Beyond fluid intelligence and personality traits in scholastic success: Trait emotional intelligence

Annamaria Di Fabio *, Letizia Palazzeschi

Department of Education and Psychology, University of Florence, Italy

A R T I C L E   I N F O

Article history:
Received 16 April 2014
Received in revised form 23 February 2015
Accepted 12 April 2015

Keywords:
Fluid intelligence
Personality traits
Trait emotional intelligence
Scholastic success

A B S T R A C T

This study investigated relationships between fluid intelligence, personality traits, and two different models of trait emotional intelligence (EI) and scholastic success. The Advanced Progressive Matrices (APM), the Big Five Questionnaire (BFQ), the Bar-On Emotional Intelligence Inventory (Bar-On EQ-i), and the Trait Emotional Intelligence Questionnaire (TEIQue) were administered to 133 Italian high school students. The results showed that trait EI according to the Petrides and Furnham model accounted for greater incremental variance in scholastic success than trait EI according to the Bar-On model beyond that attributable to fluid intelligence and personality traits. These results highlighted the relationship between trait EI, in particular trait EI according to the Petrides and Furnham model, and scholastic success, hence offering new research and intervention opportunities.

© 2015 Elsevier Inc. All rights reserved.

1. Introduction

The literature on scholastic success shows the relationship between scholastic success and fluid intelligence (Busato et al., 2000; Farsides & Woodfield, 2003; Harris, 1940; Mouw & Khanna, 1993; Neisser et al., 1996). Another variable traditionally studied in relation to scholastic success is personality (Cattell & Butcher, 1968; Eysenck & Eysenck, 1985; Kline & Gable, 1971). Various studies have also revealed positive relationships between scholastic success and Conscientiousness (Busato et al., 2000; De Fruyt & Mervielde, 1996; De Raad & Schouwenburg, 1996; Di Fabio & Busoni, 2007; Goff & Ackerman, 1992; Heaven, Mak, Barry, & Ciarrochi, 2002; Mervielde, Buyst, & De Fruyt, 1995; Rothstein, Paunonen, Rush, & King, 1994; Wolfe & Johnson, 1995) and Openness to experience (De Fruyt & Mervielde, 1996; Rothstein et al., 1994) as well as inverse relationships with Neuroticism (Ackerman & Heggestad, 1997; De Raad & Schouwenburg, 1996) and Agreeableness (Rothstein et al., 1994). Regarding the relationship between scholastic success and Extraversion, study results are contradictory — many studies have found no significant relationship (Furnham & Mitchell, 1991; Halamanadas & Power, 1999; Heaven et al., 2002), while others have found a positive relationship (Goff & Ackerman, 1992; Rothstein et al., 1994).

Besides personality traits, other non-cognitive factors associated with scholastic and academic success have also been studied, such as academic engagement, academic self-efficacy, educational commitment, resiliency, social comfort, and campus engagement (Gore, 2006, 2008, 2011; Metz, Hu, & Mitton, 2011). Among such non-cognitive factors, emotional intelligence (EI) warrants investigating in greater depth (Di Fabio & Palazzeschi, 2009b; Petrides, Frederickson, & Furnham, 2004). Indeed, interesting relationships have been found between EI and scholastic success (Parker, Summerfeldt, Hogan, & Majeski, 2004b; Perera & Di Giacomo, 2013; Saklofske, Austin, Mastoras, Beaton, & Osborne, 2012) as well as between EI and many aspects of career decision making (Di Fabio & Blustein, 2010; Di Fabio & Kenny, 2012; Di Fabio & Palazzeschi, 2008b, 2009a; Di Fabio, Palazzeschi, Asulin-Perez, & Gati, 2013; Di Fabio, Palazzeschi, & Bar-On, 2012).

