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# How parental autonomy support prevent from adolescents' depression and low self-esteem: a mediational model with trait Emotional Intelligence

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# Abstract

*Objective:* The main aim of this study was to deepen the literature about parental autonomy support, analysing the relation between its two dimensions, Promotion of Independence (PI) and Promotion of Volitional Functioning (PVF), and adaptive outcomes in adolescents. Specifically, it was hypothesized that both components would predict higher self-esteem and lower depression in adolescents, through the mediation of trait Emotional Intelligence (trait EI).

*Method:* A total of 283 adolescents, aged between 14 and 17 years (M=15.53; SD=1.21), participated in this study. They completed the Center for Epidemiologic Studies- Depression Scale (CES-D), the Promotion of Independence (PI) and Promotion of Volitional Functioning (PVF), the Rosenberg Self-Esteem and Trait Emotional Intelligence Questionnaire- Adolescent Short Form (TEIQue-ASF).

*Results:* It was found that parental autonomy support predicted trait EI, which in turn fully mediated the relation between supportive practices and psychological outcomes in adolescents, with several interesting parent gender differences.

*Conclusions:* This study highlights how autonomy-supportive practices are fundamental for healthy and adequate development of emotional intelligence in adolescents. It also contributes to the advancement of research on the contextual and individual mechanisms underlying the functional adaptation of offspring.

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# 1. Introduction

Adolescence represents a critical developmental period, in which identity-building processes constrain the individual to necessary changes (Marcia, 1980). In this delicate moment, each adolescent can use his own internal and external resources to face changes functionally, or he can oppose them in a dysfunctional way, favouring the emergence of negative psychological outcomes.

Many studies highlighted depression as the most common disorder in adolescence: first episodes commonly occur in middle to late adolescence, though it seems that depression often starts even earlier, since childhood (Avenevoli et al., 2015; Hankin, 2015; Hankin et al., 2015). Youth depression, even subclinical level, is associated with many negative outcomes, as physical health problems, substance use, high-risk sexual behaviours, academic problems, social impairments, and suicide (Rueger et al., 2016; Thapar et al., 2012). According to the vulnerability-stress model, the most vulnerable adolescents are more likely to become depressed when experiencing stressors (Hankin, 2008). Vulnerability in adolescence is linked to multiple factors, but certainly one of those most implicated is low self-esteem: many studies have, indeed, emphasized that negative self-judgments can contribute to greater personal vulnerability and therefore can nourish depressive experiences (Babore et al., 2016; Manna et al., 2016; Moksnes et al., 2016; Orth & Robins, 2013). Furthermore, low self-esteem has been found as a crucial risk factor for the onset in the adolescence of both internalizing problems, like depression or anxiety (Sowislo & Orth, 2013), and externalizing ones, as delinquency and behavioural problems (Donnellan et al., 2005).

Given the prevalence among offspring and the problems associated, it appears important for researchers to investigate which factors may affect adolescent vulnerability and the consequent risk of maladjustment, as consisting in low self-esteem and depressive experiences, taking into consideration the complex interplay of contextual and individual factors (Hankin et al., 2015).

A vast literature has put in evidence, for example, how family factors and especially parenting can be strongly correlated with depression and self-esteem of adolescents (Musa et al., 2019; Muzi, 2020). Non-authoritative parenting, less warmth, over-involvement, aversiveness and psychological control have been found as parental factors with sound evidence both for higher depression (Bleys et al., 2018; Dentale et al., 2015; Yap et al., 2014) and for low self-esteem (Milevsky et al., 2007; Wang et al., 2016). Conversely, especially parental autonomy support, which consists of a positive parenting style that aims to meet the adolescents' autonomy need, appears as a crucial factor favouring psychological adjustment of offspring. In fact, it has been found related to need satisfaction and vitality (Costa et al., 2016), wellbeing (van der Kaap-Deeder et al., 2017), emotional regulation (Brenning et al., 2015), and academic achievement (Vasquez et al., 2016). Many studies have shown that parental autonomy support is strictly related to higher self-esteem and positive affect (Hunter et al., 2015; Mageau et al., 2015) and to lower depression (Van der Giessen et al., 2014).

