

Psychological well-being in childhood: The role of trait emotional intelligence, regulatory emotional self-efficacy, coping and general intelligence

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Abstract

Given the increase of mental health problems in youth, focusing on the promotion of psychological well-being is essential. Among the variables recognized as linked to children's psychological well-being, trait emotional intelligence, emotional self-efficacy and coping seem to be crucial, whereas the role played by intelligence is still controversial. In the present study, we explored the combined effects of these variables, aimed at disentangling their unique contribution to psychological well-being of 74 children (41 males, mean age: 9.03 years). We administered verbal and reasoning tests as intelligence measures and self-report questionnaires to assess trait emotional intelligence, regulatory emotional self-efficacy, coping styles, psychological well-being. Correlations revealed two independent clusters of variables: a first cluster including intelligence indexes and a second cluster including psychological well-being, trait emotional intelligence, regulatory emotional self-efficacy and adaptive coping styles. Hierarchical regression analyses showed that only trait emotional intelligence and positive restructuring coping style significantly contributed to psychological well-being. This study highlights that, unlike general intelligence, trait emotional intelligence was associated to psychological well-being, whereas coping styles play a negligible role in explaining this relationship. These findings are valuable in identifying the most relevant factors for children's adjustment and in enhancing emotion-related aspects in interventions for psychological well-being promotion.

Keywords

Childhood, psychological well-being, emotional intelligence, coping, general intelligence, emotional self-efficacy

Introduction

Mental health problems in developmental age are quite common, affecting ~10–20% of children and adolescents worldwide (Collishaw, 2015). Early treatments for mental disorders are essential to decrease their ongoing effects and long-term consequences, but the prevention of psychological maladjustment and the promotion of psychological well-being (PWB) are equally fundamental health priorities. The research on the determinants of PWB in youth has identified the contribution of several psychological constructs in affecting well-being, like emotional intelligence, emotional self-efficacy, coping (e.g. Caprara et al., 2006; Davis & Humphrey, 2012a; Richardson et al., 2020), whereas the role played by general intelligence is still controversial (e.g. O’Connell & Marks, 2021; Wigtil & Henriques, 2015). Previous studies have explored the impact of these variables on PWB and cognate constructs (i.e. life satisfaction, happiness). Research has focused especially on the relationship between emotional factors, self-efficacy, coping and well-being (e.g. Caprara et al., 2006; Mavroveli et al., 2007; Richardson et al., 2020), on the one hand, and on the association between general intelligence and well-being (e.g. Richards et al., 2003; Wigtil & Henriques, 2015), on the other hand. In the second research line, emotional variables have been included only occasionally, as competitors (e.g. Businaro et al., 2015).

As regards the first branch of studies, different theoretical frameworks – recently unified in an integrated model of affect-related individual differences (Hughes & Evans, 2018) – have been developed on the construct of emotional intelligence, mainly conceptualized as a set of either emotion-related cognitive abilities (i.e. Ability Emotional Intelligence: AEI, Mayer & Salovey, 1997) or affect-related personality traits (i.e. Trait Emotional Intelligence: TEI, Petrides & Furnham, 2001). In this study, we focused on TEI, assessed by self-report measures, typically used in educational contexts as a good predictor of numerous outcomes (O’Connor et al., 2019). Previous research has already demonstrated that high levels of TEI correspond to high levels of well-being (e.g. Davis & Humphrey, 2012a; Di Fabio & Kenny, 2016).

Emotional self-efficacy is thought to capture the self-efficacy beliefs in one’s own emotional functioning (Kirk et al., 2008). Although emotional self-efficacy and TEI have been frequently used as synonymous (see Petrides & Furnham, 2001), it has been proposed to consider the two constructs as distinct (see Kirk et al., 2008) because TEI may include self-perceptions and dispositions other than those embraced by emotional self-efficacy. Even more specific than emotional self-efficacy is *regulatory* emotional self-efficacy, that is, beliefs in one’s own emotion regulation skills (Caprara et al., 2008). These beliefs could be as relevant for PWB as the actual skills of emotion regulation, as reported by Caprara et al. (2006), who found regulatory emotional self-efficacy to concurrently and longitudinally predict adolescents’ well-being.

