theoretical ground for EI should not be searched for or based on Thorndike’s work on three independent intelligences. Landy, and some other authors, believed that Thorndike never tried to elaborate a measure of social intelligence (Zeidner et al., 2009) and he was only concerned about the narrowness of the intelligence measures at that time (Landy, 2005). Even if this was the case, Thorndike’s criticism of the existing intelligence models and acknowledgment of multidimensionality of social intelligence certainly inspired researchers to focus on other factors that might explain success in different domains of human functioning.

After Thordike’s definition, distinct definitions of social intelligence in the literature have been proposed. Moreover, some measurement tools for social intelligence, which included identification of emotion, have been developed. For instance, Gilliland (Gilliland & Burke, 1926) introduced a concept of “sociability” as a synonym of social intelligence and defined a sociable person as an “individual
who has the ability to get on agreeably with his fellow men, who is inclined or adapted for society, who is friendly and above all easy to talk to” (p. 315). Strang (1930) supported Gilliland’s definition of social intelligence and simply defined it as an “ability to deal with people”. The development of the concept was simultaneously followed by the development of one of the first social intelligence tests – the George Washington University Test of Social Intelligence (Hunt, 1926). This test evaluates six aspects of social intelligence: judgement in social situations, memory for names and faces, recognition of mental states from the expression of the face, knowledge of the characteristic behavior of the people, social information and recognition of mental states from words (Hunt, 1926). As can be seen, one of the first social intelligence tests included aspects of today’s definition of EI. More precisely, emotional identification (recognition of mental states from facial expressions and words) was considered as an important domain of social intelligence at the time.

Nevertheless, the development of social intelligence concept did not progress much, because of the problems in separating social intelligence measures from abstract (academic) intelligence measures (Sternberg, et al., 2000). According to Sternberg et al. (2000), social intelligence researchers who used cognitive-verbal measures of social intelligence failed at distinguishing social intelligence from academic intelligence. This led some authors, like Cronbach, to argue that the tests of social intelligence do not bring nothing new and that there is no conceptual difference between social intelligence and academic intelligence (Cronbach, 1972).

Nevertheless, some new attempts in 1980’s tried to revive and evolve the concept of social intelligence. Ford and Tisak (1983), for example, made one of the first attempts to distinguish social from academic intelligence by focusing on the behavioral aspects of social intelligence. They showed that the cognitive measures (that were the dominant type of measure of social intelligence up until then) were not as good predictors of social effectiveness as behavioral measures and that social abilities are partially distinct from academic abilities. One of the most
important implications of Ford and Tisak’s work was the provided rationale for social competences development programs that would enhance competences that are not covered by standard academic programs (Ford & Tisak, 1983). Moreover, the results of their study moved the research focus to different type of measures for assessing social abilities.

Cantor and Kihlstrom, after their detailed review on social intelligence, redefined it in 1987 as individual's fund of knowledge about the social world and social interactions (Kihlstrom & Cantor, 2000). They argued that social behavior is intelligent and that individual differences in social knowledge determines the differences in social behavior (Kihlstrom & Cantor, 2000). Jones and Day (1997) continued further to differentiate between social intelligence and academic intelligence and to understand the cognitive and behavioral aspects of social intelligence. Their conceptualization of social intelligence includes crystalized social knowledge (declarative and procedural knowledge about familiar social situations) and social cognitive flexibility (flexible application of knowledge in new situations). This study, although with several limitations (student sample and measuring method), proved that processes involved in flexible application of knowledge in new social situations are different from the ones involved in solving novel academic problems.

The emphasis on the “context-specific” knowledge (that does not overlap with the abstract or academic knowledge) and the development of behavioral (verbal and nonverbal) measures of social intelligence contributed significantly to separating social from academic intelligence. In addition, the first conceptualizations and measurements of social intelligence included the concept of identification of emotions as part of social intelligence. This opened the way to the further development of EI concept. All of this influenced a certain change in paradigm and caused the appearance of new conceptualizations of intelligence in the 1980’s through Gardner’s and Sternberg’s new views on intelligence.
2.1.2 New Theories of intelligence of the 1980’s

In almost every model of intelligence traces of what is today known as EI can be found (Zeidner et al., 2009). The exception is maybe Spearman’s g factor theory. Spearman argued that one general factor is responsible for all individual differences in cognitive functioning and that it can be measured by all the tasks in an intelligence test (Gardner, 1983; Neisser et al., 1996). The g factor theory is one of the most influential and most accepted theories of intelligence.

Nevertheless, the critics of the g factor (and the psychometric approach in general) and followers of multiple intelligence models criticize the g factor theory as narrow and as neglecting other important aspects of mental ability (Neisser et al., 1996). Gardner’s work about multiple intelligences and Sternberg’s Practical Intelligence were considered new and different from the existing dominating models at the time and embed aspects that today are considered as part of EI in different EI models. Thus, the closer roots of EI in social intelligence can be found in these two intelligence models.

Sternberg (2000) criticized the limited value of academic skills measured by standard IQ tests for the everyday life and the fact that these IQ tests are treated as the unique cause of later success in life. He thus indicated that “the abilities that conventional tests measure are important for school and life performance, but they are not the only abilities that are important” (Sternberg et al., 2000, p. 10).

The Sternberg's “triarchic theory of intelligence” (Sternberg & Detterman, 1986; Sternberg et al., 2000) distinguishes between three types of intelligence – academic, practical and creative intelligence, and focuses on the difference in nature of problems of each of these intelligences. While the academic intelligence is the only aspect covered by typical already existing psychometric tests, practical and creative intelligence refer to applying existing knowledge and thinking in other situations – novel or everyday situations. Sternberg’s practical intelligence is contextual and depends on the individual-environment relationship. This so-called
“street smart” intelligence differs from academic or “book smart” intelligence and may be applied in different domains from school and household to workplace (Sternberg et al., 2000). “It serves to find a more optimal fit between the individual and the demands of individual’s environment, changing (or shaping) the environment, or selecting a different environment” (Sternberg et al., 2000, p. 34). Practical intellectual skills or practical problem solving abilities are skills that people exhibit when solving practical problems. Practical problems are those that are not completely formulated, are poorly defined, are of personal interest, lack necessary information for solution, are related to everyday experience, can have more than one solution and more than one solving method (Sternberg et al., 2000).

In order to successfully solve these problems, one must possess tacit knowledge.

According to Sternberg, tacit knowledge is an important aspect of practical intelligence and determines success in everyday life. Tacit knowledge refers to knowledge gained through personal experience, which is applied in particular situations and has practical value for the person using it (Sternberg et al., 2000). More precisely, it is knowledge acquired with no or little environmental influence (media, people etc.), through engaging in everyday activities and not always conscious. Second, it is procedural, it refers to “knowing how” to do something, rather than “knowing what”. Finally, it is relevant for the practical and personally valued goals. Several aspects of this definition of tacit knowledge can be found in some of the newer descriptions of emotional abilities (as it will be presented later). For example, Mayer & Salovey (1997) emphasized the use of emotional abilities to promote personal and professional growth. Furthermore, Micolajczak’s (2009) description of emotional abilities (opposed to emotional knowledge and emotional dispositions) refers to “knowing how” to apply certain emotional abilities in certain emotion-driven situations.

Gardner, much like Sternberg, challenged the dominant (and according to him limited) view on IQ and the privileged place of verbal and logical-mathematical intelligences in the society. Gardner (as Goleman some years later)
supported the idea that IQ is not the only and exclusive predictor of success in (professional and personal) life. He argued that the spectrum of different skills that are important in life is much wider and that as human beings we are all equipped with this different spectrum of abilities for solving different types of problems. The proof for this multiple intelligences model he found in extreme cases such as partial brain damages or exceptional populations, such as children prodigies or autistic children (Gardner, 1983). Gardner defined intelligence as “the ability to solve problems or to create products that are valued within one or more cultural settings” (Gardner, 1983, p. x). Unlike Sternberg who focused more on the differential processes behind each of the three intelligences, Gardner focused more on domains of interest, and differentiated between seven intelligences - linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal and intrapersonal (Gardner, 1983; 1995. These last two are usually linked with different aspects of today’s conceptualizations of EI.

Interpersonal intelligence addresses the interaction with others, the ability to perceive other people’s feelings, moods, motivation and to communicate effectively with them. According to Gardner (1995), this aspect is the most similar to Sternberg’s practical intelligence. Interpersonal intelligence “permits a skilled adult to read the intentions and desires – even when these have been hidden – of many other individuals and, potentially, to act upon this knowledge – for example, by influencing a group of disparate individuals to behave along desired lines” (Gardner, 1983, p. 239). Examples of high levels of interpersonal intelligence can be found among politicians and religious leaders or in helping professions, such as therapists or counselors (Gardner, 1983). Intrapersonal intelligence, on the other hand, refers to the ability to understand one’s own self, feelings, strengths and weaknesses (Gardner, 1995). Intrapersonal intelligence refers to “the capacity instantly to effect discriminations among these feelings and, eventually, to label them, to enmesh them in symbolic codes, to draw upon them as a means of understanding and guiding one’s behavior” (Gardner, 1983, p. 239). This aspect is
usually very developed in people who can understand their inner experiences very well like writers or therapists (Gardner, 1983).

Later on, Gardner widens this list with more types of intelligences that he considered as important potential for success in life. The most important critique of Gardner’s multiple intelligence model refers to the lack of empirical validation (Gardner, 1995) and inability to properly operationalize each of these types of intelligences (Zeidner et al., 2009). However, various aspects of different newer definitions of EI are reflected in Gardner’s interpersonal and intrapersonal intelligences.

Analyzing Gardner’s theory about multiple intelligences from a more political perspective, it represents a certain utopian idea about potential human equality and possibility to develop, self-actualize, and consequently contribute to better life and well-being. This idea is in accordance with the idea behind eudaimonic approach of well-being (Ryan & Deci, 2001; Ryff & Singer, 2008). However, one of the important implications of Gardner’s alternative view on intelligence is that it is an ability and that it can be learned or improved. Similar idea will be behind the ability model of EI, which will be described later on.

Both Sternberg’s practical intelligence and Gardner’s interpersonal and intrapersonal intelligences include aspects that are embedded in contemporary EI models and frameworks. They both argued intelligence is something that can be developed and enhanced. Both conceptualizations viewed intelligence as environment-dependent and both emphasized the importance of domains and content when defining intelligence.

According to Jones & Day (1997), social, practical and emotional intelligence all share a common view on procedural knowledge, flexible knowledge and multiple solutions for solving problems. When discussing about EI’s roots and antecedents, these examples from the literature provide a good
EI: THEORETICAL APPROACHES

support to the idea that the roots of EI, to some extent, can be found in the concepts of social, inter-personal, intra-personal and practical intelligence.

2.1.3 Inter-individual Variability in Emotions

Although the roots of EI are often placed in Gardner’s social intelligences, or Sternberg’s practical intelligence these authors did not explore more in depth the role of emotions and feelings in these intelligences. In general, these two intelligences focus more on social and practical competences and skills, neglecting skills related to emotional information. The focus of Gardner’s work was more on cognition and the way that understanding others and oneself can be used in everyday life and communication (Goleman, 1995). Sternberg, on the other hand, was more interested in distinguishing academic from practical intellectual skills. According to Mayer and Salovey (1993), however, social intelligence is too broadly defined and therefore lacks discriminant validity. On the other hand, EI is more easily distinguished from academic intelligence because it focuses on emotional content and emotional information (Mayer & Salovey, 1993).

Salovey and colleagues argued that social situations and social difficulties always involve affective information (Salovey et al., 2008). Therefore, in order to understand how people behave and differ in these social situations, it is necessary to move the focus from strictly social skills and include emotional skills and specificity of emotions in social interactions. Apart from this inter-personal aspect of EI, knowledge about own emotions and feelings (intra-personal aspect) is equally important for defining individual differences in emotional experiences (Salovey et al., 2008).

In addition, apart from social intelligence, another related concept influenced the development and definition of EI. Alexithymia, a term coined in the 1970’s by Peter Sifneos (1973) refers to difficulties in processing or understanding emotions and emotional information (Martínez-Sánchez, et al., 2003; Parker et al., 2001). Alexithymia was first investigated in clinical contexts in relation with
people who suffered from different psychological problems, mostly psychosomatic disorders (Parker et al., 2001; Sifneos, 1973). Research on alexithymia proposed that different kind of abilities, that are responsible for processing emotional information, exist and the proof was searched in people who suffered from different psychological problems (Parker et al., 2001; Taylor & Bagby, 2004). Recent trends in research on alexithymia continue to focus on the links between alexithymia and different health-related outcomes (Taylor & Bagby, 2004).

Alexithymia was also mentioned in the first writings about EI and the pioneers in EI acknowledged the similarities between alexithymia and some aspects of EI (Mayer, DiPaolo & Salovey, 1990; Salovey & Mayer, 1990; Salovey, Hsee & Mayer, 1993). More precisely, alexithymia was compared to appraisal and expression of emotions in self and was seen as an extreme end of this emotional appraisal continuum (Salovey et al., 1993). Examples of difficulties in appraising and describing feelings convinced the first researchers on EI that people differ in the way they process emotions and feelings and that this might be measured. From then on, these individual differences were included in the definitions and conceptualizations of EI and as an important domain of EI.

Alexithymia implied a certain integration between cognition and emotion and helped EI gain the status of mental ability, which the authors in the field longed for. As Taylor and Bagby state (2004), a fundamental assumption behind the concept of alexithymia is that it reflects a deficit in cognitive processing of emotions. Moreover, research on alexithymia, in a certain way, separated EI from its “conceptual ancestor” – social intelligence, and opened a way to the development and definitions of the concept.

### 2.2 Definition(s) and Description(s) of Emotional Intelligence

Since the first definitions and descriptions of EI, a large amount of models and theoretical approaches appeared in the literature. Some of the well-known and
EI: THEORETICAL APPROACHES

perhaps most popular definitions will be mentioned in the lines below, organized in chronological order.

Although, it has been discussed much earlier in the context of social intelligence, the term as it is known today - emotional intelligence, is mentioned for the first time by Leuner in 1966 in the context of psychotherapy (although in German). Leuner hypothesized that women who experienced difficulties in accepting their social roles were low in EI and this was caused by early separation from their mothers (see Mikolajczak, 2009 and Zeidner et al., 2009). However, the first mention of EI in English is usually attributed to Payne’s unpublished doctoral dissertation from 1986 where he argued that EI and emotional awareness should be fostered in schools (see Mikolajczak, 2009 and Zeidner et al., 2009).

However, the first ones who gave an official definition and proposed a theoretical model and instruments for measuring EI were Salovey and Mayer (1990). The term intelligence was chosen to make a clear link with social intelligence, EI’s historical roots, and because of the overlap between EI and Gardner’s intrapersonal and interpersonal intelligence (Mayer & Salovey, 1993). Although, at first, the authors define EI as a subset of Gardner’s personal intelligences (Salovey & Mayer, 1990), later on they make a clear distinction between EI and social intelligence. In their first communication about EI, Mayer and Salovey define it as “the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (Salovey & Mayer, 1990, p. 189). A revised definition of EI includes the regulation of emotions as well, and sees it as “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” (Mayer & Salovey, 1997, p. 10). In terms of promoting the concept of EI scientifically, Mayer and Salovey have laid the three fundamental pillars for supporting the scientific research of EI (according to Zeidner et al.,

41
Definition(s) and Description(s) of Emotional Intelligence

They were not only the first ones who defined the concept and proposed a theoretical model, but by trying to find a good measurement of EI, they have placed the research on EI in the field of individual differences (Zeidner et al., 2009).

Just some years after the first Mayer and Salovey´s definition of EI, Bar-On in 1997 (The Emotional Quotient Inventory (EQ-i): Technical manual, as cited in Bar-On, 2006) defined it by encompassing both emotional and social skills. According to Bar-On, this emotional-social intelligence is “a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands” (Bar-On, 2006, p. 14).

At almost the same time, Goleman, defines emotional competence as “a learned capability based on emotional intelligence that results in outstanding performance at work” (Goleman, 1998, p. 28). Goleman´s revised model of EI includes twenty competences organized into four groups or clusters – self-awareness, social awareness, self-management and relationship management (Goleman, 2001).

Petrides and Furnham see EI as a trait and define it as combination of emotion-related self-perceptions and dispositions, at hierarchically lower position than personality trait, assessed through self-report (Petrides & Furnham, 2003; Petrides, Pita, & Kokkinaki, 2007).

There have also been attempts to unify and reconcile different definitions of EI, and find the common facets or aspects that underline them. Therefore, Palmer, Gignac, Ekermans and Stough (2008, p. 22) define EI as “the skill with which one perceives, expresses, reasons and manages their own and others emotions”.

All of the above mentioned definitions (that are only a selected choice of most popular definitions) differ and include conceptually different aspects as part
of EI. However, as Ciarrochi, Chan and Caputi (2000, p. 540) argue, various definitions of EI “tend to be complementary rather than contradictory”. Moreover, some common aspects from these definitions can be extracted. For instance:

- they all denote that people differ in the way they identify, express, understand and manage emotions,
- they all indicate that emotional abilities (can) promote thought and personal or professional development, and
- they all imply that emotional abilities/skills/competences are teachable and learnable.

This first aspect will serve as a guiding definition for the present investigation. More precisely, in the present study, EI is understood as differences in the way individuals identify, express, understand, use and regulate own and others’ emotions.

2.2.1 Theoretical approaches to EI

After the pioneers in the field of EI proposed the first theoretical model (Salovey & Mayer, 1990), many other EI models appeared in the literature. Different EI models focus on different aspects as essential for explaining what EI actually is.

However, nowadays, the most common distinction of theoretical approaches to EI is between EI as a trait and EI as an ability. These two alternative approaches view the nature of EI differently. While the ability approach brings the definition of EI closer to classical cognitive abilities, trait EI approach views EI as emotion-related dispositions determining the way people behave in emotional situations. In addition, the ability EI is usually associated with a more rigorous theoretical background, while trait EI models were conceived as a response to criticism of using self-report measures to measure emotional abilities. As Mikolajczak (2009, p. 26) argues, ability models are “theory driven and then empirically tested”, while trait models are “empirically driven and then theorized”.

43
Besides these two approaches, there are mixed models of EI that include other non-cognitive features such as social skills, motivation, self-esteem or personality aspects. Some authors consider trait EI to be a mixed model, but in the present work mixed models are considered as separate group of EI models that define EI as neither solely ability nor a disposition.

It is important to mention the so-called integrative models of EI as well. These models were conceived as an attempt to reconcile and combine different (sometimes conflictive) theoretical approaches to EI. The aim of these models is to find a common ground for different approaches to EI and complement the shared aspects with important and unavoidable idiosyncrasies of each model.

**Ability vs. Trait approach**

EI as an ability is seen as the interconnection between emotion and intelligence (Mayer, Salovey & Caruso, 2004). The ability models consider EI to be composed from emotionally related specific abilities such as emotional perception, emotional expression or emotional management, among others. One of the most acknowledged and scientifically rigorous ability models of EI is Mayer and Salovey’s *four-branch model of EI* (Mayer et al., 2004; Mayer & Salovey, 1997). According to these authors, EI is an ability just the same as any other cognitive ability and EI conceptualized as an ability and measured with ability test fulfils the necessary requirements to be considered a standard intelligence (Mayer, Caruso & Salovey, 1999). More precisely, EI can be conceptually operationalized as a set of abilities, the abilities of each branch are inter-correlated and it develops with time (Mayer et al., 1999). The four branch model of EI includes four hierarchically organised areas (or group of abilities) considered to be the essence of EI: 1) perception, expression and appraisal of emotions, 2) use of emotions, 3) understanding and reasoning about emotions and 4) emotional management or regulation of emotions (Mayer et al., 2004; Mayer & Salovey, 1997). The first area refers to individual differences in accurately perceiving and expressing own and others’ emotions and distinguishing one emotion from another. The second branch,
use of emotions, focuses on applying emotions and emotional information in assisting the thought process and facilitating thought and actions. In other words, using or generating emotions in function of better thinking, decision-making or motivation. The third area refers to understanding the cause of emotions, the relationship between different emotions and how they change and/or blend over time. Finally, the fourth level of EI includes abilities related to down-regulating negative emotions and enhancing positive ones, and being able to manage emotions in others too.

Mayer and Salovey, as the pioneers in the research of EI, have tried to develop specific instruments for measuring EI according to their theoretical approach and model of EI. Since they thought of EI as a form of intelligence, one of the first measures of EI (Multifactor Emotional Intelligence Scale - MEIS) attempted to imitate cognitive ability tests and was a performance-based measure, similar to intelligence tests (Mayer & Salovey, 1999; Mayer et al., 1999). MEIS was one of the first ability-based tests used and published (Mayer, Salovey & Caruso, 1997; see Extremera, Fernandez-Berrocal, Navas & Bozal, 2004; Matthews, Zeidner & Roberts, 2002; Mayer et al., 1999). Based on the first Mayer and Salovey’s EI model (Salovey & Mayer, 1990), this scale had 402 items, grouped into 12 different tasks (4 tasks each for emotional identification and understanding emotions and two tasks each for assimilation of emotions and managing emotions).

An improved version of the MEIS, MSCEIT- Mayer-Salovey-Caruso Emotional Intelligence Test (Mayer, Salovey & Caruso, 2002, Extremera et al., 2004; Matthews et al., 2002; Mayer, Salovey, Caruso & Sitarenios, 2001, 2003) was designed to measure the four branches of the new Mayer and Salovey’s EI model – perceiving emotions, facilitating thought, understanding emotions and managing emotions (Mayer & Salovey, 1997). The test contains 141 items organized in eight tasks (two tasks for each branch) and uses two scoring systems – expert and consensus-based. There is significant evidence that MSCEIT showed
Definition(s) and Description(s) of Emotional Intelligence

good psychometric properties and theoretically supported factor structure (Mayer et al., 2003).

Different ability measures of EI (that will be presented in the following chapter) were developed later on as well. However, due to practical reasons and the fact that it is difficult to objectively measure intrapersonal emotional states, some authors chose to assess individual differences in EI through self-report measures (Schutte et al., 1998). This is an important critical point in the development of the EI concept, because researchers started using self-report measures (that were typically used in personality assessment) to measure a concept that was conceptualized as ability. This critical point, in a certain way, helped in determining the nature of EI and in defining it, because it inspired the idea about another different (but equally accepted) conceptualization of EI – the trait approach.

Soon after Mayer and Salovey’s four branch model, Petrides and Furnham introduced the trait perspective and defined EI as a trait or disposition (Petrides & Furnham, 2001). According to the trait perspective, EI represents a combination of emotion-related dispositions at hierarchically lower position than personality trait (Petrides et al., 2007). Trait EI (or trait emotional self-efficacy⁶) belongs to the personality domain, it includes behavioral dispositions and self-perceived abilities and it should be measured through self-report measures (Petrides & Furnham, 2001). In an attempt to develop a comprehensive measure of trait EI (Trait

---

⁶ In order to overcome the criticism directed to trait EI, Petrides and Furnham (2003) proposed to rename trait EI into emotional self-efficacy. However, others have argued that those two constructs are not synonyms because trait EI includes other aspects besides emotional self-efficacy (Kirk, Schutte & Hine, 2008). According to Kirk et al. (2008) emotional self-efficacy is one of the aspects of trait EI.
EI: THEORETICAL APPROACHES

Emotional Intelligence Questionnaire – TEIQue), Petrides and Furnham (2001) gathered and synthesized elements of existing EI models and theories (and related constructs) and developed a “sampling domain” of trait EI (Petrides, 2011). This sampling domain consisted of 15 facets grouped into four factors or dimensions: well-being, self-control, emotionality and sociability.

Many previous studies have confirmed that different EI measures reflect and assess different characteristics of the construct confirming the division between trait and ability EI (Austin, 2010; Brackett & Mayer, 2003; Choi & Kluemper, 2012; Joseph & Newmann, 2010; Livingstone & Day, 2005). These studies confirm, in a certain degree, that EI is not a unitary construct and cannot be narrowly defined. Therefore, in order to overcome some of the weaknesses of ability and trait EI, other models, such as mixed and integrative models of EI, appeared in the literature.

Mixed models of EI

Besides the ability and trait models, there are certain models of EI that include other psychological features like social abilities, motivation or personality traits, in order to get a better insight on individual differences in handling emotional information and the knowledge about emotions. These models of EI are usually denominated mixed model approaches, and refer to whether a model includes just cognitive abilities or mixes other non-cognitive features as well (Mayer, Salovey & Caruso, 2000). The most known mixed – model approaches to EI are Goleman’s model of emotional competences and Bar-On’s emotional-social intelligence model.

Bar-On’s Emotional Social Intelligence (ESI) model was, like Petrides and Furnham’s trait EI, developed to support the already existing measure of EI (Emotional Quotient Inventory - EQ-i). EQ-i was one of the first published and is one of the most frequently used self-report measures of EI (Bar-On, 2006). Originally conceived as a measure of well-being of 1000 items, the final version of
EQ-i consists of 133 items, organized into 15 subscales and 5 higher order factors. Each of these 5 meta-factors consist of various closely related skills, competences and behaviors.

The *intrapersonal* factor refers to the ability to understand and be aware on one’s own emotions and feelings. This domain embeds five sub-factors that generally reflect one’s ability to accurately perceive, identify and understand own emotions, to effectively express own feelings and to achieve personal goals and actualize own potential. These sub-factors are denominated self-regard, emotional self-awareness, assertiveness, independence and self-actualization.

The *interpersonal* domain refers to the ability to comprehend how others feel and to establish satisfying relationships with them. The three sub-factors of this domain- empathy, social responsibility and interpersonal relationship, refer to individual’s ability to understand how others feel, relate and cooperate with them in a socially responsible way.

*Stress management* represents the ability to control and manage emotions. More precisely, it includes the ability to effectively manage emotions in stressful circumstances (stress tolerance) and the ability to control emotions and behavioural responses (impulse control).

The *adaptability* domain is related with the ability to change and adapt to the environment (flexibility), solve problems (problem solving) and clarifying and comparing the internal experience with the objective reality (reality testing).

Finally, *general mood* reflects the ability to generate positive mood and be self-motivated. This domain includes 2 sub-factors - optimism (to have a positive attitude towards life) and happiness (be content and happy with own life in general) (Bar-On, 2006).

Bar-On’s model of EI is strongly influenced by the author’s clinical practice and his interest in determinants of psychological well-being. The initial idea behind the development of EQi was to find the skills, competences and
behaviours that are thought to impact human performance and behaviour (Bar-On, 2006). Therefore, this model of EI comprises both typical emotional abilities (such as emotional understanding or empathy) and personality aspects (such as optimism and happiness). Besides, it includes aspects that do not pertain exactly to the domain of emotions, such as problem solving or reality testing, while it lack some typical emotional abilities such as emotional perception or expression of emotions.

Another widely known mixed model of EI is Goleman’s model of emotional competences. Initially interested in finding the factors responsible for success at work and life in general, Goleman tried to identify those competences that determine what makes a successful employee or a fulfilled person. Reflecting on both Gardner’s work on interpersonal and intrapersonal intelligences and Sternberg’s idea about practical intelligence, as well as Mayer and Salovey’s emotional abilities, he as well argued that there is something more to IQ that influences peoples’ personal and professional development and that is important for society in global (Goleman, 1995). In his first description of the emotional competences model, Goleman distinguishes between 25 competences clustered into 5 groups – self-awareness, self-regulation, self-motivation, empathy and social skills (Goleman, 1998). After a large study aimed at validating the Emotional Competencies Inventory (ECI), done by Boyatzis, Goleman and Rhee (2000), the model was reduced to final list of 20 clustered in 4 domains (Goleman, 2001).

The first domain is self-awareness and it refers to accurately and timely recognizing own emotions and feelings. This domain includes three competences - emotional self-awareness, accurate self-assessment and self-confidence.

Self-management embeds competences aimed at controlling and regulating negative emotions in order to overcome everyday problems and obstacles. Competencies such as emotional self-control, trustworthiness, conscientiousness, adaptability, achievement drive and initiative belong to this particular domain.
Definition(s) and Description(s) of Emotional Intelligence

The third EI domain is **social awareness** which reflects the ability to understand others and their feelings, needs and attitudes. This domain includes empathy, service orientation and organizational awareness.

Finally, **social skills or relationship management** domain mainly refers to being able to regulate others’ emotions and knowing how to foster good interpersonal relationships. Competencies included in this EI domain are developing others, influence, communication, conflict management, visionary leadership, catalysing change, building bonds and teamwork and collaboration.

Similar to Gardner’s intrapersonal and interpersonal intelligences, the described model makes a clear distinction between the personal (self) and social domain of competences. Moreover, it separates awareness from management domain, where awareness refers to recognizing or knowing and management refers to regulating and modifying emotions or emotional situations.

Goleman’s model resembles Bar-On’s ESI model in two particular ways. First, because it includes aspects that are not narrowly linked with emotions and emotional abilities, and are reflecting personality rather than abilities, such as self-confidence or achievement drive. Second, Goleman, as well as Bar-On highlights that emotional competences can (and should) be learned and developed. Besides, Goleman goes even further in highlighting the importance of EI for personal and professional development and argues that EI is even more important than IQ for success in life (Goleman, 1995).

**Integrative models of EI**

The dispute about whether EI should be considered ability or trait or a mix of abilities and traits continues even now. The ability models are mostly criticized for the psychometric properties of their measures - low internal consistencies, factor structure and construct validity. On the other hand, trait EI models criticism is more oriented towards their overlap with personality dimensions and lack of discriminant and incremental validity (Mikolajczak, 2009; Petrides, Furnham 

Frederickson, 2004). With the aim to reconcile and integrate trait and ability EI approach, Mikolajczak (2009) and Mikolajczak, Quoidbach, Kotsou and Nelis (2009) proposed a new, so-called *tripartite model* of EI. Although a formal definition of EI (or emotional competences as they called it) is not explicitly mentioned, Mikolajczak and colleagues argue that emotional competences refer to the “differences in the way individuals identify, express, understand, use and regulate own and others’ emotions” (Mikolajczak et al., 2009, p. 7). This model distinguishes between three levels of EI structured in a hierarchical manner. The first one refers to the *knowledge*, or what people know about emotions and emotional abilities. This knowledge might refer to all familiar emotional abilities. For instance, knowledge about how emotions are identified (emotional perception), or knowledge about what causes certain emotions (emotional understanding), or knowledge about what strategies to use to avoid negative emotions (emotional regulation). The second level of EI refers to *abilities* or what can people do with this emotional knowledge in a specific emotional situation. The question here is not what someone knows about certain emotional ability, but rather whether he/she is capable of applying it in a particular situation if explicitly asked for. Finally, the last level considers emotional *traits* or *dispositions* or, in other words, what people usually do or how they behave in certain emotional situations (Mikolajczak, 2009; Mikolajczak et al, 2009). This last level refers to the propensity to use a particular emotional ability (or abilities) in circumstances that require that. According to this model, the lower levels of EI do not necessarily imply higher levels, while the development and demonstration of higher levels usually entail the lower levels. The incremental contribution of the tripartite model is not just theoretical but practical as well. Theoretically speaking, the model tries to conciliate the conflictive ability and trait perspectives.

Another model that tried to find a “dimensional commonality amongst measures of EI” was Palmer and colleagues’ (2008) taxonomic model of EI. This model comprises common factors or facets of the most familiar EI
conceptualizations and models in order to make a comprehensive taxonomy of EI dimensions. This taxonomy includes five factors (Palmer et al, 2008):

- emotional self-awareness and expression – refers to the skills with which people perceive, express and understand own emotions.
- emotional awareness of others – skills that serve to perceive and understand other people’s emotions.
- emotional reasoning – adaptive use of emotions to assist thinking or reasoning
- emotional self-management – the capacity to effectively regulate own emotions.
- emotional management of others - the capacity to effectively regulate other’s emotions

While the two previous examples of integrative approaches to EI are mainly descriptive, the next approach focuses on differences in how people process emotion information. Fiori (2009) proposes a dual process approach to EI and argues that automatic processes in emotional experience need to be taken in consideration when theorization about EI. Leaning on Mayer and Salovey’s four-branch model, Fiori suggests that besides the conscious processing of emotion information, people differ in automatic (unconscious, uncontrollable and unintentional) processing of emotions and that each Mayer and Salovey’s emotional ability includes both conscious and automatic processing (Fiori, 2009). According to Fiori, emotional processes might be performed consciously and automatically and might determine person’s behaviour differently. Using the example of declarative and procedural knowledge, Fiori distinguishes between conscious processing (as knowing the general rules and principles about emotions) and automatic processing (as practical execution of the emotion-related tasks). This process-oriented model of EI aims at explaining the individual differences in EI by focusing on the mechanisms behind them.
Finally, one more attempt to integrate different EI approaches and combine the elements of both ability and trait models is Joseph and Newman’s *Cascading Model of EI*. The main goal of this model was to examine the relationships between different EI dimensions (emotional perception, understanding and regulation) cognitive abilities, personality traits and job performance and integrate these different aspects into one “process-based” model (Joseph & Newman, 2010). With the aim to clarify the controversy about the overlap between emotional abilities and cognitive abilities on one side, and emotional abilities and personality traits on the other, Joseph and Newman used meta-analytical data to establish their sequential (and causal) relationship between the three emotional abilities. According to the cascading model, emotional perception precedes emotional understanding, and emotional understanding precedes emotional regulation. Besides, they showed that cognitive ability and personality traits are important antecedents of this “EI process”. More precisely, cognitive ability relates to emotional understanding, conscientiousness is related with emotional perception while emotional stability plays an important role in emotional regulation. Joseph and Newman argue that they provide a theoretically based and empirically confirmed solution for a familiar debate about the overlapping of EI with cognitive ability, personality traits and job performance. More precisely, they argue that this overlap is dependent on which emotional ability is in question.

This “theoretically driven model of EI and job performance” does not offer much new in terms of theoretical conceptualization of EI. However, it might contribute to clarifying or defining better the nature of EI. More precisely, the model offers an “criterion-based” integration of familiar emotional abilities, cognitive ability and personality traits organized in a process-based manner. In other words, it is the first time EI is seen as a dynamic process rather than just an ensemble of (semi)independent structures or emotional abilities.
Summary

There is still a lot of disagreement about the definition and conceptual delimitation of EI. Different approaches and theoretical models of EI are indeed conflictive and they emphasize different aspects as important for defining EI. It might seem that this deepens the dispute about the validity of the EI construct even more. While some make effort to prove that EI is a form of intelligence and try to find its roots in other previous models of intelligence, others, include other non-cognitive features in defining EI (such as motivation or personality traits), and position it more in the personality domain. Table 1 offers a concise summary of the EI models described, along with each definition and the main facets they include.

Twenty-five years after Mayer and Salovey’s first definition of the concept (Mayer & Salovey, 1990) researchers are far from agreeing about what EI is. However, even in the research of intelligence, more than one century after the beginning of scientific research of intelligence researchers in the field could not agree what intelligence was (apart from the ability to adapt flexibly to the environment) and how should it be defined and measured (Sternberg & Detterman, 1986). When more than 20 researchers in the field were asked to define intelligence, they each gave a somewhat different definition. However, as Detterman (in Sternberg & Detterman, 1986) well said, “it would be incorrect to interpret the disagreement (about intelligence) as a sign that nobody knows what he or she is talking about. Rather, it would seem to me to be a sign of healthy, vigorous scientific enterprise still in its formative stages.” Therefore, the dispute about the definition and conceptual delimitation of EI will most probably go on as long as there are researchers interested in EI.

As mentioned above, the main difference between trait and ability models of EI is the type of measurement used for assessing individual differences in EI. The differentiation between ability and mixed models reflects the different views on the nature of the concept or the theoretical conceptualization of EI. On the other hand, Goleman’s and Bar-On’s conceptualizations of EI are more “criterion-based”
because they were developed in light of finding the determinants for different outcomes. More precisely, Goleman’s conceptualization is workplace induced (the initial idea was to detect the aspects that are responsible for good performance and success at work), while Bar-On’s model reflects the interest in finding the factors that are responsible for well-being and life success.
### Definition(s) and Description(s) of Emotional Intelligence

#### Table 1: Summary of the EI models

<table>
<thead>
<tr>
<th>Authors</th>
<th>Definition</th>
<th>Facets</th>
</tr>
</thead>
</table>
| **Four-branch model of EI** (Salovey & Mayer, 1990; Mayer & Salovey, 1997; Mayer et al., 2004) | “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” | 1) perception, expression and appraisal of emotions  
2) use of emotions  
3) understanding and reasoning about emotions  
4) emotional management or regulation of emotions |
| **Trait EI** (Petrides & Furnham, 2001; Petrides et al., 2007) | “behavioral dispositions and self-perceived abilities and is measured through self-report” | 1)Well-being self-esteem, trait happiness, trait optimism  
2)Self-control emotion regulation, stress management, impulsiveness, adaptability, self-motivation  
3)Emotionality emotion perception, trait empathy, emotion expression, relationships  
4)Sociability assertiveness, emotion management, social awareness, self-esteem |
| **Emotional Social Intelligence (ESI) model** (Bar-On, 2006) | “a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands” | 1)Intrapersonal self-regard, emotional self-awareness, assertiveness, independence and self-actualization  
2)Interpersonal empathy, social responsibility and interpersonal relationship |
EI: THEORETICAL APPROACHES

<table>
<thead>
<tr>
<th>Emotional competences model</th>
<th>“a learned capability based on emotional intelligence that results in outstanding performance at work”</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Goleman, 1995; 1998; 2001)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tripartite model</th>
<th>“differences in the way individuals identify, express, understand, use and regulate own and others’ emotions”</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Mikolajczak, 2009; Mikolajczak et al., 2009)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Five-factor taxonomy of EI (Palmer et al., 2008)</th>
<th>“the skill with which one perceives, expresses, reasons and manages their own and others emotions”.</th>
</tr>
</thead>
</table>

3) Stress Management  
stress tolerance and impulse control
4) Adaptability  
reality testing, flexibility and problem solving
5) General Mood
optimism and happiness

1) Self-awareness  
emotional self-awareness, accurate self-assessment and self-confidence
2) Self-management  
emotional self-control, trustworthiness, conscientiousness, adaptability, achievement drive and initiative
3) Social awareness
empathy, service orientation and organizational awareness
4) Social skills (relationship management)
developing others, influence, communication, conflict management, visionary leadership, catalysing change, building bonds, teamwork and collaboration
Definition(s) and Description(s) of Emotional Intelligence

| Dual process framework of EI (Fiori, 2009) | “the ability to process emotional information by means of specific skills”. | 4) emotional self-management  
5) emotional management of others |
| Cascading model of EI (Joseph & Newman, 2010) | Conscious and automatic processes in:  
- Emotion perception  
- Use of emotion to facilitate thought  
- Emotion understanding  
- Emotion regulation | 1) emotional perception, understanding and regulation  
2) cognitive abilities  
3) conscientiousness and emotional stability  
4) job performance |
Each different conceptualization of EI is derived from different perspectives. Nevertheless, if these different perspectives can contribute to better understanding of the concept and its better use in different life domains, then the dispute about EI would be a “fruitful dispute”. In the present study, Mayer and Salovey’s four abilities model will be used as a theoretical niche combined with the tripartite model of EI that distinguishes between knowledge, abilities and dispositions. The focus of the present investigation will be the knowledge individuals have about their own emotional abilities conceptualized through Mayer and Salovey’s four-branch model, because this model encompasses the most important aspects of individual differences in emotional experience and emotional processing.