When studying the EI construct, two different kinds of EI models can be distinguished (Saklofske, Austin, & Minski, 2003; Stough, Saklofske, & Parker, 2009): ability-based emotional intelligence models (Mayer, Salovey, & Caruso, 2000) while trait EI models refer to the self-reported perception of emotional and social abilities (Bar-On, 1997; Petrides & Furnham, 2001). A traditional model of trait EI is the Bar-On (1997) model where EI is defined as the perception of the blending of emotional and social competences that determine how one relates to oneself and to others and how one is able to deal with environmental pressures and demands. Another trait EI model is that by Petrides and Furnham (2001), which holds that trait EI, also known as trait emotional self-efficacy, consists of a constellation of emotion-related self-perceptions (Petrides & Furnham, 2001). Petrides and Furnham (2001) concluded, after a close analysis of the literature on EI, that the Bar-On (1997) model covered the EI construct well but not fully. The two models...
have many domains in common such as the intrapersonal, interpersonal, adaptability, stress management, and general mood domains (happiness, optimism, self-regard), but the Petrides and Furnham (2001) model in addition covers the following three domains not included in the Bar-On (1997) model: emotional expression, relating to the perception of being able to communicate one’s feelings to others; emotional regulation, relating to the perception of being able to control one’s emotions (different from stress management that also features in the Bar-On (1997) model); self-motivation, relating to the perception of being able to drive oneself and not giving up in the face of adversity. The Petrides and Furnham (2001) model therefore seems more promising than the Bar-On (1997) model because of its more comprehensive structure.

The scholastic success variable was studied in relation to the different models of EI. Relationships between ability-based EI and school performance emerged in some studies (Barchard, 2003; Jaeger, 2003; Lanciano & Curci, 2014) while relationships between trait EI and scholastic success emerged in trait EI according to the Bar-On (1997) model (e.g., Parker, Duffy, Wood, Bond, & Hogan, 2005; Parker et al., 2004a) as well as in trait EI according to the Petrides and Furnham (2001) model (e.g., Ferrando et al., 2011; Mavroveli & Sánchez-Ruiz, 2011; Petrides et al., 2004; Rodeiro, Emery, & Bell, 2011; Sánchez-Ruiz, Mavroveli, & Poullis, 2013). A recent meta-analytic review (Perera & DiGiacomo, 2013) revealed that the magnitude and direction of the effect size indicated that trait EI could be related to scholastic performance. However, other studies have shown no, or very weak, relationships between trait EI and school performance (Austin, Evans, Goldwater, & Potter, 2005; Mavroveli, Petrides, Sangareau, & Furnham, 2009; Newsome, Day, & Cantano, 2000). The relationship between trait EI and scholastic success therefore warrants closer study. For example, some studies have simultaneously analyzed ability-based EI and trait EI according to the Bar-On (1997) model (Di Fabio & Palazzeschi, 2009b; O’Connor & Little, 2003; Qualter, Gardner, Pope, Hutchinson, & Whiteley, 2012) and have found that both models show relationships with scholastic success. But there are no studies on scholastic success that have simultaneously analyzed trait EI according to the Bar-On (1997) model and trait EI according to the Petrides and Furnham (2001) model. Some studies have, however, simultaneously examined trait EI according to the Bar-On (1997) model and trait EI according to the Petrides and Furnham (2001) model in relation to variables other than scholastic success, specifically individual resources (Di Fabio & Sallofske, 2014b) and career decision variables (Di Fabio & Sallofske, 2014a). These studies show that trait EI according to the Petrides and Furnham (2001) model can explain a greater percentage of variance than trait EI according to the Bar-On (1997) model in relation to the studied dependent variables.

On the basis of this theoretical framework, it would be useful to determine whether trait EI according to the Petrides and Furnham (2001) model accounts for a greater percentage of variance in scholastic success than trait EI according to the Bar-On (1997) model.

1.1. Aim and hypotheses

The present study set out to investigate the relationship between fluid intelligence, personality traits, and different models of trait EI, in particular trait EI according to the Bar-On (1997) model and trait EI according to the Petrides and Furnham (2001) model, in scholastic success among Italian high school students. The following three hypotheses were formulated.