Coping styles/strategies refer to the efforts to manage the demands that are appraised as taxing or exceeding the person’s resources (Lazarus & Folkman, 1984). The link between adaptive/maladaptive coping strategies and psychological adjustment/maladjustment has been widely established (e.g. Ebata & Moos, 1991; Herman-Stahl et al., 1995). Recently, researchers have developed more complex models, in which coping mediates the relationship between emotional variables and mental health (e.g. Mikolajczak et al., 2009). However, research on the role of coping in mediating the association between emotional intelligence and PWB is still not conclusive, given that divergent results have emerged depending on whether emotional intelligence was considered as a set of traits or abilities (see Davis & Humphrey, 2012b).

As regards the second branch of studies, previous data have already established the lack of association between general intelligence and TEI (e.g. Ferrando et al., 2010; Petrides & Furnham, 2001). On the other hand, the research on the relationship between general intelligence and well-being,

conducted in developmental age especially in the context of gifted education, has still not yielded consistent results (e.g. Ash & Huebner, 1998; Richards et al., 2003).

As suggested by the above studies, to date, to the best of our knowledge, these variables have never been simultaneously investigated in the same study in order to estimate their contribution to children's PWB. The purpose of this work was to fill this gap and examine the impact of self-report TEI, regulatory emotional self-efficacy and coping on PWB of an Italian children sample, by concurrently examining the role played by intelligence, assessed by verbal and reasoning tests. We expected to confirm the crucial role of TEI in predicting children's PWB and to either identify or replicate the positive associations between 1) TEI and coping styles typically evaluated as adaptive; 2) TEI and regulatory emotional self-efficacy; 3) adaptive coping styles and PWB; 4) regulatory emotional self-efficacy and PWB. We also hypothesized a mediation role of coping in the relationship between TEI and PWB, although we did not have hypotheses on which specific coping strategy could be involved. Moreover, specific assumptions on the link between general intelligence and PWB were avoided, given the incongruence of previous findings.

Method

Participants

Participants were recruited from four classes of one primary school located in a small-size Italian city. The initial sample which entered the protocol comprised 82 children, ranging from 8 to 11 years, attending the fourth grade. However, in order to obtain more reliable questionnaire scores, non-native Italian speakers, participants having severe intellectual disabilities, specific learning disorders or special needs, and participants performing very low at the intelligence tests were excluded from the analysis ($n = 8$). Thus, the final sample consisted of 74 children (41 males; mean age: 9.03 years \pm .28). The research, conducted according to the Declaration of Helsinki, was approved by the Ethical Committee of the University of Trieste, and children's parents gave their written informed consent to the study. Pupils were informed that their participation was voluntary and that they could withdraw from the study at any time.

Procedure

The questionnaires/tests were administered by trained research assistants, during normal class periods. Information was kept confidential, and code numbers were used to ensure anonymity. Participants underwent four sessions (~45 min each): questionnaires were completed in three sessions (two orders of administration, randomly assigned to the four classes tested); intelligence tests were completed in the fourth session. The questionnaires and two intelligence tests were administered collectively, whereas the third intelligence test was administered in groups of four children. During the sessions, researchers were available to provide further information when needed.

Measures

Primary Mental Abilities Battery (Rubini & Rossi, 1982; Thurstone & Thurstone, 1962). Only two subtests out of the seven primary mental abilities assessed by the battery were used in the present study: *Verbal Comprehension*, which evaluates verbal ability and consists of 60 stimuli, and *Inductive Reasoning*, which evaluates the ability to solve logical problems and consists of 50 stimuli. PMA subsets scores were transformed in an intelligence score for each subtest (PMA-v; PMA-r).

Raven's Coloured Progressive Matrices (Belacchi et al., 2008; Raven et al., 1998). The test is a measure of non-verbal reasoning ability, in which participants are asked to select the correct part to complete visual matrices by choosing among a certain number of options. The test comprises 36 items divided into three sets of 12. Raw scores were converted to percentiles based on normative data; finally, an intelligence score was obtained (CPM).