2.3 Evaluation of Emotional Intelligence

Since the appearance of the EI concept, measuring EI has always been a critical point, along with defining it. However, as Zeidner and colleagues argue “history has taught us that progress in understanding scientific concepts is a function of finding ways of measuring them” (Zeidner et al., 2009, p.37).

Besides the tests already described along with some of the most popular EI models, a wide variety of EI tests that have been empirically evaluated exist, and have yielded promising results in the area of EI assessments. In the current literature, evaluation of emotional intelligence mostly relies on two major groups of evaluation instruments or methods of assessment – self-report measures and ability measures (or performance-based measures). Besides the ability and self-report measures, other-report (peer-report) EI measures recently became the center of research focus. It is believed that these types of measures might be more relevant for certain outcomes and certain contexts and that they need to be investigated more (Choi & Kluemper, 2012; Van Rooy & Viswesvaran, 2004).
Naturally, self-report and ability measures differ significantly. A useful summary of the differences between self-report and ability measures was made by Zeidner and colleagues:

Table 2. Differences between performance-based and self-report measures of EI (Zeidner et al., 2009, p. 63)

<table>
<thead>
<tr>
<th>Self-reported EI</th>
<th>Performance-based EI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical performance</td>
<td>Maximal performance</td>
</tr>
<tr>
<td>Internal appraisal of performance</td>
<td>External appraisal of performance</td>
</tr>
<tr>
<td>Response bias may be great</td>
<td>Response bias minimal (or nonexistent)</td>
</tr>
<tr>
<td>Administrating time short, testing easy</td>
<td>Administrating time long, testing complicated</td>
</tr>
<tr>
<td>Personality-like</td>
<td>Ability-like</td>
</tr>
</tbody>
</table>

2.3.1 Ability measures

The first group of assessment methods consists of measures normally called ability or performance measures. These ability-based scales directly assess the actual level of EI through solving particular emotional problems and then evaluating the person's answer against criteria of accuracy. Since intrapersonal emotional experience cannot be objectively evaluated and scored (Petrides et al., 2004; Pérez, Petrides & Furnham, 2005; Zeidner et al, 2009), many of the ability tests have tried to overcome these obstacles by using consensus scoring (the correct answers are those that the majority of the population endorses) or expert scoring (the ratings from the experts in the field of emotions serve as objective criteria for scoring). This is the case of MEIS and MSCEIT, which have been described in section 1.2.1.

The majority of ability measures focus on evaluating just one emotional abilities, such as emotional perception or understanding emotions. For instance, Diagnostic Analysis of Nonverbal Accuracy 2 (Nowicki & Carton 1993; Baum & Nowicki 1998; Pitterman & Nowicki 2004) and Japanese and Caucasian Brief Affect Recognition Test (Matsumoto et al., 2000) assess only emotional perception. Nevertheless, there are measures that try to provide a more global picture of EI and evaluate various emotional abilities. Thus, the Test of Emotional Intelligence-
TEMINT (Schmidt-Atzert & Bühner, 2002, see Blickle, Momm, Liu, Witzki & Steinmayr, 2011) encompasses two out of four Mayer and Salovey’s branches – perceiving emotions and understanding emotions.

Another measure that assesses emotional understanding is the Situational Test of Emotional Understanding (STEU). Along with the Situational Test of Emotion Management (STEM) it belongs to the newer ability measures developed by MacCann and Roberts (2008).

In addition, besides ability measures that directly evaluate EI, there are measures that evaluate constructs closely related to EI. Some of the most familiar measures are the Levels of Emotional Awareness Scale (Lane, Quinlan, Schwartz, Walker & Zeitlin 1990) and Izard’s Emotional Knowledge Test (Izard et al, 2001).

Table 3 contains a brief summary of some of the most popular ability measures, their theoretical background and a short description of the aspects they assess.
### Table 3. Summary of ability (performance-based) measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Authors</th>
<th>Theoretical background</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Multifactor Emotional Intelligence Scale (MEIS)</td>
<td>Mayer, Salovey &amp; Caruso, 1997</td>
<td>Mayer &amp; Salovey’s 4 branch model</td>
<td>4 factors: Emotional perception; Using emotions; Facilitating thought; Managing emotions</td>
</tr>
<tr>
<td>Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT)</td>
<td>Mayer, Salovey &amp; Caruso (2002)</td>
<td>Mayer &amp; Salovey’s 4 branch model</td>
<td>4 dimensions: Perception, appraisal, and expression of emotion; Emotional facilitation of thinking; Understanding and analyzing emotional information; Regulation and management of emotion</td>
</tr>
<tr>
<td>The Test of Emotional Intelligence (TEMINT)</td>
<td>Schmidt-Atzert &amp; Bühner, 2002 (See Blickle et al., 2011)</td>
<td>Mayer &amp; Salovey’s 4 branch model</td>
<td>Emotional reasoning skills (emotional perception and emotional appraisal)</td>
</tr>
<tr>
<td>Diagnostic Analysis of Nonverbal Accuracy 2 (DANVA 2)</td>
<td>Nowicki &amp; Carton (1993); Baum &amp; Nowicki 1998; Pitterman &amp; Nowicki 2004</td>
<td>No particular theory; Empirical-normative background</td>
<td>Accuracy at perceiving emotion in child and adult faces, voices, postures and gestures</td>
</tr>
<tr>
<td>1. Adult Facial Expressions (DANVA 2 –AF)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Adult Paralanguage (e.g., auditory) (DANVA 2 –AP)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Posture Test (DANVA 2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI: THEORETICAL APPROACHES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Reference</th>
<th>Theory</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese and Caucasian Brief Affect Recognition Test (JACBART)</td>
<td>Matsumoto et al. 2000</td>
<td>No particular theory; Influences: Ekman’s facial expression and non-verbal behavior; Darwin’s theory on expression of emotions</td>
<td>Emotional recognition ability</td>
</tr>
<tr>
<td>Situational Test of Emotional Understanding (STEU)</td>
<td>MacCann &amp; Roberts, 2008</td>
<td>Roseman’s appraisal theory</td>
<td>Emotional understanding</td>
</tr>
<tr>
<td>Situational Test of Emotional Management (STEM)</td>
<td>MacCann &amp; Roberts, 2008</td>
<td>Situational Judgment Test (SJT) paradigm</td>
<td>Emotional management</td>
</tr>
<tr>
<td>Levels of Emotional Awareness Scale (LEAS)</td>
<td>Lane et al. 1990</td>
<td>Cognitive-developmental theory of emotional experience organization</td>
<td>Emotional understanding (recognizing and describing emotions in self and others)</td>
</tr>
<tr>
<td>Izard’s Emotional Knowledge Test (EKT)</td>
<td>Izard et al. (2001)</td>
<td>Izard’s emotional knowledge model</td>
<td>Emotional recognitions and emotional labeling</td>
</tr>
</tbody>
</table>
2.3.2 Self-report measures

The second group of measures for assessing EI includes self-report scales and questionnaires. Emotional intelligence, in this case, is measured through a personal estimation of EI level, since investigators are often interested in self-reported beliefs about people’s emotional intelligence. Although, some authors argue that self-report measures should be used as an evaluation of trait EI, many of them tend to measure EI as a cognitive ability (Pérez et al., 2005; Petrides & Furnham, 2001). However, as Brackett and Mayer (2003) state, “if a person’s self-concept is accurate, then self-report data serve as an accurate measure” (p. 1147). In other words, it is assumed that people have enough insight into their own emotional functioning (Zeidner et al., 2009), so this type of measurements can be considered valid.

Besides Bar-On’s EQ-i and Petrides and Furnham’s TEIQue, numerous self-report measures have been developed and used to evaluate the level of EI (trait or ability). For instance, one of the pioneer EI measures is Trait Meta-Mood Scale – TMMS (Salovey, Mayer, Goldman, Turvey & Palfai, 1995), based on the first Mayer and Salovey’s EI model (Salovey & Mayer, 1990), aims at evaluating people’s knowledge about their emotional states, or getting a reflexive personal estimation of people’s emotional experiences. The measure is designed to assess “relatively stable individual differences in people’s tendency to attend to their moods and emotions, discriminate clearly among them, and regulate them” (Salovey et al, 1995, p.127). TMMS consists of 48 items grouped into three dimensions: emotional attention, emotional clarity and emotional repair.

Schutte Self Report Emotional Intelligence Test – SSEIT represents another equally popular self-report measure of EI (Schutte et al., 1998). As well as TMMS, it is also based on an early model of EI by Salovey and Mayer (1990) and has been used to evaluate a global trait EI. The 33 item scale aims at evaluating three aspects
EI: THEORETICAL APPROACHES

of EI conceptualized in Mayer and Salovey’s early model - appraisal and expression of emotion, regulation of emotion and utilization of emotion.

Maybe the most widely used and most frequently translated self-report measure of EI nowadays is the Trait Emotional Intelligence Questionnaire – TEIQue (Petrides, 2009). As previously mentioned, TEIQ is based exclusively on trait EI theory and it is developed with the purpose to give backup to trait EI theory and operationalize trait EI as defined by Petrides and Furnham (2003; Petrides et al., 2004). The full form of the TEIQue (TEIQue v. 1.50) has 153 items, providing scores on 15 subscales, four factors, and global trait EI. Moreover, there are several forms of the instrument (short form - TEIQue-SF, adolescent form - TEIQue-AF, children form - TEIQue-CF and 360° form - TEIQue-360) and it is translated and adapted to more than 20 languages.

One of the most popular instruments in human resources management is Goleman’s Emotional Competence Inventory (ECI) (Boyatzis, Goleman & Hay/McBer, 1999). As previously mentioned, it consists of 20 dimensions, called competences, grouped into four domains – self-awareness, self-management, social awareness and social skills. Dulewicz & Higgs Emotional Intelligence Questionnaire (DHEIQ) (Dulewicz & Higgs, 1999) is also based on Goleman’s competency model and counts 69 items organized into seven dimensions.

Besides Goleman’s model, several instruments have been based on Mayer and Salovey’s four-branch model. For instance, Tett, Fox and Wang (2005) developed a self-report measure of 10 Mayer and Salovey’s EI facets. Their Survey of Emotional Intelligence (SEI) consists of 12 items per facet and showed good psychometric properties (Tett et al., 2005). Jordan, Ashkanasy, Hartel and Hooper (2002) developed a 27 item Work Group Emotional Intelligence Profile (WEIP) that uses a 7-point Likert-type scale to assess the EI level of individuals in teams based on Mayer and Salovey’s EI model and consists of two dimensions - ability to deal with own emotions and ability to deal with others' emotions. Another
measure that is based on Mayer and Salovey’s EI model is Wong's Emotional Intelligence Scale (WEIS). The WEIS consists of 16 items evaluating four EI dimensions - self-emotion appraisal, emotion appraisal of others, use of emotion and regulation of emotion. A summary of the most widely used self-report measures is presented in Table 4.

2.3.3 Other-Report measures

Because there has been a lot of dispute about the existing measures of EI, many authors have vouched for searching the new alternative measures of EI (Van Rooy & Viswesvaran, 2004). By providing a more objective overview of people’s emotional competences, other report measures can help overcome some of the limitations of the ability or self-report measures, such as social desirability, faking responses or problems with accuracy in reporting about own emotional competencies (Brackett & Mayer, 2003; Choi, Kluemper & Sauley, 2011).

Other-report measures are usually developed from already existing self-report measures, as in case of Trait Emotional Intelligence Questionnaire TEIQue 360° (Petrides & Furnham, 2003) and Emotional Competence Inventory ECI 2.0 (Boyatzis et al., 1999). This provides a useful advantage for researchers, because they can compare self-versus observer-ratings on EI. Some of the other-report measures are listed in Table 5.
<table>
<thead>
<tr>
<th>Measure</th>
<th>Authors</th>
<th>Theoretical background</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BarOn Emotional Quotient Inventory (EQ-i)</td>
<td>Bar-On, 1997 (See Bar-On, 2006)</td>
<td>Bar-On´s model of emotional-social intelligence (ESI)</td>
<td>15 subscales, and 5 higher-order factors:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• intrapersonal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• interpersonal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• adaptation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• stress management</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• general mood</td>
</tr>
<tr>
<td>Trait MetaMood Scale (TMMS)</td>
<td>Salovey et al. 1995</td>
<td>Salovey and Mayer (1990) model of EI</td>
<td>3 meta-mood dimensions:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• emotional attention</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• emotional clarity • emotional repair</td>
</tr>
<tr>
<td>The Schutte Self Report Emotional Intelligence Test (SSEIT)</td>
<td>Schutte et al. 1998</td>
<td>Salovey and Mayer (1990) model of EI</td>
<td>3 aspects of EI:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• appraisal and expression of emotion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• regulation of emotion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• utilization of emotion</td>
</tr>
<tr>
<td>Trait Emotional Intelligence Questionnaire (TEIQue)</td>
<td>Petrides &amp; Furnham, 2009</td>
<td>Trait EI theory (Petrides et al. 2004)</td>
<td>Global trait EI and 4 factors:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• well-being</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• self-control skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• emotional skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• social skills</td>
</tr>
<tr>
<td>Emotional Competence</td>
<td>Boyatzis et al., 1999;</td>
<td>Goleman´s emotional</td>
<td>20 dimensions</td>
</tr>
</tbody>
</table>
## Evaluation of Emotional Intelligence

<table>
<thead>
<tr>
<th>Inventory (ECI)</th>
<th>Boyatzis et al., 2000</th>
<th>competencies model (competencies) organized into four clusters: • self-awareness • self-management • social awareness • social skills (relationship management)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dulewicz &amp; Higgs Emotional Intelligence Questionnaire (DHEIQ)</td>
<td>Dulewicz &amp; Higgs, 1999; Dulewicz, Higgs &amp; Slaski, 2003</td>
<td>Goleman’s EI theory 7 dimensions: • self-awareness • influence • decisiveness • interpersonal sensitivity • motivation • conscientiousness and integrity • emotional resilience</td>
</tr>
<tr>
<td>Survey of Emotional Intelligence (SEI)</td>
<td>Tett et al., 2005</td>
<td>Salovey and Mayer (1990) model of EI 10 facets: • recognition of emotions in self • nonverbal emotional expression • recognition of emotions in others • empathy • regulation of emotions in self • regulation of emotions in</td>
</tr>
</tbody>
</table>
EI: THEORETICAL APPROACHES

- intuition vs. reason
- creative thinking
- mood redirected attention
- motivating emotions

<table>
<thead>
<tr>
<th>Measure</th>
<th>Authors</th>
<th>Theoretical background</th>
<th>Description</th>
</tr>
</thead>
</table>
| The Work Group Emotional Intelligence Profile (WEIP) | Jordan et al., 2002 | Mayer & Salovey´s EI model (1997) | 2 dimensions:  
  • ability to deal with own emotions  
  • ability to deal with others' emotions |
| Wong's Emotional Intelligence Scale (WEIS)         | Wong & Law, 2002 | Mayer & Salovey´s EI model (1997) | 4 dimensions:  
  • self-emotion appraisal  
  • emotion appraisal of others  
  • use of emotion  
  • regulation of emotion |
| Trait Emotional Intelligence Questionnaire TEIQue 360° and 360°-Short Form | Petrides, 2009 | Trait EI theory (Petrides et al. 2004) | 153 items of the TEIQue 15 facets and 4 factors |
| Emotional Competence Inventory (ECI 2.0)          | Boyatzis et al. 1999 | Goleman´s emotional competencies model | 18 competencies organized into four clusters: |
## Evaluation of Emotional Intelligence

<table>
<thead>
<tr>
<th>Evaluation Method</th>
<th>Authors/Date</th>
<th>Model/Key Areas</th>
</tr>
</thead>
</table>
| The Genos Emotional Intelligence Inventory (Genos EI) or Swinburne University Emotional Intelligence Test (SUEIT) | Palmer & Stough, 2002 (see Gignac, 2010)       | Seven-factor model of emotional intelligence by Dr Benjamin Palmer and Professor Con Stough. Key areas:  
  - Emotional  
  - Self-Awareness  
  - Emotional Expression  
  - Emotional Awareness of Others  
  - Emotional Reasoning  
  - Emotional Self-Management  
  - Emotional Management of Others  
  - Emotional Self-Control |
| Dulewicz & Higgs Emotional Intelligence Questionnaire (EIQ 360°) | Dulewicz & Higgs, 2000 (see Dulewicz et al. 2003) | Goleman’s EI theory  
  - self-awareness  
  - influence  
  - decisiveness  
  - interpersonal sensitivity  
  - motivation  
  - conscientiousness and integrity  
  - resilience |
2.4 Discriminant validity of EI

An important step in establishing and conceptually delimitating the EI construct is to evaluate its distinctiveness from other related constructs. This is usually done through assessment of the relationship between EI and other relevant psychological variables (Zeidner et al., 2009). When talking about the validity of EI, the evidence from the literature usually depends on the type of measure used to evaluate EI. More precisely, in case of ability measures of EI, researchers have tried to demonstrate convergent validity evidence for EI assessments. In other words, the relationship between EI and measures of cognitive abilities (general intelligence, verbal abilities, fluid abilities, crystallized abilities, etc.) should be moderate in order to demonstrate that EI is an ability or group of abilities similar to cognitive abilities (Zeidner et al., 2009).

There are numerous studies in the literature that confirm the convergent validity of different ability measures of EI. Usually, from all facets of EI, emotional understanding and management are most highly correlated with different aspects of cognitive ability. For instance, Bastian, Burns and Nettelbeck (2005) found that out of four MSCEIT dimensions, emotional understanding correlated with non-verbal intelligence (.38**) and verbal ability (.56**), while managing emotions correlated with non-verbal intelligence (.19**) and verbal ability (.26**). Lumley, Gustavson, Partridge and Labouvie-Vief (2005) also found positive and moderate correlations between verbal ability and global score of MSCEIT (.42***), emotional perception (.21*), emotional facilitation (.25**), understanding emotions (.57***), and managing emotions (.29***).

O’Connor and Little (2003) found general cognitive ability to be moderately correlated with MSCEIT’s global score (.35**), emotional

\* p < .05, ** p < .01, *** p < .001
understanding (.51**) and managing emotions (.28*). Moreover, reasoning correlated with MSCEIT’s global score (.25*), emotional understanding (.41**) and managing emotions (.24*).

Roberts, Schulze, et al. (2006) found some MSCEIT dimensions and JACBART (Japanese and Caucasian Brief Affect Recognition Test) to be weakly correlated with fluid and crystalized intelligence. Emotional understanding correlated with crystalized intelligence (.30* and .35*) and managing emotions correlated with fluid intelligence (.13* and .16*). JACBART (emotional perception) was somewhat correlated with crystalized intelligence (.24*) and fluid intelligence (.27*).

MacCann & Roberts (2008) showed that EI measured with other instruments besides MSCEIT also relate to intelligence. They found STEU (Situational Test of Emotional Understanding) and STEM (Situational Test of Emotional Management) to be moderately correlated with verbal ability (.49** and .41** respectively).

In a more recent study, Webb et al. (2013) found average correlations between MSCEIT (global score) and IQ full (.52***), IQ verbal (.52*** and IQ performance (.43**). Joseph and Newman’s (2010) meta-analysis provided evidence that performance-based ability EI showed a moderate relationship with cognitive ability (.25*) in more than 80 meta-analytic correlations.

In an attempt to define EI and clarify the legitimacy of EI as a type of intelligence, MacCann, Joseph, Newman and Roberts (2014) demonstrated evidence for positioning EI as a 2nd-stratum factor of intelligence using modern statistical analyses. Generally, evidence from the literature suggests that EI measured as ability is related, but not highly, with standard measures of

---

8 Correlation corrected for attenuation and range restriction.
EI: THEORETICAL APPROACHES

intelligence, implicating that EI might be considered as an independent ability from cognitive abilities.

As for the self-report measures, the main consideration has been the discriminant validity of the construct, or the overlap with the personality traits (Zeidner et al., 2009). EI as a trait should also bring added value to better comprehension of individual differences in emotional functioning over and above typical personality dimensions (Zeidner et al., 2009). There is evidence that EI measured as a trait can predict different well-being outcomes even after controlling for personality traits (Extremera & Fernandez-Berrocal, 2005; Freudenthaler, Neubauer, Gabler, Scherl & Rindermann, 2008; Landa, Martos & Lopez-Zafra, 2010; Schutte et al., 2007). However, there is also evidence that contradicts these findings and puts doubt on EI’s predictive validity (Amelang & Steinmayr, 2006; Chapman & Hayslip, 2005; Gannon & Ranzijn, 2005).

The literature review suggests that, in general, EQ-i (BarOn Emotional Quotient Inventory) fails to show good discriminant validity. Several studies showed that EQ-i correlated highly with personality traits (Dawda & Hart, 2000; Day, Therrien & Carroll, 2005; Newsome, Day & Catano, 2000).

SSEIT (The Schutte Self Report Emotional Intelligence Test) shows less high correlations with personality traits - .32 with extraversion and .43 with openness (Brackett & Mayer, 2003) - but does not increase predictive validity of self-report measures neither (Brackett & Mayer, 2003). Saklofske, Austin and Minski (2003) also confirmed low to moderate correlations between SSEIT and neuroticism (.37), extraversion (.51), openness (.27), agreeableness (.18) and conscientiousness (.38). In addition, they showed that SSEIT predicted very small portion of additional variance of well-being beyond personality traits.

On the other hand, Joseph and Newman’s (2010) meta-analytical results showed moderate correlations between self-report mixed measures and big five personality traits (from .29 with openness to .53 with emotional stability).
The most recent meta-analysis conducted by Joseph, Jin, Newman & O’Boyle (2015), however, brings some new evidence about the actual predictive validity of mixed EI models. The findings of their study showed that self-report mixed EI measures overlap significantly with conscientiousness, extraversion, general self-efficacy, self-rated performance, ability EI, emotional stability, and cognitive ability. A majority of variance in mixed EI (62%) is explained by these constructs, with personality traits and self-perceptions as the most important predictors.

On the other hand, TEIQue (Trait Emotional Intelligence Questionnaire) seems to show better psychometric properties than these previously mentioned EI measures. Although, positive and moderate to high correlations were found between TEIQue and personality traits (Mikolajczak, Luminet, Leroy & Roy, 2007; Petrides et al., 2007), TEIQue showed better predictive validity in these studies, predicting numerous outcomes beyond and above personality traits. More precisely, Petrides et al. (2007) found that TEIQue was positively related with extraversion (.53) and negatively with neuroticism (.63), while Mikolajczak and colleagues found somewhat lower correlations between TEIQue (global score) and emotional stability (.42), openness (.41), agreeability (.47) and conscientiousness (.41). However, TEIQue predicted life satisfaction, rumination and two coping strategies (Petrides et al., 2007) and emotional reactivity (Mikolajczak, Luminet, et al., 2007) over and above personality variables.

Although there is still some controversy about the discriminant and predictive validity of different self-report EI measures, some studies suggest that EI measured with certain instruments (such as TEIQue for instance) does bring added value in predicting different criteria and that it is not too highly related to standard personality measures. As Zeidner et al. (2009) argue, “it is encouraging that at least some studies provide evidence that EI adds to the predictive power of personality trait measures.” (p. 133).
3. THE EFFECTS OF EI
Mayer and Salovey (1990) highlighted the importance of EI abilities for two main reasons. First, emotional abilities might predict important life criteria, and second, these abilities can be learned and taught. Since the first conceptualizations of EI in scientific literature, the concept was related to variety of different behavioral, emotional and cognitive responses. One of the first authors to write about the potential utility of EI were exactly Mayer and Salovey. In their first writings about emotional intelligence, they relate it with openness and depression. They argue that “…emotionally intelligent person is often a pleasure to be around” and those lacking in EI might “become depressed even suicidal” (Salovey & Mayer, 1990, p. 201). Later on, the same authors repeat that EI can be beneficial for the individual and his/her social environment. According to Mayer, Salovey and Caruso (2008), “…individuals high in EI pay attention to, use, understand, and manage emotions, and these skills serve adaptive functions that potentially benefit themselves and others” (p. 503).

In an attempt to validate the concept, EI researchers have explored the link between EI and numerous cognitive, behavioral and emotion-related aspects. Evidence for the predictive validity of EI has been searched using both self-report and ability EI measures.

One important stream of research focuses on the effects EI can have on different cognitive and behavioral outcomes. Numerous studies examined EI’s predictive validity for variety of cognitive and behavioral outcomes. Some of the most often explored are academic performance, task performance, work engagement, organizational citizenship behavior, leadership performance, service performance, team performance, creativity, career adaptability and decision-making. Research yielded significant evidence on clarifying the role of EI in work

---

9 Source Consortium for Research on Emotional Intelligence in Organizations (http://www.eiconsortium.org/index.html)
Cognitive and performance-related outcomes

and academic performance (VanRooy & Viswesvaran, 2004; O’Boyle et al., 2011), as well as decision-making (Fernández-Berrocal, Extremera, Lopes & Ruiz-Aranda, 2014; Krishnakumar & Rymph, 2012).

However, perhaps the most promising evidence so far has been found for the effects of EI on health and well-being. Indeed, the relationship between EI and well-being has been investigated in numerous studies and it has been discussed that EI affects both psychological and physical health. Although it is difficult to summarize results from different studies, because they usually use different EI conceptualizations and measurement instruments, some successful meta-analyses have been conducted. For instance, Schutte et al. (2007) and Martins et al. (2010) in two separate meta-analyses collected significant amount of evidence that demonstrates that EI are linked with both psychological and physical well-being.

3.1 Cognitive and performance-related outcomes

One of the important emotional abilities according to Mayer and Salovey’s 4-branch model is using emotions to facilitate thought (Mayer & Salovey, 1997; Mayer et al., 1999). Researchers in the field have long been interested in exploring how emotionally intelligent people behave in different situations. One of perhaps most frequently studied cognitive-behavioral outcomes is decision-making. Studies have shown that high EI individuals were better at social decision-making tasks and tend to make more ethical decisions (Fernández-Berrocal et al., 2014; Krishnakumar & Rymph, 2012). Koven (2011) found that people who show higher emotional clarity (measured with TMMS) demonstrated higher frequency of utilitarian decisions even beyond verbal and abstract intelligence. Hess and Bacigalupo (2011) argue that EI can contribute not just to better decision outcome but the whole decision-making process as well. According to them, higher EI individuals are more emotionally self-aware and better understand emotions of others which enables them to make better decisions and evaluate the outcomes of their decisions for themselves and others.
Perhaps, the most frequent topic when it comes to EI’s predictive validity regarding cognitive outcomes is the relationship between EI and academic and work performance. Van Rooy & Viswesvaran (2004) examined 57 studies with 69 independent samples and showed that EI predicted around 4% of variance of both work and academic performance (as well as other life settings performance). A summary of these meta-analytic results is presented in Table 6.

<table>
<thead>
<tr>
<th>Type of performance</th>
<th>N</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>59</td>
<td>.23</td>
</tr>
<tr>
<td>Work</td>
<td>19</td>
<td>.24</td>
</tr>
<tr>
<td>Academic</td>
<td>11</td>
<td>.10</td>
</tr>
<tr>
<td>Other</td>
<td>34</td>
<td>.24</td>
</tr>
</tbody>
</table>

Note: N = number of samples; r = true or operational validity, computed by correcting observed correlations for criterion unreliability.

As can be seen from the table, EI was significantly and positively correlated with all types of performances, but showed a stronger correlation with work performance (r = .24) than academic performance (r = .10). In addition, EI had showed incremental validity over personality traits (Big Five) but not over general mental ability.

Some more recent studies have shown that EI is related with academic success (Grehan, Flanagan & Malgady, 2011; Hogan et al., 2010) and that it can predict university success over and above personality traits and cognitive ability (Sanchez-Ruiz, Mavroveli & Poullis, 2013). Moreover, EI was found to predict performance (communication and interpersonal sensitivity) among medical students over and above cognitive ability and conscientiousness (Libbrecht, Lievens, Carette & Cot, 2014).

Joseph and Newman’s (2010) meta-analysis provided some answers regarding the incremental validity of EI for job performance and the mechanisms behind this relationship. The results of their meta-analysis showed that all three types of EI measures (performance based, self-report ability measures, and self-
Cognitive and performance-related outcomes

report mixed models) significantly predicted job performance, but only self-report measures predicted it over and beyond both personality traits and cognitive ability ($\Delta R^2_{\text{Self-report Ability EI}} = 2.3\%$, $\Delta R^2_{\text{Self-report Mixed EI}} = 14.2\%; p < .05$).

O’Boyle et al. (2011) confirmed previous (Joseph & Newman, 2010; Van Rooy & Viswesvaran, 2004) conclusions about the role of EI in predicting job performance, exploring quantifiable performance outcomes (e.g., supervisor/peer/subordinate rating, sales performance). The results of the meta-analysis showed that all three types of measurement significantly and almost equally predicted job performance.

Besides, academic and work performance, the importance of EI has also been researched in career decision-making and career development in general. Substantial amount of research has shown that EI plays an important role in career decisiveness and career decision-making process (Di Fabio & Palazzeschi, 2009; Di Fabio, Palazzeschi, Asulin-Peretz & Gati, 2013) and that it is related to higher career decision-making self-efficacy (Jiang, 2014). Higher EI individuals seem to be more able to access and use the necessary information for career decision-making (Di Fabio & Kenny, 2011) and to anticipate emotions before the decisions and recall emotions after good or bad decisions (Sevdalis, Petrides & Harvey, 2007). It seems that the relationship between EI and decision-making involves both cognitive and emotional aspects. As for the cognitive aspect, it refers to the access and use of information necessary for the decision making process. Regarding the emotion-related aspect, higher EI individuals tend to better use and regulate emotions related with the decision-making process, are more aware of own and other people’s emotions, and better anticipate and recall emotions after and before the decisions are made.

In a similar line, EI has been linked with career adaptability and employability. Coetzee & Harry (2014) showed that EI (managing one's own emotions as the highest predictor) can explain individual differences in career adaptability (career concern, career control, career confidence and career curiosity).
These findings confirm some previous findings on importance of EI for career adaptability (Brown et al., 2003; Dahl et al., 2008; Puffer, 2011). Moreover, people’s EI (above all emotional perception and management) significantly predicted psycho-social employability attributes (such as career self-management, self-efficacy, career resilience, sociability, entrepreneurial orientation and proactivity) and showed that higher EI might increase people’s employability prospects (Coetzee & Beukes, 2010; Potgieter & Coetzee, 2013). In a more recent study, EI measured with Bar-On’s EQ-i significantly predicted self-perceived employability and career decision self-efficacy (Di Fabio & Kenny, 2015).

These results support Fugate’s (Fugate et al., 2004) idea about the importance of human capital (individual’s knowledge, skills and abilities) for employability showing that EI might influence people’s beliefs about their possibilities of finding employment. Moreover, the results of the studies dealing with EI and career adaptability imply the benefits of EI for career decision-making and career development in general. These results also provide support for training initiatives that aim at increasing EI in order to promote employability or other related outcomes.

3.2 Health and well-being

3.2.1 Direct effects of EI on well-being

Most of the previous studies about the benefits of EI focused on direct effects of EI on well-being. For instance, Tsaousis & Nikolaou (2005) showed that EI (trait EI) is not only negatively related to poor general health, anxiety and depression, but also other health related behaviors such as smoking, drinking and positively to exercising. In another study, Mikolajczak, Luminet, & Menil (2006) found EI (measured with TEIQue) to be highly and negatively correlated with mental health (anxiety, depression, somatization, hostility etc.) and highly and positively correlated with physical health.
Moreover, EI (measured with Schutte Emotional Intelligence Scale – EIS) was found to be a significant positive predictor of satisfaction with life and positive affect, beyond social support, personality and socio-demographic variables (Gallagher & Vella-Brodrick, 2008). Additionally, higher EI (measured with Schutte Emotional Intelligence Scale – EIS) was associated with higher self-esteem and more positive mood (Schutte, Malouff, Simunek, Hollander, & McKenley, 2002) and was found to be a significant predictor of three indicators of psychological well-being – life satisfaction, self-esteem and self-acceptance (Carmeli, Yitzhak-Halevy & Weisberg, 2009). In the same line Extremera & Fernandez-Berrocal (2005, 2006) found that EI (measured with TMMS) significantly contributed to explaining life satisfaction (beyond mood states and personality traits), and different indicators of psychological well-being (anxiety, depression, various health dimensions etc.).

Nonetheless, when discussing about emotional intelligence and its direct effects on well-being, different researchers found that EI (or some of its aspects) could have diverse effects on psychological well-being. The results of these studies suggest that some dimensions of EI relate positively with psychological well-being, while others can have negative effects on the same construct. For instance Palmer, Donaldson & Stough (2002) showed that from all three TMMS dimensions only the clarity scale was found to significantly correlate with life satisfaction. In the same line, Extremera & Fernandez-Berrocal (2006) proved that emotional clarity and repair (measured with TMMS) predict better psychological and physical adjustment, while high emotional attention correlates with high anxiety and depression, and with lower scores on mental health. Petrides and Furnham (2003) also showed that under certain conditions EI (measured with TEIQue) might have negative effects. Their mood induction procedures caused high EI individuals to react more negatively and report more deteriorated mood. Moreover, another study showed that EI could be related to emotional manipulation under specific
conditions. More precisely, among people who have more narcissistic and psychopathological personalities (Nagler, Reiter, Furtner & Rauthmann, 2014).

Zeidner et al. (2009) agree that there are certain social or organizational circumstances in which higher EI might have maladaptive outcomes. For instance, in stressful situations lower emotional perception might protect people from negative effects of stress. Excessive attention to emotions might also lead to rumination and more negative feelings. Moreover, individuals who are more emotionally self-aware and are prone to excessive emotional expressivity might not successfully handle traumatic experiences. Further, certain professions might also suffer from this “dark side” of higher EI. For example, therapist, being highly empathic, sometimes suffer from so-called “secondary traumatic stress”, or in some occupations, elevated social interaction with people might lead to lower productivity.

Although the relationship between EI and health and well-being has been investigated in numerous studies, the first detailed meta-analysis that examined this relationship was done in 2007 by Schutte et al. The meta-analytic relationship found between EI and three different indicators of health was positive, significant and moderate. As can be seen from Table 7, the highest correlation obtained was between EI and psychosomatic health, followed closely by EI and mental health correlation. Schutte and colleagues (2007) assessed 35 studies that examined the relationship between different EI conceptualizations and measurement methods and different indicators of health. Their results confirmed that EI plays a useful and beneficial role in determining different aspects of well-being.

Table 7. Summary of meta-analitic findings for EI and health indicators (Schutte et al., 2007)

<table>
<thead>
<tr>
<th>Health indicator</th>
<th>N</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>5</td>
<td>.22</td>
</tr>
<tr>
<td>Mental</td>
<td>33</td>
<td>.29</td>
</tr>
<tr>
<td>Psychosomatic</td>
<td>6</td>
<td>.31</td>
</tr>
</tbody>
</table>

Note: N = number of effect sizes in the meta-analysis; r = the EI effect.
A more recent meta-analysis performed by Martins et al. (2010) included additional 46 studies on EI-health links. The results of this meta-analysis confirmed and expanded the results of Schutte et al.’s (2007) study bringing more evidence that EI is significantly and positively related with mental, physical and psychosomatic health. Besides, this study differentiated the EI measurement methods used in previous studies, and their results showed that of all different EI measures used, the self-report measures of EI showed the highest correlation with all three types of health indicators measured. Ability EI also showed positive, although low, correlation with mental health. Table 8 summarizes the main results of Martins et al.’s (2010) meta-analysis. Nevertheless, the incremental validity of EI measures beyond other predictors was not examined in this study.

Table 8. Summary of meta-analitic findings for EI and health indicators (Martins et al., 2010)

<table>
<thead>
<tr>
<th>Health indicator</th>
<th>N</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Ability task</td>
<td>11</td>
<td>.17</td>
</tr>
<tr>
<td>Trait task</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Trait task</td>
<td>67</td>
<td>.36</td>
</tr>
<tr>
<td>Physical</td>
<td>12</td>
<td>.27</td>
</tr>
<tr>
<td>Psychosomatic</td>
<td>16</td>
<td>.33</td>
</tr>
<tr>
<td>TMMS task</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental</td>
<td>23</td>
<td>.25</td>
</tr>
<tr>
<td>Psychosomatic</td>
<td>7</td>
<td>.17</td>
</tr>
<tr>
<td>SEIS task</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental</td>
<td>13</td>
<td>.28</td>
</tr>
<tr>
<td>EQ-i task</td>
<td>10</td>
<td>.44</td>
</tr>
<tr>
<td>Mental</td>
<td>10</td>
<td>.53</td>
</tr>
</tbody>
</table>

Note: N = hypothesis tests for the relationship between EI and health; r = the EI effect.

Besides these two detailed meta-analysis, some newer studies (after Martins et al., 2010 study) also demonstrate that EI is linked with better well-being and health. Furthermore, these newer studies showed that ability-based EI can
equally contribute to predicting well-being as trait EI, even though both meta-analyses showed higher predictive power of trait EI measures.

For instance, Di Fabio and Kenny (2012) showed that EI measured as trait as well as ability contributed significantly to explaining variance of perceived social support among high school students. EI, measured with Schutte’s EIS, predicted 15%, while MSCEIT predicted 4% of additional variance of social support beyond big five personality traits (although only the contribution of 2 EIS dimensions was found significant and none of the MSCEIT factors individually). Karim and Shah (2014) found that MSCEIT’s emotional understanding and emotion regulation dimensions significantly predicted suicidal intentions among bachelor students over and beyond socio-demographic variables, cognitive ability, personality dispositions and positive and negative affect. Burrus et al., (2012) used another ability-based measure of EI (Situational Test of Emotion Management, MacCann & Roberts, 2008) to show that EI is significantly correlated with perceived well-being \( (r = .54, p < .001) \) and that people with higher EI experienced less frequent negative affect across all of the daily activities evaluated in the study (e.g., eating/preparing food, sleeping/resting, watching TV etc.).

