Perceived emotional intelligence as a predictor of depressive symptoms during mid-adolescence: A two-year longitudinal study on gender differences

Diego Gomez-Baya [a,*], Ramon Mendoza [b], Susana Paino [c], Margarida Gaspar de Matos [d]

[a] Psychology Department, Universidad Loyola Andalucia, Campus Sevilla, C/Energia Solar, 1. Building G, 41014 Sevilla, Spain
[b] Developmental and Educational Psychology Department, University of Huelva, Faculty of Educational Sciences, Av. Fuerzas Armadas, 21007 Huelva, Spain
[c] Clinical, Experimental and Social Psychology Department, University of Huelva, Faculty of Educational Sciences, Av. Fuerzas Armadas, 21007 Huelva, Spain
[d] Faculty of Human Kinetics, University of Lisboa, Estrada da Costa 1499-002 Cruz Quebrada - Dafundo, Portugal

ARTICLE INFO

ABSTRACT

Current research has supported the role of perceived emotional intelligence as an important aspect of well-being and coping throughout the life span. This study aimed to analyse the association between changes in perceived emotional intelligence and changes in depressive symptoms during mid-adolescence, with a focus on gender differences. A two-year longitudinal study comprising three assessments separated by one year each was conducted. Self-report measures of perceived emotional intelligence and depressive symptoms were administered to 525 adolescents from 12 to 15 years of age who were enrolled in 18 secondary schools in Andalusia (Spain). The results showed a lower emotional intelligence and more depressive symptoms in girls and an increase in depressive symptoms and a decrease in perceived emotional intelligence, especially in girls. A latent growth curve model indicated that gender differences in emotional repair partially explained the gender differences in depressive symptoms at each study assessment, and gender differences in the rate of change in emotional clarity were related to gender differences in the rate of change in depressive symptoms. Thus, gender-focused interventions to improve self-perceptions of emotional skills could be needed to prevent depressive symptoms in adolescent girls.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

The dramatic negative impact that depression has throughout the life span underlines the importance of studying when this disorder emerges and what factors explain its development, maintenance and/or severity (Essau & Chang, 2009). Adolescence is a period of particular risk for the emergence of depressive disorders and has shown considerable gender differences in this regard (Abela & Hankin, 2008). Some longitudinal studies revealed an increase in the rates of clinical depression from childhood to late adolescence and that the peak age of the onset of depression occurred during mid-adolescence, between the ages of 13 and 15 (Costello, Copeland & Angold, 2011). Furthermore, the literature to date has consistently shown that the initial gender differences in risk of depression emerge during adolescence. After age 13, there is a sharp increase in the presence of depressive symptoms and depressive disorders in girls, whereas in boys, the rate remains relatively stable (Hilt & Nolen-Hoeksema, 2008). In explaining depression and emotional disorders during adolescence, research has well documented the important

role of emotion regulation (Zeman, Cassano, Perry-Parrish & Stegall, 2006). Particular attention has also been paid to gender differences in emotion regulation and how these differences could be a risk factor for the occurrence of emotional disorders (Nolen-Hoeksema, 2012).

The study of emotional intelligence (EI) as an important aspect of health, psychological well-being and coping with daily events has generated substantial interest in recent years. Petrides and Furnham (2000a) distinguished between two EI constructs: trait EI and ability EI. The manner in which the individual variables are assessed, i.e., with self-reported or maximum-performance measures, influences the operationalization of the construct (Petrides, Pita & Kokkinaki, 2007). On the one hand, trait EI, or trait emotional self-efficacy, refers to a cluster of emotion-related self-perceptions and dispositions located at the lower levels of personality hierarchies and are measured via self-report questionnaires assessing typical performance (i.e., internal appraisal), in the vein of personality assessments (Perez-Gonzalez & Sanchez-Ruiz, 2014). On the other hand, ability EI, or cognitive-emotional ability, concerns actual emotion-related abilities and is evaluated though maximum-performance tests, i.e., tests that are based on items that have correct and incorrect answers (Petrides & Furnham, 2003). Regarding the associations of each type of IE with mental health, two meta-analyses reported that trait EI was strongly related to mental