Trait Emotional Intelligence Questionnaire – Child Form (Mavroveli et al., 2008; Russo et al., 2012). The questionnaire detects personality facets related to emotion in children. It includes 75 short statements rated on a 5-point Likert scale. Items are allocated to nine facets: Emotion Regulation, Emotion Expression, Emotion Perception, Self-Motivation, Self Esteem, Adaptability, Peer Relations, Affective Disposition and Low Impulsivity. Higher scores on the total factor, TEI, indicate higher levels of trait emotional intelligence. In the present sample, TEI total score demonstrated satisfactory levels of internal consistency (Cronbach $\alpha = .90$).

Regulatory Emotional Self-efficacy (Caprara et al., 2008). The questionnaire is a self-report measure of perceived self-efficacy in emotion regulation. It includes eight items on the perceived capability to regulate negative emotions (RESE-n) and seven items on the perceived capability to feel and express positive emotions (RESE-p). Items are rated on a 5-point Likert scale. Higher scores indicate higher levels of regulatory emotional self-efficacy. In the present sample, moderate levels of internal consistency were found for both RESE-n and RESE-p (Cronbach $\alpha = .69, .76$, respectively).

Emotion Regulation Checklist (Molina et al., 2014; Shields & Cicchetti, 1997). The questionnaire assesses children's emotion regulation from the perspective of parents/teachers. It comprises of 24 items rated on a 4-point Likert scale, estimating the frequency of children's behaviours. It captures two dimensions: Emotion Regulation (ERC-er) and Lability/Negativity (ERC-ln). Higher scores reflect higher observed emotion regulation. In the present study, only teachers were asked to complete the questionnaire. Internal consistency was moderate for ERC-er (Cronbach $\alpha = .65$) and good for ERC-ln (Cronbach $\alpha = .88$).

Children's Coping Strategies Checklist - Revision 1 (Ayers & Sandler, 1999; Camisasca et al., 2012). The questionnaire evaluates how children typically cope with hypothetical stressors, by asking to indicate how frequently they adopt a given coping strategy on a 4-point Likert scale. It captures five dimensions/strategies of coping: Problem-focused (CCSC-pf), Positive cognitive restructuring (CCSC-pr), Distraction (CCSC-dis), Avoidance (CCSC-av) and Support-seeking (CCSC-sup). Higher scores in a coping dimension indicate a more frequent use of that coping strategy. In this study, an Italian short version of 28 items was used (Fiorilli et al., 2015). The levels of internal consistency were acceptable (Cronbach α ranging from .68 to .81).

Comprehensive Inventory of Thriving - Child (Andolfi et al., 2017; Su et al., 2014). The questionnaire measures children's PWB and consists of 36 items, rated on a 5-point Likert scale. Five dimensions of positive functioning are represented (Relationship, Engagement, Mastery, Optimism and Life Satisfaction), loading 12 facets. Higher scores indicate higher levels of well-being. In the present sample, the total score (CIT) showed high levels of internal consistency (Cronbach $\alpha = .90$).

Data analyses and results

After descriptive statistics (Table 1), a robust correlation analysis was carried out in order to detect the relationships between PWB, TEI, regulatory emotional self-efficacy, coping strategies and intelligence measures. A confirmatory factor analysis was also conducted to test the discriminant validity between TEI and PWB, given their high correlation. Finally, a four-step hierarchical

Table 1. Descriptive statistics of the measured variables.

	Mean	SD	Min	Max	Skew	Kurtosis
PMA-v	123.45	3.56	114.00	128.00	-.75	.23
PMA-r	125.72	10.28	85.00	141.00	-1.15	1.99
CPM	107.30	14.46	80.00	130.00	-.07	-.99
TEI	3.52	.41	2.67	4.48	-.05	-.65
RESE-n	24.50	5.61	13.00	40.00	.21	.17
RESE-p	30.36	3.92	20.00	35.00	-.62	-.59
ERC-In	1.47	.47	1.00	3.53	1.82	4.19
ERC-er	3.46	.36	2.50	4.00	-.31	-.63
CCSC-pf	13.54	3.20	7.00	20.00	.01	-.88
CCSC-pr	12.81	3.35	5.00	20.00	-.06	-.38
CCSC-dis	15.49	4.58	6.00	24.00	-.06	-.83
CCSC-av	15.11	3.79	7.00	23.00	-.24	-.84
CCSC-sup	14.31	4.56	6.00	23.00	-.25	-.91
CIT	45.89	6.40	30.67	58.00	-.51	-.33