Even though EI can have maladaptive outcomes under some circumstances, there is a large amount of previous studies in the literature that shows that EI, in general, is linked with adaptive behaviours and positive psychological and physical well-being. Nevertheless, contrary to the ideas of ability EI “defenders”, the empirical evidence is more in favour of trait and mixed EI, showing that they are more strongly related to positive outcomes than the ability models of EI. Some authors would argue that this is due to significant overlap between trait and mixed EI models and other (familiar) predictors of well-being (such as emotional stability, empathy, self-efficacy etc.).

Another important fact is that the majority of the studies that investigated the EI-well-being relationship used self-report measures for assessing well-being, so “common method variance” can be one of the reasons of the high correlations
between the predictors (self-report EI) and criterion variables (Martins et al, 2010). On the other hand, not many of the previous studies explored the possible mechanisms behind these relationships. Zeidner et al. (2009) suggest several mediating variables that might be responsible for beneficial effect of EI on psychological health and well-being. These are emotional resilience, optimism, social support and adaptive coping, among others.

3.2.2 The moderating role of EI for well-being and health related outcomes

Beyond the potential direct influences of emotional intelligence on psychological well-being, there is evidence that emotional skills or competences might interact significantly with stress in the prediction of life satisfaction, well-being and other important life outcomes. According to Extremera, Duran and Rey (2009), trait meta-mood along with dispositional optimism are two aspects that are considered to moderate the effect of stress on psychological adjustment through facilitating coping with stressful demands. The results of their study not only showed that EI interacted significantly with perceived stress in predicting life satisfaction, but also identified emotional clarity (from TMMS scale) as the strongest protective factor in the moments of high perceived stress. As the authors conclude, individuals who understand their emotional experience are in a better position to protect themselves from negative psychological consequences of stress (Extremera et al., 2009).

Another important study confirmed that EI moderated the relationship between stress and mental health. More precisely, Ciarrochi, Deane and Anderson (2002) found that individuals high on emotional perception (objective emotional perception) reported higher depression, hopelessness and suicidal thoughts than their lower emotional perception counterparts. The authors propose two possible explanations for this finding. Either low perception people just ignore or repress stressful life demands, or they are just confused and do not realize the possible adverse impact of stressful situations. The results for the self-report measure of EI
of the same study (Schutte’s Emotional Intelligence Survey) showed that participants high in managing other’s emotions responded to stress with less suicidal ideation. Individuals who are good at regulating other people’s moods and feelings possess bigger possibility for making close friendships, which can lead to greater social support. Nevertheless, managing own emotions was not found significant in determining the effects of stress on well-being. On the other hand, Day et al. (2005) did not confirm EI’s buffering role in in the stressor–mental health relationship. The results of their study showed that EI (measured with EQ-i) did not interact significantly with daily hassles in predicting well-being, burnout or strain symptoms.

While all of the three previously mentioned studies used self-report measures for assessing the stress level among the participants, next two investigations showed the moderating role of EI using both, natural and laboratory stressors. In the first study Mikolajczak and colleagues (2006), demonstrated that EI promotes better mental and physical health among university students. EI (measured with TEIQue-LF) was found to explain a large amount of variance in both mental and physical health. The authors suggest that one of the pathways by which this occurs is that EI seems to moderate psychological and somatic responses to stress. The results of the study showed that both psychological and somatic symptoms in situations of stress (university exam period) were significantly predicted by EI. It seems that high EI students are more resistant to stressful life events than their low EI colleagues. More precisely, individuals high in self-control dimension of TEIQue will be more stress resistant reporting higher level of both psychological and physical health. Furthermore, the authors proved the incremental validity of EI (self-control dimension) to predict stress resiliency beyond similar well-established constructs such as alexithymia and optimism.

The second study (Mikolajczak, Roy, Luminet, Fillee, & De Timary, 2007) used an experimental design to examine the extent to which EI buffers the relationship between a laboratory stressor (in this case Trier Social Stress Task)
Health and well-being

and the later subjective and objective responses. The results of this study showed that EI not only moderates the subjective response to stress (mood deterioration) but also the objective (in this case cortisol secretion) response. Participants who had higher scores on EI scale demonstrated less negative responses in the situation of stress than their lower EI counterparts. Moreover, trait EI significantly predicted mood deterioration and physiological reaction to stressors over and beyond other related constructs (such as alexithymia and personality traits). As the authors conclude, “this finding adds to the growing body of evidence showing that trait EI brings a unique contribution in the prediction of a number of adaptation-related phenomena” (Mikolajczak, Roy, et al., 2007, p. 1008).

Two more recent studies that explored the role of EI in psychological resilience to negative life events and stressors used ability-based EI instead of trait EI measures (Armstrong, Galligan & Critchley, 2011; Schneider, Lyons, & Khazon, 2013). The findings of the first study confirmed the buffering role of EI, measured with Swinburne University Emotional Intelligence Test (SUEIT; Palmer & Stough, 2002, see Gignac, 2010) for psychological distress. More precisely, four out of six SUEIT dimensions showed to be related to the greater psychological resilience after negative life events - Emotional Self-Awareness, Emotional Expression, Emotional Self-Control and particularly Emotional Self-Management (Armstrong et al., 2011). In the second study MSCEIT dimensions (perception, understanding and management) facilitated stress resilience in situations of induced stress (Schneider et al., 2013). People with higher emotional perception reduced negative affect stress response over time. People with higher emotional understanding maintained more positive affect, while people with higher emotional management appraised stressful event as more challenging than threatening.

The majority of the previous studies suggest and prove that high and low EI people generally differ in their reactions to stressful situations and events. Nevertheless, some of the results suggest that the dimensions of EI might act in different directions in the interaction with stress. This needs to be considered when
hypothesizing about different EI-stress interactions and their consequences. Some authors argue that EI protects individuals from stressful events through adaptive coping mechanisms. In this line, Montes-Borges and Augusto (2007) showed that TMMS dimensions were significant predictors of different coping strategies and social support among nursing students. In addition, Gooty, Gavin, Ashkanasy and Thomas (2014) showed that people high on EI (measured with MSCEIT) react better to negative and positive emotions (anger, pride and joy) by choosing more adaptive coping strategies.

In summary, the results of the previous investigation about the effects of EI indicate that EI is a beneficial resource for variety of life outcomes. Higher EI individuals show better academic and work performance, and demonstrate other positive and effective academic and job-related behaviors. Furthermore, high EI is linked with better career adaptability and employability prospects. Maybe the strongest evidence for the beneficial effects of EI has been found in the domain of health and well-being. EI has been related with better mental and physical health and better well-being in numerous studies. Moreover, some studies showed that EI can act as a buffer, protecting individuals from the negative effects of stress. Nevertheless, studies that explore the relationship between EI, cognitive and behavioural outcomes and health and well-being mostly use cross-sectional designs. Therefore, it would be useful to conduct research using longitudinal designs in order to obtain more sound evidence for the beneficial role of EI.

3.2.3 Potential role of EI in the context of unemployment

As described in above sections, previous research brought abundant amount of evidence that EI has positive and beneficial effects on cognitive, behavioral and health outcomes across different age groups and samples. However, the majority of the mentioned studies used general population (children students, workers etc.) to assess the effects EI can have on variety of these outcomes. A useful quest would be to examine whether these positive effects of EI would be
repeated using some less privileged populations, such as unemployed individuals. Studies about the cognitive, behavioral or health effects of EI in the context of unemployment are scarce. Research on unemployment at the individual-focus level has mostly been focused on three major aspects. First, the effects of unemployment on physical and psychological well-being. Unemployment is linked with impaired well-being. Unemployed people show worse mental health, life satisfaction, physical health etc. than their employed counterparts. Also, a great deal of research has been dedicated to finding the factors that moderate the effects of unemployment on well-being, those individual or situational (contextual) differences and idiosyncrasies that affect the scope and the intensity of negative effects of unemployment (McKee-Ryan et al., 2005; Paul & Moser, 2009). The second research stream in the unemployment literature has been focused on finding the factors that can help individuals regain employment. Finally, the third aspect concerns interventions that can help unemployed individuals cope better with unemployment and eventually find employment. In this sense, the concept of EI can easily find its place in all three mentioned research streams and can contribute to clarify and buffer the experience of unemployment.

Previous research have demonstrated, in general, positive links between unemployment and deteriorated physical and psychological well-being. In one of the first comprehensive meta-analyses on well-being during unemployment, McKee-Ryan et al. (2005) showed that unemployment was generally linked with deteriorated well-being in more than 100 relevant studies with 146 independent samples in both cross-sectional and longitudinal studies. For instance, they found

---

10 Unemployed individuals are defined as persons aged 15 to 74 who are currently without work, are available for work, and are actively seeking work (International Labour Organization, 2013).
that unemployed individuals showed worse mental health ($d_{\text{c}}^{11} = -.57$), life satisfaction ($d_{\text{c}} = -.48$), marital satisfaction ($d_{\text{c}} = -.21$) and subjective physical health ($d_{\text{c}} = -.45$) in 52 cross-sectional studies. Moreover, the results of more than 20 longitudinal studies following people from employment to unemployment and vice versa also showed that unemployment was related with worse mental health ($d_{\text{c}} = -.89$ and $d_{\text{c}} = -.38$), life satisfaction ($d_{\text{c}} = -3.04$) and physical health ($d_{\text{c}} = -.36$). The results of this meta-analysis suggest that unemployment causes reduced mental health. Besides, evidence from the longitudinal studies suggest that mental health improves as individuals re-enter employment and declines when they go from employment to job loss. In a more recent meta-analysis of more than 200 cross-sectional studies, Paul and Moser (2009) confirmed that unemployment is linked with impaired mental health. They found moderate negative effect of unemployment on mixed symptoms of distress ($d = .55$), depression ($d = .50$), anxiety ($d = .40$), subjective well-being ($d = .51$) and self-esteem ($d = .45$) and low effect on psychosomatic symptoms ($d = .11$).

Several factors are believed to determine the effects of unemployment on physical and psychological well-being. These factors range from demographic characteristics, such as marital status, age or minority status, to socio-economic factors, such as market opportunities or the social welfare system (Paul & Moser, 2009). McKee-Ryan et al. (2005) for instance, identified unemployment duration and life status (school leaver or adult unemployed) as important factors that might determine the effects of unemployment on mental health. Long-term unemployed and school leavers suffered more from unemployment. Besides these moderating factors, McKee-Ryan et al. (2005) identified several factors that might facilitate well-being during unemployment, such as work role centrality, coping resources (positive core self-evaluations, social support, financial resources and time structure), positive appraisal, active job search and human capital. The buffering

$^{11}$ $d_{\text{c}} = \text{mean corrected weighted effect size}$
effect of time structure in the relationship between unemployment and psychological well-being was found in other studies as well (Wanberg, Griffith & Gavin, 1997; Van Hoye & Loothens, 2013). The results of previous studies showed that not only time structure related positively with better mental health (Wanberg et al., 1997; Van Hoye & Loothens, 2013), but also mediated the relationship between other predictors of mental health such as personality traits and role demands (Van Hoye & Loothens, 2013). Time structure, more precisely sense of purpose and present orientation was found to be an important coping mechanism for unemployed adults. Paul and Moser (2009), on the other hand, identified gender, occupational status and unemployment duration as the key moderators of unemployment-well-being relationship.

Many years of research has identified the most important factors that moderate the effects of unemployment on psychological well-being. In the context of the present research, one of those potential buffers of the negative effects of unemployment might be EI. As previously mentioned, EI was found to be a good predictor of both physical and psychological mental health among different samples. As seen from McKee-Ryan et al.’s meta-analysis (2005) factors like coping resources, positive appraisal and human capital were identified as the key correlates of well-being during unemployment. Those factors are directly or indirectly related with EI and examining the role of EI in the context of unemployment might bring valuable findings.

Another area where EI might contribute to is the research on factors that predict the reemployment success. Wanberg (2012) identified human and social capital and characteristics of the individual’s job search as some of the most important factors for reemployment success. Human capital refers to individual’s job-related skills, abilities and knowledge. Other authors highlight the importance of human capital for employability as well. Thus, Fugate et al. (2004) identified career identity, personal adaptability, and social and human capital as key determinants of individual’s employability. Human capital embeds a myriad of
factors considered important for individual’s career advancement such as age and education, work experience and training, emotional intelligence, cognitive ability and other knowledge, skills and abilities (Fugate et al., 2004). Having in mind the results of the previous studies on the effects of EI on career decision making and career adaptability, it is not surprising that EI is identified as one of the key determinants of employability and reemployment. The role of EI in the employability prospects of unemployed individuals should be an important topic in unemployment research. Unfortunately, most of the research effort in this area has been focused on characteristics of job search (such as job search methods, job information sources or other aspects of job search) and their effects on the reemployment (Wanberg, 2012).

Finally, although the main research topic in the unemployment literature have been the effects of unemployment and the relationship between unemployment and well-being, some authors have focused on planned interventions aimed at helping unemployed individuals on different levels. Interventions for unemployed usually take one of two main directions. The first one is improving people’s job search skills or helping unemployed people find a new job and increase their employability prospects (Van Ryn & Vinokur, 1992; Graversen & Van Ours, 2008; Koen, Klehe, Van Vianen, Annelies, 2013). The second one is helping unemployed people cope better with unemployment through stress management, coping skills or self-esteem building (Creed, Machin & Hicks, 1999; Machin & Creed, 2003; Vuori & Vinokur, 2005). Independently of the intervention direction and goals, these previous intervention programs showed that not only the participants of these interventions significantly increased their reemployment probabilities, but also reduced depression, psychological distress and increased job search self-efficacy, among other outcomes (Paul & Moser, 2009; Vinokur et al., 2000; Vuori et al., 2005; Vuori & Vinokur, 2005; Wanberg, 2012). Nevertheless, even though examples of interventions for unemployed are many (Wanberg, 2012), interventions focusing on increasing EI and exploiting the
An important practical aspect when it comes to interventions for unemployed that has been addressed in some previous studies is to identify the factors that might determine the effects of interventions for unemployed. Two factors are being pointed out as important moderators of intervention effects - unemployment duration and job search. Unemployment duration is considered a significant moderator of the negative effects of unemployment on mental health. Long-term unemployed individuals were found to suffer from worse well-being and mental health in previous research (McKee-Ryan et al., 2005; Paul & Moser, 2009). Prolonged unemployment may cause deterioration of self-regulation of emotions which is considered useful for coping with unemployment (Wanberg, 2012) or it can accumulate stress factors which negatively affects well-being (Paul & Moser, 2009). Therefore, unemployment duration might moderate the effects of intervention aimed at reducing negative effects of unemployment. Although there is evidence that even long term unemployed people benefitted from planned interventions, the moderator role of unemployment duration for the intervention effects gives some contradictory results. Paul and Moser (2009) found small but significant moderator effect of unemployment duration in tested intervention studies (d = 0.09). Vinokur et al. (2000) showed that their 1-week job search workshop had an effect on both reemployment and mental health among long-term unemployed adults. However, the participants of the workshop were unemployed less than 13 months, so no data was analysed for participants who were unemployed for a longer period of time. In a similar line, Koen et al. (2013) found a small effect of reemployment interventions on the development of employability among long-term unemployed individuals. On the other hand, some studies showed that the length of unemployment is not a moderator of the intervention effects on
well-being (Creed & Machin, 2003). These contradictory findings need to be addressed in future research.

Another possible moderator of the intervention effects is job search behaviour (job information sources, job search intensity and effort, job search approach, etc.). Data from one meta-analysis showed that job search intensity is related to shorter unemployment duration and better reemployment (Kanfer et al., 2001). However, McKee-Ryan et al. showed that job search effort was associated with lower mental health during unemployment possibly due to rejections and uncertainty and perhaps higher pressure to find a job.

Koen et al. (2013) argued that job search intensity was mostly explained by the more cognitive–affective and motivational dimensions of people's employability. For instance, Vansteenkiste, Lens, De Witte and Feather (2005) showed that autonomous motivation positively predicted job search behaviour. According to self-determination theory, intrinsic autonomous motivation stimulates unemployed individuals to actively seek employment because they find it interesting and satisfying (Vansteenkiste et al., 2005). Therefore, proactive people and people who are intrinsically and autonomously motivated might be more motivated to participate and benefit from planned interventions, as well. In a similar line, self-regulation theory proposes that proactive personality (having a tendency to take initiative) increases people’s employment confidence and job search intensity and may help them get more interviews and job offers (Brown, Cober, Kane & Levy, 2006). Kanfer et al. (2001) proposed a motivational, self-regulatory conceptualization of job search and defined it as an indicator of self-managed, motivational process. The ability to self-regulate emotions and effort during the job search process is important and people differ in this ability. Job search behaviours, as indicators of this self-regulatory process, might moderate the effects of any planned intervention aimed at increasing the employability and reducing stress during unemployment.
In summary, including EI in at least these three research directions that are described above might bring important and useful findings for the area of unemployment research. EI should be included and studied as an important moderator of unemployment-well-being relationship, besides coping resources, human capital and time structure. Moreover, many authors implicitly (and some of them explicitly) suggest that EI is one of the key determinants of employability and reemployment success. And finally, interventions that focus on enhancing EI, and not just on job search skills, might bring significant benefits to unemployed individuals.
4. PLASTICITY OF EI
As described above, the validity of EI construct has been tested and confirmed in numerous previous researches, linking EI with a variety of outcomes. Since many investigations have proven the large potential of EI for improving physical and psychological well-being, performance in distinct domains, and for protecting from stressful effects, the research interest moved to answering the question of the plasticity of EI. Is EI something that can be taught and learned? To what degree can EI be developed and trained? In line with this, there has been a lot of discussion in the literature about whether different socio-emotional abilities and personality traits have potential for change.

Regarding the nature of personality traits and its maturity, there has been a lot of dispute among researchers on whether personality traits can be changed and at what degree (McCrae et al., 1999, 2000; Roberts, Walton, & Viechtbauer, 2006). The most common viewpoints are the classical trait approach, or the five-factor model of personality (McCrae et al., 1999), and a more recent one, HEXACO six-factor model of personality (Ashton et al., 2004). According to these approaches, personality traits are completely dependent on genetic factors and environmental influences are insignificant (McCrae et al., 2000; Roberts, Walton, et al., 2006). Thus, this perspective supports the idea that after the age of 30 any developmental change in personality is not possible (McCrae et al., 1999, 2000).

However, other approaches oppose the classical psychometric perspective. Contextual approach, for example, highlights the influence of environment on personality development. However, this approach does not focus on personality traits per se, but more on socio-cognitive constructs that are highly context-dependent, such as social skills, competences or motivation (Roberts, Walton, et al., 2006). Therefore, it would be expected that these constructs indeed are much more affected by the environmental factors and that potential for change is much bigger. In this context, change in emotional competences would also be probable.
Another approach that emphasises the environmental influence is the interactional approach. This approach focuses more on personality change that is driven by social role changes through life span (Roberts, Walton, et al., 2006). From this viewpoint, the interaction between personal strivings and societal norms represents the key factor for development that occurs in adulthood.

Finally, Baltes’ life span approach also supports the idea of the plasticity of intellectual and psychological functioning even after young adulthood (Baltes, 1997). This approach, more known as life span theory, focuses on adaptation rather than development in the traditional sense of the word.

Additionally, there is empirical evidence that supports the idea that personality is amenable to change and that environment indeed can affect the change even in later adulthood (Roberts, Helson, & Klohnen, 2002; Roberts, Walton, et al., 2006; Srivastava, John, Gosling, & Potter, 2003).

Nevertheless, these studies show that environment has an important impact on personality development, but they do not examine if a thoughtful and planned intervention would have had an effect. The same question implies for change in EI. In their early work on EI, Mayer and Salovey highlighted that people differ in their abilities to perceive, express, use and regulate emotions and that these abilities can be learned and taught (Salovey & Mayer, 1990). Many of the researchers in the field agree that some of the aspect of EI can be developed, even though there is still a lot of disagreement about the conceptual delimitation and definition of EI. Attitudes toward the plasticity of EI also depend on the theoretical model or approach to EI. According to trait EI perspective, EI is a cluster of lower-order personality traits (Petrides et al., 2007). It is believed that trait EI is conceptually more similar to stable personality traits and is, thus, more resistant to change. However, as stated above, several perspectives about personality development support the idea of the plasticity of personality traits and socio-cognitive facets. On the other hand, EI defined as ability or set of different abilities gives more space for potential change and development.
As previously mentioned, in the present study, EI is understood as differences in the way individuals identify, express, understand, use and regulate own and others’ emotions. A large amount of research showed that these individual differences affect and determine cognitive and behavioral responses in variety of situations. A rigid definition of EI as intelligence or trait leaves little space for improvement and development of both EI and its outcomes. Some researchers argue that the term intelligence should not be used because it can be misleading, and that the term emotional competences should be used instead. For example, Scherer (2007) differentiates emotional competence from abilities (stable dispositional capacities) and skills (specific, easily acquired capacities) and defines individual differences in appraising, regulating and communicating emotions as competences in using emotion mechanisms (Scherer, 2007). EI defined as competence implies the potential for its improvement and development and is a much more appropriate term in the context of EI interventions. Therefore, in the present research, the term emotional competences (EC) will be used to demark these individual differences in emotional perception, understanding, use and regulation and to highlight the potential for development and improvement of those competences.

4.1 Training programs in EC

Recent years brought an important increase in EC development methods and interventions. These interventions are aimed at many different target groups, from children and adolescents (Ruini et al., 2009), students (Nelis, Quoidbach,
Training programs in EC

Mikolajczak & Hansen, 2009; Nelis, et al., 2011; Yilmaz, 2009) to managers and employees (Cherniss, Grimm & Liauta, 2010; Groves, McEnrue & Shen, 2008; Slaski & Cartwright, 2003). Besides, these interventions are conducted in different contexts (educational, clinical, and organizational) and aim at different outcomes. In educational settings, these outcomes are usually academic performance or different well-being related outcomes, such as mental health, decreasing anxiety, anger control etc. Various reviews on different school-based intervention programs for promoting social and emotional skills and related aspects confirmed the efficacy of those interventions for various outcomes, such as academic performance, mental health, antisocial behavior etc. (Greenberg et al., 2003; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). One meta-analysis (Durlak et al., 2011) on the effects of social-emotional learning (SEL) programs showed that students who participated in these programs benefited from them in comparison with the students who did not participate in them. These students significantly improved not only their academic performance ($d^{12} = .27$), but also emotional and social skills ($d = .57$), positive social behavior ($d = .24$) and emotional distress ($d = .24$). The findings of this meta-analysis have important practical implications in the school context but also give promising boost for research on EC interventions in other contexts. As for the organizational context, the focus is usually on increasing the level of emotional and social competences of employees or leaders, and decreasing work-related stress.

In a more recent meta-analysis, Schutte and colleagues (2013) aimed at obtaining an estimate of the effect size of EC trainings for adults. They included four experimental intervention studies with random assignment to intervention and control groups and comprised six effect sizes. The results of their findings yielded a moderate overall effect size for the impact of training on emotional intelligence

\[ d = \text{mean effect size.} \]
(g = 0.46). They concluded that EC interventions are promising and called for further exploration of interventions’ efficacy and utility.

A review of some of these successful EC interventions is presented in the continuation. First, interventions whose main goal was increasing the level of EI will be presented, followed by the interventions aiming at increasing other cognitive, behavioural and emotion-related outcomes. A summary of these interventions is presented in Table 9. Sample and theoretical background of each intervention is also presented, along with the effect sizes if they were available in the cited study.

4.1.1 Increasing the level of EC

As mentioned above, different EC interventions are set in different contexts and aim at improving different outcomes. However, some of the interventions have a specific goal to enhance the level of EC of the participants. Several examples in the literature confirm that this is possible. For instance, a study by Sala (2006) focuses on the workplace interventions and yields a promising result that EI can be improved among different occupations (retail managers, consultants and accounting officers). Mastering Emotional Intelligence Program (MEI) based on Goleman’s competency model of EC was a one-year process that aimed at identifying and addressing workplace emotional intelligence issues, and improving participants’ emotional intelligence competencies. The results showed that the intervention had an effect on improving participants’ EC measured by Goleman’s Emotional Intelligence Inventory (ECI). Cherniss et al. (2010) also focused on increasing EC measured with Goleman’s Emotional Competence Inventory and used entry, mid and executive level managers from broad range of businesses. The managers participated in process-designed training with the goal to enhance their emotional and social leadership competencies. The results showed a significant increase in those competencies over the course of two years.
Another study aimed at discovering whether EC can be deliberately developed through EC training based on Mayer and Salovey’s four branch model and leader skill-building exercises among fully employed student (Groves et al., 2008). The findings of this study revealed that the participants from the intervention group significantly increased their overall EC score ($\Delta X_{12F} = -.41$) after an 11 week EC training program. Besides, scores on all of the EC dimensions were also improved: emotional perception ($\Delta X = -.43$), facilitating thinking ($\Delta X = -.43$), understanding emotions ($\Delta X = -.62$) and regulation of emotions ($\Delta X = -.21$), in comparison with their control group counterparts. The control group improved on facilitating thinking ($\Delta X = -.19$) and regulation of emotions ($\Delta X = -.19$).

One of the first studies that included the control group in the intervention process yielded interesting results about the possibilities for EC enhancement. Nelis and colleagues (2009) showed that emotional identification and emotional management could be improved, even after a brief (4 days/ 10h) EI training based on Mayer and Salovey’s four branch model of EC (Nelis et al., 2009). The results of their study showed that the participants of the training group significantly improved EC (measured with TEIQue) ($t (18) = -2.29, p = .033$) after the intervention. Besides, three out of four emotional abilities measured were also improved – regulating own emotions ($t(18) = -6.81, p < .001$), regulating others’ emotions ($t(18) = -3.45, p = .003$) and emotion identification (measured with Toronto Alexithymia Scale, $t(18) = 2.17, p = .043$). These improvements were even maintained six months after the intervention.

Fletcher, Leadbetter, Curran and O’Sullivan (2009) examined whether EC development program can increase EC score measured with Bar-On’s EQ-i. Third year medical students were assigned either to a 7 months EC intervention program or a control group that attended normal medical curriculum classes. Pretest and

$^{13} \Delta X$ Mean difference
posttest measures were used 2 weeks before and 2 weeks after the training. The study was based on Bar-On mixed ability approach of EC. The results showed that EI global score was enhanced in the treatment group and not in the control group. Although the present study does not offer a detailed explanation of the intervention the EC intervention and lacks a clear theoretical basis, it proved that training in emotional competences could indeed improve those competences among the participants.

In a more recent study, Dacre Pool and Qualter (2012) confirmed that it is possible to improve EC and emotional self-efficacy among young adults. Leaning on Mayer and Salovey´s four branch model and on a previous study by Nelis et al. (2009), Dacre Pool and Qualter (2012) designed an 11 week intervention and showed that the intervention group significantly increased their levels of ability EC (measured by MSCEIT) and emotional self-efficacy (measured by Emotional Self-Efficacy Scale - ESES). More precisely, they significantly improved 2 out of 4 MSCEIT dimensions (understanding emotion (d = .20) and managing emotion (d = .19) and all of ESES dimensions (using and managing own emotions (d = .38), identifying and understanding own emotions (d = .47), dealing with emotions in others (d = .47) and perceiving emotion (d = .39).

Most of the previously described EC interventions use traditional learning strategies, such as lectures, role-plays, pair works etc. However, there are studies in organizational settings that move the focus on team learning and team EC interventions. One such study, by Moriarty and Buckley (2003), focused on enhancing team EI through experiential learning. The authors of the study support the idea that “active team learning strategies may enhance a deeper understanding of the concepts and issues than traditional passive learning techniques” (p. 99). They suggest that the participants would improve their emotional competences through participation and interaction, rather than passively accepting EC related concepts. The results of their study showed that participants of the program in
Training programs in EC developing team skills increased their levels of EC, both measured with self-report and peer evaluated measures.

These studies demonstrate that EC interventions developed on different theoretical backgrounds and conducted in different contexts can increase the level of EC measured with both self-report and ability EI measures. In addition, as it was seen in previous chapters EC has positive and beneficial effects on variety of life outcomes. Therefore, increasing EC might indirectly affect important life outcomes such as work and academic performance, physical and psychological health and well-being, coping mechanisms, etc.

4.1.2 Various Outcomes

Recent years, however, brought several studies that are not exclusively focused on increasing the level of EC. The focus of these studies is moved to examining how can different cognitive, behavioral and health-related aspects be increased and also which specific groups might benefit the most from this kind of intervention programs. These studies, using students, workers or general population, also confirmed the fact besides EC, other important life outcomes can be successfully improved.

For example, several interventions were applied in education settings and were designed for pupils and students. Ruini et al. (2009) designed a school-based intervention based on well-being therapy and Ryff’s Eudemonic perspective to enhance students’ (9th grade; Mean age-14.47; SD-07.69) well-being and decrease stress and anxiety. The intervention included a control group that received an attention-placebo protocol (relaxation techniques, improving communication and conflicts) and a pre-test, post-test, follow-up design. Although not specifically based on any known EI model or theory, the intervention was therapy-like and the purpose was promoting emotional well-being among students. The results showed that the intervention was effective not only in increasing psychological well-being among adolescents, but also in decreasing distress, in particular anxiety and
somatization. However, this intervention does not include any well-known conceptualization of EI or measure of EI. It is done in a school context with adolescents and is based on Well Being Therapy (WBT).

Similarly, two more studies that aimed at improving students’ well-being (using a pre-test post-test design and a control group) were conducted by Yilmaz (2009) and Saadi, Honarmand, Najarian, Ahadi and Askari (2012). The first study aims at decreasing anger levels among students with high anger scores by implementing an EI training especially developed for the purposes of the study. EI skills training program (12 1½ h sessions) based on group psychotherapy was developed by the researcher. Each session was dedicated to teaching one particular skill: detecting emotions, expressing emotions, regulating emotions, internal motivation, empathy, evaluation of relationships, etc. The results showed that the training was effective and that the levels of anger decreased in the treatment group. Although the authors mention Mayer and Salovey’s EI model, there is no evidence that the training is based on this model and that the activities aim at enhancing these particular emotional abilities. Additionally, the study lacks a detailed explanation of the intervention. In the second study, Saadi et al. (2012) confirmed that training in EI can have a positive effect on aggression reduction, showing that female students who participated in EI training decreased significantly their levels of aggression.

A recent longitudinal study overcame a common subject of criticism and used a clear theoretical basis for the EC intervention. Ruiz-Aranda, Salguero, Cabello, Palomera, & Fernández-Berrocal (2012) and Ruiz-Aranda et al. (2012), in two different studies, showed a significant effect of EI training program among adolescents. Set in the primary school context, the authors designed a 2 year EI educational program (the INTEMO project) based on Mayer & Salovey’s EI model with the purpose to analyze the effects of the intervention on adolescents’ mental health and psycho-social adjustment. The results of this pretest–posttest quasi-experimental design with a treatment and a control group showed that training in
Training programs in EC

emotional skills can positively affect mental health and well-being. Not only did the participants in the intervention group report better scores on mental health and psychological and psychosocial adjustment, but also these improvements were held over time. The results of these studies are somewhat more important in the sense that the intervention was based and designed on a firm theoretical background (Mayer and Salovey’s 4 branches model) which makes the results more rigorous and valid.

Adding to previous findings on beneficial effect of EC interventions on students’ well-being, a study that used an educational program (RULER Feeling Words Curriculum) in school setting expands these beneficial effects on promoting social and emotional competences and academic performance. Brackett, Rivers, Reyes and Salovey, (2012) showed that social-emotional learning (SEL) programs can have an important and positive impact on different outcomes. Thus, students who participated in their 30-week RULER program improved their social and emotional competence and increased academic performance in comparison with the control group. This study is congruent with previous findings on different SEL programs in promoting academic achievement and socio-emotional development among children and adolescents.

Besides, student samples, Slaski and Cartwright (2003) conducted a specially designed EI program (4 days) based on Bar-On’s mixed ability model, among 60 retail workers. The aim of one of the first studies on EI interventions in organizational settings was to examine the effects of EI program on workers’ well-being and performance. The results showed that the training improved the level of EI of the training group, and also their well-being, but not their performance. The workers in the intervention group showed significant increase in EI (ΔX = 5.2),

\[ \Delta X = \text{Training group difference in mean pre-post scores.} \]
work morale (10.5%), quality of working life (6.6%) and general health \( \Delta X=-6.5 \), and significant decrease in distress (11.1%) and subjective stress \( \Delta X=-1.4 \).

Kirk, Schutte and Hine (2011) conducted an interventions aiming at improving emotional self-efficacy (as defined by Petrides and Furnham, 2003). Their results demonstrated that an emotional self-efficacy writing intervention can increase significantly participants’ emotional self-efficacy score. Moreover, the participants of the intervention, in comparison to the control group, increased significantly their levels of EC and positive affect and decreased their levels of incivility perpetration after controlling for pre-test scores.

On the other hand, there are authors who argue that previous trainings based on mixed EI models or trait EI might have brought some improvements but they lack rigorous evaluation and proof, so the focus should be moved on trainings based on ability models (Clarke, 2006). Clarke (2006) discusses that some research show that EI abilities can indeed be developed but through informal workplace learning and depending a lot on the context (especially the ability to manage emotions). The accent is on the contextualized nature of emotion management. In other words, EI abilities, especially managing emotions can be developed through workplace learning, undertaking the job itself. The attempts to develop EI through training outside of the socio-cultural context cannot be effective. The results of another Clarke’s study are in accordance with these ideas. “The first study to appear in the literature that has investigated whether participation in a short training programme can affect the development of emotional intelligence abilities in project managers” (p. 467) conducted by Clarke (2010) did not reveal promising results. The author conducted a 2-days EI intervention on 53 project managers to see if the training can enhance EI abilities and the project management competencies (managing conflict and teamwork). The results show that the only ability that was enhanced by this EI training was “understanding emotions” and only after 6 months. The training did not enhance any of the abilities (measured with MSCEIT) on short term (1 month after). These results suggest that the EI
Training programs in EC

training can be effective but in "cooperation" with other (contextual) factors and after some time.

In a more recent study, Nelis et al. (2011) showed that not only emotional competencies increased after a brief training, but also the development of emotional competencies brought positive changes in psychological well-being, subjective health, quality of social relationships, and employability in the sample of students. As in the previous study, the authors developed a training program based on Mayer and Salovey four branch model of EI, but it was slightly different from the previous one. The training lasted 18 hours and it included a mixture of theoretical parts and practical activities. The training sessions were focused on enhancing each of the Mayer and Salovey emotional ability - identifying one’s own emotions and others’ emotions, understanding emotions, regulating one’s own and others’ emotions, and using positive emotions to foster well-being. The results of this study showed that people who participated in the training significantly improved their global EI (measured with TEIQue) \( (d = 1.13) \), emotion regulation \( (d = 1.20) \), emotion understanding \( (d = .70) \) and even extraversion \( (d = .54) \). All of these improvements were maintained over time (6 months later) and the participants even decreased their levels of neuroticism \( (d = .80) \), and increased their levels of agreeableness \( (d = .22) \). Nevertheless, further analyses showed that the changes in extraversion and neuroticism were mediated by the increase in EI. Besides the improvements in global EI and some of the personality measures, the results of the second study of the same authors showed that the training group significantly improved several indicators of physical, psychological and social adjustment. The training group increased their levels of happiness \( (d = .57) \), life satisfaction \( (d = .59) \), global social functioning \( (d = .47, \text{ informant-report global EC} \ (d = .30) \) and employability \( (d = .30) \) and decreased their levels of somatic complaints \( (d = .61) \) and mental disorders \( (d = .62) \).

Finally, the last study conducted by the same group of authors proved that the improvement in emotional competences was associated with a decrease in
perceived and objective stress (cortisol), a decrease in somatic complaints, and an improvement in the quality of social relationships (Kotsou et al., 2011). These authors conducted a very similar EC intervention, based on Mayer & Salovey’s EI model, among general population. The intervention, comprised experimental and control group, it lasted 15 hours and it was divided into five modules. Each module was focused on enhancing a specific emotional competence: the capacity to identify one’s own and others’ emotions, the capacity to understand emotions, the capacity to express emotions in a socially adequate manner and to listen to others’ emotions, the capacity to manage one’s own and others’ emotions, and the capacity to use emotions to enhance thinking and actions (Kotsou et al, 2011). The results of this study confirmed that EI can be improved after a short intervention. Training group increased their levels of EI 1 month after the training (TEIQue-SF: $d = .9$, TEIQue-360º: $d = .63$). Moreover, the intervention caused a significant decrease in perceived stress ($d = 1.34$), objective stress ($d = .75$) and somatic complaints ($d = .82$) and a significant increase in satisfaction with life ($d = .62$) and quality of social relationships (self-reported: $d = .54$, informant-reported: $d = .63$).

Recently, researchers in organizational contexts have been more focused on exploring whether EC interventions might be beneficial for some occupations in particular. The rationale behind these studies is that some occupations suffer more from the negative effects of stress and increased emotional labor. Daus and Ashkanasy (2005) summarized studies that show that EI might ameliorate the negative effects of emotional labor\textsuperscript{15}. Higher emotional labor is usually associated to service workers and helping professions. Therefore, a new trend in EC interventions area has been to detect those professions that might benefit from increasing their EI. In this line, Grant, Kinman and Alexander (2014) investigated whether EC intervention based on Mayer and Salovey’s ability model of EI might

\textsuperscript{15} Emotional labor is defined as managing emotions and feelings in order to achieve work goals and fulfil work tasks (Hochschild, 1983).
Training programs in EC have positive effects on future social workers. The quantitative and qualitative results of their study showed that social work students benefitted from an EC workshop by increasing their emotional literacy, empathy and reflective ability and decreasing psychological distress. In another study, Vesely, Saklofske and Nordstokke (2014) examined the effects of EC intervention on EC and well-being among future teachers. Although they only found significant increase in EI measured with Wong and Law Emotional Intelligence Questionnaire (WLEIS; \( d = .26 \)), EI measured with TEIQue and indicators of well-being showed a positive increasing trend among the training group.