(H1). Trait EI according to the Bar-On (1997) model will account for significant incremental variance in scholastic success beyond that attributable to fluid intelligence and personality traits.

(H2). Trait EI according to the Petrides and Furnham (2001) model will account for significant incremental variance in scholastic success beyond that attributable to fluid intelligence and personality traits.

(H3). Trait EI according to the Petrides and Furnham (2001) model will account for greater incremental variance in scholastic success than trait EI according to the Bar-On (1997) model beyond that attributable to fluid intelligence and personality traits.

2. Material and methods

2.1. Participants

One hundred and thirty-three high school students attending the last year of school in a Tuscan school system participated in the study. All high school students in the school system were invited to participate. With regard to gender, 62 (46.62%) of the participants were males and 71 (53.38%) were females. The participants ranged in age from 17 to 20 years ($M = 19.34, SD = .27$).

2.2. Measures

2.2.1. Advanced Progressive Matrices (APM)

The Italian version by Di Fabio and Clarotti (2007) of the Advanced Progressive Matrices (APM) test by Raven (1962) was used to evaluate fluid intelligence. The test consists of two series of items consisting respectively of 12 (Series I) and 36 (Series II) items from which the participants had to choose one response from eight possible alternatives for each item. Regarding the construct validity of the Italian version, a positive relationship emerged with the Wechsler Intelligence Scale (Wechsler, 1981). Regarding the reliability of the Italian version, the Cronbach’s alpha was .91. In the present study, the Cronbach’s alpha was .90.

2.2.2. Big Five Questionnaire (BFQ)

The Big Five Questionnaire (BFQ, Caprara, Barbaranelli, & Borgogni, 1993) was used to evaluate personality traits. The questionnaire consists of 132 items with response options in a 5-point Likert scale format ranging from 1 = absolutely false to 5 = absolutely true. The questionnaire measures five personality dimensions (see below). Confirmatory factor analysis supported the five-dimensional structure for the Italian version (Caprara et al., 1993). The questionnaire demonstrates adequate construct validity as shown by correlations with the Italian version (Dazzi, Pedrabissi, & Santinello, 2004) of the Eysenck Personality Questionnaire Revised Short Form (EPQ-RS, Eysenck, Eysenck, & Barrett, 1985). In the Italian normative sample, the Cronbach’s alpha coefficients were .81 for Extraversion, .73 for Agreeableness, .81 for Conscientiousness, .90 for Emotional Stability, and .75 for Openness. In the present study, the Cronbach’s alpha coefficients were .82 for Extraversion, .75 for Agreeableness, .84 for Conscientiousness, .87 for Emotional Stability, and .76 for Openness.

2.2.3. Bar-On Emotional Intelligence Inventory (Bar-On EQ-i)

The Italian version by Franco and Tappatà (2009) of the Bar-On Emotional Intelligence Inventory (Bar-On EQ-i, Bar-On, 1997) was used to evaluate self-reported EI. The inventory consists of 133 items consisting of response options in a 5-point Likert scale format ranging from 1 = not at all true for me to 5 = absolutely true for me. The inventory provides a total score (EQ total) and individual scores for five principal dimensions: Intrapersonal, which refers to awareness of one’s own emotions and the perceived ability to communicate one’s own needs; Interpersonal, which refers to the perceived ability both to establish cooperative, constructive, and satisfactory relationships and to understand the feelings of others; Adaptability, which refers to the perceived ability to use emotions to implement effective strategies for problem solving; Stress Management, which refers to the perceived ability to control emotions; and General Mood, which refers to the perception of being optimistic, feeling positive emotions, and drawing pleasure from the presence of others. Confirmatory factor analysis supported the five-
dimensional structure for the Italian version (Franco & Tappatà, 2009). Regarding construct validity, positive correlations emerged between the Italian version of the Bar-On EQ-i (Franco & Tappatà, 2009) and the Italian version of the TEIQue (Di Fabio, 2013) and low positive correlations with the Italian version of the Mayer–Salovey–Caruso Emotional Intelligence test (MSCET) (D’Amico & Curci, 2010). Construct validity was shown also through negative correlations with the subscales of the Toronto Alexithymia Scale (TAS; Bagby, Parker, & Taylor, 1994). The Cronbach’s alpha coefficients for the Italian version were .91 for Intrapersonal, .84 for Interpersonal, .81 for Adaptability, .87 for Stress Management, .83 for General Mood, and .95 for the Emotional Quotient (QE) (Franco & Tappatà, 2009). In the present study, the Cronbach’s alpha coefficients were: .89 for Intrapersonal, .87 for Interpersonal, .83 for Adaptability, .88 for Stress Management, .81 for General Mood, and .93 for the Emotional Quotient (QE).