Two different conceptualizations can be described in literature on parental autonomy support. Some authors define it as parents' Promotion of adolescents' Independent thought, expression and decision-making (Promotion of Independence, PI), in line with a conception of autonomy as physical and emotional separation from parents and consequent individuation (Silk et al., 2003). PI predicts adolescent wellbeing and self-esteem (Soenens et al., 2007). Selfdetermination Theory (SDT), instead, proposes a conceptualization of autonomy support as Promotion of Volitional Functioning (PVF): specifically, parents encourage their offspring to explore and make choices that reflect their true values and interests, not necessarily independently from the parents. In fact, SDT views adolescents' autonomy not as independence, but as possessing a sense of volition and choiceness, whose opposite is not dependence but the feeling of being controlled by external forces or internal compulsions (Chirkov et al., 2003). Differently from PI, PVF focus on how they promote autonomy and not on what parents promote (independence vs dependence): parents high in PVF tend to recognize and accept feelings and opinions of their children and to encourage them to act according to their inclinations (Soenens et al., 2007). In the SDT view, PVF is conceived as more connected, compared than PI, to the well-being of adolescents, since it favours in them a more selfdetermined action: some studies found in fact PVF as resulting a stronger predictor of adolescent adjustment (Grolnick, 2003; Liga et al., 2018; Soenens et al., 2007).

Although this distinction appears fundamental, especially to understand the process that underlies the acquisition of an autonomous functioning by adolescents, there are still few studies that have deepened the relation between these two distinct dimensions of autonomy support and other psychological outcomes during the development of children and adolescents.

A recent line of studies has shown that supportive parenting practices are strongly connected with adolescents' trait emotional intelligence (Argyriou et al., 2016; Costa et al., 2018). Specifically, it has been shown that autonomy supportive parents tend to promote adolescents' expression of inner opinions and emotions, facilitating adolescent self-regulation (Ryan & Deci, 2017) and the development of higher levels of trait EI (Alegre, 2011; Costa et al., 2018). Trait EI is defined as a constellation of emotional self-perceptions and behavioural dispositions (Petrides et al., 2007, 2016), conceptually distinct from emotional intelligence as a cognitive ability. Trait EI consists of 15 facets: 13 of them grouped in four oblique factors, namely Well-Being, Self-Control, Emotionality, and Sociability, and the remaining two, such as Adaptability and Self-Motivation, that contribute directly to the global trait EI score (Andrei et al., 2016).

In light of these data, both the dimensions of the autonomy support, the Promotion of Independence (PI) and the Promotion of Volitional Functioning (PVF), could be strongly correlated with trait EI, since one promotes an independent decision making and personal responsibility, the other leads the child to a greater understanding of his own internal perspective and values to make a personal choice. It seems, therefore, reasonable to hypothesize how both these dimensions can contribute to the emergence of self-regulatory skills and a greater emotional understanding and awareness in adolescents.

Many studies found that trait EI promotes a lot of positive psychological outcomes among adolescents, such as life satisfaction, positive affect, psychological well-being (Bhullar et al., 2013; Heshmati & Ahmadkhanloo, 2017), self-esteem (Kong et al., 2012), socio-emotional competence (Frederickson et al., 2012), adaptive coping styles and scholastic achievement (Mancini et al., 2017), and reduces the likelihood of negative outcomes, such as adolescent's emotional maladjustment (Andrei et al., 2016), depressive thoughts and somatic complaints (Mavroveli et al., 2007), self-harm (Mikolajczak et al., 2009), internalizing and externalizing problems (Gugliandolo et al., 2015a). Furthermore, some studies found that trait EI could be a relevant mediator between parenting and adolescent development (Gugliandolo et al., 2015b; Huang et al., 2017).