These studies give proof and support not only that EC can be improved, but also that these improvements can have a short term effect and a long term effect on variety of health related variables, such as life satisfaction, perceived health, stress reduction, quality of interpersonal relationships. Moreover, they highlight the potential of EC interventions for unprivileged occupations and target groups.
Table 9. Summary of the EC interventions from the literature

<table>
<thead>
<tr>
<th>Authors</th>
<th>Sample</th>
<th>Intervention background</th>
<th>Outcomes</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interventions designed to increase the level of EC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moriarty &amp; Buckley, 2003</td>
<td>Undergraduate students</td>
<td>Developing team skills program</td>
<td>Team EI</td>
<td>/</td>
</tr>
<tr>
<td>Sala, 2006</td>
<td>Retail managers, consultants and accounting officers</td>
<td>Mastering Emotional Intelligence Program (MEI) based on Goleman´s competency model of EI</td>
<td>EI (ECI)</td>
<td>$\eta^2$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Self-confidence: 0.58 Organization awareness: 0.40 Service orientation: 0.75 Conscientiousness: 0.57 Adaptability: 0.62 Initiative: 0.59 Communication: 0.47 Conflict management: 0.49</td>
</tr>
<tr>
<td>Groves et al., 2008</td>
<td>Fully employed student</td>
<td>EI training based on Mayer and Salovey´s four branch model and leader skill-building exercises</td>
<td>EI</td>
<td>/</td>
</tr>
<tr>
<td>Fletcher et al., 2009</td>
<td>3rd year Medical students</td>
<td>EI development training programme implemented by externally recruited professionals</td>
<td>EI</td>
<td>/</td>
</tr>
</tbody>
</table>
## Training programs in EC

<table>
<thead>
<tr>
<th>Study</th>
<th>Population</th>
<th>Intervention</th>
<th>Outcome</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nelis et al., 2009</td>
<td>Psychology students</td>
<td>Mayer &amp; Salovey 4 branch model of EI</td>
<td>General EI: TEIQue; different emotional abilities: Emotion Regulation (own emotions), Regulation of others’ emotions, Emotion identification (Openness to Emotional experiences and Alexithymia) and Emotional understanding</td>
<td>F (repeated measures ANOVA): Emotion Regulation: 5.58 Regulation of others’ emotions: 3 Alexithymia: 4.19 TEIQue: 2.59</td>
</tr>
<tr>
<td>Cherniss et al., 2010</td>
<td>Entry, mid and executive level managers</td>
<td>Process-designed training</td>
<td>Emotional and social leadership competencies (ECI)</td>
<td>( \eta^2 ) Peer ratings: Overall EI: 0.31 Self-management: 0.55 Self-awareness: 0.38 Relationship management: 0.52 Social awareness: 0.38 Self-rating: Overall EI: 0.06 Self-management: 0.07 Self-awareness: 0.05 Relationship management: 0.05</td>
</tr>
<tr>
<td>Brackett et al., Elementary</td>
<td>Educational program</td>
<td>Social and emotional</td>
<td></td>
<td>( \eta^2 )</td>
</tr>
<tr>
<td>Year</td>
<td>Group</td>
<td>Methodology</td>
<td>Measures</td>
<td>Results</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>2012</td>
<td>School students</td>
<td>(RULER Feeling Words Curriculum)</td>
<td>Competence and academic performance</td>
<td>adaptability: 0.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>school problems: 0.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Academic performance: 0.07</td>
</tr>
<tr>
<td>Dacre Pool &amp;</td>
<td>Undergraduate students</td>
<td>Mayer &amp; Salovey 4 branch model of EI</td>
<td>EI (MSCEIT) and emotional self-efficacy (ESES)</td>
<td>$\eta^2$</td>
</tr>
<tr>
<td>Qualter, 2012</td>
<td></td>
<td></td>
<td></td>
<td>MSCEIT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Understanding emotions: 0.09</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Managing emotions: 0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ESES:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Using and managing emotions: 0.07</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Identifying and understanding own emotions: 0.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Dealing with emotions in others: 0.20</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Perceiving emotions: 0.08</td>
<td></td>
</tr>
<tr>
<td>Garaigordobil</td>
<td>Adolescents</td>
<td>Social skills development program</td>
<td>Social behavior, empathy, EI (EQ-i), interaction strategies</td>
<td>$\eta^2$</td>
</tr>
<tr>
<td>&amp; Peña, 2014</td>
<td></td>
<td></td>
<td></td>
<td>Social conformity: 0.08</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Collaboration: 0.05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Security: 0.03</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Empathy: 0.32</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>EI (global): 0.13</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Intrapersonal EI: 0.22</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Interpersonal EI: 0.06</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mood: 0.12</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Assertiveness: 0.39</td>
</tr>
</tbody>
</table>
Training programs in EC

<table>
<thead>
<tr>
<th>Interventions designed to improve various outcomes</th>
<th>Slaski &amp; Cartwright, 2003</th>
<th>Retail workers</th>
<th>EI program based on Bar-On’s mixed ability model</th>
<th>EI, work morale, quality of working life, general health, distress, subjective stress, performance</th>
<th>/</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ruini et al., 2009</td>
<td>9th grade students</td>
<td>Well-being therapy and Ryff’s Eudemonic perspective</td>
<td>Well-being, stress and anxiety</td>
<td>Cohen’s d: Well-being: 0.17 Anxiety: -0.18</td>
</tr>
<tr>
<td></td>
<td>Yilmaz, 2009</td>
<td>Students</td>
<td>EI skills training program based on group psychotherapy</td>
<td>Anger levels</td>
<td>/</td>
</tr>
<tr>
<td></td>
<td>Kirk et al., 2011</td>
<td>Employed adults</td>
<td>Emotional self-efficacy writing intervention</td>
<td>Emotional self-efficacy, EI, positive and negative affect, workplace incivility</td>
<td>$\eta^2$ Emotional self-efficacy: 0.10 EI: 0.31 Positive affect: 0.12 Workplace incivility: 0.12</td>
</tr>
<tr>
<td></td>
<td>Kotsou et al., 2011</td>
<td>General population</td>
<td>Mayer &amp; Salovey 4 branch model of EI</td>
<td>Global EI, Perceived and objective stress (e.g., cortisol), somatic complaints, quality of life</td>
<td>$\eta^2$ EI self-report: .24 EI 360º: .25 Satisfaction with life: .11</td>
</tr>
<tr>
<td>Study</td>
<td>Participants</td>
<td>Methodology</td>
<td>Measures</td>
<td>Submeasures</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>--------------</td>
<td>-------------</td>
<td>----------</td>
<td>-------------</td>
<td></td>
</tr>
<tr>
<td>Ruiz-Aranda, Salguero, et al., 2012, Ruiz-</td>
<td>Adolescents (primary school)</td>
<td>Emotional intelligence educational program (INTEMOr project) based</td>
<td>Mental health and psychological and psycho-social</td>
<td>r (pretest-follow-up) Anxiety: 0.22 Depression: 0.08</td>
<td></td>
</tr>
</tbody>
</table>
Training programs in EC

<table>
<thead>
<tr>
<th>Study</th>
<th>Participants</th>
<th>Intervention</th>
<th>Outcome</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aranda, et al., 2012</td>
<td>on Mayer &amp; Salovey´s EI model</td>
<td>adjustment</td>
<td>Social stress: 0.08</td>
<td>External locus: 0.15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Somatization: 0.07</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Anxiety: 0.03</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Atypicality: 0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Depression: 0.04</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Self-esteem: 0.06</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Social stress: 0.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Somatization: 0.03</td>
<td></td>
</tr>
<tr>
<td>Saadi et al., 2012</td>
<td>2nd year high school students</td>
<td>/</td>
<td>Aggression reduction</td>
<td>$\eta^2$ Aggression: 0.95</td>
</tr>
<tr>
<td>Vesely et al., 2014</td>
<td>Undergraduate teacher candidate students</td>
<td>Training modules based on the Swinburne emotional intelligence model</td>
<td>EI (TEIQque and Wong and Law Emotional Intelligence Questionnaire, stress, anxiety, satisfaction with life, teacher efficacy, resiliency</td>
<td>$\eta^2$ EI (Wong and Law Emotional Intelligence Questionnaire): .26</td>
</tr>
</tbody>
</table>

Note: $\eta^2$ estimated effect size
Nevertheless, many authors have been critical towards different EC interventions in the literature. Groves et al. (2008) argue that previous EC interventions usually lack a control group and a more detailed explanation about the training programs, use unknown EI measures and lean on controversial EI models, and apply training programs that are not exclusively focused on EI. In the same line, Nelis et al. (2011) add that the previous intervention programs use confusing conceptualizations of EI and focus only on one or two specific EI dimensions, adding other non-EI related competences to the training. Besides this, evaluations of EI programs are “often limited to subjective impressions right after the training” (Nelis et al., 2009). Not many researches explore the long-term effect of EI training (and possible EI improvement) on stress reduction and well-being (Zeidner, Roberts & Matthews, 2008).

In addition, the literature review revealed that:

- The majority of EC interventions used students and “privileged” populations, such as children and employees as target groups. Not many of investigations have focused on more unprivileged groups of adult population, such as unemployed adults. Still, some of the previous EC interventions have proved their effectiveness and the fact that some aspects of emotional intelligence and well-being can be successfully improved.

- Even though the authors of the interventions lean on some of the familiar EI models and conceptualizations, the training programs are usually developed independently and for the purpose of the study or project. They include other aspects not specifically related to EI, such as social skills, stress management or motivation. This makes any rigorous empirical comparison of different EC interventions difficult to conduct.
5. SUMMARY AND AIMS OF THE STUDY
As it was presented in previous chapters, the importance of EI/EC for variety of outcomes has been demonstrated in numerous studies. The beneficial role of EC is reflected in various life outcomes, from work and academic performance to health and well-being. EC has been linked with better physical and psychological health, higher satisfaction with life and better mental health in general (Schutte et al., 2007; Martins et al., 2010). Furthermore, EC has been shown to be a protective factor in stressful circumstances. A buffering role of EC has been demonstrated in many studies that explored the relationship between stress and psychological and physical well-being.

Besides, the role of EC for academic and work performance has also been considerably explored in more than 2-decade long research. There is evidence that EC is associated with better academic and work performance (Van Rooy & Viswesvaran, 2004; O’Boyle et al, 2011). Furthermore, higher EC has been linked with better job satisfaction, organizational citizenship and commitment, better interpersonal relationships at work and effective leadership (Zeidner et al, 2009). In addition, research has shown that EC plays an important role in career decision-making and career development. However, the majority of the studies on the beneficial role of EC use cross-sectional designs. Therefore, it would be appropriate to develop longitudinal studies to establish the causal relationships between EC and various important results. In addition, the effects of EC on different life outcomes has almost always been studied in samples of adolescents, students, workers or general population. Testing the beneficial role of EC among less “privileged” groups, such as unemployed adults for instance, is not a common subject in the EC literature.

Naturally, after it became clear that higher EC has a wide spectrum of positive and adaptive effects, the research focus moved to exploring the potential of EC improvement. Thus, numerous EC training programs were developed for various purposes and various target groups and showed that EC can be improved. However, the majority of interventions used students as target groups (10 of the 18
SUMMARY AND AIMS OF THE STUDY

studies that are reported above), followed by workers (4 studies), adolescents (3 studies) and general population (1 study). EC interventions in the workplace are usually designed with the aim of increasing the level of EC among employees and leaders and consequently cause other individual or organizational benefits, such as better performance, job satisfaction or better mental health of the employees. One of the major gaps in the intervention literature is certainly this extensive focus on privileged groups and samples. There is no study in the literature that aims at enhancing EC among less privileged individuals, such as unemployed adults.

Numerous previous studies showed that unemployment is linked with reduced well-being, deprived psychological and physical health, depression and even suicide (Paul & Moser, 2009; Wanberg, 2012). Therefore, numerous interventions for unemployed have been designed to help unemployed individuals. The interventions for unemployed are usually focused on either helping unemployed individuals find a job (through improving job search skills) or helping unemployed individuals cope better with unemployment (e.g. stress management courses) (Koen et al., 2013). There is no effort, though, to focus on EC (as an important aspect of human capital) in order to merge these two intervention goals and help unemployed individuals cope better with unemployment and increase their employability prospects at the same time. Moreover, the potential of EC for well-being of unemployed individuals has not been studied so far, even though the positive effects of EC on different life outcomes have been proved in many previous studies. In addition, several aspects have been identified as moderators of the unemployment effects on well-being, but their role as determinants of the intervention effects has not been examined in detail. At first place, unemployment duration was identified as a moderator of the effects of unemployment on well-being. In other words, long-term unemployed suffer more from the negative effects of unemployment (McKee-Ryan et al., 2005; Paul & Moser, 2009). Moreover, unemployment duration might moderate the effects of interventions for unemployed, as well (Paul & Moser, 2009). Besides, an important predictor of
reemployment success, job search behavior, might moderate the effects of the intervention for unemployed individuals, due to its motivational and self-regulatory nature (Kanfer et al., 2001).

In this sense, the present work aims at overcoming the limitations of the previous studies by exploring whether EC can be developed in an unprivileged population, such as unemployed adults, through a planned intervention developed on sound theoretical assumptions, and whether this improvement can predict improvements in different aspects of unemployed people’s lives. This represents the main objective of the research. In order to reach this objective three empirical studies have been developed and conducted. Aims and hypotheses of each study are summarized in continuation.

**Study 1.**

The aim of the Study 1 is to examine whether the training in EC can increase the level of EC of the unemployed participants and if the training effects will be moderated by the length of unemployment. Moreover, to test if changes in EC can predict changes in physical and psychological well-being. As previously described, intentions to enhance EC among different target groups have been relatively numerous, as well as the intentions to link EC with the variety of psychological and physical well-being indicators. Nevertheless, these previous studies do not focus on unprivileged populations, such as unemployed adults. Besides, unemployment duration was identified as an important moderator of the effects of unemployment on well-being (McKee-Ryan et al., 2005; Paul & Moser, 2009) and it might moderate the effects of interventions for unemployed, as well. Therefore, the assumed hypotheses of the Study 1 are:

*Hypothesis 1:* The training in EC increases the level of EC of the unemployed participants.

*Hypothesis 2:* The effects of EC training are less pronounced if the unemployment duration is longer.
Hypothesis 3: Changes in EC predict changes in the levels of psychological and physical well-being (perceived stress, somatic complaints, mental health and mood states).

Study 2.

Study 2 is dedicated to the employability prospects of unemployed adults and how the EC intervention might improve those prospects in short and long term. The literature review suggests that human capital and enhancing human capital might significantly improve people’s employability prospects. Therefore, it would be useful to explore if one aspect of human capital, such as EC, can have beneficial effects on employability prospects of unemployed individuals. In this sense, the assumed hypotheses are:

Hypothesis 1: Participants in the intervention group will show higher levels of employability, job search, entrepreneurial self-efficacy and entrepreneurial intention after the EC intervention than their control group counterparts.

Hypothesis 2: These improvements will be maintained six months after the intervention.

Hypothesis 3: The intervention will increase later reemployment success.

Study 3.

Finally, the aim of the Study 3 is to test one more determinant of the intervention effects and to examine whether changes in EC after the intervention can predict changes in several positive psychology constructs. According to Kanfer et al. (2001), job search behavior is one of the indicators of the self-managed, motivational process. Therefore, due to its motivational and self-regulatory nature, job search might moderate the effects of the intervention for unemployed individuals. In addition, Study 1 deals with some of the indicators of positive human functioning that are considered useful for handling unemployment. Nevertheless, although previous studies explored predictors and determinants of different positive psychological strengths, the effects of EC on these characteristics
have not been explored in a specific context, such as unemployment. Therefore, Study 3 will test the following two hypotheses:

**Hypothesis 1:** The effects of the EC intervention will be stronger among people who are more actively seeking employment.

**Hypothesis 2:** Changes in EC will predict changes in levels of satisfaction with life, optimism, interpersonal relationships and adaptive coping strategies.
6. METHOD
6.1 Design

A controlled experimental longitudinal design with one experimental and one control group and three data collection times was used in the present thesis. Prior to the intervention all measures were completed by all the participants (T1). The participants were randomly divided into experimental or control group and the experimental group received a 15h EC intervention. All the measures were collected again one month after T1 (T2), and six months after T1 (T3). The control group was used to assure that the possible changes were the actual effects of the intervention and not a spontaneous natural change. The control group completed all the same measures in the same time intervals as the experimental group and was offered the same intervention after the last data collection.

6.2 Sample and Procedure

The sample recruitment started with announcing the training in emotional competences at several Valencian offices for occupation and formation (Servei Valencià d'Ocupació i Formació - SERVEF) and on the website of the University of Valencia (Spain) and different social networks (Facebook, LinkedIn). The training was announced as a free-of-charge course in emotional intelligence for learning how to manage stress. It was addressed to unemployed people only and the participants were offered an official diploma after the completion of the course. The posters that were used to announce the training are presented in Annex 1. In total, 212 people signed up for the training, from which 113 (53.3%) came to the selection interview. The selection interview was performed in order to explain the training aims, content and the steps of the investigation, as well as to check if the participants met the requirements to participate in the training. These requirements were: a) being unemployed (no part time or full time employment either), b) be motivated for the intervention process, c) do not have extensive prior knowledge about EC d) not going through any planned psychological intervention during the training, e) do not have drugs or alcohol dependence or abuse and f) do not use
Sample and Procedure

psycho-pharmaceutics. The questions from the selection interview are presented in the Annex 2.

A detailed flow diagram of the progress through all the phases of a parallel randomized trial is presented in Figure 1. After the initial selection interview, several people were excluded from the intervention process. The majority (20) were excluded because they were not available to participate in the training, due to the training schedule. Some (18) were excluded because they did not meet the above stated requirements, either because they were part-time employed, they were going through therapies and using medication or they wanted to make use of the training content for their own professional purposes (coaches, therapists and psychologists). The rest of the participants (75 or 66.37%) were randomly allocated to EC training program, or a control group.

The EC training group consisted of 41 participants (38 women and 3 men; mean age = 32.68, SD = 10.34) that went through a 2 and half day training. All the participants from the experimental group were divided into four smaller groups that consisted from 8 to 12 participants to ensure that all the participants participated equally in the training sessions. Three groups had the training in the morning and one group in the afternoon. The control group consisted of 34 individuals (27 women and 7 men; mean age = 36.4, SD = 12.02) that did not go through any kind of intervention.
Figure 1. Flow diagram of the trial progress

As previously mentioned, the control group went through the same data collection periods as the experimental group, and was offered the training after the last data collection (after T3). From all participants from the control group only 12 people received the intervention, due to the availability restrictions. All participants signed an informed consent to participate in the study prior to the training, which is presented in Annex 3.
6.3  EC intervention

The results of the studies previously conducted on the effects of the EC trainings are hard to compare due to the variety of training programs and theoretical perspectives of the interventions. Therefore, a training used in a previous study with guarantees for rigour was used in the present study. More precisely, it was a previously tested and validated intervention by Kotsou and colleagues (2011). The general aim of the intervention was to improve emotional competencies and develop effective emotion regulation strategies. The general theoretical framework the intervention is Mayer and Salovey’s four-branch model of emotional intelligence (Mayer & Salovey, 1997; Mayer et al., 1999). The more detailed explanation of content and the references used in the intervention program can be found in the book Emotional Competences written by Mikolajczak et al. (2009). The total duration of the intervention was 15 hours and following the authors’ suggestions the first two days were consecutive and the last training day took place 2 weeks after the second day. The two-week gap permitted the participants to apply the knowledge and skills they obtained through the training in their every-day lives. The content of the training was translated from French to Spanish by the two lecturers who conducted the training. The training consisted of 6 modules, with each module covering a specific emotional competence. The modules were:

1) introduction to EC and identifying one's own and others' emotions,
2) understanding emotions and using them to better respond to one's needs
3) regulating one's own emotions in relationships,
4) regulating other's emotions in relationships and conflict management (including strategies to express one's emotions constructively and to listen to others' emotions),
5) practical techniques to down-regulate unpleasant emotions,
6) positive emotions and practical techniques to up-regulate pleasant emotions

Table 10. *Global scheme of the training*

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Module 1:</strong></td>
<td>• Introduction to emotional intelligence</td>
<td><strong>Module 5:</strong></td>
</tr>
<tr>
<td></td>
<td>• Identifying one’s own emotions</td>
<td>• Practical techniques to down-regulate unpleasant emotions</td>
</tr>
<tr>
<td></td>
<td>• Identify others’ emotions</td>
<td></td>
</tr>
<tr>
<td><strong>Module 2:</strong></td>
<td>• Understanding emotions and using them to better respond to one’s needs</td>
<td></td>
</tr>
<tr>
<td><strong>Module 3:</strong></td>
<td>• Regulating one’s own emotions in relationships</td>
<td></td>
</tr>
<tr>
<td><strong>Module 4:</strong></td>
<td>• Regulating other’s emotions in relationships</td>
<td>• Positive emotions and practical techniques to up-regulate pleasant emotions</td>
</tr>
<tr>
<td></td>
<td>• Conflict management</td>
<td></td>
</tr>
</tbody>
</table>

The first module consisted of a short theoretical introduction about emotional intelligence, emotional competences and emotions, followed by the explanation about the importance of emotions and emotional competences. Only empirically supported and scientifically relevant concepts and theories were used to illustrate the key concepts. Examples of the content used in this part of the training are presented in Annex 4.1. Afterwards, the participants were showed how to identify own emotions through different key indicators and how to identify other people’s emotions through facial expression, postures and non-verbal language (example of the slides in Annex 4.2.). Picture and video examples were given to explain better the indicators. Between the theoretical explanations, practical exercises were conducted where the participants had a chance to put in practice the
concepts and skills they learned (example in Annex 4.3.). These practical exercises included evoking some emotional situation and recognizing the emotions that occurred via the signs learned and identifying micro emotional expression and fake smiles from the videos presented.

The second day was dedicated to the modules 2, 3 and 4. Example slides for these three modules are presented in Annexes 4.4, 4.5 and 4.6. In module 2 participants were taught to understand the cause and consequences of particular emotions and the needs usually associated with different emotions. Participants were also asked to analyse a short movie clip and in order to understand which emotions occurred to the protagonists. Modules 3 and 4 were dedicated to learning the basic protocol for managing (regulating) own and other people’s emotions in relationships. More precisely how to accurately observe and articulate the situation without judging, how to accurately express own emotions, feelings and needs, how to distinguish between needs and triggers and needs and means for satisfying the needs and how to find a solution. Besides, participants practiced in pairs this protocol and saw videos about the negative effects of judging and self-fulfilling prophecies. Moreover, module 4 included a part about conflict management where participants had a chance to learn about possible conflict resolution strategies and to practice solving real life example conflicts in pairs.

As previously mentioned, after the second training day there was a 2-week break before the last (third) day of the training. In this period, participants were sent brief reminders of the content from the previous modules and were asked to pay attention to their every-day life events (especially those emotionally charged situations) so they could be discussed during the last day of the training (example of one of the reminders content is presented in Annex 4.7). Some of the participants shared their experiences with the group during the last day.

In the fifth module, the participants learned about the importance of regulating negative emotions and the negative effects stress can cause. Several regulation strategies were presented to them including situational modification,
attention re-orientation, cognitive change, social exchange and some relaxing techniques, such as a breathing and muscle relaxation techniques. Finally, in the sixth module the participants learned about the importance of positive emotions and the effects they can have on physical and psychological well-being. Some practical techniques for enhancing positive emotions were presented (gratitude, auto-priming, physical exercises etc.) as well. Example slides for modules 5 and 6 are presented in Annex 4.8.

Pair work, teamwork or individual exercise were used to give participants the chance to implement what they learned into practice throughout all six modules. In addition, some of the concepts related to a specific emotional competence were explained using video clips, role-plays or interesting cases from history. Example exercise and one case from the history used in the training are presented in Annexes 4.9 and 4.10. Group discussions and personal examples sharing were also encouraged in order to let the participants be more active and implicate more in the training process.

The training was held in the same facility for all groups and two lecturers were in charge of the intervention. The two lecturers always presented the same modules to each intervention group in order to ensure equal experimental conditions for all groups.

6.4 Measurement instruments

Different type of measures, depending on the type of variables (control variables, EC variable, dependent variables), were used in the three studies that compose the present research. The measures will be presented in that order in the following lines. All the selected measures were tested and validated in Spanish.

6.4.1 Control Variables

Verbal ability was measured using the Test of Verbal Ability Buenos Aires (BAIRES, Cortada de Kohan, 2004). The test consists of 98 items, half of which
Measurement instruments

are Definitions and half Synonyms. All items have multiple choice (four possible) answers, one of which is correct. The Definitions part consists of 50 words and the respondent has to choose one out of four possible definitions that best defines the word (e.g., “Utopia”, “Myth” etc.). The Synonyms part consists of 48 words and the respondent has to choose one of four words that has the most similar meaning. The correct answers are summed up in order to obtain a global score of verbal ability. Verbal ability was controlled because previous studies have shown that EC correlates significantly with verbal ability (Bastian et al., 2005; Zeidner et al., 2009).

6.4.2 Pre and post measures of EC

*Emotional Competences* were measured using the Spanish adaptation (Pérez, 2003) of Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF, Petrides & Furnham, 2006). This self-report measure is based on the full form of the TEIQue and it includes 30 items ranging from 1 (strongly disagree) to 7 (strongly agree) and provides a global score of EC. The scale includes items such as: “Expressing my emotions with words is not a problem for me” and “I’m usually able to find ways to control my emotions when I want to”. In the present thesis, the internal consistency of the scale was .83 (T1), .88 (T2), and .82 (T3). TEIQue-SF was chosen as the main EC measure in the present studies because it usually demonstrates excellent psychometric properties (Cooper & Petrides, 2010) and it is used in numerous previous studies. Besides, as previously mentioned, it has strong theoretical background since it was developed with the purpose to operationalize trait EI and support the trait EI theory (Petrides & Furnham, 2003; Petrides et al, 2004). In addition, as discussed in the section about discriminant validity of EI, TEIQ shows better psychometric properties and predictive validity than other self-report EI measures and predicts numerous outcomes beyond and above personality traits (Mikolajczak, Luminet, et al., 2007; Petrides et al., 2007).

6.4.3 Dependent variables
Stress was measured with the Spanish version (Remor, 2006) of the Perceived Stress Scale (PSS) developed by Cohen, Kamarck, and Mermelstein (1983). PSS evaluates the global level of perceived stress during the previous month. The instrument includes 14 items (e.g., How often have you felt that the difficulties are so compounded that you cannot overcome them?” and “How often have you felt unable to control the important things in your life?”). The response scale is a five-point Likert scale (1 = Never, 5 = Very often) and the sum of the scores yields a global score of perceived stress. The reliability of the scale was .86 (T1), .82 (T2) and .80 (T3). PSS is an outcome measure that assesses the experienced level of stress as a function of objective stressful events (Cohen et al., 1983). According to Cohen et al. (1983), PSS is a more global measure than objective measures of stressful events because it is sensitive to chronic stress caused by ongoing or future life circumstances and to reactions to the specific life events. Therefore, this scale was considered adequate for assessing the level of stress of unemployed participants.

Somatic complaints were assessed with Pennebaker Inventory of Limbic Languidness (PILL, Pennebaker, 1982). PILL is a 54-item self-report measure that evaluates the frequency of occurrence of some usual physical symptoms and bodily sensations. For the purpose of this investigation, a shorter version consisting of 29 most frequent somatic complaints was used. The items include symptoms such as “bleeding nose”, “out of breath” and “back pains”, among others. The scale ranges from 1 (never or almost never) to 5 (more than once a week). The global score is calculated by summing up the scores on each item. Since unemployment is linked with deteriorated physical health (McKee-Ryan et al., 2005; Wanberg, 2012), somatic complaints, as one of the indicators of physical health, were assessed in the present research. Subjective physical health assessments, such as PILL, are not rare in the unemployment literature, since they offer some information that objective health assessments cannot provide (McKee-Ryan et al., 2005). PILL covers a wide spectrum of symptoms that cannot be observed by others, such as back pain,
headache or out of breath sensations and it allows to explore whether the frequency of experiencing those symptoms can be affected through the EC intervention. In addition it shows good psychometric properties (Pennebaker, 1982) and the internal consistency (α) of the scale in the present research was .92 (T1), .91 (T2) and .93 (T3).

**Mental health** was measured through Spanish adaptation (Rodríguez, Hontangas, Bravo, Grau, & Ramos, 1993) of the General Health Questionnaire (GHQ-12; Goldberg, 1972). GHQ is the most commonly used measure of psychological well-being in unemployment research and contains items that cover both positive and negative affect. The participants were asked how they felt during the last weeks. The response scale is a four-point Likert scale (from 1 = More than usually, to 4 = Very less than usually). Example items are "Have you been able to successfully tackle your problems?" and "Have you felt unhappy and depressed?". Six items were inverted so that a high score on this measure indicates poor mental health. The internal consistency in the present sample was .89 (T1), .89 (T2) and .86 (T3).

**Satisfaction with life** was assessed with Satisfaction with life scale (SWLS) developed by Diener, Emmons, Larsen and Griffin (1985). More precisely, a Spanish adaptation by Atienza, Balaguer and Garcia-Merita (2003) was used. This scale consists of five items (e.g., "The conditions of my life are excellent" and "I am satisfied with my life") and it evaluates the overall judgment of one’s subjective well-being. Response options range from 1 (strongly disagree) to 5 (strongly agree). The reliability of the scale was .84 (T1), .88 (T2) and .82 (T3) for the present sample. SWLS showed favorable psychometric properties in numerous studies and was shown to be an adequate measure of subjective psychological well-being across different samples and languages (Atienza et al., 2003). Moreover, EC were associated with better life satisfaction in many previous studies (as can be seen in the Study 3 of the present research), but this link has not been explored in the context of unemployment. As it will be in the present sample.
Mood was measured with Spanish abbreviated adaptation (Perczek, Carver, Price, & Pozo-Kaderman, 2000) of the Profile of Mood States questionnaire (POMS, McNair, Lorr & Droppelman, 1971). POMS includes a list of 65 mood descriptors (adjectives) that refer to a more transit and fluctuating affective states (e.g., tense, sad, angry, active, anxious etc.). Respondents indicate the intensity of each mood in the preceding week, on a scale ranging from 1 (never) to 5 (extremely). In the present investigation, an abbreviated version of 18 items and 6 subscales was used. The scale includes three items for anxiety, four items for depression, four items for vigor, two items for fatigue, three items for anger, and two items for confusion. Different subscales of POMS showed good psychometric properties (see Perczek et al., 2000). For the present sample, the internal consistencies for different dimensions of POMS were: Anxiety .89 (T1), .81 (T2) and .83 (T3); Depression .84 (T1), .83 (T2) and .86 (T3); Vigor .83 (T1), .87 (T2) and .82 (T3); Confusion .60 (T1), .55 (T2) and .55 (T3); Fatigue .72 (T1), .87 (T2) and .87 (T3); Anger .79 (T1), .78 (T2) and .88 (T3). Besides, as POMS assesses more current affective states and more rapid affective changes (the respondents were asked how they felt during the last week), it seemed adequate for using in the present study to obtain an indicator of less persistent mood states and maybe less influenced by stress (caused by unemployment for instance), in comparison to other mental well-being indicators.

Quality of interpersonal relationships was evaluated with four subscales of the Échelle de la Qualité des Relations Interpersonnelles (EQRI) developed by Senécal, Vallerand and Vallières (1992). The EQRI assesses quality of interpersonal relationships in different life domains. Given the fact that social relationships are an important factor for psychological well-being in general as well as in unemployed people (Koen et al., 2013; McKee-Ryan et al, 2005; Myers, 2000), this aspect was included in the present research in order to explore the possibilities for its improvement through training in EC. In addition, one of the important aspects of the training content was precisely managing own and others’
Measurement instruments

emotions in relationships. For the purposes of the present investigation, four aspects of interpersonal relationships were measured - family life, love relationships, relationships with friends, and relationships in life in general. Participants were asked to evaluate the level of harmony, reward, satisfaction and trust they consider to have with their family, friends, partners and people in general on a Likert scale from 0 to 4. This scale showed good psychometric qualities (Senecal et al., 1992). For the present sample, the internal consistencies for each subscale was: family life .89 (T1), .92 (T2) and .91 (T3); partner relationship .90 (T1), .96 (T2) and .93 (T3); relationships with friends .88 (T1), .91 (T2) and .89 (T3); relationships in life in general .85 (T1), .86 (T2) and .86 (T3).

Optimism was evaluated with the Spanish adaptation (Otero, Luengo, Romero, Gómez & Castro, 1998) of The Life Orientation Test (LOT) developed by Scheier and Carver (1985). LOT consists of six items (e.g., “In uncertain times, I usually expect the best” and “Overall, I expect more good things to happen to me than bad”) scored on a scale from 1 (Strongly disagree) to 5 (Strongly agree) and provides a global score of generalized expectations toward positive or negative results in life. The scale shows good psychometric properties (Scheier & Carver, 1985) and the reliability of the scale for the present sample was .75 (T1), .80 (T2) and .78 (T3). Optimism was assessed in the present sample in order to examine to what degree enhancing EC can predict generally positive expectations from life. An important part of the training (mostly managing own emotions and down-regulating negative emotions) was dedicated to cognitive modification and changing irrational beliefs and destructive ways of thinking, which can affect life expectations in general. Therefore, since LOT evaluates generalized expectations toward positive or negative results in life, it was considered as the most adequate measure in the current research.

Coping strategies were measured with adapted version (Cano, Rodríguez Franco & García Martínez, 2007) of Coping Strategies Inventory (Tobin, Holroyd, Reynolds & Wigal, 1989) which evaluates the frequency of use of different coping
strategies in past stressful situations. The scale contains 40 statements (actions) and
the respondents have to assess the level they used each of these actions in the
preceding month. Each item is rated on a 5-point Likert scale (1= None, 5= Very
much) to obtain eight scores for eight subscales. These subscales are:

- **Problem solving**: behavioral and cognitive strategies aimed at changing
  or modifying the situation in order to reduce stress (e.g. “I worked on
  solving the problems in the situation”, “I knew what had to be done, so
  I doubled my efforts and tried harder to make things work”). The alpha
  coefficients for this subscale were .84 (T1), .88 (T2) and .81 (T3).

- **Cognitive restructuring**: changing or adjusting the meaning of stressful
  situations (e.g. “I convinced myself that things aren't quite as bad as
  they seem”, “I asked myself what was really important, and discovered
  that things weren't so bad after all”). The alpha coefficients were .71
  (T1), .70 (T2) and .74 (T3).

- **Social support**: actions oriented towards seeking emotional support
  (e.g. “I found somebody who was a good listener”, “I talked to
  someone that I was very close to”). The alpha coefficients were .84
  (T1), .88 (T2) and .81 (T3).

- **Emotional expression**: emotional disclosure and tendency to express
  emotions that occur as the consequences of stressful situations (e.g. “I
  let out my feelings to reduce the stress”, “I let my emotions out”). The
  alpha coefficients were .82 (T1), .84 (T2) and .81 (T3).

- **Problem avoidance**: negation or avoidance of thoughts and actions
  related to stressful events (e.g. “I tried to forget the whole thing”, “I
  didn't let it get to me; I refused to think about it too much”). The alpha
  coefficients were .71 (T1), .71 (T2) and .79 (T3).

- **Wishful thinking**: inability or reluctance to change or amend the
  stressful situation (e.g. “I wished that the situation had never started”,
  “I wished that the situation would go away or somehow be over with”).
  The alpha coefficients were .75 (T1), .82 (T2) and .87 (T3).
- **Social withdrawal**: withdrawal from friends, family and important people as a form of emotional reaction to the stressful events (e.g. “I spent more time alone”, “I avoided being with people”). The alpha coefficients were .67 (T1), .71 (T2) and .62 (T3).

- **Self-critique**: blaming and criticizing oneself for the stressful situation or its bad handling (e.g. “I blamed myself”, “I criticized myself for what happened”). The alpha coefficients were .89 (T1), .85 (T2) and .84 (T3).

Since previous studies have shown that EC are positively related to adaptive and negatively to maladaptive coping strategies (Saklofske, Austin, Galloway, & Davidson, 2007) and that EC can predict the choice of coping strategies (Petrides, Pérez Gonzales, & Furnham, 2007), this aspect had to be measured in the specific sample such as unemployed adults, in order to see if change in EC can predict improvement in coping strategies choice. The Coping Strategies Inventory was chosen precisely because of the reasons Cano et al. (2007) mention – excellent psychometric properties, application and correction simplicity and versatility in the analysis of stressful situations.

As for the employability prospects indicators, four of them were assessed in the present research (besides objective reemployment rate) – perceived employability, job search, entrepreneurial self-efficacy and entrepreneurial intentions. More detailed explanation about the reasons for including exactly these indicators is given in the Study 2 of the present research. **Employability** and **Job search** were measured with items from the Employment Outlook Scale of the Career Exploration Survey (Stumpf, Colarelli, & Hartman, 1983). The Spanish versions of both scales were used (Prieto, Peiró, Ripoll, Rodriguez, Bravo, Salanova, & Hontagas, 1994). Both scales showed good psychometrics qualities (Stumpf et al., 1983).

**Employability** is assessed through three items that evaluate self-perceptions about finding employment in the current job market. The respondents rate the following items on a scale from 1 (completely disagree) to 5 (completely agree):
In the current job market situation, I think it is possible to find a job that I am prepared for or have experience in”, “In the current job market situation, I think it is possible to work in a company that I choose” and “In the current job market situation, I think it is possible to find an interesting job”. For the present sample, the reliability of the scale was .87 (T1), .89 (T2) and .89 (T3).

Job search was measured with four items from the Employment Outlook Scale of the Career Exploration Survey (Stumpf et al., 1983). These four items reflect some of the job search methods and the respondents evaluate the level they use these methods in their usual job search on a five-point Likert scale (1 = not at all, 5 = very much). The items were: “To what extent do you plan your job search in detail?”; “To what extent do you use specific processes for investigating firms?”; “To what extent do you prepare questions to ask at interviews?” and “To what extent do you search systematically for firms in your career area?”. For the present sample, the reliability of the scale was .72 (T1), .69 (T2) and .76 (T3).

Entrepreneurial Self-efficacy was measured with the Spanish adaptation (Moriano, Palaci & Morales, 2006) of the Entrepreneurial Self-efficacy scale (De Noble, Jung & Ehrlich, 1999). This scale evaluates people’s beliefs about their ability to successfully create and manage their own company. The scale consists of 23 items and the respondents answer on a 5-point Likert scale from “completely unable” (1) to “perfectly able” (5). Example items are: “I can identify new areas for potential growth”; “I can inspire others to embrace the vision and values of the company”; and “I can persist in the face of adversity”. The scale provides a global score and a specific score for each of the following six subscales of the scale:

- Developing new product and market opportunities (7 items) refers to the ability to recognize opportunities to start own business and adapt to market changes. Example items: “I can see new market opportunities for new products and services” and “I can identify new areas for potential growth”. The internal consistency of the subscale was .87 (T1), .91 (T2) and .92 (T3).
- **Building an Innovative Environment** (4 items) refers to the ability to foster creativity, initiative and responsibility among the potential members of the team. Example items: “I can develop a working environment that encourages people to try out something new” and “I can form partner or alliance relationship with others”. The internal consistency of the subscale was .85 (T1), .88 (T2) and .86 (T3).