2.2.4. Trait Emotional Intelligence Questionnaire (TEIQue)

The Italian version by Di Fabio (2013) of the Trait Emotional Intelligence Questionnaire (TEIQue, Petrides & Furnham, 2004) was used to evaluate trait EI. The questionnaire consists of 153 items consisting of response options in a 7-point Likert scale format ranging from 1 = completely disagree to 7 = completely agree. The questionnaire provides a total score and individual scores for four principal dimensions: Well-being, which refers to aspects of dispositional mood; Self-Control, which refers to self-efficacy in regulating emotions/impulses; Emotionality, which refers to self-efficacy in perceiving and expressing emotions; and Sociability, which refers to self-efficacy in interpersonal use and management of emotions. Confirmatory factor analysis supported the four principal dimensions for the Italian version of the TEIQue (Di Fabio, 2013). Regarding construct validity, positive correlations emerged between the Italian version of the TEIQue (Di Fabio, 2013) and the Italian version of the Bar-On EQ-i (Franco & Tappatà, 2009) and low positive correlations with the Italian version of the MSCET (D’Amico & Curci, 2010). The Cronbach’s alpha coefficients for the Italian version were .91 for Well-being, .84 for Self-control, .87 for Emotionality, .86 for Sociability, and .93 for the total score. In the present study, the Cronbach’s alpha coefficients were .92 for Well-being, .82 for Self-control, .88 for Emotionality, .83 for Sociability, and .89 for the total score.

2.2.5. Grade Point Average (GPA)

The student GPA was used to evaluate scholastic success. In the present study, the GPA was calculated on the basis of the grades achieved at the end of the scholastic year as the average score obtained in the principal subjects in high schools in Italy, that is, Italian (mother tongue), Mathematics, and Science. These grades range from 1 to 10. In this sample, the GPA provided adequate reliability (alpha = .83).

The choice of the GPA was problematic in some respects as the GPA as an index of scholastic success is subject to variability in grading on the part of teachers. Nevertheless, it remains a comprehensive measure of the grades received in different subjects from different teachers thus diluting teachers’ tendency to distort grades (Lourensbury, Sundstrom, Loveland, & Gibson, 2003). The GPA can also guarantee a higher level of comparability with the results of other studies (Di Fabio & Busoni, 2007). It was for these reasons that the GPA was chosen as an index of scholastic success in the present study.

2.3. Procedure and data analysis

The instruments were administered in the classroom by trained staff at a time agreed upon with the school and with due adherence to the requirements of privacy and informed consent. The order of administration was counterbalanced to control the effects of presentation. A ten-minute break was given after the APM and BFQ to combat possible fatigue. The APM, BFQ, Bar-On EQ-I, and TEIQue were administered during the school year whereas the GPA was calculated at the end of the school year (about six months later).

Descriptive statistics, Pearson’s $r$ correlation, and hierarchical regressions were calculated for the data. Gender differences were investigated for the studied variables, but no significant differences were found. Hierarchical regressions were consequently not carried out separately for the males and females.