Note: $N = 74$. PMA-v: Primary Mental Abilities, verbal comprehension; PMA-r: inductive reasoning; CPM: Coloured Progressive Matrices; TEI: Trait Emotional Intelligence; RESE-n: Regulatory Emotional Self-efficacy, regulating negative emotions; RESE-p: expressing positive emotions; ERC-In: Emotion Regulation Checklist, lability/negativity; ERC-er: emotion regulation; CCSC-pf: Children's Coping Strategies Checklist, problem-focused strategies; CCSC-pr: positive cognitive restructuring; CCSC-dis: distraction; CCSC-av: avoidance; CCSC-sup: support-seeking strategies; CIT: Comprehensive Inventory of Thriving (PWB).

regression and a stepwise regression analyses were performed to detect possible predictors of PWB. Given the results of the regression analysis, the hypothesized mediation role of coping strategies in the relationship between TEI and PWB was not tested further. All the analyses were carried out in R (R Core Team, 2019).

Correlation analyses

Figure 1 displays the pattern of Pearson's correlations, in terms of their magnitudes, using intensity of shading and correlation-based variable ordering (Friendly, 2002; Patil & Powell, 2018). Specifically, robust correlation coefficients were used to control for univariate skewness and bivariate outliers. The location of variables along axes was determined by multivariate clustering algorithms searching for similarities in magnitude and sign of correlation coefficients. As shown in Figure 1, two separate clusters of variables clearly emerged: the first cluster of variables, all positively related, included the intelligence measures; the second cluster of variables, all positively related, included TEI, regulatory emotional self-efficacy in managing negative emotions, coping strategies generally evaluated as adaptive (i.e. problem-focused, support-seeking, positive cognitive restructuring) and, remarkably, PWB. Importantly, the two clusters of variables were not related to each other, except for a moderate negative association between distraction coping and reasoning ability. Within the last cluster, TEI and PWB were the most strongly correlated variables and were both highly correlated with adaptive coping strategies. Among coping strategies, distraction and avoidance were positively associated to each other, but not related either to the other coping strategies (except for a positive correlation between avoidance and positive cognitive restructuring) or to the variables of the second cluster. Regulatory emotional self-efficacy in expressing positive emotions was positively