- **Initiating Investor Relationships** (3 items) reflects the activities that serve to foster social contacts and obtain enough resources to start the own business. Example items: “I can develop and maintain favourable relationships with potential investors” and “I can identify potential sources of funding for investment”. The internal consistency of the subscale was .82 (T1), .83 (T2) and .89 (T3).

- **Defining core purpose** (3 items) is the ability to define and focus on the vision and key purpose of the business. Example items: “I can articulate vision and values of the organization” and “I can inspire others to embrace vision and values of the company”. The internal consistency of the subscale was .64 (T1), .79 (T2) and .81 (T3).

- **Coping with unexpected challenges** (3 items) represents the ability to deal with the ambiguity and uncertainty that may occur in different stages of the entrepreneurial process. Example items: “I can tolerate unexpected changes in business conditions” and “I can persist in the face of adversity”. The internal consistency of the subscale was .60 (T1), .66 (T2) and .67 (T3).

- **Developing Critical HR** (3 items) refers to the ability to attract and keep valuable and necessary partners for the entrepreneurial process. Example items: “I can recruit and train key employees” and “I can identify and build management teams”. The internal consistency of the subscale was .78 (T1), .92 (T2) and .89 (T3).
Entrepreneurial intention was assessed with 2 items recommended by Krueger, Reilly and Carsrud (2000) and adapted to Spanish by Sánchez (2009). The items assess the level of respondents’ intention to start their own business and open their own firm in the next five years, on a 5-point Likert scale ranging from 1 (completely disagree) to 5 (completely agree). For the present sample, the internal consistency of the scale was .94 (T1), .97 (T2) and .97 (T3).

6.5 Data analysis

In order to obtain mean and standard deviation values for the studied variables as well as Pearson correlations basic descriptive statistical analyses were conducted. In addition, reliability analyses were conducted in order to obtain the reliability of all the applied measures (Cronbach’s α). Descriptive statistic and reliability indices are presented in the corresponding tables in each study of the present research. Almost all of the scales and subscales used in the present research showed good reliability levels (higher than .70 according to Nunnaly, 1978), and the ones that do not reach this threshold are discussed and considered as a limitation in the corresponding study.

In order to test each hypotheses of the three studies different statistical procedures were applied. All analyses were carried out using SPSS 21.0. At first place, independent t tests were conducted to test for the significant differences between the intervention group and the control group on any pre-test measures. In study 2, differences between the intervention group and the control group were found for entrepreneurial self-efficacy and two out of six dimensions of entrepreneurial self-efficacy (coping with unexpected challenges and developing critical HR). In study 3, those differences were found for satisfaction with life and quality of relationships with friends. To account for those differences all the following analyses, in both studies, have been conducted using time 2 and time 3 scores that had been corrected for time 1 scores using covariate adjustments.
In order to test whether the intervention had an effect on the EC level and other dependent variables, repeated measures analyses of variance controlling age and verbal ability (ANCOVA) in study 1 and repeated measures analysis of variance (ANOVA) in study 2 were performed, using group (intervention vs. control) as between-subject factor and time (time 1 vs. time 2 and time 1 vs. time 3) as within-subject factor.

To test for the potential moderators of the effects of intervention on changes in EC, moderated regression analyses were performed using standardized scores in study 1 and 3. To clarify the nature of the interaction effects, a graphical representation that uses procedures by Aiken and West (1991), and Dawson (2014) interpreting two-way interactions.

Finally, in order to analyze if change in EC can predict changes in different dependent variables several hierarchical regression analyses were performed for each dependent variable (in studies 1 and 3). To do so, all 3 times were considered in the analyses as well as some control variables. Following recommendations for analyzing change in longitudinal studies with panel data by Finkel (1995), all the dependent variables were controlled at time 1 (prior to the intervention) and time 2 in order to explore the change. The F-test of statistical significance was used to assess the change in $R^2$. Moderated regression analyses were carried out using SPSS 21.0 in following steps:

- Step one: control variables were introduced (age, verbal ability in study 1)
- Step two: the dependent variables in Time 1 and Time 2
- Step three: EC level in Time 1 and Time 2
- Step four: EC level in Time 3
7. STUDY 1. THE EFFECTS OF EMOTIONAL COMPETENCES TRAINING AMONG UNEMPLOYED ADULTS: A LONGITUDINAL STUDY
7.1 Abstract

Background: The present study aimed at analyzing whether the training in emotional competences (EC) would increase the level of perceived EC among unemployed adults, whether the unemployment duration would moderate the effects of the training and whether the changes in EC would predict changes in the levels of perceived stress, somatic complaints, mental health and mood states.

Methods: Seventy-five participants were randomly allocated to EC training program, or a control group. Following a controlled experimental design, the participants completed all the measures prior to the intervention (T1), one month after (T2) and six months after the first data collection (T3). Results: The results showed that change in EC after the training depended on the unemployment duration. The difference between the experimental and control groups in EC after the training was significant when the participants had been unemployed less time. Additionally, the results indicated that changes in EC were found to be significant predictors of changes in perceived stress, mental health, somatic complaints and vigor and confusion (mood dimensions) six months after the intervention.

Conclusion: The data suggest that unemployment duration plays a crucial role in determining the range and intensity of intervention effects.

Keywords: Emotional competences, well-being, unemployment, training.
7.2 Introduction

In recent years, research on emotional intelligence has focused on analyzing whether it is possible to improve emotional competencies (EC) through training. However, with the exception of Yalcin and colleagues’ study on diabetic patients (Yalcin, Karahan, Ozcelik & Igde, 2008), all published studies, to our knowledge, focus on quite privileged populations (i.e., university students, managers etc.). As Kotsou, Nelis, Gregoire and Mikolajczak (2011) suggest, it is necessary to develop new studies to determine which individuals or groups of individuals may benefit or not from interventions on emotional competences.

The present research tests the efficiency of the EC training for the wellbeing of one particularly vulnerable group - unemployed adults. Unemployment has various maladaptive outcomes and unemployed people tend to have lower psychological and physical well-being and feel less satisfied with their lives than those with employment (Paul & Moser, 2009; Wanberg, 2012). Many of those studies have mentioned the need for interventions that could buffer these negative effects of unemployment (Dooley, Fielding & Levi, 1996; Wanberg, 2012). To this end, we carried out a three-wave longitudinal study in an experimental setting.

EC and can they be learned?

EC usually refer to the capacity to identify, understand, express, manage, and use one’s own feelings and those of others (Mayer & Salovey, 1997; Mikolajczak, 2009). These competences can be viewed from two different perspectives. From the trait perspective, they are more stable innate characteristics, similar to personality traits (Petrides & Furnham, 2000). The ability perspective, however, contemplates these competences as individual differences in a specific emotion-related ability (or mix of different abilities). From this perspective, EC are something much more prone to change and can be learned. In order to overcome the limitations of different approaches, the tripartite model has appeared recently
Introduction

(Mikolajczak, 2009). This EC model distinguishes between three different levels structured in a hierarchical manner. The first one refers to the knowledge or what people know about emotions and emotional situations. The second one refers to abilities or what can people do with this emotional knowledge in a specific emotional situation. The last level considers emotional traits or dispositions or, in other words, what people usually do or how they behave in certain emotional situations. Following Kotsou et al. (2011), we assessed this level in the present study.

Research on EC has yielded significant amount of evidence that demonstrates that EC are linked with psychological and physical well-being (Martins, Ramalho & Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007; Zeidner, Matthews & Roberts, 2012). Not only are EC directly associated with better mental and physical health, but there is evidence that EC can buffer the effects of negative and stressful events (Mikolajczak, Luminet & Menil, 2006; Mikolajczak, Roy, Luminet, Fillée & De Timary, 2007). However, as Zeidner et al. (2012) mention, the majority of the studies that analyze the positive effects of EC over physical and psychological health use cross-sectional designs and “healthy samples”. Thus, it would be useful to develop longitudinal studies with more sample variability to explore in what degree the changes in EC can produce changes in the physical and psychological well-being.

Independently of the theoretical approach to EC, different studies showed that EC training improved the level of EC of the participants. These studies have mainly been conducted using samples of children, adolescents and university students (Brackett, Rivers, Reyes & Salovey, 2012; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Nelis, Quoidbach, Mikolajczak & Hansenne, 2009; Nelis, Kotsou, Quoidbach, Hansenne, Weytens, Dupuis, & Mikolajczak, 2011; Ruiz-Aranda, Salguero, Cabello, Palomera, & Fernández-Berrocal, 2012; Ruiz-Aranda, Castillo, Salguero, Cabello, Fernández-Berrocal, & Balluerka, 2012). Nevertheless, studies on the effects of EC training on samples of adults have also
been conducted. Results showed that EC improved as a result of training (Clarke, 2010; Groves, McEnrue, & Shen, 2008; Cherniss, Grimm, & Liautaud, 2010; Kotsou et al., 2011; Slaski & Cartwright, 2003; Yalcin et al, 2008). In order to progress in research on the effects of training in EC, it is necessary to determine which individuals or groups can benefit from this type of training.

**Unemployment context**

One specific group that might benefit from an EC intervention are unemployed adults. Unemployment is one of the important socio-economic predictors of mental well-being and ill-being (Huppert, 2009). Previous research indicated that unemployment is linked with impaired well-being, poor psychological health, depression, physical complaints, even suicide (Paul & Moser, 2009; Wanberg, 2012).

The research on unemployment has reported several interventions that aimed at reducing these negative consequences among unemployed individuals. The majority of these interventions, however, have focused on job search skills, reemployment skills or increasing employability (Koen, Klehe, Van Vianen, Annelies, 2013; Vuori & Vinokur, 2005). To our knowledge, there are no interventions in the unemployment literature that focus specifically on increasing EC. Nevertheless, among different individual differences that are considered important for reemployment, EC play a significant role (Fugate, Kinicki & Ashforth, 2004). The focus of the present study is whether training in EC in the group of unemployed adults can improve those competencies.

Among different possible moderators of the negative effects of unemployment on mental health, unemployment duration is considered as a significant one. Unemployment had worse effect on well-being and mental health among individuals who were unemployed for a longer period of time (Paul & Moser, 2009). The reasons for this can be many, but usually involve manifest (e.g. financial restraints) or latent (e.g. time structure) factors that determine how people
cope with a stressful situation such as unemployment (Van Hoye & Lootens, 2013). In addition, prolonged unemployment may cause deterioration of self-regulation of emotions (in this case negative ones) which is considered useful for coping with unemployment (Wanberg, 2012) or it can produce a “cumulative stress” effect which negatively affects well-being. Thus, unemployment duration might moderate the effect of any intervention aimed at reducing negative effects of unemployment or at increasing emotional competences.

Considering the theoretical background and the empirical evidence mentioned above, we propose the following hypotheses:

**Hypothesis 1:** Training in EC increases the level of EC of the unemployed participants.

**Hypothesis 2:** The effects of EC training are less pronounced if the duration of unemployment is longer.

**Hypothesis 3:** Changes in EC predict changes in the levels of psychological and physical well-being (perceived stress, somatic complaints, mental health and mood states).

### 7.3 Method

**Sample**

In order to recruit the sample, training in emotional competences was announced at various local offices for occupation and formation. In total, 212 people signed up for the training, from which 113 came to the selection interview. The interview was conducted to verify the exclusion criteria for the training. These criteria were: a) being employed (part time or full time), b) lack of motivation for the intervention process, c) extensive prior knowledge about EC d) any planned psychological intervention during the training, e) drugs or alcohol dependence or abuse and f) use of psycho-pharmaceutics. A detailed flow diagram of the progress through all the phases of a parallel randomized trial is presented in figure 1. After
the initial selection interview, several people were excluded mostly for the lack of availability to participate in the training. The rest of the participants (75) were randomly assigned to EC training program, or a control group. The EC training group consisted of 41 participants (38 women and 3 men; mean age = 32.68, SD = 10.34; mean unemployment duration = 17.34 months) divided into 4 smaller groups that went through a 2 and half day training. The control group consisted of 34 individuals (27 women and 7 men; mean age = 36.4, SD = 12.02; mean unemployment duration = 16.35 months) that did not go through any kind of intervention. All participants signed an informed consent to participate in the study.
Method

Figure 1: Flow diagram of the trial progress

Measures

Control Variables.

Age and verbal ability were controlled in the present study. Age usually correlates with EC (Tsaousis & Kazi, 2013) and psychological and physical well-being (Diener, Lucas & Oishi, 2002).
Verbal ability was also considered since EC correlates significantly with verbal ability (Bastian, Burns & Nettelbeck, 2005; Zeidner, Matthews & Roberts, 2009). In the present study, verbal ability was measured using the Test of Verbal Ability Buenos Aires (BAIRES, Cortada de Kohan, 2004). The test consists of 98 items, and offers a global score of verbal ability.

**Measures of potential moderators of the training effects**

The time that the participants had spent unemployed was also measured with a single item (i.e., “How long have you been unemployed?”). The unemployment period was expressed in months.

**Pre and post measures of EC**

EC were measured using the adaptation of Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF, Petrides & Furnham, 2006). This measure includes 30 items ranging from 1 (strongly disagree) to 7 (strongly agree) and provides a global score of EC. TEIQue-SF usually demonstrates excellent psychometric properties (Cooper & Petrides, 2010). In the present study, the internal consistency of the scale was .83 (T1), .88 (T2), and .82 (T3). We used the Spanish version by Pérez (2003).

**Pre and post measures of psychological well-being**

**Stress** was measured with the Perceived Stress Scale (PSS) developed by Cohen, Kamarck, and Mermelstein (1983). The Spanish version of the PSS was used (Remor, 2006). The instrument includes 14 items measuring the level of perceived stress during the last month. The response scale is a five-point Likert scale (1 = Never, 5 = Very often). The reliability of the scale was .86 (T1), .82 (T2) and .80 (T3).

**Somatic complaints** were assessed with Pennebaker Inventory of Limbic Languidness (PILL, Pennebaker, 1982). In the present study a shorter version computed from the most frequent somatic complaints was used. This 29-item scale measures the frequency of occurrence of a group of common physical symptoms.
Method

and sensations. The scale ranges from 1 (never or almost never) to 5 (more than once a week). The internal consistency (α) of the scale was .92 (T1), .91 (T2) and .93 (T3).

Mental health was measured through a Spanish adaptation (Rodríguez, Hontangas, Bravo, Grau, & Ramos, 1993) of the General Health Questionnaire (GHQ-12; Goldberg, 1972). The participants were asked how they had felt during the last weeks. The response scale is a four-point Likert scale (from 1 = More than usually, to 4 = Very less than usually). A high score on this measure indicates poor mental health. The internal consistency (α) in the present sample was .89 (T1), .89 (T2) and .86 (T3).

Mood was measured with the Spanish abbreviated adaptation (Perczek, Carver, Price, & Pozo-Kaderman, 2000) of the Profile of Mood States questionnaire. POMS includes a list of mood-descriptive adjectives that are included in a number of measures of mood states. Respondents were asked to indicate the extent to which they had had that feeling during the preceding week, using response choices ranging from 1 (never) to 5 (extremely). It included three items for anxiety, four items for depression, four items for vigor, two items for fatigue, three items for anger, and two items for confusion. Different subscales of POMS showed good psychometric properties (see Perczek et al., 2000). In this study the internal consistency for different dimensions of POMS was: Anxiety .89 (T1), .81 (T2) and .83 (T3); Depression .84 (T1), .83 (T2) and .86 (T3); Vigor .83 (T1), .87 (T2) and .82 (T3); Confusion .60 (T1), .55 (T2) and .55 (T3); Fatigue .72 (T1), .87 (T2) and .87 (T3); Anger .79 (T1), .78 (T2) and .88 (T3).

Procedure

All the measures were completed by the participants prior to the intervention (T1), one month after the first data collection (T2) and six months after the first data collection (T3). The control group completed the measures at the
same time intervals as the experimental group and was offered the training after the last data collection (after T3).

The organization of the intervention was the same as the previously designed intervention by Kotsou, et al. (2011). The training lasted 15 hours in total (3 days) with 2-weeks gap between day 2 and day 3. The four experimental groups consisted of between 8 and 12 participants and the training sessions were always held at the same location. Two lecturers conducted the training and always presented the same training sessions to each experimental group.

The content of the intervention

The training was based on a previously tested intervention by Kotsou et al. (2011) and focused on improving EC and on effective emotion regulation strategies. The same structure and the content was followed except for some minor changes and adaptations (mostly language related and related to cultural references). The training was divided into six modules and each module served as background for learning about and enhancing a specific emotional competence. The modules were: 1) introduction to EC and identifying one's own and others' emotions, 2) understanding emotions and using them to better respond to one's needs 3) regulating one's own emotions in relationships, 4) regulating other's emotions in relationships and conflict management (including strategies to express one's emotions constructively and to listen to others' emotions), 5) practical techniques to down-regulate unpleasant emotions, 6) practical techniques to up-regulate pleasant emotions. Each module started with a theoretical explanation and clarification of the important constructs with examples, using theoretical references, video clips, or interesting cases from history. After that, participants had the chance to apply what they had learned through group exercises, group discussions, role-plays, work in pairs, or individual tasks. During the last session, instruction was given on some practical techniques for managing negative emotions and enhancing the positive ones.
7.4 Results

Preliminary analyses

Independent t tests (see Table 1) showed that there were no significant differences between the intervention group and the control group on any of the pretest measures. Means, standard deviations, and significance of differences between intervention and control groups prior to EC intervention are shown in Table 1.

Table 1. Means (and Standard Deviations) and Significance of Differences between Experimental and Control Group Prior to Emotional Competences Intervention

<table>
<thead>
<tr>
<th>Variable</th>
<th>Training group (N= 39)</th>
<th>Control group (N= 33)</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC*</td>
<td>4.95 (0.64)</td>
<td>4.99 (0.61)</td>
<td>t= -0.28, p&lt;.78</td>
</tr>
<tr>
<td>Perceived stress**</td>
<td>2.86 (.60)</td>
<td>2.75 (.75)</td>
<td>t= 0.65, p&lt;.52</td>
</tr>
<tr>
<td>Somatic complaints</td>
<td>1.98 (.73)</td>
<td>1.82 (.47)</td>
<td>t= 1.09, p&lt;.28</td>
</tr>
<tr>
<td>Mental health</td>
<td>2.42 (.53)</td>
<td>2.58 (.60)</td>
<td>t= -1.19, p&lt;.24</td>
</tr>
<tr>
<td>Mood Anxiety</td>
<td>2.94 (.98)</td>
<td>2.59 (.95)</td>
<td>t= 1.55, p&lt;.13</td>
</tr>
<tr>
<td>Mood Depression</td>
<td>1.83 (.87)</td>
<td>1.70 (.58)</td>
<td>t= .76, p&lt;.45</td>
</tr>
<tr>
<td>Mood Vigor</td>
<td>3.47 (.82)</td>
<td>3.32 (.86)</td>
<td>t= .750, p&lt;.46</td>
</tr>
<tr>
<td>Mood Fatigue</td>
<td>2.32 (1.06)</td>
<td>2.05 (.81)</td>
<td>t= 1.24, p&lt;.22</td>
</tr>
<tr>
<td>Mood Confusion</td>
<td>2.41 (1.03)</td>
<td>2.23 (.90)</td>
<td>t= .748, p&lt;.46</td>
</tr>
<tr>
<td>Mood Anger</td>
<td>2.06 (.88)</td>
<td>1.95 (.58)</td>
<td>t= .633, p&lt;.53</td>
</tr>
</tbody>
</table>

* Training group N= 41; ** Training group N= 38

Note. EC = Emotional competences.

Change in EC

To test Hypothesis 1, repeated measures analyses of variance controlling for age and verbal ability (ANCOVA) were performed using group (experimental vs. control) as between-subject factor and time (time 1 vs. time 2 and time 1 vs. time 3) as within-subject factor. The results did not show a significant GROUP x TIME interaction for EC in either of the two cases (F (1) = 1.43, p< .24; F (1) = .14, p< .71, respectively), indicating no significant change in EC in the training group.
To test Hypothesis 2, regarding unemployment duration as a potential moderator of the effects of intervention on changes in EC, a moderated regression analysis was performed using standardised scores. The results showed that the interaction between the intervention and unemployment duration was found to explain a small but significant incremental portion of variance in EC change (TEIQ-T2) ($\Delta R^2 = 4\%$, $\Delta F=3.95$, $p<.05$), beyond the variance contributed by the control variables and the level of EC prior to the intervention (see Table 2).

Table 2. The Effects of Intervention on Emotional Competences at Time 2 Moderated by Unemployment Duration

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>$B$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age</td>
<td>.02</td>
<td>.03</td>
<td>.94</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verbal ability</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>EC_T1</td>
<td>.36</td>
<td>.33</td>
<td>35.58</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Intervention</td>
<td>-.14</td>
<td>.38</td>
<td>.02</td>
<td>1.18</td>
<td>.31</td>
</tr>
<tr>
<td></td>
<td>Unemployment duration</td>
<td>-.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Intervention*Unemployment duration</td>
<td>.41</td>
<td>.41</td>
<td>3.95</td>
<td>.05</td>
<td></td>
</tr>
</tbody>
</table>

***p<.001 **p<.01 *p<.05

Note. EC = Emotional competences.

To clarify the nature of the interaction effects, a graphical representation that uses procedures by Aiken and West (1991), and Dawson (2014) interpreting two-way interactions is presented in Figure 2. The difference between the experimental and control group is significant when the participants spent less time unemployed. The experimental group showed higher scores on TEIQue_SF than the control group at Time 2. In contrast, when the participants were unemployed for a longer time, no significant difference between experimental and control group was found.
Results

Figure 2. Intervention*Unemployment duration interaction effect on emotional competences after the intervention

Since the results of the moderated regression analysis showed that unemployment duration moderates the effect of EC intervention on EC, we wanted to explore whether unemployment duration also moderates the effect size of EC intervention on mental health. Therefore, before testing the Hypothesis 3, we performed a hierarchical regression analysis for mental health (measured with GHQ) at Time 2, controlling for Time 1, age and verbal ability. As can be seen from table 3, no significant interaction between the intervention and unemployment duration for mental health was found. The effects of the EC intervention on mental health did not depend on unemployment duration.
### Table 3. The Effects of Intervention on Mental Health at Time 2 Moderated by Unemployment Duration

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>Mental health_T2</th>
<th>Mental health_T1</th>
<th>Intervention</th>
<th>Unemployment duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Age</td>
<td>.02</td>
<td>.02</td>
<td>.76</td>
<td>.47</td>
</tr>
<tr>
<td></td>
<td>Verbal ability</td>
<td>.09</td>
<td></td>
<td>-.01</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mental health_T1</td>
<td>.40</td>
<td>.38</td>
<td>41.35</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.37***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Intervention</td>
<td>.42</td>
<td>.02</td>
<td>1.03</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td>Unemployment duration</td>
<td>.17</td>
<td></td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Intervention*Unemployment</td>
<td>.42</td>
<td>.00</td>
<td>.08</td>
<td>.79</td>
</tr>
<tr>
<td></td>
<td>duration</td>
<td>-.03</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To examine Hypothesis 3, several hierarchical regression analyses were performed for each indicator of psychological and physical well-being. The purpose was to analyze whether the changes in EC would produce changes in the levels of perceived stress, somatic complaints, mental health and mood states. To do so, all 3 times were considered in the analyses as well as age and verbal ability as control variables. Following the recommendations of Finkel (1995) for analyzing change in longitudinal studies with panel data, all the indicators of psychological and physical well-being were controlled at time 1 (prior to the intervention) and time 2 in order to explore the change. Means and standard deviations of all the dependent variables in all times are presented in Table 4. The results of hierarchical regression analyses are shown in Table 5. Changes in EC predicted changes in perceived stress, somatic complaints, mental health, vigor and confusion, but not in the rest of POMS dimensions.
### Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention group</th>
<th>Control group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T1</td>
<td>T2</td>
</tr>
<tr>
<td>Perceived stress</td>
<td>2.86</td>
<td>2.73</td>
</tr>
<tr>
<td>Somatic complaints</td>
<td>1.98</td>
<td>1.95</td>
</tr>
<tr>
<td>Mental Health</td>
<td>2.42</td>
<td>2.18</td>
</tr>
<tr>
<td>Mood Anxiety</td>
<td>2.94</td>
<td>2.63</td>
</tr>
<tr>
<td>Mood</td>
<td>1.83</td>
<td>1.76</td>
</tr>
<tr>
<td>Depression</td>
<td>3.47</td>
<td>3.29</td>
</tr>
<tr>
<td>Mood Vigor</td>
<td>(87)</td>
<td>(75)</td>
</tr>
<tr>
<td>Mood Fatigue</td>
<td>2.32</td>
<td>2.22</td>
</tr>
<tr>
<td>Mood</td>
<td>2.40</td>
<td>2.12</td>
</tr>
<tr>
<td>Confusion</td>
<td>(1.06)</td>
<td>(1.22)</td>
</tr>
<tr>
<td>Mood Anger</td>
<td>2.06</td>
<td>1.91</td>
</tr>
<tr>
<td></td>
<td>(88)</td>
<td>(90)</td>
</tr>
</tbody>
</table>
Table 5. Results of Regression Analyses Predicting Changes in Stress, Mental health, and Mood states (Vigor and Confusion) at Time 3

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable Perceived stress_T3</th>
<th>B</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.01</td>
<td>.01</td>
<td>.37</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verbal ability</td>
<td>-.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perceived stress_T1</td>
<td>.37**</td>
<td>.30</td>
<td>11.93</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perceived stress_T2</td>
<td>.19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T1</td>
<td>-.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T2</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T3</td>
<td>-.32*</td>
<td>.30</td>
<td>11.93</td>
<td>.00</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable Somatic complaints_T3</th>
<th>B</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.00</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verbal ability</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Somatic complaints_T1</td>
<td>.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Somatic complaints_T2</td>
<td>.57**</td>
<td>.30</td>
<td>44.01</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T1</td>
<td>-.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T2</td>
<td>.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T3</td>
<td>-.29*</td>
<td>.26</td>
<td>6.17</td>
<td>.02</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable Mental health_T3</th>
<th>B</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.01</td>
<td>.01</td>
<td>.37</td>
<td>.69</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verbal ability</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mental health_T1</td>
<td>.12</td>
<td>.11</td>
<td>3.45</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mental health_T2</td>
<td>.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T1</td>
<td>-.46*</td>
<td>.08</td>
<td>2.89</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T2</td>
<td>.40*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T3</td>
<td>-.43**</td>
<td>.13</td>
<td>9.98</td>
<td>.00</td>
<td></td>
</tr>
</tbody>
</table>
**Table 1: Correlation Matrix**

### Variable: Mood_Vigor_T3

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>Age</th>
<th>Verbal ability</th>
<th>Mood_Vigor_T1</th>
<th>Mood_Vigor_T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>.05</td>
<td>.05</td>
<td>1.50</td>
<td>.23</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verbal ability</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mood_Vigor_T1</td>
<td>.29</td>
<td>.24</td>
<td>9.29</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Mood_Vigor_T2</td>
<td>.44**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>EC_T1</td>
<td>.29</td>
<td>.00</td>
<td>.11</td>
<td>.90</td>
</tr>
<tr>
<td></td>
<td>EC_T2</td>
<td>.04</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>EC_T3</td>
<td>.36</td>
<td>.06</td>
<td>4.92</td>
<td>.03</td>
</tr>
</tbody>
</table>

### Variable: Mood_Confusion_T3

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>Age</th>
<th>Verbal ability</th>
<th>Mood_Confusion_T1</th>
<th>Mood_Confusion_T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>.01</td>
<td>.01</td>
<td>.31</td>
<td>.74</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Verbal ability</td>
<td>-.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Mood_Confusion_T1</td>
<td>.45</td>
<td>.44</td>
<td>22.72</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Mood_Confusion_T2</td>
<td>.39**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>EC_T1</td>
<td>.46</td>
<td>.01</td>
<td>.41</td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td>EC_T2</td>
<td>-.18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>EC_T3</td>
<td>.51</td>
<td>.05</td>
<td>5.44</td>
<td>.02</td>
</tr>
</tbody>
</table>

***p<.001 **p<.01 *p<.05

*Note. EC = Emotional competences; T1=Time 1, T2=Time 2, T3=Time 3.*

### Discussion

The present study aimed to explore whether an intervention in EC could increase the level of EC among the participants, and whether the changes in the levels of EC improve the levels of physical and psychological well-being (perceived stress, somatic complaints, mental health and mood states). The study integrates and expands information obtained in previous research on similar
interventions by focusing on a specific population of unemployed adults using a longitudinal experimental design.

The obtained results, however, are contradictory to previous studies that showed that even a short intervention in EC could improve the level of EC among the participants (Nelis, Quoidbach, Mikolajczak & Hansenne, 2009; Nelis et al. 2011; Kotsou et al. 2011). No significant difference in emotional competences between experimental and control group was found after the intervention. Nevertheless, the results showed that change in EC after the intervention depends on the unemployment duration. The significant differences found between experimental and control group among the participants with shorter unemployment duration confirmed the Hypothesis 2. As the unemployment time increases, the chance for change or the positive intervention effect decreases. This result evokes some previous findings about the moderating role of unemployment duration in the relationship between unemployment and well-being (Paul & Moser, 2009). According to the Jahoda’s latent deprivation model (Jahoda, 1981), the lack of latent factors of employment (time structure, social contacts, the experience of social purpose, status and identity and regular activity) causes distress to unemployed people, having stronger effect on them than interventions designed to improve their emotional competences, especially when unemployment duration is longer. It seems that EC intervention has an effect, but only “marginal”one; it cannot help individuals with deeper difficulties caused by prolonged unemployment. Furthermore, long term unemployed people may also develop symptoms not covered by the EC intervention, such as lack of motivation and passivity in behavior or unhealthy behaviors (for instance alcoholism), which can buffer the effects of the intervention. In addition, one factor that might explain this result is the possibility that people with poorer psychological health remain unemployed for longer. Thus, deterioration in mental health explains both the prolongation of the duration of unemployment and the lack of intervention effects. However, while some studies have shown that prolonged unemployment was the
Discussion

consequence and not the cause of poor mental health, other (longitudinal) studies have demonstrated that well-being decreased after losing a job but increased after re-employment, showing that unemployment was a predictor of well-being (McKee-Ryan, Song, Wanberg & Kinicki, 2005). These contradictory findings should be addressed in future research.

While our findings showed that unemployment duration moderated the effect size of EC intervention on EC changes, this result was not repeated in the case of mental health. Change in mental health after the intervention did not depend on unemployment duration. Nevertheless, the content of the intervention we used was directly focused on enhancing emotional competences, not improving mental health. Therefore, the change in EC would be more expected than change in mental health. The results of our study, however, indicate that changes in EC can predict changes in mental health, and other indicators of psychological well-being as well. More specifically, the changes in EC were found to be significant predictors of changes in perceived stress, somatic complaints, mental health, vigor and confusion six months after the intervention. This result suggests that improving basic EC such as understanding, using or managing negative emotions and enhancing the positive ones might help unemployed adults cope with the negative effects of this chronic stressful situation. Possible mechanisms behind the relationships obtained between EC and the indicators of psychological well-being can be numerous. Zeidner et al. (2012) suggest that adaptive coping strategies and richer social relationships might mediate the links between EC and psychological well-being. In the context of unemployment these two factors might be interesting to explore in future studies. In addition, results of previous studies have demonstrated direct and moderator effects of EC on psychological well-being in stressful circumstances (Mikolajczak et al., 2007; Schutte et al., 2007). The findings of the present study confirm those results and expand them, adding that change in EC can predict change in psychological and physical well-being indicators.
On the other hand, the lack of significant changes in several mood dimensions (measured by POMS) could be related to the fact that POMS is used to measure more transient and changeable affective states (Perczek et al., 2000). Unemployed participants in the present study might suffer from more stable (chronic) anxiety, depression, anger or fatigue, due to the nature and duration of the stressful circumstances in which they find themselves.

In other words, if the intervention is planned and conducted soon after the job loss, it might have better outcomes than if it is carried out when the participants are already long-term unemployed. Long-term unemployment might cause these individuals to lose hope that any kind of intervention can be valuable or productive for them and might not immerse themselves in the training as much as individuals who have spent less time unemployed. However, there are examples in the literature that showed that even long-term unemployed individuals can benefit from a planned intervention. Proudfoot, Guest, Carson, Dunn and Gray (1997) argue that a more behavioral treatment or approach has to be applied on long-term unemployed people. They showed that long-term unemployed adults significantly improved mental health and job finding through cognitive-behavioral therapy. In addition, Creed, Hicks and Machin (1998) identified immediate benefits in well-being for long-term unemployed after the work preparation program, but not long-term effects.

**Limitations and suggestions for future research**

This study contributes to the research on EC by testing the effect of an EC training on a specific population—unemployed adults—using an experimental and longitudinal design, as suggested by different scholars (Kotsou et al., 2011; Zeidner et al., 2012). In spite of this fact, several limitations of this study should be addressed in future research.

First, the sample was too small and the gender distribution was not equal. However, this sample size is common in experimental studies where an
intervention is applied (Nelis et al., 2009; Clarke, 2010; Nelis et al., 2011). Nevertheless, future studies should include more participants, better gender-balanced groups and have stricter sample restrictions separating different types of unemployed people in order to get clearer results. Sample type, type of job and gender were found to be significant moderator variables in previous unemployment research (Paul & Moser, 2009). Thus, future studies should examine the differential effect of the training according to these variables.

Second, the control group did not go through any intervention, which also limits the results of the study. Just participating in the intervention might have caused possible changes in EC, independently of the intervention content. In addition, individuals from the control group could have developed coping mechanisms on their own to cope with unemployment distress. To overcome this limitation a control group in future investigations should go through another, but non-EC related activity.

Another limitation was the use of self-report measures for both EC and the indicators of physical and psychological well-being. Although GHQ is the most commonly used measure of psychological well-being in unemployment research, other, more objective measures should be included in future studies and measures particularly relevant to unemployed people such as self-esteem or self-efficacy. Additionally, ability measures of EC, such as MSCEIT (Mayer, Salovey & Caruso, 2002) might yield different results in future studies, even though some authors argue that EC measured as trait is a more robust predictor of well-being than EC measured as ability (Zeidner et al., 2012).

Finally, the low internal consistency showed by one of the POMS dimensions (Confusion) limits the reliability of the results. Other measures of mood states should be considered in future research.
8. STUDY 2. CAN INTERVENTION IN EMOTIONAL COMPETENCES INCREASE EMPLOYABILITY PROSPECTS OF UNEMPLOYED ADULTS?
8.1 Abstract

The purpose of the present study is to explore the effects of a structured intervention in emotional competences (EC) on employability prospects of unemployed adults. More precisely, the objective is to analyse whether enhancing EC (such as identifying and expressing emotions, understanding emotions, and regulating one’s own and others’ emotions) can improve perception of employability, job search, entrepreneurial intention and entrepreneurial self-efficacy and improve reemployment success among unemployed participants. Seventy three participants were randomly assigned to either an experimental (40) or control group (33), and the experimental group underwent a 15h intervention focused on improving EC and developing effective emotion regulation strategies. Both groups completed all the measures before the intervention (T1), one month later (T2), and six months after the intervention (T3). The results showed that the participants in the experimental group significantly increased their level of perceived employability, overall entrepreneurial self-efficacy, and three dimensions of entrepreneurial self-efficacy after the intervention, unlike their control group counterparts. Moreover, the experimental group showed more reemployment success and less reemployment delay than the control group. No changes were detected in job search or entrepreneurial intention in either group after the intervention. In addition, the positive effects of the intervention were not maintained six months after the intervention. The results suggest that structured interventions in EC can increase people’s beliefs in their own capabilities (entrepreneurial self-efficacy) and their ability to find employment (employability) and can contribute to the actual reemployment.

**Keywords**: employability, entrepreneurial self-efficacy, reemployment, intervention, emotional competences.
8.2 Introduction

Unemployment has negative consequences and produces costs for economies, societies and individuals. The economic and social costs usually refer to reduced economic growth potential, scarce economic resources, social deprivation and other socially related problems, such as increased poverty, a rise in crime rates and worse health (Hooghe, Vanhoutte, Hardyns & Bircan, 2011; Stenberg & Westerlund, 2008). The individual costs of unemployment, however, involve loss of income, social contacts and social status, but also impaired physical and psychological well-being of unemployed individuals and their families (McKee-Ryan, Song, Wanberk & Kinicki, 2005; Paul & Moser, 2009; Wanberg, 2012). Governments often try to prevent unemployment and improve the employment prospects of unemployed citizens (Graversen & Van Ours, 2008; Petrongolo, 2009; Van Ryn & Vinokur, 1992). There are many examples in the literature of different types of interventions aimed at helping unemployed individuals regain employment or cope with the stressful effects of unemployment, but, to our knowledge, none of them has focused on improving the emotional competences (EC) of unemployed adults. Studies on interventions for unemployed people usually focus on personal development characteristics, such as self-esteem, self-efficacy, motivation or coping skills (Caplan, Vinokur, Price and van Ryn, 1989; Creed, Machin & Hicks, 1999; Machin & Creed, 2003). On the other hand, different studies have shown that EC training could have beneficial effects on individuals. These studies have mainly been conducted in educational contexts (Brackett, Rivers, Reyes & Salovey, 2012; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011; Ruiz-Aranda, Salguero, Cabello, Palomera & Fernández-Berrocal, 2012; Ruiz-Aranda, Castillo, Salguero, Cabello, Fernández-Berrocal & Balluerka, 2012), although in some of these studies, training in EC had positive effects on adults as well (Kotsou, Nelis, Gregoire & Mikolajczak, 2011). As Kotsou et al. suggest, it would be interesting to investigate which individuals/groups can benefit, or not, from these types of interventions.
Introduction

From this perspective, the purpose of the present study is to explore whether a structured intervention focusing on teaching unemployed individuals to better identify and express their emotions, understand their feelings, use them to think and act better, and manage their own and others’ emotions can improve their employability prospects. Focusing on enhancing EC, the aim is to improve their job search skills, increase their perceptions about the possibilities of finding a job or starting a business, and enhance their intention to start their own business. In addition, we would like to examine whether this kind of intervention can increase reemployment among unemployed adults. To the best of our knowledge, this particular topic has not been used in previous interventions for unemployed individuals.