3. Results

Means, standard deviations, and correlations between the APM, BFQ, Bar-On EQ-I, TEIQue and GPA are reported in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. APM</td>
<td>22.75</td>
<td>6.22</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. Extraversion</td>
<td>84.93</td>
<td>22.16</td>
<td>.08</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Agreeableness</td>
<td>69.34</td>
<td>7.04</td>
<td>.13*</td>
<td>.24**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Conscientiousness</td>
<td>99.66</td>
<td>20.27</td>
<td>.09</td>
<td>.28**</td>
<td>.32**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. Emotional Stability</td>
<td>53.71</td>
<td>14.41</td>
<td>.16*</td>
<td>.20*</td>
<td>.34**</td>
<td>.32**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. Openness</td>
<td>90.44</td>
<td>10.35</td>
<td>.14**</td>
<td>.39**</td>
<td>.30**</td>
<td>.38**</td>
<td>.27**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. Bar-On EQ-i</td>
<td>365.45</td>
<td>35.84</td>
<td>.09</td>
<td>.25**</td>
<td>.34**</td>
<td>.28**</td>
<td>.31**</td>
<td>.28**</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. TEIQue</td>
<td>534.12</td>
<td>74.18</td>
<td>.08</td>
<td>.27**</td>
<td>.26**</td>
<td>.29**</td>
<td>.25**</td>
<td>.29**</td>
<td>.57**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9. GPA</td>
<td>6.56</td>
<td>2.67</td>
<td>.33**</td>
<td>.27**</td>
<td>.18</td>
<td>.36</td>
<td>.34</td>
<td>.14</td>
<td>.45</td>
<td>.53**</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. $N = 133$.

$*$ $p < .05$.

** $p < .01$.

APM = Advanced Progressive Matrices; Bar-On EQ-I = Bar-On Emotional Intelligence Inventory; TEIQue = Trait Emotional Intelligence Questionnaire; GPA = Grade Point Average.


### Table 2
Hierarchical regression. The contributions of fluid intelligence (first step), personality traits (second step), trait emotional intelligence according to the Bar-On model (third step), and trait emotional intelligence according to the Petrides and Furnham model (fourth step) to scholastic success (GPA).

<table>
<thead>
<tr>
<th>Step</th>
<th>Trait</th>
<th>GPA</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>APM — fluid intelligence</td>
<td>.33</td>
<td>***</td>
</tr>
<tr>
<td>2</td>
<td>Extraversion</td>
<td>.25</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Agreeableness</td>
<td>.17</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Conscientiousness</td>
<td>.34</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Emotional stability</td>
<td>.31</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Openness</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Trait emotional intelligence according to the Petrides and Furnham model</td>
<td>.49</td>
<td>**</td>
</tr>
<tr>
<td>4</td>
<td>Trait emotional intelligence according to the Bar-On model</td>
<td>.12</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>ΔR² step 1</td>
<td>.13</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>ΔR² step 2</td>
<td>.13</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>ΔR² step 3</td>
<td>.12</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>ΔR² step 4</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>R² total</td>
<td>.44</td>
<td>***</td>
</tr>
</tbody>
</table>

**Note.** N = 133.

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

More specifically, in the second hierarchical regression, the GPA was the criterion variable, and fluid intelligence was introduced in the first step, personality traits in the second step, trait EI according to the Bar-On model in the third step, and trait EI according to the Petrides and Furnham model in the fourth step (Table 3).

Fluid intelligence accounted for 13% of the variance on the first step. In the second step, personality traits accounted for 18% of the variance; in the third step, trait EI according to the Bar-On model accounted for an additional 9% of the variance; and in the fourth step, trait EI according to the Petrides and Furnham model accounted for an additional 3% of the variance.