Although parenting research often considers the overall parenting practices, assuming that both parents employed the same parenting style, some studies have emphasized the importance of analysing the predictive role of the parenting style of mothers and fathers separately (Gryczkowski et al., 2010; McKinney & Renk, 2008). Specifically, it seems that not only there are differences in the style adopted by mothers and fathers (Simons & Conger, 2007), but that parent gender can have a different effect on adolescent adjustment. For example, if the authoritative style in mothers, unlike the permissive one, correlates with higher self-esteem, less depression and more life satisfaction in adolescents, for fathers it seems that these relationships are not so strong and that the paternal permissive style is not so detrimental for the adjustment of the child as the maternal one (Milevsky et al., 2007). Furthermore, parent gender can have an effect on the self-regulation of children: in fact, paternal autonomy support could influence more the relationships of the children with the external world, while the maternal one with the internal and social world (Soenens & Vansteenkiste, 2005).

#### 1.1 Aim of the study

Despite these studies mentioned above, still few researches have analysed separately the maternal and paternal parenting and to date no one has investigated the differential relation between parental autonomy support, trait EI and adolescent outcomes according to parent gender.

Moreover, although the literature has shown that differentiating Promotion of Indipendence (PI) and Promotion of Volitional Functioning (PVF) can provide more explanations in the understanding of adolescent development, and that appropriate parenting strategies can promote the development of Trait EI, that in turn may affect depression and self-esteem, this model has never been verified.

For this reason, the objective of this research is to verify:

- the relation between parental Promotion of Independence (PI), Promotion of Volitional Functioning (PVF) and trait EI;
- 2. the relation between trait EI, self-esteem and depression;
- 3. the role of trait EI as mediator in the relation between Maternal Promotion of Independence (PI) and Maternal Promotion of Volitional Functioning (PVF) to self-esteem and depression;
- the role of trait EI as mediator in the relation between Paternal Promotion of Independence (PI) and Paternal Promotion of Volitional Functioning (PVF) to self-esteem and depression.

All hypotheses were examined with regard to both maternal and paternal ratings of autonomy support, in order to examine the individual contribution of mothers and fathers: in fact, even if in literature significant differences between maternal and paternal ratings of PI e PVF were not found (Soenens et al., 2007), the gender of the parent could predict different psychological outcomes in adolescents (Desjardins & Leadbeater, 2011).

#### 2. Method

#### 2.1 Participants

Questionnaires were administered to 124 male and 159 female adolescents aged between 14 and 17 years old (M=15.53; SD=1.21). All the participants were Italian and had the middle school certification. Regarding parents' education, 33% of fathers had the middle school certification, 50% had a high school diploma, and 17% had a first level degree. Furthermore, 29% of mothers had the middle school certification, 50% had a high school diploma, and 21% had a first level degree.

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#### 2.2 Procedure

The subjects were recruited among friends and acquaintances of psychology students. The questionnaires were administered to offspring individually in silent room. Before filling out the questionnaires, parents signed the informed consent. Participants were reassured of the anonymity of their responses. The protocol took about 30 minutes to be completed. The data were then analysed using IBM SPSS and MPLUS.

#### 2.3 Measures

*Center for Epidemiologic Studies- Depression Scale (CES-D)* (Radloff, 1997). It is a self-report questionnaire, aimed at assessing the presence of depressive symptoms. The items focus in particular on cognitive and emotional symptoms, whereas only two items investigate the physical symptoms. The test consists of a total of 20 items; the response system is on a 4-point Likert-type scale, from 0 (="Never or rarely") to 3 (="Continuously or most of the time"). In the present study Cronbach's alphas was .90.

Promotion of Independence (PI) and Promotion of Volitional Functioning (PVF) (Soenens et al., 2007). The Promotion of Independence scale consists of 8 items that refer to how the adolescent perceives his mother and his father promoting independent decision making. The Promotion of Volitional Functioning scale consists of 6 items: adolescents responded according their perception of parents' provision and support of options and volitionally enacted choices, separately for mothers and fathers. Both scales have a 5-point Likert scale response system from 1 (= "Completely disagree") to 5 (= "Completely agree"). In the present study Cronbach's alphas was .74 for Maternal Promotion of Independence, .80 for Maternal Promotion of Volitional Functioning, .84 for Paternal Promotion of Independence, and .87 for Paternal Promotion of Volitional Functioning.