* Corresponding author.
E-mail addresses: dgomez@uloyola.es (D. Gomez-Baya), ramon@uhu.es (R. Mendoza), sgpaino@uhu.es (S. Paino), mmatos@fmh.ulisboa.pt (M.G. de Matos).

health and demonstrated that this association was greater than that presented by ability EI (Martins, Ramalho & Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar & Rooke, 2007). When comparing relationships of both types of EI with different mental health results, previous research has shown that ability EI is more strongly associated with externalizing symptoms (Bracket, Mayer & Warner, 2004) and that trait EI is a better predictor of internalizing symptoms (Gardner & Qualter, 2010). Moreover, Davis and Humphrey (2012a) compared the influences of trait and ability EI on adolescent psychological adaptation. These authors concluded that ability EI influenced mental health by a more flexible selection of coping strategies, whereas trait EI improved coping effectiveness by amplifying the beneficial effects of active coping and minimizing the negative effects of avoidance on depressive symptomatology. In other work, Davis and Humphrey (2014) found that actual emotional skill, or ability EI, depended on perceived competency, or trait EI, to achieve adaptive mental health results in adolescents. Specifically, they reported that a profile with high ability IE and low self-confidence was deleterious under stress because avoidant coping was activated and was insufficient for successful adaptation; thus high trait IE is needed to protect against maladaptive coping with depression and to attenuate the impact of stress. In this line, Mikolajczak, Petrides, Coumans and Luminet (2009) showed that trait EI reduces vulnerability to emotional disorders by minimizing mood deterioration in difficult circumstances. Consequently, trait EI, rather than ability EI, is expected to be involved in the development of emotional disorders during mid-adolescence (Davis & Humphrey, 2012b) and will be the focus of the present study.

Furthermore, research on the developmental dynamics of EI has paid little attention to the trait EI perspective. Although personality traits are stable across time, during childhood and adolescence, some changes are expected as a function of socio-emotional developments, cognitive development, social experiences and the broader development of the self (Petrides, Furnham & Mavroveli, 2007). Keefer, Holder and Parker (2013) conducted a longitudinal assessment of trait EI from childhood to adolescence and indicated a decline in EI perceptions during adolescence. Adolescents are better able to generate more realistic self-appraisals of their strengths and weaknesses, and they become more self-conscious about how they compare to their classmates and peers (Harter, 2015). Moreover, their confidence in their ability to understand and regulate emotions can be reduced as a consequence of the heightened emotional sensitivity that accompanies the onset of pubertal growth. Middle adolescence is a period of heightened vulnerability to problems in regulating affect because maturation of the frontal lobes does not occur until late adolescence (Steinberg, 2005). Adolescents face major emotionally laden life dilemmas from an early age, while the development of the regulatory capabilities is a lengthy process.

Although many trait EI measures have been developed, only a few of them present a clear theoretical framework and empirical foundations (Perez, Petrides & Furnham, 2005). The Trait Meta-Mood Scale (TMMS; Salovey, Mayer, Goldman, Turvey & Palfai, 1995) has been one of the most empirically tested self-report scales. This scale has been widely used as a measure for assessing individual differences in what authors have called Perceived EI, or own perceptions of three emotional skills, i.e., perceived attention to emotion (the perception of the level of attention given to own emotional states), perceived emotional clarity (the perception of the degree of understanding of own emotions), and perceived emotional repair (the perceived ability to regulate own emotional states and repair negative emotions). Therefore, a greater perceived EI is characterized by greater perceptions of emotional clarity, emotional repair and moderate attention to emotions (Salovey et al., 1995). Fernández-Berrocal and Extremera (2008) reviewed the literature using this scale and indicated that individuals with poor psychological adjustment present greater attention to their emotions, lower emotional clarity, and inability to regulate their own mood states. These authors also concluded in several studies that Perceived EI dimensions showed incremental validity over personality