Unemployment research

A large amount of research in the field of unemployment has been dedicated to investigating the effects of job loss, more precisely the negative effects on well-being. Previous research confirmed that many stress-related consequences are a result of this specific situation, including poor psychological health, depression, and an increase in physical complaints, suicide and mortality (McKee-Ryan et al. 2005; Paul & Moser, 2009; Wanberg, 2012). Several factors are believed to moderate the effects of unemployment on mental health. These factors range from demographic characteristics, such as marital status, age or minority status, to socio-economic factors, such as market opportunities or the social welfare system (Paul & Moser, 2009). Research has shown that unemployment duration is one of the factors that enhance the negative impact of unemployment. The risks for well-being increase as unemployment duration increases. Not only do long-term unemployed people suffer the effects of unemployment more, but their chances of benefitting from any planned intervention are also much lower (Koen, Klehe & Van Vianen, 2013; Paul & Moser, 2009). The process underlying these results might be the prolonged exposure to stress and anxiety caused by unemployment. This prolonged exposure
to stress, along with deteriorated emotional self-regulation, decreases the chances for healthy coping with the negative consequences of unemployment. Moreover, the possibilities of finding new employment drop as well, for a variety of reasons – from a lack of job skills and knowledge to labour market requirements. Research shows that employability and job search intensity (and quality) are very important factors for re-entering the job market and regaining employment. Employability usually refers to people’s perceptions of their possibilities of finding and keeping new (in the case of unemployment) or equivalent or better (in the case of employed individuals) employment (Berntson, Naswall & Sverke, 2008; Berntson, Sverke & Marklund, 2006). Employability depends on the individual’s knowledge, skills and abilities (KSA) and his/her ability to change those facets and adapt to new circumstances (Fugate, Kinicki & Ashfort, 2004). In the context of unemployment, this “pro-active” characteristic of employability makes it an important resource for coping with negative effects of unemployment. As some research suggests, individuals who perceive themselves as more employable evaluate unemployment as less harmful and choose better coping strategies to confront the stressful consequences of unemployment (Fugate et al., 2004). Furthermore, employability is linked to better and more proactive job search behaviours and, consequently, positive job search outcomes (Koen et al., 2013; Fugate et al., 2004). If employability depends on psychological resources (skills, abilities, knowledge), enhancing people’s EC might lead them to have better perceptions of their employability prospects.

Another important and valuable source of employment and reemployment is entrepreneurship (Hisrich, Langan-Fox & Grant, 2007; Malchow-Moller, Schjerning, & Sorensen, 2011). Entrepreneurship is defined as a specific interaction between individuals and their environment, consisting of having entrepreneurial intent and identifying, evaluating and exploiting opportunities (Shane & Venkataraman, 2000; Eckhardt & Shane, 2003; Shook, Priem, & McGee, 2003). Although the newer definitions and conceptualizations of entrepreneurship emphasize the role of opportunities for the entrepreneurial process, in the present

179
Introduction

study we focus on two aspects of entrepreneurship - the entrepreneurial intention and entrepreneurial self-efficacy. Whether the outcome is creating value (Hisrich, Langan-Fox & Grant, 2007) or creating a company (Laguna, 2013), or whether the individual demonstrates entrepreneurial activities inside the organization (Shane & Venkataraman, 2000), the entrepreneurial process usually starts with the intent to open a new business or start a new venture (Shook et al, 2003). Intention is, however, just one of the elements in the entrepreneurial process (Shook et al, 2003). Among many individual differences that are believed to affect the entrepreneurial process, entrepreneurial self-efficacy is one of them. Entrepreneurial self-efficacy can be defined as people’s belief in their ability to take entrepreneurial actions based on their assessment of the necessary skills they possess (De Noble, Jung and Ehrlich, 1999). Research shows that entrepreneurial self-efficacy is related to entrepreneurial intention and the actual business start-up (Chen, Greene & Crick, 1998; De Noble et al, 1999; Laguna, 2013). Moreover, research has shown that entrepreneurial self-efficacy, among other variables, is what distinguishes entrepreneurs from non-entrepreneurs, suggesting that increasing it can be useful for improving employability prospects (Aviram, 2006).

Interventions for the unemployed

The literature review shows that the content and desirable outcomes of interventions for unemployed individuals usually correspond to either interventions aimed at improving employability and job search skills, or interventions aimed at coping with unemployment. The former refer to programs that teach job search skills (such as interview skills, how to write a CV, training in the use of computers etc.) or other job related skills, with the purpose of successfully finding and keeping employment and increasing participants’ employability (Van Ryn & Vinokur, 1992; Graversen & Van Ours, 2008; Koen et al., 2013). The goal of the latter is to help unemployed individuals cope better with the negative effects of unemployment through stress management, coping skills or self-esteem building, among other things (Creed et al, 1999; Machin & Creed, 2003; Vuori & Vinokur,
STUDY 2

Although there are examples of interventions that integrate these two aspects, (Vinokur, Vuori, Schul & Price, 2000; Vuori, Price, Mutanen & Malmberg-Heimonen, 2005), they are still scarce. Vinokur et al. (2000) and Vuori et al. (2005) showed that combination of job search skills training and enhancing coping skills can have a positive effect on unemployed adults. These studies demonstrated that teaching unemployed individuals to overcome the barriers and setbacks during the job search process (along with teaching them actual job search skills) could help those individuals increase reemployment and improve their mental health. Independently of the type of intervention, the results of these interventions show that, to a greater or lesser degree, they have a positive effect on unemployed participants, increasing their employability and physical and psychological well-being.

As mentioned above, interventions focusing on increasing EC have not been used in the context of unemployment. These interventions, however, have been shown to have positive effects in other contexts, such as educational, clinical or organizational settings. Previous studies have demonstrated positive effects of EC interventions on children, adolescents, students and workers (Brackett et al, 2012; Fletcher, Leadbetter, Curran & O’Sullivan, 2009; Groves, McEnrue & Shen, 2008; Kotsou et al, 2011; Slaski & Cartwright, 2003 Ruini et al, 2009). The results of these studies have shown that different kinds of interventions aimed at improving EC in different groups have had positive effects on a variety of outcomes, such as academic success, psychological well-being, social behaviour and interpersonal relationships, among others. Until now, however, no studies have been conducted to explore to what degree these kinds of interventions can improve unemployed people’s situations. Teaching people how to regulate negative emotions resulting from accumulated stress caused by unemployment might help them to cope better with this kind of stress, view their employability prospects more positively and increase their reemployment level.

Objectives and hypotheses
Method

In order to integrate and expand the results of previous studies dealing with interventions for unemployed individuals, the purpose of the present study is to explore whether enhancing one aspect of human capital, EC, can improve the employability prospects of unemployed adults. More precisely, the study will analyse whether a structured intervention in EC can help unemployed participants increase their levels of employability, job search, entrepreneurial self-efficacy and entrepreneurial intention. In this sense, we believe that participants in the intervention group will show higher levels of employability, job search, entrepreneurial self-efficacy and entrepreneurial intention after the EC intervention than their control group counterparts (Hypothesis 1). Moreover, we believe that these improvements will be maintained six months after the intervention (Hypothesis 2). Furthermore, we think that the intervention will increase later reemployment success (Hypothesis 3).

8.3 Method

Sample and procedure

Sample recruitment started with announcing EC training in several local employment and training offices. Out of 212 people who initially applied for the training, 113 came to the selection interview. After the selection interview, 35 candidates were excluded from the intervention either because of lack of availability (17) or because they did not fulfil the requirements to participate in the intervention (18). These requirements were a) being unemployed, b) being motivated about the intervention process, c) not having extensive prior knowledge about the content of the intervention, d) not using the intervention content for professional purposes, e) not participating in any planned psychological intervention during the training, and f) not being dependent on drugs, alcohol or psycho-pharmaceuticals. Finally, 78 participants were randomly assigned to either the intervention or control group. However, four participants from the control group and one from the experimental group did not come to the first follow up (T2), and so they were excluded from the analyses. Thus, the final sample
consisted of 40 participants (3 men and 37 women) in the intervention group (mean age = 32.95, SD = 10.33) and 33 (7 men and 26 women) in the control group (mean age = 36.06, SD = 12.03). All the participants were unemployed at the time of the first data collection, and participation was voluntary. The intervention group was divided into 4 smaller groups (between 8 and 12 participants per group) and underwent a 15-hour (two and a half days) intervention. Following a controlled experimental design, the participants completed all the measures before the intervention (T1), one month after T1 (T2) and six months after T1 (T3). The control group completed the same measures at the same time intervals as the experimental group, and the intervention was offered to them after the last data collection (after T3). Due to lack of availability, only 12 participants from the control group went through the intervention. All participants signed an informed consent to participate in the study.

The content of the intervention

The content and the organization of the intervention was based on a previously tested and validated intervention by Kotsou and colleagues (Kotsou et al. 2011), focused on improving emotional competencies and developing effective emotion regulation strategies. The theoretical framework of the intervention was Mayer and Salovey’s four-branch model of emotional intelligence (Mayer, Roberts & Barsade, 2008) and the references from the Emotional Competences book by Mikolajczak, Quoidbach, Kotsou, and Nelis (2009). The intervention lasted 15 hours, split into three days – the first two days were consecutive and the last day was 2 weeks later. It was divided into 6 modules, with each module covering a specific emotional competence. The modules were: 1) introduction to EI and identifying one’s own and others’ emotions, 2) regulating emotions, 3) regulating one’s own emotions in relationships, 4) regulating others’ emotions in relationships and conflict management, 5) practical techniques for emotional regulation, and 6) positive emotions and using positive emotions to foster well-being. The first four modules included a theoretical explanation of the key constructs with examples,
followed by group exercise, group discussions, pair work or individual tasks where participants had the chance to implement what they learned into practice. In addition, some of the concepts related to a specific emotional competence were explained using video clips, role-plays or interesting cases from history. In the fifth module, the participants became familiarized with some practical techniques for regulating negative emotions, such as a breathing technique and muscle relaxation techniques. Finally, in the sixth module the participants learned about the importance of positive emotions and the effects they can have on physical and psychological well-being. Two lecturers were in charge of the intervention and always presented the same modules to each intervention group.

**Measures**

**Control Variables**

As for the socio-demographic variables, age, gender and educational level were considered as control variables and measured by single items (i.e., “Are you a male/female?”, “How old are you?” and “What is your educational level?”). Gender was coded as a Dummy variable (0 = Male/1 = Female). Educational level was also coded as a Dummy variable (0 = primary and secondary school/1 = university level). These variables were included as control variables because previous research has suggested that they might potentially moderate the psychological effects of unemployment (Paul & Moser, 2009).

**Dependent variables**

*Employability* and *Job search* were measured with 3 and 4 items, respectively, from the Employment Outlook Scale of the Career Exploration Survey (Stumpf, Colarelli, & Hartman, 1983). The Spanish versions of both scales were used (Prieto, Peiró, Ripoll, Rodriguez, Bravo, Salanova, & Hontagas, 1994). The *employability* scale measures participants’ perceptions about current job market possibilities. The response scale is a five-point Likert scale (1 = completely disagree, 5 = completely agree). The items were: “In the current job market situation, I think it is possible to find a job that I am prepared for or have
experience in”, “In the current job market situation, I think it is possible to work in a company that I choose” and “In the current job market situation, I think it is possible to find an interesting job”. This scale showed good psychometrics qualities (Stumpf et al, 1983). For the present sample, the reliability of the scale was .87 (T1), .89 (T2) and .89 (T3).

Reemployment success was measured by asking participants whether they had found reemployment at Time 3 and one year after the intervention. In addition, participants were asked when exactly they started working in order to obtain data on the delay before reemployment. More precisely, the period after the training until reemployment. This data was expressed in months. The Job search scale measures the use of job search methods. The response scale is a five-point Likert scale (1 = not at all, 5 = very much). The items were: “To what extent do you plan your job search in detail?”; “To what extent do you use specific processes for investigating firms?”; “To what extent do you prepare questions to ask at interviews?”; and “To what extent do you search systematically for firms in your career area?” This scale showed good psychometric qualities (Stumpf et al, 1983). For the present sample, the reliability of the scale was .72 (T1), .69 (T2) and .76 (T3).

The Spanish adaptation (Moriano, Palaci & Morales, 2006) of the Entrepreneurial Self-efficacy scale (De Noble et al., 1999) was used to evaluate people’s beliefs about their ability to successfully create and manage their own company. The participants respond to 23 items on a 5-point Likert scale from “completely unable” (1) to “perfectly able” (5). Example items are: “I can identify new areas for potential growth”; “I can inspire others to embrace the vision and values of the company”; and “I can persist in the face of adversity”. It is possible to calculate the global score or a specific score for each of the following six subscales of the scale:

- Developing new product and market opportunities (7 items) refers to the ability to recognize opportunities to start the entrepreneurial venture.
• **Building an Innovative Environment** (4 items) refers to the ability to foster innovative actions among other potential members of the team.

• **Initiating Investor Relationships** (3 items) concerns the necessary activities to obtain enough resources to start the venture.

• **Defining core purpose** (3 items) is the ability to define and focus on the vision and key purpose of the venture.

• **Coping with unexpected challenges** (3 items) refers to dealing with the ambiguity and uncertainty that may arise in different stages of the entrepreneurial adventure.

• **Developing Critical HR** (3 items) is related to the ability to attract and keep crucial and necessary partners for the entrepreneurial process.

This scale showed good psychometric qualities (Moriano et al., 2006). For the present sample, the internal consistency ($\alpha$) of the scale was .94 (T1), .95 (T2) and .96 (T3).

*Entrepreneurial intention* was measured with 2 items recommended by Krueger, Reilly and Carsrud (2000) and adapted to Spanish by Sánchez (2008). Participants were asked to indicate their level of intention to start their own business and open their own firm in the next five years, using a 5-point Likert scale (1 = completely disagree, 5 = completely agree). For the present sample, the internal consistency ($\alpha$) of the scale was .94 (T1), .97 (T2) and .97 (T3).

### 8.4 Results

*Descriptive analyses*

The correlation matrix between all dependent variables at all the time points is presented in Table 1. According to the results, employability correlated with entrepreneurial self-efficacy in time 2 and time 3, while entrepreneurial self-efficacy was found to be significantly correlated with entrepreneurial intention in the same periods. Job search correlated with entrepreneurial self-efficacy in T1 and T2. As for the reemployment success, reemployment delay was significantly and
negatively correlated with reemployment status at both, time 3 and one year after the intervention, as expected.

*Preliminary analyses*

Independent *t* tests (see Table 2) showed that there were no significant differences between the intervention group and the control group on any pretest measures, apart from entrepreneurial self-efficacy and two out of six dimensions of entrepreneurial self-efficacy (*coping with unexpected challenges* and *developing critical HR*). Participants in the control group reported higher levels of entrepreneurial self-efficacy (global score and two dimensions) before the intervention. The means, standard deviations, and significance of differences between intervention and control groups prior to EC intervention are shown in Table 2.

To account for the differences identified for the dependent variables, the following analyses have been conducted using time 2 and time 3 scores that had been corrected for time 1 scores using covariate adjustments.
## Results

Table 1. Correlations between the Study Variables at all Times

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employability T1</td>
<td>1</td>
<td>.14</td>
<td>.14</td>
<td>-.01</td>
<td>-.01</td>
<td>-.08</td>
<td>.01</td>
</tr>
<tr>
<td>2. Job search T1</td>
<td>.14</td>
<td>1</td>
<td>.36**</td>
<td>.11</td>
<td>.06</td>
<td>.01</td>
<td>-.03</td>
</tr>
<tr>
<td>4. Entrepreneurial intention T1</td>
<td>-.01</td>
<td>.11</td>
<td>.22</td>
<td>1</td>
<td>-.09</td>
<td>-.01</td>
<td></td>
</tr>
<tr>
<td>5. Employment status at T3</td>
<td>-.01</td>
<td>.06</td>
<td>.04</td>
<td>-.00</td>
<td>1</td>
<td>.67**</td>
<td>-.63**</td>
</tr>
<tr>
<td>6. Employment status 1 year after</td>
<td>-.08</td>
<td>.01</td>
<td>-.14</td>
<td>-.09</td>
<td>.67**</td>
<td>1</td>
<td>-.60**</td>
</tr>
<tr>
<td>7. Reemployment delay</td>
<td>.01</td>
<td>-.03</td>
<td>.07</td>
<td>-.01</td>
<td>-.63**</td>
<td>-.60**</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employability T2</td>
<td>1</td>
<td>.10</td>
<td>.38**</td>
<td>.15</td>
<td>-.04</td>
<td>-.14</td>
</tr>
<tr>
<td>2. Job search T2</td>
<td>.14</td>
<td>1</td>
<td>.36**</td>
<td>.03</td>
<td>.10</td>
<td>-.04</td>
</tr>
<tr>
<td>3. Entrepreneurial self-efficacy T2</td>
<td>.38**</td>
<td>.36**</td>
<td>1</td>
<td>.42**</td>
<td>-.17</td>
<td>-.25*</td>
</tr>
<tr>
<td>4. Entrepreneurial intention T2</td>
<td>.15</td>
<td>.03</td>
<td>.42**</td>
<td>1</td>
<td>.03</td>
<td>-.08</td>
</tr>
<tr>
<td>5. Employment status at T3</td>
<td>-.04</td>
<td>.10</td>
<td>-.17</td>
<td>.03</td>
<td>1</td>
<td>.67**</td>
</tr>
<tr>
<td>6. Employment status 1 year after</td>
<td>-.14</td>
<td>-.04</td>
<td>-.25*</td>
<td>-.08</td>
<td>.67**</td>
<td>1</td>
</tr>
<tr>
<td>7. Reemployment delay</td>
<td>-.02</td>
<td>.04</td>
<td>.26</td>
<td>.05</td>
<td>-.63**</td>
<td>-.60**</td>
</tr>
</tbody>
</table>
## STUDY 2

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Employability T3</td>
<td>1</td>
<td>.12</td>
<td>.36**</td>
<td>.16</td>
<td>-.01</td>
<td>-.07</td>
</tr>
<tr>
<td>2. Job search T3</td>
<td>.12</td>
<td>1</td>
<td>.19</td>
<td>.13</td>
<td>.02</td>
<td>-.05</td>
</tr>
<tr>
<td>3. Entrepreneurial self-efficacy T3</td>
<td>.36**</td>
<td>.19</td>
<td>1</td>
<td>.48**</td>
<td>-.00</td>
<td>-.05</td>
</tr>
<tr>
<td>4. Entrepreneurial intention T3</td>
<td>.16</td>
<td>.13</td>
<td>.48**</td>
<td>1</td>
<td>.09</td>
<td>.01</td>
</tr>
<tr>
<td>5. Employment status at T3</td>
<td>-.01</td>
<td>.02</td>
<td>-.00</td>
<td>.09</td>
<td>1</td>
<td>.67**</td>
</tr>
<tr>
<td>6. Employment status 1 year after</td>
<td>-.07</td>
<td>-.05</td>
<td>-.05</td>
<td>.01</td>
<td>.67**</td>
<td>1</td>
</tr>
<tr>
<td>7. Reemployment delay</td>
<td>-.13</td>
<td>-.16</td>
<td>.15</td>
<td>.08</td>
<td>-.63**</td>
<td>-.60**</td>
</tr>
</tbody>
</table>

*Note: * p < .05 ** p < .01 *** p < .001*
## Table 2. Means (and Standard Deviations) and Significance of Differences between Experimental and Control Groups Prior to EC Intervention

<table>
<thead>
<tr>
<th>Variable</th>
<th>Training group (Nº 38)</th>
<th>Control group (Nº 32)</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employability</td>
<td>2.26 (1.01)</td>
<td>2.34 (1.05)</td>
<td>-0.33</td>
<td>.75</td>
</tr>
<tr>
<td>Job search*</td>
<td>3.72 (.73)</td>
<td>3.78 (.67)</td>
<td>-0.35</td>
<td>.73</td>
</tr>
<tr>
<td>Entrepreneurial self-efficacy</td>
<td>3.11 (.54)</td>
<td>3.41 (.64)</td>
<td>-2.09</td>
<td>.04</td>
</tr>
<tr>
<td>Developing new product and market opportunities</td>
<td>3.12 (.62)</td>
<td>3.31 (.72)</td>
<td>-1.16</td>
<td>.25</td>
</tr>
<tr>
<td>Building an innovative environment</td>
<td>3.28 (.71)</td>
<td>3.60 (.71)</td>
<td>-1.92</td>
<td>.06</td>
</tr>
<tr>
<td>Environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initiating investor</td>
<td>2.89 (.72)</td>
<td>3.26 (.84)</td>
<td>-1.95</td>
<td>.06</td>
</tr>
<tr>
<td>Relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defining core purpose</td>
<td>3.24 (.60)</td>
<td>3.45 (.70)</td>
<td>-1.34</td>
<td>.18</td>
</tr>
<tr>
<td>Coping with unexpected challenges</td>
<td>2.95 (.65)</td>
<td>3.40 (.71)</td>
<td>-2.66</td>
<td>.01</td>
</tr>
<tr>
<td>Developing critical HR</td>
<td>3.11 (.78)</td>
<td>3.50 (.81)</td>
<td>-2.01</td>
<td>.05</td>
</tr>
<tr>
<td>Entrepreneurial intention</td>
<td>2.55 (1.47)</td>
<td>2.81 (1.40)</td>
<td>.79</td>
<td>.43</td>
</tr>
</tbody>
</table>

* Nº Control Groups = 31

### Effects of the intervention

In order to test whether the intervention had an effect on the dependent variables, repeated measures analysis of variance (ANOVA) was performed using group (intervention vs. control) as between-subject factor and time (time 1 vs. time 2) as within-subject factor. Moreover, because we thought that age, gender and educational level might affect the intervention effects on the dependent variables, we included them as covariables in the analyses of variance. The results showed significant GROUP x TIME interactions for employability (F(1) = 4.62, p= .04), entrepreneurial self-efficacy (F(1) = 6.28, p= .02) and four entrepreneurial self-efficacy dimensions: building an innovative environment (F(1) = 6.86, p= .01),
initiating investor relationships ($F(1) = 5.12, p = .03$), coping with unexpected challenges ($F(1) = 3.85, p = .05$) and developing critical HR ($F(1) = 4.41, p = .04$). No significant interactions were found for job search, entrepreneurial intention or the other two entrepreneurial self-efficacy dimensions (developing new products and market opportunities and defining core purpose). The breakdown of these interactions indicated that the intervention group significantly increased their employability level and entrepreneurial self-efficacy (global score and three dimensions) after the intervention (Table 3). No significant change was found in the intervention group for one of these four entrepreneurial self-efficacy dimensions (Initiating investor relationships). No significant changes were found in the control group. Thus, hypothesis 1 was partially supported.

Long term effects

As for the long term effects (6 months later) of the intervention, none of the significant T1-T2 changes were found to be significant at Time 3, except for two dimensions of entrepreneurial self-efficacy, coping with unexpected changes and developing critical HR (see Table 3). The control group showed no significant differences at Time 3 on any of the dependent variables. The means, standard deviations and t tests between Time 2 and Time 3 are presented in Table 3.

Reemployment success

In order to test whether the intervention contributed to finding reemployment (Hypothesis 3) we conducted a simple chi-square analysis. The results did not show any significant difference in reemployment success between the experimental and control group at time 3 (see Table 4; Pearson $\chi^2 (1) = 1.48$, $p = .22$). Nevertheless, the results showed that the number of participants from experimental group who became reemployed one year after the intervention was significantly higher than the number of participants from the control group (see Table 4; Pearson $\chi^2 (1) = 6.02$, $p = .01$).
### Results

Table 3. *Means (and SD) and significance of differences between all times for all significant variables for both groups*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention group (N°38)</th>
<th>Control group (N°32)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T1 (SD)</td>
<td>T2 (SD)</td>
</tr>
<tr>
<td>Employability</td>
<td>2.26 (.10)</td>
<td>2.54 (.03)</td>
</tr>
<tr>
<td>Entrepreneurial self-efficacy</td>
<td>3.11 (.54)</td>
<td>3.25 (.59)</td>
</tr>
<tr>
<td>Building an innovative environment</td>
<td>3.28 (.71)</td>
<td>3.53 (.67)</td>
</tr>
<tr>
<td>Initiating investor relationships</td>
<td>2.89 (.72)</td>
<td>3.03 (.74)</td>
</tr>
<tr>
<td>Coping with unexpected challenges</td>
<td>2.95 (.65)</td>
<td>3.20 (.69)</td>
</tr>
<tr>
<td>Developing critical HR</td>
<td>3.11 (.78)</td>
<td>3.32 (.82)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention group (N°34)</th>
<th>Control group (N°25)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T1 (SD)</td>
<td>T3 (SD)</td>
</tr>
<tr>
<td>Employability b</td>
<td>2.42 (.98)</td>
<td>2.36 (.15)</td>
</tr>
<tr>
<td>Entrepreneurial self-efficacy</td>
<td>3.07 (.47)</td>
<td>3.23 (.71)</td>
</tr>
<tr>
<td>Building an innovative environment</td>
<td>3.23 (.60)</td>
<td>3.40 (.79)</td>
</tr>
<tr>
<td>Coping with unexpected challenges b</td>
<td>2.90 (.64)</td>
<td>3.30 (.82)</td>
</tr>
<tr>
<td>Developing critical HR</td>
<td>3.04 (.71)</td>
<td>3.36 (.88)</td>
</tr>
</tbody>
</table>

b N° 35
<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention group (Nº 37)</th>
<th>Control group (Nº 26)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T2</td>
<td>T3</td>
</tr>
<tr>
<td>Employability</td>
<td>2.23</td>
<td>2.40</td>
</tr>
<tr>
<td>Entrepreneurial self-efficacy</td>
<td>3.07</td>
<td>3.23</td>
</tr>
<tr>
<td>Building an Innovative Environment</td>
<td>3.51</td>
<td>3.40</td>
</tr>
<tr>
<td>Coping with unexpected challenges</td>
<td>3.15</td>
<td>3.30</td>
</tr>
<tr>
<td>Developing Critical HR</td>
<td>3.30</td>
<td>3.33</td>
</tr>
</tbody>
</table>

^ C Nº 36
Results

Table 4. *Proportion of participants in each group regarding reemployment status at Time 3 and 1 year after the intervention*

<table>
<thead>
<tr>
<th>Group</th>
<th>Unemployed</th>
<th>Employed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>27</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>% within group</td>
<td>90%</td>
<td>10%</td>
<td>100%</td>
</tr>
<tr>
<td>N</td>
<td>26</td>
<td>7</td>
<td>33</td>
</tr>
<tr>
<td>Intervention</td>
<td>21</td>
<td>12</td>
<td>33</td>
</tr>
<tr>
<td>% within group</td>
<td>63.6%</td>
<td>36.4%</td>
<td>100%</td>
</tr>
</tbody>
</table>

\[ \chi^2(1) = 1.48, \ p=.22 \]

<table>
<thead>
<tr>
<th>Group</th>
<th>Unemployed</th>
<th>Employed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>27</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>% within group</td>
<td>90%</td>
<td>10%</td>
<td>100%</td>
</tr>
<tr>
<td>N</td>
<td>21</td>
<td>12</td>
<td>33</td>
</tr>
<tr>
<td>Intervention</td>
<td>21</td>
<td>12</td>
<td>33</td>
</tr>
<tr>
<td>% within group</td>
<td>63.6%</td>
<td>36.4%</td>
<td>100%</td>
</tr>
</tbody>
</table>

\[ \chi^2(1) = 6.02, \ p=.01 \]

In addition, a regression analysis on reemployment delay was performed. The results showed that the EC intervention explained significant incremental portion of variance in reemployment delay beyond the variance contributed by age, gender and educational level (\(\Delta R^2 = .12, \ p<.059, \ B=-5.15, \ p<.05\)). Mean comparison showed that the average reemployment delay was shorter for the experimental group and this difference was significant (t (23) =2.25, p=.05). On average, it took 10 months (SD= 6.18) for the participants from the experimental group to find a job and 15.69 (SD=7.47) months for the participants from the control group. Therefore, hypothesis 3 is supported.
8.5 Discussion

In the present study, we tried to integrate and expand the results from previous studies on interventions for unemployed adults by using a specific planned intervention in emotional competences. The aim of the study was to find out what effects this type of intervention can have on employability, job search, entrepreneurial intention, entrepreneurial self-efficacy and actual reemployment in a group of unemployed adults. The results obtained partially support the hypotheses proposed. In the first place, we found that the level of perceived employability significantly increased in the experimental group after the intervention. Individuals who went through a two and a half day intervention perceived themselves as more employable than individuals from the control group. This result is in accordance with some previous proposals about crucial aspects of individuals’ perceived employability. Various researchers have argued that human capital and increasing human capital has a great influence on people’s beliefs about their possibilities of finding new employment (Becker, 1993; Fugate et al, 2004; Bernston et al, 2006; Bernston et al, 2008). According to human capital theory, investing in education, job skills and experience, or developing competences, can help individuals increase their employability (Becker, 1993). Our results support this idea, showing that EC might be one of the necessary aspects of human capital for individuals’ perceived employability. Focusing on improving competences related to identifying, understanding, using and managing emotions seems to have a positive influence on how capable individuals perceive themselves to be in getting a job in the near future. Our results showed that this positive effect on employability was not maintained six months after the intervention. This could lead to the conclusion that other factors, apart from individual factors, influence people’s perceptions about their possibilities of re-entering the job market. The strength of human capital variables as predictors of employability may be diminished by the strength of other predictor variables, such as the current economic situation, the job supply, or employment policies. Future studies should
address this issue by combining both individual and contextual factors in trying to find the predictors of employability among unemployed adults.

Our results, however, showed that the intervention had a positive effect on actual reemployment. More people from experimental group found employment after the intervention (1 year after) than from the control group, suggesting that the EC intervention contributed significantly to reemployment success of unemployed participants. Moreover, the reemployment delay was significantly shorter for the participants of the intervention, suggesting that they found employment faster than their control group counterparts did. Focusing on the content and methodology of the intervention used in this study, some of its aspects might have contributed to the positive effects of EC intervention on reemployment success. More precisely, the learning context enabled the participants to share their experiences about conflicts, problems or difficulties in job search process or in everyday life. This way, participants could have taken advantage of the knowledge and abilities of others. Moreover, they had a chance to learn to recognize and express their own emotions and to handle better the conflicts and the negative emotions caused by different stressful situations. These constructive skills and techniques they learned might have helped them in their job search process and consequently enabled them to find reemployment. Our results support the findings of previous research that showed that teaching unemployed to cope better with the obstacles they encounter during job search can contribute to further reemployment success (Vuori et al, 2005). Additionally, as our results showed, the participants of the intervention increased their perceived employability, which affects not only job search behaviors but also job search outcomes (Fugate et al, 2004).

In addition, frequent interaction between participants might have enabled them to assist each other in terms of employment options and job opportunities. The role of social networks in job search and reemployment has been mentioned in various previous studies (Lindsay, 2010; Koen et al, 2013; Wright Brown & Konrad, 2001). Social capital is considered as one of the most important aspects of
employability (Fugate et al, 2004) and it refers not only to social skills but also to social networks. This aspect might have contributed to the reemployment success of our participants.

On the other hand, individuals who participated in the intervention showed no significant change in their job search methods. The intervention did not encourage them to engage more in job search behaviours. This finding is similar to the results of a previous study, which showed that when individuals made progress in searching for a job, they dedicated less effort to the job search the next day, even without an actual job offer (Wanberg, Zhu & Van Hooft, 2010). Wanberg et al. (2012) explained their finding by using control theory, which suggests that when people make progress toward achieving some kind of goal, they may take time to relax and devote their time to other activities. If applied to the present sample, our participants might have considered participation in the intervention as a kind of progress related to their employment prospects. This perceived progress might have influenced their job search activities in the negative direction, so that they did not improve their job search behaviours.

As for the entrepreneurial aspects, participants in the intervention group significantly increased their global entrepreneurial self-efficacy and three out of six dimensions of entrepreneurial self-efficacy (Building an innovative environment, Coping with unexpected challenges and Developing critical HR) immediately after the intervention. Changes in two of these three entrepreneurial self-efficacy dimensions (Coping with unexpected challenges and Developing critical HR) were maintained six months after the intervention. Our results suggest that entrepreneurial self-efficacy can be developed, and that an intervention intended to enhance EC among unemployed adults may actually increase the level of entrepreneurial self-efficacy. According to Bandura’s model of self-efficacy, people’s beliefs in their capabilities are developed through several routes (Bandura, 1994, 2012). One of them is through mood. Somatic and emotional states affect people’s judgments of their personal efficacy (Bandura, 1994). Reducing stress and
enhancing positive emotions can increase people’s beliefs in their capabilities. In this sense, improving people’s EC resulted in higher personal beliefs of entrepreneurial efficacy among unemployed adults. In addition, the development of entrepreneurial self-efficacy depends on other (external) factors as well, such as economic circumstances, policies or culture (Hisrich et al, 2007; Mueller & Dato-on, 2013), which might explain the lack of long-term improvement in entrepreneurial self-efficacy.

**Limitations and suggestions for future research**

Although the present study shows that the employment outlook of unemployed adults can be modified after a short intervention, future studies are necessary to overcome its limitations and clarify the conditions and factors involved in the intervention effects. First, the study mostly relies on self-report measures. The advantage of the study, however, is the objective measure of reemployment and a longitudinal design where we measured all the variables in three periods.

Second, gender imbalance of the sample limits the study, as it might seem that the findings apply much more to women than to men. This imbalance reflects the initial interest for the EC intervention, which was much higher among women, since substantially more women than men applied for the intervention. We have to mention that unemployment rates were higher for women than for men at the time of sample recruitment (Encuesta de Población Activa (EPA)), which might explain the elevated interest for EC intervention among women. In addition, women prefer social and emotional support and are more likely to seek this kind of support (such as emotional competences training) than men, who tend to minimize their emotional difficulties and focus more on tangible support (Ashton & Fuehrer, 1993; Stokes & Wilson, 1984). Future studies, however, should include more gender-balanced groups, in order to clarify the role of gender in employability outlooks and training success and also to explore gender differences in the initial interest and motivation for these types of interventions.
In addition, although the EC intervention enhanced the reemployment success in certain degree, more research is needed to see how EC training increases the reemployment. It is important to determine what kind of variables might mediate the impact of EC training on reemployment.

Moreover, since the sample was too diverse regarding the occupational distribution, conclusions regarding differences in intervention success depending on the participants’ occupation were not possible. Nevertheless, future research in this area should focus on identifying specific occupational groups that might benefit the most from these kind of interventions.

Moreover, some authors distinguish between preparatory and active job search behaviour (Blau, 1993). Preparatory search involves all the activities prior to the actual search (such as gathering information, revising CV’s or reading a book about job search). Active job search refers to actually applying for open positions. (Blau, 2003; Wanberg, 2012). The measure used to assess job search behaviour in the present study could be better characterized as involving preparatory job search behaviour. Future studies would benefit from the use of both preparatory and active job search measures.

Finally, the control group did not go through any intervention, which might limit the validity of the intervention. As previously mentioned, frequent interaction among the participants might have facilitated their future reemployment. Even though, it was very difficult to control this latent variable in the present study, future studies should be designed in a matter that would permit to address this issue and try to examine the role of social contacts in reemployment success. In addition, future studies should include an alternative parallel intervention for the control group in order to examine whether the social interaction between the unemployed individuals increases reemployment possibilities, independently of the type of the intervention.
Discussion

Nevertheless, the results of the present study support the notion that increasing employability is an important task, considering new trends in the labour market and changes in career developments, such as more flexibility, job insecurity etc. (De Witte, 2005; Van den Broeck, Vansteenkiste, Lens, & De Witte, 2010). It is useful for all individuals in transition – unemployed people or those who are looking for a change in their careers, because their careers might greatly depend on their perceived employability (Fugate et al, 2004).

Furthermore, the present study opened up a path to an important practical implication, developing entrepreneurship, as a valuable source of employment. Our results showed that one of the important aspects of entrepreneurship (entrepreneurial self-efficacy) could be developed over time. Some suggestions about how to use emotion management (coping with failure or managing emotions to avoid failure) to increase entrepreneurship have already been made (Shepherd, 2004). Entrepreneurship is a complex process encompassing different stages, and learning to manage emotions that might occur in each of these stages can be useful for future entrepreneurs.

Conclusion

The aim of the present study was to expand findings of previous interventions for unemployed adults by focusing on enhancing emotional competences and, thus, contribute to the area of unemployment research. Our results show that teaching people how to identify, express, understand, use and regulate emotions can, to some degree, change their perception of their employability, contribute to reemployment success and enhance their entrepreneurial self-efficacy. Given that employability is an important asset for reemployment and career development, and that it can be enhanced, reemployment practice could benefit from these and similar interventions. In addition, the fact that people improved their beliefs in their own ability to become an entrepreneur emphasizes the importance of the EC intervention in the entrepreneurial process.
9. STUDY 3. CAN CHANGE IN EMOTIONAL COMPETENCES (EC) PREDICT CHANGES IN POSITIVE PSYCHOLOGY CONSTRUCTS? EVALUATING THE EFFECTS OF EC TRAINING
9.1 Abstract

Previous interventions in Emotional Competences (EC) have produced benefits beyond increasing levels of EC, such as better academic performance, psychological well-being, mental health and employability. The present study aimed to explore what factors might determine the effects of EC intervention among unemployed adults. Moreover, we wanted to examine whether changes in EC after the intervention can predict changes in several positive psychology constructs. The study involved 74 unemployed adults randomly divided to experimental group (41) or control group (33). The interaction between the intervention and job search was found to explain a significant incremental portion of variance in EC change ($\Delta R^2 = 6.1\%, p=.00$). People who were more active in job search benefited more from the intervention. Moreover, change in EC predicted change in satisfaction with life ($\Delta R^2=3\%, p=.03$), optimism ($\Delta R^2=2\%, p=.06$), quality of social relationships ($\Delta R^2=4\%, p=.00$ and $\Delta R^2=10\%, p=.04$), and two coping strategies ($\Delta R^2=15\%$ and $12\%, p=.00$).

Keywords: emotional competences, intervention, unemployment, positive psychology, job search
9.2 Introduction

The increased interest for emotional intelligence interventions can be related to development and popularization of Positive Psychology and increased investigative curiosity in trying to relate different personality characteristics to health and well-being. Positive psychology is usually defined as ‘‘science of positive subjective experience, positive individual traits, and positive institutions’’ (Seligman & Csikszentmihalyi, 2000, p. 5). This new wave of psychology of positive human functioning inspired numerous positive health interventions directed to reinforcing people’s psychosocial well-being.