### Table 3
Hierarchical regression. The contributions of fluid intelligence (first step), personality traits (second step), trait emotional intelligence according to the Bar-On model (third step), and trait emotional intelligence according to the Petrides and Furnham model (fourth step) to scholastic success (GPA).

<table>
<thead>
<tr>
<th>Step</th>
<th>Trait</th>
<th>GPA</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>APM — fluid intelligence</td>
<td>.33</td>
<td>***</td>
</tr>
<tr>
<td>2</td>
<td>Extraversion</td>
<td>.25</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Agreeableness</td>
<td>.17</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Conscientiousness</td>
<td>.34</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Emotional stability</td>
<td>.31</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td>Openness</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Trait emotional intelligence according to the Bar-On model</td>
<td>.49</td>
<td>**</td>
</tr>
<tr>
<td>4</td>
<td>Trait emotional intelligence according to the Petrides and Furnham model</td>
<td>.32</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>ΔR² step 1</td>
<td>.13</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>ΔR² step 2</td>
<td>.13</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>ΔR² step 3</td>
<td>.09</td>
<td>***</td>
</tr>
<tr>
<td></td>
<td>ΔR² step 4</td>
<td>.03</td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>R² total</td>
<td>.43</td>
<td>***</td>
</tr>
</tbody>
</table>

**Note.** N = 133.

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

4. Discussion

The aim of the present study was to determine whether different models of trait EI, in particular trait EI according to the Bar-On model and trait EI according to the Petrides and Furnham model, could explain a different percentage of incremental variance in scholastic success compared to fluid intelligence and personality traits among Italian high school students. More specifically, the present study set out to determine whether trait EI according to the Petrides and Furnham (2001) model accounted for a greater percentage of incremental variance in scholastic success than trait EI according to the Bar-On (1997) model beyond that attributable to fluid intelligence and personality traits.

The results of the present study supported the first and the second hypotheses as both trait EI according to the Bar-On (1997) model and trait EI according to the Petrides and Furnham (2001) model accounted for significant incremental variance in scholastic success beyond that attributable to fluid intelligence and personality traits. These results supported earlier findings on the relationship between trait EI and scholastic success (Di Fabio & Palazzeschi, 2009b; Mavroveli & Sánchez-Ruiz, 2011; Parker et al., 2004a, 2004b; Perera & DiGiacomo, 2013; Petrides et al., 2004; Saklofske et al., 2012; Sanchez-Ruiz et al., 2013). The results relating to the first and second hypotheses of the present study indicate the relationship between trait EI and scholastic success, showing that people who perceive themselves to be aware of their emotions, who perceive themselves to be able to integrate emotional experiences with thoughts and action, and who perceive themselves as being able to use emotions to solve problems seem to achieve a better scholastic performance.

The results of the present study also supported the third hypothesis as trait EI according to the Petrides and Furnham (2001) model accounted for a greater percentage of incremental variance in scholastic success compared to trait EI according to the Bar-On (1997) model beyond that attributable to fluid intelligence and personality traits. These results show that trait EI according to the Petrides and Furnham (2001) model and trait EI according to the Bar-On (1997) model do not completely overlap. More particularly, the results show how trait EI according to the Petrides and Furnham (2001) model makes an additional weak but interesting contribution to explaining scholastic success (Stough et al., 2009) compared to the Bar-On (1997) model, probably because it is a more comprehensive model that includes aspects of EI such as emotion expression, emotion regulation, and self-motivation, which do not feature in the Bar-On (1997) model (Petrides & Furnham, 2001). These results are also in line with findings for other variables such as individual resources (Di Fabio & Saklofske, 2014a) and career decision-making variables (Di Fabio & Saklofske, 2014b).