and general intelligence. Few studies have examined the associations between perceived EI and depression in adolescents. In a sample composed of American teenagers and undergraduates aged between 16 and 23 years, Salovey, Stroud, Woolery and Epel (2002) found that low perceived emotional clarity and repair were cross-sectionally associated with a greater presence of depressive symptoms. Similarly, another cross-sectional study with a sample of Spanish adolescents aged between 14 and 19 years found that perceived EI was positively related with emotional adjustment; adolescents who perceived themselves to be more emotionally intelligent presented fewer anxiety and depressive symptoms (Fernandez-Berrocal, Alcaide, Extremera & Pizarro, 2006). There are also very few studies that have longitudinally addressed the association between perceived EI and depressive symptoms. In a sample of 256 American teenagers between 12 and 13 years old, Stange, Alloy, Flynn and Abramson (2013) found that less perceived emotional clarity interacted with negative attributional styles and the experience of negative life events to predict the onset of depressive symptoms after a nine-month follow-up period. In a sample of Spanish adolescents aged between 13 and 17 years old, another longitudinal study showed that greater perceived emotional attention and lower perceived emotional repair predicted a greater presence of depressive symptoms after one year (Salguero, Palomera & Fernandez-Berrocal, 2012).

Regarding gender differences in EI, women are frequently considered to be more emotionally sensitive than men, although gender differences in depressive symptoms are well documented (Thayer, Rossy, Ruiz-Padial & Johnsen. 2003). This paradox of women being more emotionally responsive but at a greater risk of psychopathology could be due to gender differences in trait EI, rather than ability EI. On the one hand, Salguero, Extremera and Fernandez-Berrocal (2012) showed that girls presented higher ability EI than boys and that lower levels of ability EI were related to more depressive symptoms in men but not in women. On the other hand, regarding trait EI, Petrides and Furnham (2000b) demonstrated that males believed that they had higher EI than females. McIntyre (2010) indicated that men reported higher trait intrapersonal skills, whereas women showed higher trait interpersonal skills. Using the TMMS in adolescents, Extremera, Duran and Rey (2007) reported that girls paid more attention to emotions than boys, whereas boys reported greater emotional clarity and repair. Other studies indicated that girls reported lower perceived efficacy in emotional regulation and noted that this lower perceived efficacy was associated with lower psychological well-being and more depressive and anxiety symptoms in girls (Bandura, Caprara, Barbaranelli, Gerbino & Pastorelli, 2003). Muris (2002) indicated that girls exhibited lower levels of emotional self-efficacy but higher levels of anxiety and depressive symptoms than did boys. A review by Sanchez-Nunez, Fernandez-Berrocal, Montanez and Latorre (2008) on gender differences in EI concluded that girls presented higher scores on ability EI than men but lower scores on self-reported measures of EI; these findings seem to indicate that women underestimate their emotional skills, whereas men tend to overestimate them (Szymanowicz & Furnham, 2013). Thus, gender differences in the perceptions of own emotional skills could play a key role in the higher prevalence of depressive symptoms in adolescent girls.

There are very few studies to date that have analysed the prospective role of perceived EI in depressive symptoms during adolescence, and those that have been conducted only used a single follow-up after a short period of time. More research is needed to establish the associations between perceived EI skills as the antecedents and depressive symptoms as the outcome with a longer follow-up during middle adolescence (i.e., two years), as this is the developmental period when the literature has reported the emergence of this psychopathology. To identify the trajectory of these variables, several assessments also need to be conducted. Although the literature has independently shown the emergence of depression during middle adolescence and the decline of self-perception of emotional skills, no study to date has targeted the association between both trajectories, and none have