Rosenberg Self-Esteem (Rosenberg, 1965) is a 10 item self-report to measure self-esteem. The responses are given on a 4-point Likert-type scale, ranging from 1 to 4 (1=completely disagree; 4= completely agree). Higher scores indicate a greater self-esteem. In this study Cronbach's alphas was .84.

*Trait Emotional Intelligence Questionnaire- Adolescent Short Form* (TEIQue-ASF) (Petrides et al., 2006). The TEIQue-ASF is a simplified version of the TEIQue-SF adult version. The test consists of 30 items with a 7-point Likert scale response from 1 (= "Completely disagree") to 7 (= "Completely agree") and yield scores about a total measure (total trait EI). In the present study Cronbach's alphas was .86.

#### 3. Results

#### 3.1 Descriptive and Correlations

Means and Standard Deviations, Skewness and Kurtosis for each variable and Correlations are shown in Table 1. Depression negatively correlated with Maternal and Paternal Promotion of Independence, Maternal and Paternal Promotion of Volitional Functioning, trait EI and Selfesteem. All other variables positively correlated with each other.

	Min	Max	М	SD	Skew	Kurt	α	1	2	3	4	5	6
1. Maternal PI	1.00	4.86	3.47	.70	50	.30	.74				·		
2. Maternal PVF	1.80	5.00	3.46	.62	13	13	.80	.68**					
3. Paternal PI	1.00	5.00	3.48	.85	59	.16	.84	.61**	.47**				
4. Paternal PVF	1.67	5.00	3.48	.67	29	20	.87	.43**	.53**	.70**			
5. Trait EI	2.34	6.83	4.73	.74	.15	04	.86	.35**	.29**	.38**	.36**		
6. Self-esteem	1.30	4.00	3.12	.55	55	13	.84	.21**	.22**	.29**	.32**	.72**	
7. Depression	.00	2.70	.97	.54	.64	07	.90	19**	20**	22**	27**	51**	57**

 Table 1. Descriptive and correlational analyses

Note: N = 283; Min = Minimum value; Max = Maximin value; M = Mean; SD Standard Deviation; Skew = Skewness; Kurt = Kurtosis; \* p < .05; \*\*p < .01

In this study, Structural Equation Modeling (SEM) was used to examine the relations of variables: a saturated and unsaturated maternal model and a saturated and unsaturated paternal model were tested.

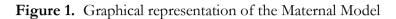
#### Maternal Model

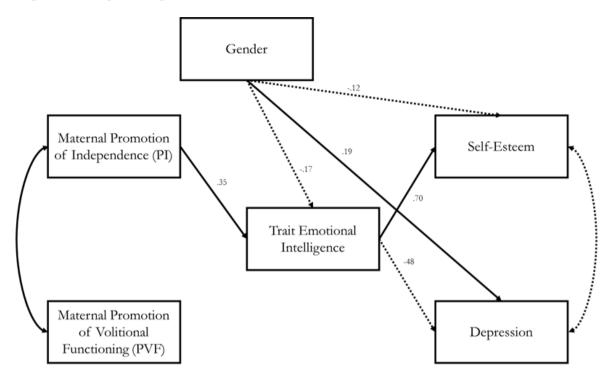
Estimation of the saturated model, and therefore no fit indices were reported, showed a significant path from Gender to trait EI ( $\beta = -.17$ ; p < .01), Self-esteem ( $\beta = -.11$ ; p < .01), and Depression ( $\beta = .19$ ; p < .01). Furthermore, Maternal Promotion Independence was related to trait EI ( $\beta = .30$ ; p < .01), trait EI was related to Self-esteem ( $\beta = .71$ ; p < .01) and Depression ( $\beta = -.47$ ; p < .01).