Although not explicitly classified as positive psychology category or human strength, emotional competences (EC), defined as capacity to identify, understand, express, manage, and use one’s own feelings and those of others (Mayer & Salovey, 1997), have been part of positive psychology discourse in one form or another for some time.

The development of the concept of EC and its validation caused numerous practical implications in terms of promoting emotions in different fields of human activities and initiating and encouraging different EC interventions. Numerous previous studies demonstrated that EC can be increased through training (Schutte, Malouff, & Thorsteinsson, 2013). Moreover, interventions in EC have produced benefits beyond increasing EC such as better academic performance (Brackett, Rivers, Reyes, & Salovey, 2012), psychological well-being (Kotsou, Nelis, Gregoire, & Mikolajczak, 2011), mental health (Ruiz-Aranda, Salguero, Cabello, Palomera, & Fernández-Berrocal, 2012), interpersonal relationships and even employability (Kotsou et al., 2011). However, one study that used specific samples (such as unemployed adults) showed that EC intervention does not have an effect on all people equally. For instance, unemployment duration was found to be a significant determinant of training effects for unemployed individuals (Hodzic, Ripoll, Bernal, & Zenasni, in press).
Therefore, in the present study, we were interested to explore other factors that might determine the effects of EC intervention on unemployed adults. Considering a specific context of unemployment, we would like to focus on factors that are related with motivation, proactivity and learning goals. One of the indicators of this proactive behavior is certainly job search behavior. Leaning on self-determination theory, intrinsic or autonomous motivation rather than extrinsic or controlled motivation would be better predictors of unemployed people’s well-being and unemployment experience in general (Ryan & Deci, 2000). For instance, Vansteenkiste, Lens, De Witte and Feather (2005) showed that autonomous motivation positively predicted job search behavior. Moreover, learning goal theory suggests that proactive individuals prefer learning goals to performance goals and are more prone to learning and mastering their skills (Dweck, 1986). Proactive individuals might engage themselves more in activities that offer them new skills and competences, such as trainings and interventions. Therefore, we believe that active job search behavior and the propensity to learn new skills both characterize this proactive and intrinsically motivated individual and that the effects of EC intervention would depend on job search behavior. In addition, although numerous studies of traits related to positive psychological health and well-being have been conducted (Seligman & Csikszentmihalyi, 2000), previous positive psychology interventions (PPI) have usually focused on the same outcomes (such as subjective well-being or satisfaction with life), excluding many of the domains of psychological strengths mentioned in positive psychology literature. Therefore, we were interested to examine whether changes in EC can predict changes in other positive dimensions besides satisfaction with life, such as interpersonal relations, and optimism. Moreover, since we focused on a specific negative context (unemployment), we were interested to see if changes in EC can affect changes in coping strategies of our unemployed participants. In order to test these assumptions, we used a longitudinal experimental design with three data collection periods and with one experimental and one control group.
For the purpose of the present study, we chose to deal with some of the indicators of positive human functioning that we consider useful for handling unemployment. One of those indicators of positive human functioning is satisfaction with life (SWL) defined as individual’s cognitive evaluation of his/her overall life (Diener, Emmons, Larsen, & Griffin, 1985). Besides the usual research interest on the direct effects of EC on satisfaction with life, some studies have focused on the buffering role of EC in stressful circumstances as well. The results of these studies showed that EC interacted with stress in predicting this important psychological strength (Extremera, Duran, & Rey, 2009; Bhullar, Schutte, & Malouff, 2012). However, the effects of EC on satisfaction with life have not been explored in a specific context, such as unemployment.

Another highly beneficial human strength from positive psychology framework that can be useful for unemployed individuals is optimism. Tendency to expect positive results in life and have generally positive expectations from life determines how one can handle negative and stressful events (Scheier, Weintraub, & Carver, 1986). According to positive psychology researchers, optimism is one of the human strengths that can buffer the negative effects of mental illness and promoting optimism can prevent psycho-social problems such as depression, anxiety or deteriorated social relations (Seligman & Csikszentmihalyi, 2000). Moreover, unemployment literature showed that optimism is one of the important moderators of the effects of unemployment on well-being. Results of previous research showed that having a generally positive view on life helps unemployed individuals cope better with stress of being unemployed (McKee-Ryan, Song, Wanberg, & Kinicki, 2005) and that optimistic people choose better and more efficient coping strategies (Scheier et al., 1986).

Although studies on relations between EC and optimism are scarce, results of some studies showed significant positive correlations between EC and optimism (Augusto-Landa, Pulido-Martos, & Lopez-Zafra, 2011; Extremera, Duran, & Rey, 2009; Bhullar, Schutte, & Malouff, 2012). However, the effects of EC on satisfaction with life have not been explored in a specific context, such as unemployment.
Nevertheless, studies about predictors of optimism have mainly focused on social or developmental factors, thus the relationship between EC and dispositional optimism has not been investigated much.

Finally, another important aspect of optimal human functioning according to positive psychology researchers are quality relationships with others (Ryff & Singer, 1998). The role of social relationships for health and well-being has been studied in numerous studies. Social support, social integration, quality of interpersonal relationships, marital relationships have all been proved to influence different health outcomes (Cohen, 2004). The beneficial role of social relationships and social support for unemployed people’s well-being has also been shown in previous research (McKee-Ryan et al., 2005).

In addition, EC have been linked with social adaptation across different theoretical approaches, and have been shown to predict positive social outcomes in childhood, adolescence, adulthood and across different life domains (Mayer, Roberts, & Barsade, 2008). As Ryff and Singer (1998) highlight, having pleasant and gratifying relations with others is not a given state, it needs constant effort and nourishing. Thus, interventions that aim at improving interpersonal relationships directly or indirectly (through enhancing EC) can contribute to more positive psychosocial health and well-being.

**Coping with unemployment**

In the context of unemployment, coping strategies are very important, because they can reduce the negative effects of unemployment (McKee-Ryan et al., 2005). Both, problem-focused and emotion-focused coping strategies have been associated with better mental health in previous studies with unemployed people (McKee-Ryan et al., 2005).

The way people deal with stressful events can determine the effects these events can have on their physical and psychological health. This dealing with stressful events usually refers to intentional cognitive and behavioral efforts
oriented towards managing psychological stress - either changing the external factors causing negative emotions, or changing or decreasing these negative emotions per se (Lazarus, 1993). There are different categorizations of coping strategies, but in the present study we used an inventory of coping strategies that distinguishes between problem-focused coping and emotion-focused coping (Tobin, Holroyd, Reynolds, & Wigal, 1989). Both of these categories include adaptive and non-adaptive coping strategies. This means people might choose effective or less effective strategies to cope with stressful events. Previous research has shown that EC are positively related to adaptive and negatively to maladaptive coping strategies (Saklofske, Austin, Galloway, & Davidson, 2007) and that EC can predict the choice of coping strategies (Petrides, Pérez Gonzales, & Furnham, 2007).

Thus, if enhancing EC can help unemployed people in choosing more efficient and adaptive coping strategies it might ease the distress caused by the lack of manifest and latent factors (such as financial resources or time structure) that unemployment brings (McKee-Ryan et al., 2005).

**Objectives and hypotheses**

Leaning on past results about the possibilities and limitations of enhancing EC in different contexts, the aim of the current study is to explore what factors might affect the effects of EC intervention in a sample of unemployed adults. More precisely, we aim at testing whether job search moderates the changes in EC after a short intervention. In addition, we want to observe whether changes in EC can produce changes in positive human strengths (such as satisfaction with life, optimism and interpersonal relationships) and coping strategies. In this sense, we propose that the effects of the EC intervention will be stronger among people who are more actively seeking employment (Hypothesis 1). Furthermore, we expect that changes in EC will predict changes in levels of satisfaction with life, optimism, interpersonal relationships and adaptive coping strategies (Hypothesis 2).
9.3 Method

Sample and procedure

The sample consisted of 74 unemployed adults who all applied for the EC training that was announced in several local employment offices. The majority of the sample were women (64) with university degree (44) and the mean age was 34.5 years old ($SD=11.26$). They were randomly assigned to the EC training group (41 participant; mean age = 32.7, $SD = 10.34$) or the control group (33 participants; mean age = 36.7, $SD = 12.11$). The experimental group was divided into four smaller groups (between 8 and 12 people per group) and they assisted a 15h intervention in EC. They also completed all the measures in three times - prior to the intervention, 1 month after and 6 months after the intervention. The participants from the control group went through the same data collection procedure but did not receive a training until after the last data collection. Participation in the study was voluntary and all the participants signed an informed consent form prior to the first data collection.

The content of the intervention

The training represented an adaptation of a previously used and tested intervention program by Kotsou et al. (2011) that proved to be beneficial for various well-being correlates even in long term. In 3 days of training (with a two weeks gap between the second and the third day), the participants had a chance to learn about emotions, emotional competences and the benefits of enhancing them. More precisely, the intervention program was divided into 6 modules, each focusing on different emotional competence: identifying emotions, understanding and using emotions, regulating one's own emotions in relationships, regulating other's emotions in relationships and conflict management, regulating unpleasant
emotions and regulating pleasant emotions\textsuperscript{16}. Participants also had a chance to put in practice what they have learned participating in different practical exercises (role-plays, pair-work, group discussions etc.).

\textit{Measures}

\textit{Pre and post measures of EC}

To assess EC, we used a Spanish adaptation of Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF, Pérez, 2003). This measure consists of 30 items (e.g., “Expressing my emotions with words is not a problem for me”) ranging from 1 (strongly disagree) to 7 (strongly agree) and gives a global score of trait emotional intelligence. TEIQue-SF is derived from the full 153-item form and, in the present study, the internal consistency of the scale was .83 (T1), .88 (T2), and .82 (T3).

\textit{Measures of a potential moderator of the training effects}

\textit{Job search} was measured with four items from the Spanish version of the Employment Outlook Scale of the Career Exploration Survey adapted by Prieto et al. (1994).

This scale measures the use of job search methods. More precisely, it reflects preparatory job search behaviour or the activities prior to the actual search of employment (such as planning a job search, investigating companies or preparing questions for the interviewees). The response scale is a five-point Likert scale (1 = not at all, 5 = very much) and the reliability of the scale was .72 (T1), .69 (T2) and .76 (T3).

\textit{Pre and post measures of positive psychological strengths and coping strategies}

\textsuperscript{16} More detailed information about the EC intervention can be found in Kotsou et al. (2011).
**Method**

Satisfaction with Life Scale (SWLS) is a five item self-report measure that measures the overall judgement of one’s subjective well-being (e.g., “In most ways my life is close to my ideal”). The response scale is a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The Spanish version of the SWLS was used, adapted by Atienza, Balaguer and Garcia-Merita (2003). For the present sample, the reliability of the scale was .84 (T1), .88 (T2) and .82 (T3).

To evaluate the quality of interpersonal relationships we used four subscales of the Échelle de la Qualité des Relations Interpersonnelles (EQRI) developed by Senécal, Vallerand and Vallières (1992). The scale assesses quality of relationships in different life domains, and in the present study, we assessed family life, love relationships, relationships with friends, and relationships in life in general. Each life domain is assessed with four items on a Likert scale from 0 to 4. This scale showed good psychometric qualities (Senecal et al., 1992). For the present sample, the internal consistency (α) of the scale for each subscale was: family life .89 (T1), .92 (T2) and .91 (T3); love relationship .90 (T1), .96 (T2) and .93 (T3); relationships with friends .88 (T1), .91 (T2) and .89 (T3); relationships in life in general .85 (T1), .86 (T2) and .86 (T3).

Optimism was evaluated with Spanish adaptation of the The Life Orientation Test (LOT, Otero, et al., 1998). Each of the six items (e.g., “In uncertain times, I usually expect the best”) is scored on a scale from 1 (Strongly disagree) to 5 (Strongly agree) to obtain a global score of generalized expectations toward positive or negative results. The reliability of the scale was .75 (T1), .80 (T2) and .78 (T3).

Coping strategies were assessed through adapted version (Franco, García, Javier Cano, & Picabia, 2004) of Coping Strategies Inventory (Tobin et al., 1989) which contains 40 items. Each item is rated on a 5-point Likert scale (1= None, 5= Very much) to obtain eight scores for eight subscales. These subscales refer to the coping strategies people use when in stressful situations: Problem solving: behavioral and cognitive strategies directed towards eliminating stress by
modifying the situation; *Cognitive restructuring*: cognitive strategies that change the meaning of stressful situations; *Social support*: strategies oriented towards seeking emotional support; *Express emotions*: releasing and expressing emotions that occur in the process of stress; *Problem avoidance*: strategies that include negation or avoidance of thoughts or action related to the stressful event; *Wishful thinking*: strategies that refer to an inability or reluctance to change or amend the stressful situation; *Social withdrawal*: withdrawal from friends, family and important people related with the emotional reaction to the stressful event and *Self-critique*: strategies that include blaming and criticizing oneself for the stressful situation or its bad handling.

The alpha coefficients for these subscales range from .67 to .89 (at T1), .70 to .88 (at T2) and .62 to .87 (at T3).

### 9.4 Results

**Preliminary analyses**

Independent *t* tests (see Table 1) showed that the only significant differences between the intervention group and the control group before the intervention were found for satisfaction with life and quality of relationships with friends. Participants in the intervention group perceived themselves as more satisfied with life in general and as having better relations with their friends than their control group counterparts before the intervention. The means, standard deviations, and significance of differences between intervention and control groups prior to EC intervention are shown in Table 1. To account for the differences in the dependent variables identified prior to the intervention, the analyses that followed have been conducted using time 2 and time 3 scores that were corrected for time 1 scores using covariate adjustments.
Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Training group</th>
<th>Control group</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC</td>
<td>4.95 (.64) (N= 41)</td>
<td>4.99 (.61) (N= 32)</td>
<td>t = 0.34, p&lt;.74</td>
</tr>
<tr>
<td>Job search</td>
<td>3.71 (.73) (N= 39)</td>
<td>3.76 (.67) (N= 31)</td>
<td>t = -0.31, p=.75</td>
</tr>
<tr>
<td>Satisfaction with life</td>
<td>3.33 (.74) (N= 40)</td>
<td>2.85 (.91) (N= 31)</td>
<td>t = -2.42, p&lt;.02</td>
</tr>
<tr>
<td>Optimism</td>
<td>3.78 (.66) (N= 38)</td>
<td>3.73 (.73) (N= 32)</td>
<td>t = -0.28, p&lt;.78</td>
</tr>
<tr>
<td>Quality of social relationships-Family</td>
<td>15.71 (2.91) (N= 38)</td>
<td>15.00 (3.54) (N= 31)</td>
<td>t = .90, p&lt;.37</td>
</tr>
<tr>
<td>Quality of social relationships-Partner</td>
<td>16.17 (3.31) (N= 29)</td>
<td>15.64 (4.36) (N= 22)</td>
<td>t = -.48, p&lt;.63</td>
</tr>
<tr>
<td>Quality of social relationships-Friends</td>
<td>15.77 (2.82) (N= 39)</td>
<td>14.25 (2.96) (N= 32)</td>
<td>t = -2.20, p&lt;.03</td>
</tr>
<tr>
<td>Quality of social relationships-General</td>
<td>14.03 (2.54) (N= 39)</td>
<td>13.69 (1.77) (N= 32)</td>
<td>t = -.66, p&lt;.51</td>
</tr>
<tr>
<td>Problem solving</td>
<td>3.76 (.77) (N= 39)</td>
<td>3.73 (.76) (N= 32)</td>
<td>t = -.18, p&lt;.86</td>
</tr>
<tr>
<td>Cognitive restructuring</td>
<td>3.54 (.66) (N= 39)</td>
<td>3.34 (.62) (N= 32)</td>
<td>t = -1.32, p&lt;.19</td>
</tr>
<tr>
<td>Social support</td>
<td>3.41 (.91) (N= 39)</td>
<td>3.50 (.88) (N= 32)</td>
<td>t = .45, p&lt;.66</td>
</tr>
<tr>
<td>Emotion expression</td>
<td>3.23 (.88) (N= 39)</td>
<td>3.39 (.83) (N= 32)</td>
<td>t = .77, p&lt;.44</td>
</tr>
<tr>
<td>Problem avoidance</td>
<td>2.57 (.71) (N= 39)</td>
<td>2.59 (.76) (N= 32)</td>
<td>t = .08, p&lt;.94</td>
</tr>
<tr>
<td>Wishful thinking</td>
<td>3.28 (.81) (N= 31)</td>
<td>3.61 (.76) (N= 32)</td>
<td>t = 1.75, p&lt;.08</td>
</tr>
<tr>
<td>Social withdrawal</td>
<td>2.33 (.77) (N= 39)</td>
<td>2.24 (.67) (N= 32)</td>
<td>t = -.53, p&lt;.60</td>
</tr>
<tr>
<td>Self-critique</td>
<td>2.31 (.95) (N= 39)</td>
<td>2.23 (.97) (N= 32)</td>
<td>t = -.33, p&lt;.74</td>
</tr>
</tbody>
</table>

**Effect of the intervention on EC**

In order to test whether job search behaviour prior to the intervention influenced the effects of the intervention on EC, we performed a moderated regression analysis. The results showed that the interaction between the intervention and job search was found to explain a significant incremental portion of variance in EC change (TEIQ-T2) ($\Delta R^2 = 6.1\% \; F=12.5, \; p=.00$), beyond the variance contributed by the level of EC prior to the intervention (see Table 2).
Table 2. Results of Moderated Hierarchical Regression Analysis for Emotional Competences (EC) at time 2

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>$B$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
<th>$\Delta F$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>0.37</td>
<td>0.37</td>
<td></td>
<td>39.53</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>EC T1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Intervention</td>
<td>0.08</td>
<td>0.00</td>
<td>0.31</td>
<td>7.02</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Job search</td>
<td>-0.27*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Intervention*Job search</td>
<td>0.44</td>
<td>0.06</td>
<td>7.02</td>
<td></td>
<td>0.01</td>
</tr>
</tbody>
</table>

To explore the nature of the interaction effects, we used a graphical representation that uses Dawson’s (2014) procedures for interpreting two-way interactions. As seen in figure 1, the difference between experimental and control group is significant when participants were more active in the preparatory job search. The experimental group showed higher scores on TEIQue_SF than the control group at Time 2. In contrast, no significant difference between experimental and control group was found among the participants who were more passive at job search. Therefore, Hypothesis 1 was supported.
Results

Figure 1. Interaction effect: Intervention * Job search

*Change in positive psychological constructs and coping strategies*

In order to test if changes in EC predicted changes in indicators of positive psychological functioning and coping strategies, we performed several hierarchical regression analyses following Finkel’s (1995) recommendations for analyzing change in longitudinal studies with panel data. In order to examine the change, we used all three times and we controlled for all dependent variables at time 1 (prior to the intervention) and time 2 (one month after the intervention). As can be seen in table 3, changes in EC predicted changes in satisfaction with life, optimism, relationships with friends, relationships in general and two of eight coping strategies (problems solving and cognitive restructuring).
Table 3. Results of Regression Analyses for, Satisfaction with life, Optimism, Quality of Social Relationships-Friends, Quality of Social Relationships-General, Problem Resolution and Cognitive Restructuring at Time 3

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>( B )</th>
<th>( R^2 )</th>
<th>( \Delta R^2 )</th>
<th>( \Delta F )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Satisfaction with Life_T3</td>
<td>.67</td>
<td>.67</td>
<td>55.66</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfaction with Life_T1</td>
<td>.27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Satisfaction with Life_T2</td>
<td>.72***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>EC_T1</td>
<td>.67</td>
<td>.00</td>
<td>.00</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T2</td>
<td>-.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>EC_T3</td>
<td>.69</td>
<td>.03</td>
<td>4.85</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EQRI_Friends_T3</td>
<td>.37*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Optimism_T3</td>
<td>.67</td>
<td>.67</td>
<td>57.45</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Optimism_T1</td>
<td>.28*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Optimism_T2</td>
<td>.54***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>EC_T1</td>
<td>.68</td>
<td>.01</td>
<td>.94</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T2</td>
<td>-.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>EC_T3</td>
<td>.70</td>
<td>.02</td>
<td>3.79</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EQRI_General_T3</td>
<td>.22*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>EQRI_Friends_T1</td>
<td>.27</td>
<td>.27</td>
<td>10.61</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EQRI_Friends_T2</td>
<td>.31*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>EC_T1</td>
<td>.32</td>
<td>.03</td>
<td>.05</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T2</td>
<td>.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>EC_T3</td>
<td>.46</td>
<td>.10</td>
<td>14.49</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EQRI_General_T3</td>
<td>.2.5***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>EQRI_General_T1</td>
<td>.43</td>
<td>.43</td>
<td>22.05</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EQRI_General_T2</td>
<td>.38*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>EC_T1</td>
<td>.44</td>
<td>.01</td>
<td>.52</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EC_T2</td>
<td>.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

217
### Discussion

The purpose of the present study was two-folded: at first place, we wanted to examine whether job search moderates the effects of EC intervention on change in EC among unemployed adults. At second place, we were interested to test whether changes in EC can predict changes in different indicators of positive human functioning. The study pretends to replicate an already tested intervention and to explore one potential factor that could influence the effects of the intervention. In addition, we pretend to contribute to the existing literature on positive psychological indicators focusing on the possibility to change and enhance the above-mentioned psychological strengths.

Even though the obtained results do not confirm the previous findings about the efficiency of the EC intervention regarding the improvement of EC

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>B</th>
<th>R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>EC_T3</td>
<td>.48</td>
<td>.04</td>
<td>3.67</td>
<td>.04</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>B</th>
<th>R²</th>
<th>ΔR²</th>
<th>ΔF</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Problem Solving_T1</td>
<td>.27*</td>
<td>.30</td>
<td>.30</td>
<td>11.94</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>Problem Solving _T2</td>
<td>.39*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>EC_T1</td>
<td>-.46*</td>
<td>.32</td>
<td>.02</td>
<td>1.04</td>
<td>.36</td>
</tr>
<tr>
<td></td>
<td>EC_T2</td>
<td>-.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>EC_T3</td>
<td>.55***</td>
<td>.47</td>
<td>.15</td>
<td>15.29</td>
<td>.00</td>
</tr>
</tbody>
</table>

9.5 Discussion

The purpose of the present study was two-folded: at first place, we wanted to examine whether job search moderates the effects of EC intervention on change in EC among unemployed adults. At second place, we were interested to test whether changes in EC can predict changes in different indicators of positive human functioning. The study pretends to replicate an already tested intervention and to explore one potential factor that could influence the effects of the intervention. In addition, we pretend to contribute to the existing literature on positive psychological indicators focusing on the possibility to change and enhance the above-mentioned psychological strengths.

Even though the obtained results do not confirm the previous findings about the efficiency of the EC intervention regarding the improvement of EC
(Kotsou et al., 2011), we found a differential effect of the intervention according to the job search behavior. People who were more active in job search and used preparatory job search methods more actively benefited more from the intervention. One of the important determinants of job search behaviors and intentions is learning goal orientation (Veiga & Turban, 2014). Learning goal orientation reflects the focus on increasing competence to master a certain task (Dweck, 1986). People who have higher levels of learning goal orientation are usually interested in improving their skills and competences in order to accomplish some task or goal (Dweck, 1986). Individuals from our training who were more actively preparing their job search share this motive to learn and accept challenges, and therefore benefitted more from the training. In addition, intrinsic autonomous motivation (according to self-determination theory) prompts unemployed individuals to actively seek employment because they find it inherently satisfying (Vansteenkiste et al., 2005). These factors might be the key determinants of intervention success. Future studies should explore the differential effect of learning goal orientation and intrinsic motivation for effects of EC interventions.

As for the other objective of the study, the results showed that change in EC predicted change in several positive psychology constructs - satisfaction with life, optimism and two out of four indicators of the quality of social relationships, as well as two coping strategies – problem solving and cognitive restructuring.

The predictive validity of EC for satisfaction with life has been showed in numerous previous studies. Our results support these findings and confirm that change in EC can predict changes in satisfaction with life even in the unprivileged contexts, such as unemployment. Satisfaction with life is a cognitive evaluation of one’s own life. If people perceive themselves as good at identifying, understanding and regulating own and other people’s emotions, they might use more positive and adaptive approaches to life events and appraise those events more positively. If those life events are objectively negative (such as unemployment), emotional
abilities can at least buffer their negative effect and provide unemployed people with more positive attitudes towards life.

Furthermore, the obtained results showed that change in EC predicted changes in dispositional optimism. As some authors argue better understanding of emotional knowledge and better emotion regulation is connected with generally more positive expectations from life (Extremera et al., 2007). Therefore, providing people with more knowledge and techniques on how to understand own emotions and those of others or how to regulate emotions and use them for better psychological growth can in a certain way make them feel more confident and expect positive outcomes from some future (emotion-related) life events. These positive expectations related with emotional events are linked with more general expectations from life.

Changes in EC also predicted changes in quality of friendships and social relationships in general. Changes in participants’ perceptions on how satisfied and gratifying were their relationships with their friends or with people in general were significantly predicted by changes in their scores on TEIQue. This finding is of particular importance for the unemployment context. As previously mentioned, numerous studies proved that social relationships are associated with better well-being and health outcomes in unemployed and general samples. Potential mechanisms responsible for these links might be different for general population and for unemployed individuals. However, whether it is emotional support or tangible support, the “stress-buffering” effect of social relationships is a valuable aid in times of stress, such as unemployment. In addition, our results showed that EC change did not affect changes in partner and family relations. The studies regarding the influence of EC on family and intimate relationships have yielded some contradictory results (Brackett, Mayer, & Warner, 2004; Brackett, Warner, & Bosco, 2005; Mayer et al., 2008; Smith, Ciarrochi, & Heaven, 2008; Zeidner & Kloda, 2013). Some of the studies show weak and some no relationship between EC and satisfaction with partner and family relations. It might be that other factors
(such as partner’s EC, self-esteem, attachment styles, positive emotions etc.), which were not controlled for in the present study, determine better the quality of family and partner relationships.

Finally, our results showed that the change in EC significantly predicted change in problem focused adaptive coping strategies. This result gives certain support for the validity of our intervention program since a significant part of the training program was dedicated to enhancing problem solving and cognitive restructuring strategies as means of regulating negative emotions. However, some authors suggest that EC already include aspects related to coping and that these two constructs might share some common variance (Saklofske et al., 2007). Therefore, the relationship between EC and coping strategies should be investigated more in forthcoming studies.

Nevertheless, if enhancing EC can influence the use of positive coping strategies than interventions such as ours are worth conducting especially in such adverse contexts. Besides this, future EC interventions should include other content that will focus on increasing emotion focused coping strategies as well.

In sum, we consider that the obtained results are promising, indicating that enhancing EC can help in cultivating positive psychological strengths which act as buffers against stressful life events.

Limitations and suggestions for future studies

In the present study we intended to expand the findings of previously tested EC interventions using a specific “unprivileged” sample. In addition, we aimed at contributing to the existing literature in positive psychology, focusing on some of the indicators of positive human functioning and possibilities for their change.

Although results are promising, they should be interpreted with caution. One of the reasons for this caution is the unequal gender distribution of the sample used in the study. Since gender differences in EC have always been a subject of interest, future studies should try to balance better the gender distribution in order to test the
Discussion

differential effect of the training depending on gender. Furthermore, the lack of intervention for the control group restricts the conclusions about the efficacy of the used EC intervention. The improvements of EC in the experimental group might have been due to simple participation in organized training sessions. A replication of the training with a non-EC related training for the control group could clarify the range of the EC intervention effects.

An important limitation of the present study is the use of only one self-report measure for assessing EC. Although TEIQ-SF evaluates EC conceptualized as trait, ability measures of EC could contribute to better evaluation of the training validity.

As for additional suggestions for future studies, the first one concerns exploring the determinants of the intervention success. As we mentioned, one of important determinants of intervention success can be learning goal orientation and this should be further explored. Future studies should explore other possible factors, such as openness to experience, self-efficacy or receptivity to feedback, as they might be important for maximizing the effects of EC interventions.

Finally, as we mentioned before, EC and coping strategies are conceptually very similar and future investigation should focus on determining the incremental validity of EC beyond coping strategies.
10. GENERAL DISCUSSION
The aims of the present research were three-folded. At first place, to examine whether the training in EC can increase the level of EC of the unemployed participants and if the training effects will be moderated by the length of unemployment. Moreover, to test if changes in EC can predict changes in physical and psychological well-being. A second aim was to examine whether the EC intervention can contribute to improving employability prospects (objective and subjective) of unemployed adults in short and long term. The last aim was to test whether job search behaviour might moderate the effects of the EC intervention and whether changes in EC after the intervention can predict changes in several positive human strengths. In order to reach these aims three empirical studies were conducted. A graphical representation of the synthesis of the three conducted studies is presented in Figure 2.

Study 1 aimed to examine whether the training in EC can increase the level of EC of the unemployed participants and if the training effects will be moderated by unemployment duration. An additional aim was to test if changes in EC can predict changes in indicators of physical and psychological well-being. The results of Study 1 showed a differential impact of the training depending on the unemployment duration. Significant differences were found between experimental and control group among the participants with shorter unemployment duration, implying that the longer the people are without work, the lesser are the chances for change or the positive intervention effect. Leaning on Jahoda’s latent deprivation model (Jahoda, 1981), unemployed people are distressed due to the lack of latent factors of employment - time structure, social contacts, the experience of social purpose, status and identity and regular activity. When unemployment is prolonged this effect is even stronger and might be stronger than effects of any intervention designed to help them. In this case, the EC intervention had a “marginal” effect, failing to help individuals with deeper difficulties caused by prolonged unemployment.
GENERAL DISCUSSION

Figure 2. The synthesis of the three conducted studies
Furthermore, other symptoms might be developed, during prolonged unemployment, which can buffer the effects of the intervention. For instance, long-term unemployed might suffer from lack of motivation and passivity in behavior or unhealthy behaviors (for instance alcoholism). As for the effects of EC on well-being, the results of Study 1 showed that changes in EC significantly predicted changes in several indicators of physical and psychological well-being - perceived stress, somatic complaints, mental health, and two mood dimensions (vigor and confusion) six months after the intervention. These results confirm the findings of some previous studies that showed the direct and moderator effects of EC on psychological well-being in stressful circumstances (Mikolajczak et al., 2007; Schutte et al., 2007) and expand them showing that change in EC can predict change in psychological and physical health indicators. The obtained results are contradictory to results of the previous studies that showed that even a short intervention in EC could increase EC and produce benefits for variety of outcomes (Nelis et al., 2009; Nelis et al., 2011; Kotsou et al., 2011). The experimental group in general did not increase the level of EC after the training. However, the results showed that change in EC after the intervention depends on the unemployment duration. So, an important factor for the interventions success has been detected. This issue should be addressed in future studies and interventions in the context of unemployment.

The aim of the Study 2 was to analyse whether a structured intervention in EC can help unemployed participants increase their levels of employability, job search, entrepreneurial self-efficacy and entrepreneurial intention. The results partially supported the hypotheses proposed. As for the employability, the experimental group showed significantly higher level of perceived employability after the intervention. Many authors argue that investing in human capital can have a great influence on people’s self-beliefs about their possibilities of finding new employment (Becker, 1993; Fugate et al, 2004; Bernston et al., 2006; Bernston et al, 2008). In this sense, the results of Study 2 suggest that EC might also be one
GENERAL DISCUSSION

aspect of human capital that is important for perceived employability of unemployed individuals and that enhancing EC might help them feel more employable. Also, leaning on self-regulation theory, being able to regulate emotions and effort during unemployment and job search might help individuals feel more confident about the job search and future employment options (Brown et al., 2006). Nevertheless, other factors besides individual ones also affect the beliefs about own employability and this should be addressed in future studies.

Besides perceived employability, the participants of the EC intervention also improved their actual reemployment. More people from experimental group found employment after the intervention, and more quickly than the participants from the control group. This result supports the above described influence of human capital not only on perceived employability, but actual employment as well. The obtained results support the findings of previous research that showed that teaching unemployed to cope better with the obstacles they encounter during job search can contribute to further reemployment success (Vuori et al., 2005).

Another type of personal beliefs that were improved after the intervention was entrepreneurial self-efficacy. Participants in the intervention group significantly increased their global entrepreneurial self-efficacy and three out of six dimensions of entrepreneurial self-efficacy - building an innovative environment, coping with unexpected challenges and developing critical HR. According to Bandura’s model of self-efficacy, people develop beliefs about their capabilities through many ways and mood is one of them (Bandura, 1994, 2012). Reducing stress and enhancing positive emotions can increase people’s beliefs in their capabilities because somatic and emotional states affect people’s judgments of their personal efficacy (Bandura, 1994). This mechanism might explain the obtained effects of the EC intervention on entrepreneurial self-efficacy.

Although the intervention had positive effect on employability, reemployment success and entrepreneurial self-efficacy, it did not affect the actual job search behaviours. Individuals who participated in the intervention showed no significant
change in their job search methods. According to control theory, when people make progress toward achieving some kind of goal, they may take time to relax and devote their time to other activities (Wanberg et al., 2012). If the participation in the intervention was considered as a kind of progress related to employment prospects among the participants, then this perceived progress might have influenced their job search activities in the negative way making them more passive in the actual job search process. However, job search behaviour in the present study is more likely to be a so called preparatory job search behaviour (Blau, 1993). It may be that the participants of the intervention improved their active job search behaviours instead, which could explain the improvement in employability and reemployment success. This issue should be tested in future studies.

The purpose of Study 3 was to test whether job search moderated the changes in EC after the intervention and whether changes in EC could produce changes in positive human strengths (satisfaction with life, optimism and interpersonal relationships) and coping strategies. The obtained results showed that job search does moderate the effects of the training. People who were more active in job search and used preparatory job search methods more actively benefited more from the intervention. These differential effects of the training, to a certain degree, might be explained by learning goal orientation and intrinsic motivation. At first place, higher levels of learning goal orientation usually prompt people to improve their skills and competences in order to accomplish some task or goal (Dweck, 1986). Therefore, people who were more actively preparing their job search might have been more motivated to learn and accept challenges, and consequently benefitted more from the training. In addition to this, according to self-determination theory, intrinsic motivation is the key factor for the active job search. People who are intrinsically motivated find the job search process inherently fulfilling and it reflects an autonomous and personal choice for them (Vansteenkiste et al., 2005).
Therefore, they might be motivated to participate and be active in the training and learn new things from the same reasons.

In addition, the results also showed that change in EC predicted change in satisfaction with life, optimism and two out of four indicators of the quality of social relationships, as well as two coping strategies – problem solving and cognitive restructuring. The results suggest that enhancing EC can help in cultivating positive psychological strengths which can act as buffers against stressful life events. Better understanding of emotional knowledge and better emotion regulation is connected with generally more positive expectations from life (Extremera et al., 2007). Therefore, enhancing these competences, especially in the context of unemployment, can have beneficial effects for people. Also, changes in EC predicted changes in quality of friendships and social relationships in general. Social relationships are associated with better well-being and health outcomes in unemployed and general samples (Cohen, 2004; McKee-Ryan et al., 2005). Social relationships can provide either emotional support or tangible support, but either way this “stress-buffering” effect can be valuable in difficult times, such as unemployment. Finally, since a significant part of the training program was dedicated to enhancing problem solving and cognitive restructuring strategies as means of regulating negative emotions, it is no surprise that the change in EC significantly predicted change in problem focused adaptive coping strategies. This is an important result because if enhancing EC can influence the use of positive coping strategies, then similar interventions are worth conducting especially in contexts such as unemployment.

10.1 General limitations and suggestions for future studies

The general purpose of the present study was to overcome the limitations of the previous studies and explore whether EC can be developed in an unprivileged population, such as unemployed adults, through a planned intervention developed on sound theoretical assumptions, and whether this improvement can predict
improvements in different aspects of unemployed people’s lives. Although some of
the results are promising, a certain caution in their interpretation is necessary.
Limitations of each study are presented with more detail in the discussion of each
corresponding study, but some general limitations that are common for all the three
studies will be described here.

At first place, control group did not go through a parallel non-EC related
intervention. As argued in Study 1, just participating in the intervention might have
had an effect on EC, independently of the intervention content. In order to test the
validity of the intervention and clarify the range of the EC intervention effects,
future studies should include a parallel intervention for the control group that
covers some aspects different from EC and EC related concepts.

A second limitation is related to the sample and it is two-folded. First, the
sample was relatively small. However, this sample size is common in experimental
studies where an intervention is applied (Nelis et al, 2009; Clarke, 2010; Nelis et
al, 2011). In addition, even though the sample was relatively small, some
promising results were found. Second, the gender distribution of the sample was
unequal. There were much more women who participated in the intervention.
Therefore, the differential effect of the training depending on gender could not be
tested and it might be an interesting aspect to test in the context of unemployment.
Previous research showed that gender was a significant moderator of the
unemployment effects (Paul & Moser, 2009) and exploring whether men or women
benefit more from the interventions and why can be an interesting objective in
future studies.

Another important limitation of the present research is the use of self-report
measures for all the variables in the study, with the exception of reemployment
success and reemployment delay (Study 2). Ability measures of EC, for instance,
such as MSCEIT (Mayer, Salovey & Caruso, 2002) might yield different results,
even though some authors argue that EC measured as trait is more robust predictor
of well-being than EC measured as ability (Zeidner et al., 2012). Some evidence
General limitations and suggestions for future studies

also suggest that EC measured as a trait and assessed with self-report measures is more strongly related to mental health than EC measured as an ability and assessed through ability measures (Martins et al., 2010; Schutte et al., 2007). Nevertheless, the validity of the EC intervention could have a more complete evaluation if ability measures of EC were used. In addition, future studies should include other measures of physical, psychological and social well-being as well, because it can clarify better the effects of the intervention. However, one advantage of the present research is a longitudinal design where all the variables were measured in three periods.

Finally, the present research explored two potential determinants of the training effects – unemployment duration and job search behaviour. Future studies should explore other potential determinants of the training effects in the unemployment context, as it might be important for intervention design and implementation. As described previously, several factors are believed to determine the effects of unemployment on physical and psychological well-being, from demographic characteristics, such as marital status, age or minority status, to socio-economic factors, such as market opportunities or the social welfare system (Paul & Moser, 2009). Paul and Moser (2009), for instance, identified gender and occupational status (besides unemployment duration) as the key moderators of unemployment-well-being relationship. These factors might also moderate the effects of the EC training. Other factors, such as openness to experience, self-efficacy or receptivity to feedback should also be tested, as they might be important for maximizing the effects of EC interventions, especially among unemployed people. In addition, since the results showed that the EC intervention enhanced the reemployment success, it is important to determine what kind of variables might mediate the impact of EC training on reemployment success, as it might be useful for maximizing the effects of the intervention.
10.2 Practical implications

Even though the present research has several limitations that could and should be addressed in future studies, it also brings up some important and valuable implications of a more practical nature. At first place, the conducted intervention proved that EC are a useful psychological strength even in difficult and stressful circumstances such as unemployment and that enhancing EC can help unemployed individuals on many levels. Interventions for unemployed have usually been focused on enhancing job search skills and helping people to reintegrate in the job market more quickly (Wanberg, 2012). Practitioners, employment offices, and government institutions should be aware that interventions that focus on EC and enhancing EC can have equally positive impact on well-being and employability prospects of unemployed as some other intervention programs.