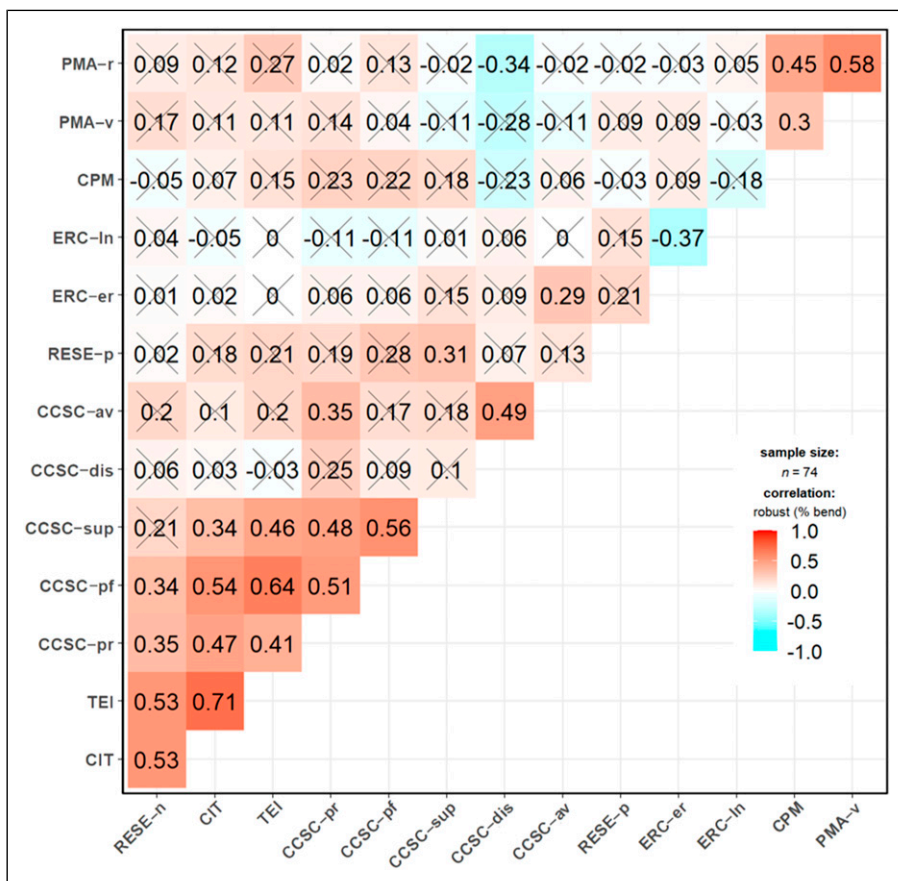


Figure 1. Robust correlations among variables represented by intensity of shading. Note: X = correlation not significant at $p < 0.05$, controlling for false discovery rate (Benjamini & Hochberg, 1995). RESE-n: Regulatory Emotional Self-efficacy, regulating negative emotions; RESE-p: expressing positive emotions; CIT: Comprehensive Inventory of Thriving (PWB); TEI: Trait Emotional Intelligence; CCSC-pf: Children’s Coping Strategies Checklist, problem-focused strategies; CCSC-pr: positive cognitive restructuring; CCSC-dis: distraction; CCSC-av: avoidance; CCSC-sup: support-seeking strategies; ERC-er: Emotion Regulation Checklist, emotion regulation; ERC-ln: lability/negativity; CPM: Coloured Progressive Matrices; PMA-v: Primary Mental Abilities, verbal comprehension; PMA-r: inductive reasoning. Variables are ordered according to a hierarchical clustering algorithm. 163 × 153 mm (150 × 150 DPI).

correlated only with support-seeking coping. Moreover, children’s TEI self-report scores were not correlated with children’s emotion regulation rated by the teachers.

Given the very high correlation between TEI and PWB ($r = .71$), discriminant validity was preliminarily explored with two rigorous strategies based on confirmatory factor analysis (e.g. Torkzadeh et al., 2003). First, a multiple indicator two-factor model with a correlation between factors set as free parameter was compared with a constrained model with correlation between factors set to 1.0. A statistically significant chi-square difference test between these models (chi-square difference test = 8.541, $df = 1$, $p = .003$) provided evidence of discriminant validity between TEI and PWB (e.g. Torkzadeh et al., 2003). Second, since the bootstrapped 95% confidence

interval of the correlation between the two factors [.72–.99] did not include the value 1, this was interpreted as further evidence that TEI and PWB were distinct constructs (Torkzadeh et al., 2003).

Hierarchical regression

To examine the proportions of variance of the PWB explained by TEI, regulatory emotional self-efficacy in managing negative emotions and the coping strategies correlated with the dependant variable, a four-step hierarchical regression was performed. Age and verbal intelligence (which was most likely to affect self-report completion among the intelligence measures) were entered into the model as control variables in the first step; the adaptive coping strategies significantly related to PWB (i.e. problem-focused strategies, support-seeking, positive cognitive restructuring) were entered in the second step; regulatory self-efficacy in managing negative emotions (i.e. the only scale of the regulatory emotional self-efficacy questionnaire correlated to PWB) was entered in the third step; finally, TEI was entered in the last step. The results of the regression model are shown in Table 2. Control variables were not significant determinants of PWB ($R^2 = .02, p = n.s.$). Among the coping styles, only problem-focused strategy significantly predicted higher PWB levels. Regulatory emotional self-efficacy in managing negative emotions, added to the model in the third step, proved to be a significant determinant of PWB, whereas problem-focused coping became only marginally significant. The fourth step including TEI significantly increased the amount of variance explained by previous steps: only TEI was statistically significant, with higher scores of TEI predicting higher scores of PWB. By including TEI in the model, regulatory emotional self-efficacy in managing negative emotions ceased to be significant, whereas the opposite pattern was shown for positive restructuring coping. Bayes Factors (BF_{01}) analyses (Table 2) showed that the model without TEI was less likely than the model including this variable ($BF_{01} < 1$), whereas the exclusion of other variables determined an improvement of model likelihood ($BF_{s01} > 1$). Bayesian analyses also confirmed that positive restructuring coping strategy did not significantly predict PWB when considering the other variables of the fourth model (i.e. $BF_{01} > 1$, indicating more evidence for the null-hypothesis). In the stepwise regression, Akaike criterion (AIC) supported a final model with TEI and positive restructuring coping as significant determinants of PWB, both with forward and backward selection methods (see the last part of Table 2 and Figure 2). However, given the scarce reliability of positive restructuring coping strategy in significantly predicting PWB, its role as a mediator of the relationship between TEI and PWB was not further tested.