Even though the results of the present study show the relationship between trait EI, particularly trait EI according to the Petrides and Furnham (2001) model, and scholastic success, some limitations of the study need mentioning. One limitation is the exclusive use of a quite small group of Italian high school students attending the last year of high school in the Tuscan school system. These students and this system may not be representative of the overall Italian high school context. Another limitation could be the possible contamination of the data as a result of fatigue after having to complete the APM, the BFQ, the Bar-On EQ-I, and the TEIQue in one sitting, even if 10-minute breaks were given after the APM and BFQ to combat fatigue and the order of administration was counterbalanced to control the effects of presentation. Also, in the present study only the total scores for EI according to the Petrides and Furnham (2001) model as well as for EI according to the Bar-On (1997) model were used and not the different dimensions. Another limitation was the exclusive use of trait EI measures. Future research should therefore consider involving a group of participants who are more representative of Italian demographics,
including high school students from other geographic areas in Italy. Future research could also involve other targets such as university students, and the results of the present study could be replicated in various international contexts. More and longer breaks should be given for the administration of the various instruments, and it could also be interesting to analyze the relationship between the dimensions of the Petrides and Furnham (2001) model and of the Bar-On (1997) model and scholastic success and not only the total scores. Finally, in future research it could be interesting to analyze ability-based EI and different models of trait EI at the same time.

5. Conclusions

Notwithstanding the above limitations, the results of the present study provide useful insights into the relationship between two different models of trait EI and scholastic success in an Italian context, underlining in particular the contribution of trait EI according to the Petrides and Furnham (2001) model compared to trait EI according to the Bar-On (1997) model. If the results of the present study are further confirmed by future research opportunities could be opened for new interventions to enhance emotional intelligence as EI is a variable that can be increased through specific training (Di Fabio & Kenny, 2011). Such training should focus not only on traditional domains of trait EI according to the Bar-On (1997) model but also on new domains according to the Petrides and Furnham (2001) model such as emotion expression, emotion regulation, and self-motivation.

References


Austin, E. J., Evans, P., Goldwater, R., & Potter, V. (2005). A preliminary study of emotional intelligence, empathy and exam performance in UK university students, and the results of the present study could be replicated in various international contexts. More and longer breaks should be given for the administration of the various instruments, and it could also be interesting to analyze the relationship between the dimensions of the Petrides and Furnham (2001) model and of the Bar-On (1997) model and scholastic success and not only the total scores. Finally, in future research it could be interesting to analyze ability-based EI and different models of trait EI at the same time.

5. Conclusions

Notwithstanding the above limitations, the results of the present study provide useful insights into the relationship between two different models of trait EI and scholastic success in an Italian context, underlining in particular the contribution of trait EI according to the Petrides and Furnham (2001) model compared to trait EI according to the Bar-On (1997) model. If the results of the present study are further confirmed by future research opportunities could be opened for new interventions to enhance emotional intelligence as EI is a variable that can be increased through specific training (Di Fabio & Kenny, 2011). Such training should focus not only on traditional domains of trait EI according to the Bar-On (1997) model but also on new domains according to the Petrides and Furnham (2001) model such as emotion expression, emotion regulation, and self-motivation.

References


Austin, E. J., Evans, P., Goldwater, R., & Potter, V. (2005). A preliminary study of emotional intelligence, empathy and exam performance in UK university students, and the results of the present study could be replicated in various international contexts. More and longer breaks should be given for the administration of the various instruments, and it could also be interesting to analyze ability-based EI and different models of trait EI at the same time.

5. Conclusions

Notwithstanding the above limitations, the results of the present study provide useful insights into the relationship between two different models of trait EI and scholastic success in an Italian context, underlining in particular the contribution of trait EI according to the Petrides and Furnham (2001) model compared to trait EI according to the Bar-On (1997) model. If the results of the present study are further confirmed by future research opportunities could be opened for new interventions to enhance emotional intelligence as EI is a variable that can be increased through specific training (Di Fabio & Kenny, 2011). Such training should focus not only on traditional domains of trait EI according to the Bar-On (1997) model but also on new domains according to the Petrides and Furnham (2001) model such as emotion expression, emotion regulation, and self-motivation.