In addition, the results of the Study 1 showed that unemployment duration is a significant moderator of the intervention effects. This result implies that the EC intervention has a “marginal” effect, it cannot help individuals with deeper difficulties caused by prolonged unemployment. In other words, as unemployment duration increases, the chances for positive intervention effect decrease. Although examples in the literature showed that even log-term unemployed individuals benefitted from the interventions (Paul and Moser, 2009; Vinokur et al., 2000), evidence from previous studies suggest that prolonged unemployment causes deterioration in mental health and well-being (McKee-Ryan et al., 2005; Paul & Moser, 2009). In order to avoid this accumulation of stress factors, caused by prolonged unemployment, future interventions should try to target unemployed individuals as soon as they lose their jobs. That way, intervention might have better outcomes. In addition, ways to help long-term unemployed individuals need to be found. Some authors argue that a more behavioural approach has to be applied on long term unemployed people (Proudfoot et al., 1997). Nevertheless, a more global approach should be considered, including institutional and government efforts to
Practical implications

help long-term unemployed re-enter the job market and increase their employability prospects.

Another important moderator of the training effects that was detected in the present research was job search behaviour. People who were more active in the so-called preparatory job search methods benefitted more from the training. As previously mentioned, active job search might reflect proactive, intrinsically motivated people who want to learn and improve their competencies (Vansteenkiste et al., 2005). If this kind of people is benefitting from the training, the question is how people who are not motivated in that way can benefit from similar interventions. Future interventions should target individuals who are not so active in their job search and try to adapt intervention programs to help those who are not that intrinsically motivated to persist in the job search process and to cope better with unemployment.

Unequal gender distribution of the sample was an important limitation of the present research. However, this issue also represents a practical implication that needs to be addressed in future interventions. The initial interest for the EC training was much higher among women than men, as there was substantially much more women who applied for the training than men. This by itself might be an interesting research topic because it might contribute to the discussion about gender differences in emotional competences and emotion related aspects. From a practical point of view, recruiting and implicating more men in the training can be an interesting challenge for future intervention designers.

Finally, as it was discussed in Study 2, the present research yielded an important practical implication, developing entrepreneurship, as a valuable source of employment. One of the important aspects of entrepreneurship, entrepreneurial self-efficacy, was developed after the training. Entrepreneurship is a valuable source of employment (Hisrich et al., 2007; Malchow-Moller et al., 2011) and increasing entrepreneurship and employability in general is an important task, considering new trends in the labour market and changes in career developments,
such as more flexibility, job insecurity etc. (De Witte, 2005; Van den Broeck, Vansteenkiste, Lens, & De Witte, 2010). Some suggestions about how to use emotion management to increase entrepreneurship have already been proposed (Shepherd, 2004), but learning to manage emotions that might occur in each of the complex stages of entrepreneurship can be useful for unemployed people who want to become entrepreneurs, as well. In general, any effort to improve employability prospects is useful for all individuals in transition – unemployed people or those who are looking for a change in their careers, because their careers might significantly depend on their perceived employability (Fugate et al., 2004).

10.3 Conclusions

Since the very first conceptualizations of EC authors have tried to define what EI or EC are and whether it is a new form of intelligence or something already well-known but differently described. Over the course of years, the research focus has changed and the question nowadays is not what EC are but rather what can be done with it. The present research has tried to contribute, at least to some extent, to answering that question.

With some careful considerations and relevant limitations, the results generally showed that EC can be enhanced in an unprivileged population, that changing EC can predict change in physical, psychological and social well-being to some extent and that enhancing EC can improve some employability prospects of unemployed adults.

More precisely, at first place, the results showed that EC can be improved but the range of those improvements depend on the duration of unemployment. The EC training was shown more effective among people who were less time unemployed. Moreover, change in EC predicted change in perceived stress, somatic complaints, mental health, and mood six months after the intervention, showing that EC can affect psychological and physical health even in unprivileged contexts.
At second place, the results showed that the training in EC positively improved self-perceived and objective employability of unemployed adults. Not only did the participants of the training improve their beliefs about future employment options, but also they had more success in actual reemployment. More people from experimental group found employment after the intervention, and the reemployment delay was shorter than among the control group participants. Besides, the experimental group also showed significant improvement of entrepreneurial self-efficacy after the training, highlighting another area where this kind of interventions could have an impact.

Finally, several important positive psychological strengths, that can act as buffers against stressful life events, were also predicted by the change of EC, such as satisfaction with life, optimism, some aspects of quality of social relationships, as well as some coping strategies. If these positive psychological strengths can be enhanced through EC then programs that aim at improving EC should be a part of interventions for unemployed. In addition, the results showed that the improvement of EC depended on people’s job search behaviour. People who were more active in job search benefited more from the intervention in terms of increasing the level of EC. The explanation for this result is possibly of a more cognitive-affective or motivational nature. It is possible that either intrinsic motivation or learning goal orientation reflects this kind of job search behaviour and that people who share this proactive orientation are more prone to participate and involve themselves in the trainings.

In summary, the results about developing EC are promising but as Greenberg et al. (2003) argue, “Conversely, multiyear, multicomponent programs are more likely to foster enduring benefits. When classroom instruction is combined with efforts to create environmental support and reinforcement from peers, family members, school personnel, health professionals, other concerned community members, and the media, there is an increased likelihood that students will adopt positive social and health practices” (p. 470). The same can be applied for the
present and any other population. If efforts from the intervention programs are combined with a global effort of all the stakeholders in the environment and society the benefits will be stronger and more enduring.
REFERENCES


REFERENCES


Clarke, N. (2010). The impact of a training programme designed to target the emotional intelligence abilities of project managers. *International


beyond personality, type a behaviour, and daily hassles. *European Journal of Personality*, 19, 519-536. doi: [10.1002/per.552](https://doi.org/10.1002/per.552)


REFERENCES


REFERENCES


255
REFERENCES


REFERENCES


261
REFERENCES


REFERENCES


REFERENCES


intelligence test (MSCEIT) with established emotion measures.  


Sala, F. (2006). Do programs designed to increase emotional intelligence at work—work? Consortium for Research on Emotional Intelligence


American Journal of Community Psychology, 12, 53-69. doi: 10.1007/BF00896928


REFERENCES


of integrative versus mixed model measures of emotional intelligence. Intelligence, 41, 149-156. doi: 10.1016/j.intell.2013.01.004


ANNEX 1: POSTERS USED TO ANNOUNCE THE TRAINING
ANNEX 1: POSTERS USED TO ANNOUNCE THE TRAINING

¿ESTRESADO?

Acude al CURSO GRATUITO de
INTELIGENCIA EMOCIONAL
para aprender a manejar tu ESTRÉS

Dirigido a personas desempleadas. Si estás interesado, contacta con
entrenamiento.emociones@gmail.com
o llama al 608328094. Más información en la web:
www.uv.es/intrlemocion/
¡Atención!
¡Las plazas son limitadas!

Al finalizar el curso se hará entrega de un
DIPLOMA OFICIAL del IDECAL (Universitat de València)

¿ESTRESADO?

Acude al CURSO GRATUITO de
INTELIGENCIA EMOCIONAL
para aprender a manejar tu ESTRÉS

Dirigido a personas desempleadas. Si estás interesado, contacta con
entrenamiento.emociones@gmail.com
o llama al 608328094. Más información en la web:
www.uv.es/intrlemocion/
¡Atención!
¡Las plazas son limitadas!

Al finalizar el curso se hará entrega de un
DIPLOMA OFICIAL del IDECAL (Universitat de València)
ANNEX 2: THE SELECTION INTERVIEW EXAMPLE
Entrevista inicial:

A cumplimentar por el entrevistador:

Fecha ______________________

Entrevistador __________________

<table>
<thead>
<tr>
<th>APELLIDOS</th>
<th>NOMBRE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DATOS PERSONALES

<table>
<thead>
<tr>
<th>TELÉFONO</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Saludo inicial y se le pide que confirme sus datos personales (si falta alguno se le solicita)

2. Se le da información sobre el curso:

   Este curso forma parte de un estudio realizado por un equipo de investigadores de la Universidad de Valencia. El objetivo es analizar los efectos psicológicos del entrenamiento en competencias emocionales. A continuación, te voy a plantear una serie de preguntas que son importantes para determinar si estás en disposición de participar en el estudio, y por tanto, realizar el curso de desarrollo de competencias emocionales. Siéntete libre para contestar pero, por favor, si lo haces, sé totalmente sincero/a.

   ¿Qué edad tienes?

   ¿Actualmente, estás desempleado/a?

   ¿Cuánto tiempo hace que lo estás?
¿Te ha ocurrido algún hecho traumático en la última semana (por ejemplo, un accidente de coche, la muerte de un ser querido)?

¿Estás tomando actualmente algún tipo de medicación? En caso de respuesta positiva, ¿me puedes decir cuál?

¿Eres consumidor habitual de algún tipo de sustancia? En caso de respuesta positiva, ¿cuál, con qué frecuencia y desde cuándo?

¿En los últimos tres meses has recibido algún tipo de tratamiento psicológico? En caso de respuesta positiva, que os dé algún detalle del mismo

A continuación, me gustaría que comentaras las razones por las que te gustaría participar en este curso.

Durante el estudio, además de recibir el curso de formación, se te pedirá que cumplimentes una serie de cuestionarios. La información que se obtenga será utilizada exclusivamente para fines científicos, respetando siempre el anonimato de todos los que participéis. ¿Estás de acuerdo?

Para que cumplimentes los cuestionarios, un miembro del equipo de investigación se pondrá en contacto contigo para concretar las fechas.

El curso se realizará en tres sesiones de 5 horas cada una. Existe la posibilidad de elegir entre hacer el curso por la mañana o por la tarde. El horario de mañana será de 9 a 14 horas y el de tarde de 16 a 21 horas. ¿Tú tienes alguna preferencia?
ANNEX 3: THE EXAMPLE OF THE INFORMED CONSENT FORM
CONSENTIMIENTO INFORMADO

D./Dña. ____________________________________________ se compromete a participar en el curso de formación en competencias emocionales que se realizará los días y horas señalados:

Días:
…………………………………………………………………………………….

Horas………………………………………………………………………………

…

A lo largo de dicho curso tendrá que realizar las tareas que se le asignen. Además, tendrá que cumplimentar los cuestionarios que se le indiquen los siguientes días y horas:

…………………………………………………………………………………….

…..

La información que se obtenga será utilizada exclusivamente para fines científicos, respetando el anonimato de los participantes.

291
El abajo firmante se da por informado del procedimiento que se va a seguir durante el curso de formación, comprometiéndose a cumplir las normas que se le indiquen y a asistir a todas las sesiones establecidas.

El incumplimiento de las condiciones descritas supondrá la no obtención del certificado de participación en el curso.

Firmado: NOMBRE Y APELLIDOS (en mayúsculas)
ANNEX 4: SELECTED EXAMPLES OF THE TRAINING CONTENT
4.1. Example of the slides for module 1 - introduction to EC and identifying one's own and others' emotions
4.2. Example images for identifying emotion through facial expression

- **RABIA**
  - Cejas arrugadas
  - Líneas verticales entre las cejas
  - Parpados levantados
  - Boca cerrada
  - Labios apretados

- **ASCO**
  - Cejas en “V”
  - Ojos arrugados
  - Labio superior hacia arriba
  - Nariz arrugada
  - Pómulos levantados

4.3. Example exercise for identifying own emotions

**Ejercicio 1**
Identificación de sus propias emociones

En grupos de tres, pensad en una situación que haya provocado una emoción en vosotros e intentad describir los cinco componentes relevantes a la emoción específica provocada por la situación
4.4. Example slides for module 2 – understanding emotions and using them to better respond to one’s needs

Las necesidades

- Emoción como información
- Necesidades fisiológicas y necesidades psicológicas
- Son esenciales para nuestra vida y nuestro desarrollo

Pirámide de las necesidades de Maslow

- Maslow, 1940
- Cualquier frustración o posibilidad de frustración de las necesidades puede ser considerada como una amenaza psicológica
ANNEX 4: SELECTED EXAMPLES OF THE TRAINING CONTENT

El modelo causa/desencadenante

COGNICIÓN, JUSTIFICACIÓN

EMOCIÓN

NECESIDAD

DESENGADENANTE
4.5. Ejemplo de ejercicio para Módulo 3 – manejo de propias emociones

**Instrucciones:**

En grupos de 2, explorad la situación a través de las distintas etapas necesarias para manejar sus emociones.

A) Descripción de la situación
B) ¿Cuál fue la emoción o emociones?
C) ¿Qué provocó la emoción o emociones? (Desencadenante)
D) ¿Cuál es la causa de la/s emoción/es? ¿Cuál es la/las necesidad/es?
E) ¿Qué medio se puede usar para satisfacer las necesidades?

<table>
<thead>
<tr>
<th>Situación (es)</th>
<th>Emoción (es)</th>
<th>Desencadenante (s)</th>
<th>Necesidad(es)</th>
<th>Medios</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.6. Example slide for module 4 – conflict management

4.7. Content of the first reminder
4.8. Example slides for modules 5 and 6 – techniques for regulating unpleasant and pleasant emotions

---

**El cambio cognitivo (1)**

Concepto generalizado pero erróneo

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Situación</strong></td>
<td><strong>Emoción</strong></td>
</tr>
</tbody>
</table>

Concepto correcto

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Situación</strong></td>
<td><strong>Percepción</strong></td>
</tr>
</tbody>
</table>

Todo es una cuestión de perspectiva!
Las técnicas fisio-relajantes (1)

- Las técnicas de relajación dirigidas
  - La contracción / relajación muscular
  - La respiración diafragmática

- Las técnicas de relajación personales
  - Olor
  - Vista
  - Audición
  - Tacto
  - Gusto

Aumentar sus emociones positivas

- Las estrategias de regulación « a priori »: mejorar su estado de ánimo
  - Auto-priming
  - Gratitud
  - Actividad física

- Las estrategias de regulación « a posteriori »: disfrutar.
  - Estar presente (vs. Distracción)
  - Intercambio social
4.9. Example exercise used in the training

<table>
<thead>
<tr>
<th>Ejercicio 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>En grupos de dos (intercambiando) intentad expresar vuestras emociones poniéndoos en la piel del protagonista.</td>
</tr>
<tr>
<td><strong>Situación 1</strong></td>
</tr>
<tr>
<td>Has dejado tu piso a un amigo durante las vacaciones. En la vuelta de vacaciones encuentras el piso muy sucio y desordenado. Decides hablar con él porque te enfadaste mucho.</td>
</tr>
<tr>
<td><strong>Situación 2</strong></td>
</tr>
<tr>
<td>Trabajas en un restaurante. El lunes llegas al trabajo y ves que han cambiado los turnos sin consultarte y avisarte. Estos cambios no sólo afectan a tus planes para la semana, sino que te sientes decepcionado/a con tus colegas y tu jefe. Decides hablar con tu jefe.</td>
</tr>
</tbody>
</table>
Phineas P. Gage (1823 – 21 de mayo, 1861) fue un obrero de ferrocarriles, quien debido a un accidente sufrió daños severos en el cerebro, específicamente en parte del lóbulo frontal. Gage sufrió cambios notorios en su personalidad y temperamento, lo que se consideró como evidencia de que los lóbulos frontales eran los encargados de procesos relacionados con las emociones, la personalidad y las funciones ejecutivas en general.

El caso de Gage está considerado como una de las primeras evidencias científicas que sugerían que una lesión del lóbulo frontal podía alterar aspectos de la personalidad, la emoción y la interacción social. Antes de este caso (y bastante tiempo después) los lóbulos frontales se consideraban estructuras silentes (sin función), y sin relación alguna con el
ANNEX 5: MEASUREMENT INSTRUMENTS
TRAIT EMOTIONAL INTELLIGENCE QUESTIONNAIRE – SHORT FORM (TEIQUE-SF)

Por favor, responda cada una de las afirmaciones expuestas más abajo poniendo un círculo alrededor del número que mejor refleja su grado de acuerdo o desacuerdo con cada afirmación. Lea cada afirmación y escoja la respuesta que se corresponda mejor con su manera más frecuente de ser, pensar o actuar. NO piense demasiado sobre el significado exacto de la afirmación. Responda con sinceridad. NO hay respuestas correctas o incorrectas. Hay siete posibles respuestas a cada afirmación, variando desde “Completamente en Desacuerdo” (nº 1) hasta “Completamente de Acuerdo” (nº 7).

<table>
<thead>
<tr>
<th>Completamente en desacuerdo</th>
<th>Bastante en desacuerdo</th>
<th>Algo en desacuerdo</th>
<th>Ni de acuerdo ni en desacuerdo</th>
<th>Algo de acuerdo</th>
<th>Bastante de acuerdo</th>
<th>Completamente de acuerdo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

1. No tengo dificultad para expresar mis emociones con palabras.
2. A menudo me resulta difícil ver las cosas desde el punto de vista de otra persona.
3. En general soy una persona con alta motivación.
4. Me cuesta controlar mis emociones.
5. En general no encuentro la vida agradable.
6. Puedo relacionarme fácilmente con la gente.
7. Tiendo a cambiar de opinión frecuentemente.
8. Muchas veces no consigo tener claro qué emoción estoy sintiendo.
9. Creo que poseo buenas cualidades.
10. En muchas ocasiones me resulta difícil defender mis derechos.
11. Soy capaz de influir en los sentimientos de los demás.
12. Soy pesimista en la mayoría de las cosas.
13. Las personas de mi entorno más cercano se quejan de que no les trato bien.
14. Me cuesta trabajo adaptarme a los cambios.
15. En general soy capaz de afrontar situaciones estresantes.
16. A menudo siento dificultad para mostrar mi afecto a las personas más allegadas.
17. Soy capaz de “ponerme en la piel” de los demás y sentir sus emociones.
18. Me cuesta motivarme por lo que hago.
19. Puedo encontrar diferentes maneras de controlar mis emociones cuando lo deseo.
20. En general estoy encantado/a con mi vida.
21. Me considero un/a buen/a negociador/a.
22. Me implico, sin pensar lo suficiente, en cosas que más tarde desearía poder dejar.
23. A menudo me detengo a pensar sobre mis sentimientos.
24. Creo que estoy lleno/a de virtudes.
25. En una discusión tiendo a ceder incluso cuando sé que estoy en lo cierto.
26. No creo tener ningún poder sobre los sentimientos de los demás.
27. En general creo que las cosas me irán bien en la vida.
28. Me cuesta conectar con las personas, incluso con aquéllas más cercanas a mí.
29. Por lo general soy capaz de adaptarme a nuevas situaciones.
30. Algunas personas me admiran por ser tan tranquilo/a.
Las preguntas en esta escala hacen referencia a tus sentimientos y pensamientos durante el último mes. En cada caso, por favor indica cómo te has sentido o has pensado en cada situación:

<table>
<thead>
<tr>
<th>Nunca</th>
<th>Casi nunca</th>
<th>De vez en cuando</th>
<th>A menudo</th>
<th>Muy a menudo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. En el último mes, ¿con qué frecuencia ha estado afectado por algo que ha ocurrido inesperadamente?
2. En el último mes, ¿con qué frecuencia se ha sentido incapaz de controlar las cosas importantes en su vida?
3. En el último mes, ¿con qué frecuencia se ha sentido nervioso o estresado?
4. En el último mes, ¿con qué frecuencia ha estado seguro sobre su capacidad para manejar sus problemas personales?
5. En el último mes, ¿con qué frecuencia ha sentido que las cosas le van bien?
6. En el último mes, ¿con qué frecuencia ha sentido que no podía afrontar todas las cosas que tenía que hacer?
7. En el último mes, ¿con qué frecuencia ha podido controlar las dificultades de su vida?
8. En el último mes, ¿con qué frecuencia se ha sentido al control de todo?
9. En el último mes, ¿con qué frecuencia ha estado enfadado porque las cosas que le han ocurrido estaban fuera de su control?
10. En el último mes, ¿con qué frecuencia ha sentido que las dificultades se acumulan tanto que no puede superarlas?
ANNEX 5: MEASUREMENT INSTRUMENTS

PENNEBAKER INVENTORY OF LIMBIC LANGUIDNESS (PILL)

Por favor, indica con qué frecuencia experimentas las siguientes dolencias:

<table>
<thead>
<tr>
<th>Nunca o casi nunca</th>
<th>Tres o cuatro veces al año</th>
<th>Cada mes</th>
<th>Cada semana</th>
<th>Mas de una vez Por semana</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Ojos llorosos
2. Picazón en los ojos y/o en la piel
3. Zumbido en los oido
4. Sordera temporal
5. Nudo en la garganta
6. Sensación de ahogo
7. Nariz congestionada
8. Quedarse sin aliento
9. Dolores en el pecho
10. Latidos acelerados del corazón
11. Frío en las manos o los pies, incluso en climas cálidos
12. Calambres en las piernas
13. Insomnio o dificultad para dormir
14. Dolor de muelas
15. Malestar estomacal
16. Diarrea
17. Estreñimiento
18. Rigidez o dolor en los músculos
19. Dolores de espalda
20. Opresión en el pecho
21. Erupciones en la piel
22. Sudor, incluso en tiempo frío
23. Dolores de cabeza
24. Sensación de presión en la cabeza
25. Sofocos
26. Escalofríos
27. Mareo
28. Sentirse débil
29. Entumecimiento u hormigueo en cualquier parte del cuerpo
GENERAL HEALTH QUESTIONNAIRE (GHQ-12)

Por favor, utiliza esta escala para indicar cómo te has sentido durante las últimas semanas. Debes comparar tus sentimientos actuales con los que habitualmente has tenido en los últimos años:

<table>
<thead>
<tr>
<th>Más que habitualmente</th>
<th>Más o menos</th>
<th>Menos que habitualmente</th>
<th>Mucho menos que habitualmente</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

1. ¿Has podido concentrarte bien en lo que hacías?
2. ¿Has sentido que estás jugando un papel útil en la vida?
3. ¿Te has sentido capaz de tomar decisiones?
4. ¿Has sido capaz de disfrutar de tus actividades normales cada día?
5. ¿Has sido capaz de hacer frente adecuadamente a tus problemas?
6. ¿Te sientes razonablemente feliz considerando todas las circunstancias?
7. ¿Tus preocupaciones te han hecho perder mucho sueño?
8. ¿Te has notado constantemente agobiado y bajo tensión?
9. ¿Has tenido la sensación de que no puedes superar tus dificultades?
10. ¿Te has sentido poco feliz y deprimido?
11. ¿Has perdido confianza en ti mismo?
12. ¿Has pensado que eres una persona que no vale para nada?
SATISFACTION WITH LIFE SCALE (SWLS)

Por favor utiliza la siguiente escala para mostrar tu nivel de acuerdo o desacuerdo con cada una de las afirmaciones que se presentan a continuación:

<table>
<thead>
<tr>
<th>Muy en desacuerdo</th>
<th>En desacuerdo</th>
<th>Nivel medio</th>
<th>De acuerdo</th>
<th>Muy de acuerdo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. El tipo de vida que llevo se parece al tipo de vida que siempre soñé llevar
2. Las condiciones de mi vida son excelentes
3. Estoy satisfecho con mi vida
4. Hasta ahora he obtenido las cosas importantes que quiero en la vida
5. Si pudiera vivir mi vida de nuevo, me gustaría que todo volviese a ser igual
Ahora te vamos a dar una lista de emociones. Por cada palabra, por favor dinos con qué frecuencia te has sentido de esta manera la semana pasada:

<table>
<thead>
<tr>
<th>Nunca</th>
<th>Un poco</th>
<th>A menudo</th>
<th>Muchas veces</th>
<th>Muchísimo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Tensa/tenso
2. Incapaz
3. Enojada/enojado
4. Vivaz
5. Dificultad al concentrarme
6. Nerviosa/nervioso
7. Gastada/gastado
8. Triste
9. Alegre
10. Resentida/resentido
11. Activa/activo
12. Ansiosa/ansioso
13. Agotada/agotado
14. Inútil
15. Malhumorada/malhumorado
16. Con energía
17. Olvidadiza/olvidadizo
18. Sin esperanza
QUALITY OF INTERPERSONAL RELATIONSHIPS (ÉCHELLE DE LA QUALITÉ DES RELATIONS INTERPERSONNELLES – EQRI)

Indique la CALIDAD de cada una de las RELACIONES que tienes EN LA ACTUALIDAD con las personas que te rodean:

<table>
<thead>
<tr>
<th>Nada</th>
<th>Poco</th>
<th>Nivel medio</th>
<th>Bastante</th>
<th>Mucho</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1- Actualmente mi relación con mi FAMILIA
(Si actualmente no tienen una relación con su familia, pase a la pregunta 2)
- Armoniosas
- Gratificantes
- Satisfactorias
- Me llevan a confiar en ellos

2- Actualmente mi relación con mi PAREJA
(Si actualmente no tienen una relación, vaya a la pregunta 3)
- Armoniosas
- Gratificantes
- Satisfactorias
- Me llevan a confiar en ellos

3- Actualmente mi relación con mi (s) AMIGO/A (S)
(Si actualmente no tienen ninguna relación con ninguna amigo/a (s), vaya a la pregunta 4)
- Armoniosas
- Gratificantes
- Satisfactorias
- Me llevan a confiar en ellos

4- Actualmente mi relación con la GENTE EN GENERAL
- Armoniosas
- Gratificantes
- Satisfactorias
- Me llevan a confiar en ellos
THE LIFE ORIENTATION TEST (LOT)
Por favor, utiliza la siguiente escala para mostrar tu nivel de acuerdo o desacuerdo con cada una de las afirmaciones que se presentan a continuación:

<table>
<thead>
<tr>
<th>Nada de acuerdo</th>
<th>Algo de acuerdo</th>
<th>Bastante de acuerdo</th>
<th>Muy de acuerdo</th>
<th>Totalmente de acuerdo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. En momentos de incertidumbre, generalmente espero que ocurra lo mejor
2. Si algo me puede ir mal, me irá mal
3. Siempre soy optimista sobre mi futuro
4. Casi nunca espero que las cosas salgan como me gustaría
5. Rara vez espero que me ocurran cosas buenas
6. En general, espero que me ocurran más cosas buenas que malas
Piensa durante unos minutos en un hecho o situación que ha sido muy estresante para ti en el último mes. Responde a la siguiente lista de afirmaciones basándote en el grado en que hiciste lo que indican para manejar la situación.

<table>
<thead>
<tr>
<th>Nada</th>
<th>Poco</th>
<th>Nivel medio</th>
<th>Bastante</th>
<th>Mucho</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Luché para resolver el problema
2. Me culpé a mí mismo
3. Deje salir mis sentimientos para reducir el estrés
4. Deseé que la situación nunca hubiera empezado
5. Encontré a alguien que escuchó mi problema
6. Repasé el problema una y otra vez en mi mente y al final vi las cosas de una forma diferente
7. No dejé que me afectara; evité pensar en ello demasiado
8. Pasé algún tiempo solo
9. Me esforcé para resolver los problemas de la situación
10. Me di cuenta de que era personalmente responsable de mis dificultades y me lo reproché
11. Expresé mis emociones, lo que sentía
12. Deseé que la situación no existiera o que de alguna manera terminase
13. Hablé con una persona de confianza
14. Cambié la forma en que veía la situación para que las cosas no parecieran tan malas
15. Trató de olvidar por completo el asunto
16. Evité estar con gente
17. Hice frente al problema
18. Me critiqué por lo ocurrido
19. Analicé mis sentimientos y simplemente los dejé salir
20. Deseé no encontrarme nunca más en esa situación
21. Dejé que mis amigos me echaran una mano
22. Me convencí de que las cosas no eran tan malas como parecían
23. Quité importancia a la situación y no quise preocuparme más
24. Oculté lo que pensaba y sentía
25. Supe lo que había que hacer, así que doblé mis esfuerzos y traté con más ímpetu de hacer que las cosas funcionaran
26. Me recriminé por permitir que esto ocurriera
27. Dejé desahogar mis emociones
28. Deseé poder cambiar lo que había sucedido
29. Pasé algún tiempo con mis amigos
30. Me pregunté qué era realmente importante y descubrí que las cosas no estaban tan mal después de todo
31. Me comporté como si nada hubiera pasado
32. No dejé que nadie supiera cómo me sentía
33. Mantuve mi postura y luché por lo que quería
34. Fue un error mío, así que tenía que sufrir las consecuencias
35. Mis sentimientos eran abrumadores y estallaron
36. Me imaginé que las cosas podrían ser diferentes
37. Pedí consejo a un amigo o familiar que respeto
38. Me fijé en el lado bueno de las cosas
39. Evité pensar o hacer nada
40. Traté de ocultar mis sentimientos
Por favor, indica tu nivel de acuerdo o desacuerdo con las siguientes afirmaciones:

<table>
<thead>
<tr>
<th>Muy en desacuerdo</th>
<th>En desacuerdo</th>
<th>Nivel medio</th>
<th>De acuerdo</th>
<th>Muy de acuerdo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. En la situación actual del mercado laboral me resulta posible encontrar el tipo de trabajo para el cual me he preparado o tengo experiencia.

2. En la situación actual de mercado me resulta posible trabajar en una empresa de mi preferencia.

3. En la situación actual de mercado me resulta posible encontrar un trabajo que me resulte interesante.
Por favor, utiliza la siguiente escala para mostrar la medida en que realizas las actividades que se presentan a continuación:

<table>
<thead>
<tr>
<th>Nada</th>
<th>Poco</th>
<th>Nivel medio</th>
<th>Bastante</th>
<th>Mucho</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Planificas con detalle tu búsqueda de trabajo.
2. Utilizas procedimientos concretos de búsqueda de información sobre ofertas de empleo.
3. Te preparas preguntas que quieres aclarar en la entrevista de selección.
4. Buscas sistemáticamente empresas que tienen trabajos adecuados a tu preparación.
ENTREPRENEURIAL SELF-EFFICACY SCALE

Por favor, utiliza la siguiente escala para mostrar tu nivel de acuerdo o desacuerdo con cada una de las afirmaciones que se presentan a continuación:

<table>
<thead>
<tr>
<th>Completamente incapaz</th>
<th>Algo incapaz</th>
<th>Capaz</th>
<th>Muy capaz</th>
<th>Perfectamente capaz</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. Trabajar eficazmente bajo un continuo estrés, presión y conflicto
2. Desarrollar y mantener relaciones favorables con potenciales inversores
3. Reconocer nuevas oportunidades en el mercado para nuevos productos y servicios
4. Reclutar y entrenar a los empleados clave
5. Establecer la visión y valores de la organización
6. Descubrir nuevas formas para mejorar los productos existentes
7. Desarrollar relaciones con personas clave para obtener capital
8. Identificar nuevas áreas de crecimiento potencial
9. Desarrollar una adecuada planificación de personal para cubrir los puestos clave de la empresa
10. Inspirar a otros a aceptar la visión y valores de la compañía
11. Tolerar los cambios inesperados en las condiciones del negocio
12. Diseñar productos que resuelvan problemas corrientes
13. Identificar recursos potenciales de financiación
14. Crear un entorno de trabajo que permita a las personas ser más su propio jefe
15. Persistir frente a la adversidad
16. Crear productos que satisfagan las necesidades no cubiertas de los clientes
17. Formular unas acciones rápidas para perseguir las oportunidades
18. Desarrollar un entorno laboral que promueva que las personas intenten hacer cosas nuevas
19. Usar antiguos conceptos comerciales de una nueva manera
20. Determinar si el negocio va bien
21. Alentar a las personas para que tomen iniciativas y responsabilidades sobre sus ideas y decisiones, independientemente de sus resultados
22. Identificar y construir equipos de gestión
23. Formar asociaciones o alianzas con otros
ENTREPRENEURIAL INTENTION

Por favor, utiliza la siguiente escala para mostrar tu nivel de acuerdo o desacuerdo con cada una de las afirmaciones que se presentan a continuación:

<table>
<thead>
<tr>
<th>Nada de acuerdo</th>
<th>Algo de acuerdo</th>
<th>Bastante de acuerdo</th>
<th>Muy de acuerdo</th>
<th>Totalmente de acuerdo</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

En los próximos cinco años tienes intención de:

1. Crear tu propia empresa
2. Poner en marcha un negocio
Abstract

Numerous studies showed that Emotional Intelligence (EI) is related to and can predict variety of cognitive and behavioural outcomes (Di Fabio, Palazzeschi, Asulin-Peretz & Gati, 2013; Fugate, Kinicki & Ashfort, 2004; Joseph & Newman, 2010; Van Rooy & Viswesvaran, 2004) and psychological and physical well-being and mental health (Martins, Ramalho & Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar & Rooke, 2007). Besides, the results of previous EI or Emotional Competences (EC) trainings showed that EI/EC and different cognitive, behavioral and health-related aspects can be improved and developed (Schutte, Malouff & Thorsteinsson, 2013). Expanding the results of the previous studies, the present study examines whether EC can be developed among unemployed adults, whether the training effects are moderated by the unemployment duration and whether changes in EC can predict changes physical and psychological well-being (Study 1). Second, it is hypothesized that the EC intervention can increase employability prospects of unemployed adults (Study 2). Finally, job search is tested, as a possible determinant of the intervention effects, and whether changes in EC after the intervention can predict changes in positive psychological strengths and adaptive coping strategies (Study 3). The results showed a differential impact of the training depending on the unemployment duration and job search. Besides, change in EC significantly predicted changes in perceived stress, somatic complaints, mental health, two mood dimensions, satisfaction with life, optimism, quality of social relationships and problem oriented coping strategies. Besides, the intervention had positive effects on self-perceived employability, reemployment success and entrepreneurial self-efficacy. The results are discussed focusing on the potential of EC development and the effectiveness of the EC interventions for different life outcomes of unemployed people.

Keywords: emotional intelligence, emotional competences intervention, well-being, employability, unemployment
Resumen

Numerosos estudios han demostrado que la Inteligencia Emocional (IE) está vinculada y que puede predecir la variedad de resultados cognitivos y conductuales (Di Fabio, Palazzeschi, Asulin-Peretz y Gati, 2013; Fugate, Kinicki y Ashford, 2004; José y Newman, 2010; Van Rooy y Viswesvaran, 2004) y el bienestar físico, psicológico y la salud mental (Martins, Ramalho y Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar y Rooke, 2007). Además, los resultados de los entrenamientos anteriores basados en la IE o las Competencias Emocionales (CE) mostraron que la IE/CE y diferentes aspectos cognitivos, conductuales y de salud pueden ser mejorados y desarrollados (Schutte, Malouff y Thorsteinsson, 2013). Ampliando los resultados de los estudios previos, el presente estudio examina si las CE se pueden desarrollar entre los adultos desempleados, si los efectos del entrenamiento son modulados por la duración del desempleo y si los cambios en las CE pueden predecir los cambios en el bienestar físico y psicológico (Estudio 1). En segundo lugar, se plantea la hipótesis de que la intervención en las CE puede aumentar las perspectivas de empleabilidad de los adultos desempleados (Estudio 2). Por último, se analiza la búsqueda de empleo, como un posible factor determinante de los efectos de la intervención, y si los cambios en las CE después de la intervención pueden predecir los cambios en las fortalezas psicológicas positivas y estrategias de afrontamiento adaptativo (Estudio 3). Los resultados mostraron un impacto diferencial del entrenamiento en función de la duración del desempleo y de la búsqueda de trabajo. Además, los cambios en las CE predijeron significativamente los cambios en la percepción de estrés, quejas somáticas, salud mental, dos dimensiones del estado de ánimo, satisfacción con la vida, optimismo, calidad de las relaciones sociales así como las estrategias de afrontamiento orientadas al problema. Además, la intervención tuvo efectos positivos en la percepción subjetiva de la empleabilidad, el éxito real en encontrar empleo y en la autoeficacia emprendedora. Los resultados se discuten centrándose en el potencial de desarrollo de las CE y de la eficacia de la intervención en CE para diferentes resultados de la vida de las personas desempleadas.

Palabras clave: inteligencia emocional, intervención en competencias emocionales, bienestar, la empleabilidad, el desempleo
Résumé

De nombreuses études ont montré que l'intelligence émotionnelle (IE) permet de prédire différents comportements cognitifs émotionnels et sociaux (Di Fabio, Palazzeschi, Asulin-Peretz et Gati, 2013; Fugate, Kinicki & Ashfort, 2004; Joseph & Newman, 2010; Salovey et Mayer, 1990; Van Rooy & Viswesvaran, 2004) le bien-être psychologique et physique ainsi que la santé mentale (Martins, Ramalho & Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar & Rooke, 2007). En outre, les recherches étudiants les effets des formations en Compétences Émotionnelles (CE) montrent que ces dernières permettent d’améliorer certaines dimensions cognitives, émotionnelles et comportementales liées à la santé (Schutte, Malouff & Thorsteinsson, 2013). Notre recherche examine si (a) les CE peuvent être développée chez les adultes chômeurs, (b) si ces effets de formation sont modérés par la durée du chômage et (c) si les changements en CE contribuent aux changements de bien-être physique et psychologique (étude 1). Nous faisons par ailleurs l’hypothèse que les perspectives d'employabilité des chômeurs adultes peuvent être améliorées après la formation (étude 2). La recherche d'emploi est testée, comme un possible facteur déterminant des effets de l'intervention, de même que nous examinons si les changements en CE sont associés aux ressources et des stratégies d'adaptation (étude 3). Les résultats montrent un impact différentiel de la formation en fonction de la durée du chômage et de la recherche d'emploi. En outre, le changement dans la CE prédit de façon significative des changements dans le stress perçu, les plaintes somatiques, la santé mentale, les deux dimensions de l'humeur, la satisfaction avec la vie, l'optimisme, la qualité des relations sociales ainsi que les stratégies d'adaptation orientées vers les problèmes. En outre, l'intervention a eu des effets positifs sur l'employabilité perçue, l'employabilité réelle et l'auto-efficacité entrepreneuriale. Les résultats sont discutés au regard du potentiel de développement des CE et de l'efficacité de l'intervention en CE pour les chômeurs.

Mots-clés: intelligence émotionnelle, développement des compétences émotionnelles, bien-être, l'employabilité, le chômage