Discussion

The main purpose of the present study was to clarify the role of some individual variables in determining well-being in childhood. Specifically, we considered TEI, regulatory emotional self-efficacy, coping styles and, concurrently, some measures of verbal and nonverbal intelligence. Although previous studies have already investigated how these constructs can affect children's PWB, to the best of our knowledge, these variables have never been considered all together to estimate their respective contribution.

First, a robust correlation analysis revealed that measures of intelligence were not related to the other psychological constructs. The absence of association between general intelligence and TEI confirmed that the latter is more related to the personality than to the cognitive domain (Petrides & Furnham, 2001). Importantly, general intelligence was not associated with children's PWB. In this regard, previous studies have exhibited discordant results (e.g. Richards et al., 2003; Wigtill & Henriques, 2015), possibly as a consequence of the diverse and specific tests employed for the

Table 2. Analyses of hierarchical regression on CIT.

	Beta	SE	t	Df	p	R ²	R ² change	Chi-square (df)	p	BF ₀₁
BLOCK 1	—	—	—	—	—	.02	.02	1.05 (2)	—	—
PMA-v	.09	.110	.830	71	—	—	—	—	—	2.14
Age	.23	.110	2.110	71	.038	—	—	—	—	1.75
BLOCK 2	—	—	—	—	—	.34	.31	29.33 (3)	<.001	—
PMA-v	.06	.104	.602	68	—	—	—	—	—	2.68
Age	.16	.102	1.555	68	—	—	—	—	—	1.94
CCSC-pf	.37	.133	2.746	68	.008	—	—	—	—	.07
CCSC-pr	.22	.125	1.775	68	.080	—	—	—	—	.67
CCSC-sup	.01	.130	.039	68	—	—	—	—	—	3.10
BLOCK 3	—	—	—	—	—	.43	.09	10.59 (1)	.001	—
PMA-v	-.03	.104	-.274	67	—	—	—	—	—	3.27
Age	.08	.102	.754	67	—	—	—	—	—	2.50
CCSC-pf	.26	.134	1.902	67	.062	—	—	—	—	.20
CCSC-pr	.23	.125	1.817	67	.074	—	—	—	—	1.24
CCSC-sup	-.03	.129	-.221	67	—	—	—	—	—	3.27
RESE-n	.33	.109	2.999	67	.004	—	—	—	—	.03
BLOCK 4	—	—	—	—	—	.54	.11	17.01 (1)	<.001	—
PMA-v	-.04	.085	-.488	66	—	—	—	—	—	3.54
Age	-.04	.083	-.538	66	—	—	—	—	—	3.12
CCSC-pf	.04	.120	.324	66	—	—	—	—	—	2.72
CCSC-pr	.21	.101	2.049	66	.044	—	—	—	—	1.13
CCSC-sup	-.10	.106	-.927	66	—	—	—	—	—	3.36
RESE-n	.13	.100	1.281	66	—	—	—	—	—	1.57
TEI	.55	.120	4.560	66	.000	—	—	—	—	.00
Stepwise model selection by AIC						.55	.55	58.75 (3)	<.001	
TEI	.56	.103	5.411	70	.000	—	—	—	—	.00
CCSC-pr	.18	.089	1.998	70	.050	—	—	—	—	.91
RESE-n	.14	.098	1.417	70	—	—	—	—	—	2.28

Note: BF₀₁ = Bayes Factor; values greater than one indicate more evidence for the null-hypothesis. *p*-values > .10 were not reported. CIT: Comprehensive Inventory of Thriving (PWB); PMA-v: Primary Mental Abilities, verbal comprehension; CCSC-pf: Children's Coping Strategies Checklist, problem-focused strategies; CCSC-pr: positive cognitive restructuring; CCSC-sup: support-seeking strategies; RESE-n: Regulatory Emotional Self-efficacy, regulating negative emotions; TEI: Trait Emotional Intelligence.

assessment of intelligence (e.g. analytic reasoning, verbal abilities, or proxy measures, like grade point average in scholastic performance). In the current study, we included various measures of intelligence: because none of them was associated with PWB, we inferred that variables like TEI, self-efficacy or coping are more salient than intelligence for children's optimal adjustment.

Crucially, TEI, regulatory emotional self-efficacy in managing negative emotions and coping strategies generally considered as adaptive (i.e. problem-focused, support-seeking, positive cognitive restructuring) emerged as related to PWB. In particular, TEI was positively and highly correlated to PWB, in line with our hypothesis and previous evidence (e.g. [Davis & Humphrey, 2012a](#); [Mavroveli et al., 2007](#)). Also, regulatory emotional self-efficacy in negative emotions was associated to PWB, partially in line with the findings of [Caprara et al. \(2006\)](#), who observed an

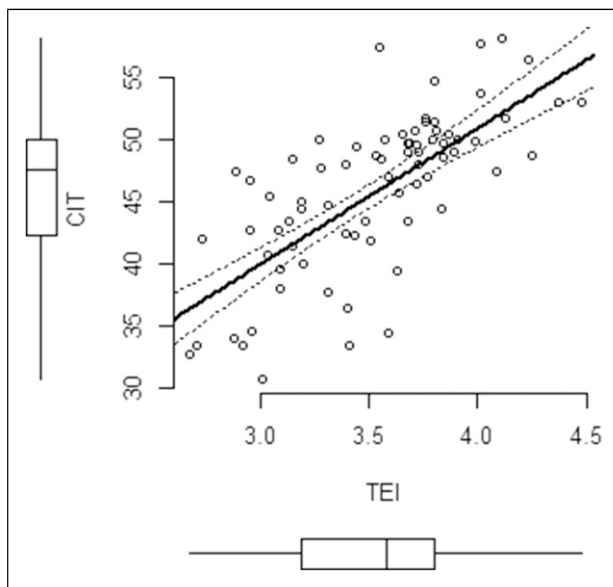


Figure 2. Scatter plot analysis of the relationship between TEI and PWB (CIT scores). Note: The plot contains data points, robust linear regression prediction (solid line), 95% confidence intervals bands (dotted lines) and box plots for the univariate distribution of CIT (=Psychological Well-Being) and TEI (=Trait Emotional Intelligence) 94 × 98 mm (96 × 96 DPI).

association between adolescents' well-being and both measures of regulatory emotional self-efficacy. Presumably, for children's PWB, the perceived capability to handle negative emotions is more valuable than the perceived capability to express positive emotions because of the beneficial effect that the self-efficacy in regulating perturbing emotions may have on self-confidence and therefore on PWB. Adaptive coping styles were also related to PWB, in line with both our hypothesis and the existing literature (e.g. [Frydenberg & Lewis, 2009](#); [Zammuner, 2019](#)). As also shown in the regression analysis, among the coping styles, problem-focused and positive reframing strategies were the most determinant for children's PWB, although higher level emotional variables showed better predictive properties.

As expected, TEI, regulatory self-efficacy in managing negative emotions and adaptive coping strategies were all positively associated. Whereas previous evidence has already highlighted a positive relationship between TEI and adaptive coping (e.g. [Mavroveli et al., 2007](#); [Mikolajczak et al., 2009](#)), to date, this is the first study to investigate and establish a relationship between regulatory emotional self-efficacy and both TEI and coping styles.

No associations were detected between the questionnaire completed by children's teachers and the questionnaires completed by children themselves, in line with some previous studies reporting a discrepancy between children's and adults' perspectives (e.g. [Hourigan et al., 2011](#); [Kerr et al., 2007](#)). This is possibly due to the fact that in evaluating themselves, children have a direct access to their own thoughts and feelings, whereas, in evaluating children, teachers can rate only an external behaviour, mostly related to the school context.

Regression analysis, performed in order to detect the unique contribution of the investigated variables in determining children's PWB, confirmed the relevance of TEI as a major personal resource for an optimal psychological functioning and highlighted a negligible contribution of the

other variables when TEI is taken into account. The predictive role of TEI in determining PWB was in line with our hypothesis and with previous studies (e.g. [Di Fabio & Kenny, 2016](#); [Martins et al., 2010](#)). Instead, our results did not confirm the role played by coping in influencing children's PWB when TEI is involved, except for a minor contribution of positive cognitive restructuring, which however is in need of further support by future studies. This finding precluded a further investigation of the role of coping as a mediator of the association between TEI and PWB. The inconsistency between our results and those reporting a mediation/moderation effect of specific coping styles in the relationship between TEI and PWB might be due to the moderate reliability of some subscales of the coping questionnaire we employed, rather than to theoretical reasons. Future studies should further explore these relationships using multiple tools to assess the constructs of interest. Notably, regulatory emotional self-efficacy in negative emotions ceased to exert an effect on PWB when TEI was added in the model. It is arguable that the two emotional variables partially overlap; however, given that TEI showed a higher predictive value of PWB than emotional self-efficacy, it is possible to state that the two constructs are distinct, rather than interchangeable as previously hypothesized (see [Petrides & Furnham, 2001](#)).

The current study presents some limitations that should be acknowledged. First, many variables were assessed by using self-report questionnaires, which present several benefits (e.g. they are quick to answer, easy to administer, motivating), but even some disadvantages (e.g. they can be biased by social desirability, and they may be either difficult to understand or to rate, especially for children). However, in order to minimize at least the impact of verbal abilities on these measures, we controlled for verbal intelligence. Second, data were cross-sectional; therefore, although we hypothesized that the considered variables could predict PWB, the experimental design precluded any inferences regarding causation. Future studies on the link between these variables and PWB should be developed in a longitudinal perspective, which is fundamental for obtaining a systematic picture of the nature and sources of developmental changes ([Grammer et al., 2013](#)). Third, because some scales yielded only a moderate internal consistency (i.e. children's self-ratings of regulatory emotional self-efficacy in negative emotions and avoidance coping, and teachers' ratings of emotion regulation), related results should be interpreted with caution.

Nevertheless, our findings suggest various and new perspectives for research and practice in both health and clinical psychology. As regards research, it may be worthwhile investigating whether the major impact of emotional intelligence on children's PWB persists using emotional ability rather than emotional trait measures: indeed, the two models of emotional intelligence (ability vs. trait), although not mutually exclusive, are considered as distinct constructs ([Petrides & Furnham, 2001](#)). In addition, since we employed a dispositional measure of coping, future research should contemplate the possibility to assess coping styles at a situational level, which might be a more suitable way to explore coping in childhood, although such types of investigation tools are scarce, at least in the Italian scenario. As regards psychological practice, a significant implication of the present research is the need to prioritize emotional variables, in both educational and clinical settings, to promote PWB. Indeed, interventions focused on EI promotion in developmental age may have considerable benefits both at an intrapersonal level, by facilitating the regulation of unpleasant emotions, and at an interpersonal level, by fostering positive relationships with peers and adults. This, in turn, may contribute to protect children from the effects of distress and to prevent the occurrence of psychological symptoms. Some studies have already documented the beneficial effects of EI trainings on children's EI and PWB (e.g. [Ruiz-Aranda et al., 2012](#); [Ulutas & Omeroglu, 2007](#)). However, although a recent meta-analysis confirmed the effectiveness of rigorous EI intervention programmes in adulthood (see [Hodzic et al., 2018](#)), additional data need to be collected in developmental age.

To conclude, although the relationship between general intelligence, TEI, emotional self-efficacy, coping and mental health has already been investigated, to the best of our knowledge this is the first study exploring the simultaneous contribution of all these variables to children's PWB. We provided evidence for the lack of associations between intelligence and PWB, TEI, regulatory emotional self-efficacy and coping styles. Unlike general intelligence, problem-focused coping and regulatory emotional self-efficacy were strongly associated to PWB. However, when these variables were considered simultaneously to TEI, the last construct resulted the unique significant predictor of PWB. Overall, the present findings may be extremely valuable in detecting the most relevant psychological variables for children's PWB, to both enrich the theoretical models of the field and orient interventions to promote well-being in developmental age.

Declaration of conflicting interests

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