In according with common procedure to test the saturated model (Pedhazur, 1997) all nonsignificant paths were removed and several indices indicated that the data fit the final model (Fig. 1),  $\chi 2(7) = 5.35$ ; p = .62, CFI = 1.00, RMSEA = .00 (90% CI = .00 – .06), SRMR=.02.

Similarly to the saturated model, Gender was related with trait EI ( $\beta = -.17$ ; p < .01), Self-esteem ( $\beta = -.12$ ; p < .01), and Depression ( $\beta = .19$ ; p < .01), Promotion Independence was related to trait EI ( $\beta = .35$ ; p < .01), trait EI was related to Self-esteem ( $\beta = .70$ ; p < .01) and Depression ( $\beta = -.48$ ; p < .01). To explore the significance of the indirect effects that emerged (i.e., drop from the total to direct effect) we used the bootstrap-generated bias-corrected confidence interval approach (Preacher & Hayes, 2004; Shrout & Bolger, 2002). Statistically significant

indirect associations between Promotion Independence and Depression through trait EI ( $\beta$  = -.17; p < .01), and also between Promotion Independence and Self-esteem through trait EI ( $\beta$  = .25; p < .01) were showed.





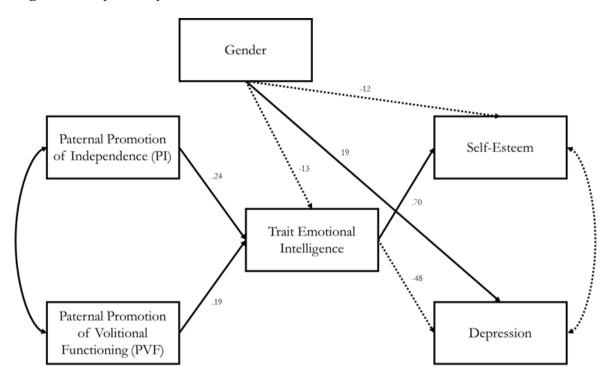
Note: Only significant paths were reported.

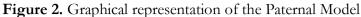
#### Paternal Model

Saturated model showed a significant path from Gender to trait EI ( $\beta = -.13$ ; p < .05), Selfesteem ( $\beta = -.11$ ; p < .01) and Depression ( $\beta = .19$ ; p < .01). Both Paternal Promotion Independence ( $\beta = .24$ ; p < .01) and Promotion of Volitional Functioning ( $\beta = .18$ ; p<.05) were related to trait EI. Moreover, trait EI was related to Self-esteem ( $\beta = .69$ ; p < .01) and Depression ( $\beta = -.46$ ; p < .01).

In according with common procedure to test the saturated model (Pedhazur, 1997) all nonsignificant paths were removed and several indices indicated that the data fit the final model (Fig. 2),  $\chi 2(6) = 7.20$ ; p = .30, CFI = 1.00, RMSEA = .03 (90% CI = .00 - .09), SRMR = .03.

Gender was related to trait EI ( $\beta$  = -.13; p < .01), Self-esteem ( $\beta$  = -.12; p < .01) and Depression ( $\beta$  = .19; p < .01). Both paternal Promotion Independence ( $\beta$  = .24; p < .01) and Promotion of Volitional Functioning ( $\beta$  = .19; p < .05) were related to trait EI. Furthermore, trait EI was related to Self-esteem ( $\beta$  = .70; p < .01) and Depression ( $\beta$  = -.48; p < .01).





Note: Only significant paths were reported.

To explore the significance of the indirect effects that emerged we used the bootstrap-generated bias-corrected confidence interval approach (Preacher & Hayes, 2004; Shrout & Bolger, 2002). There was a statistically significant indirect association between Paternal Promotion Independence and Depression through trait EI ( $\beta = -.12$ ; p < .01), between Promotion of Volitional Functioning and Depression through trait EI ( $\beta = -.09$ ; p < .05), between Promotion Independence and Self-esteem through trait EI ( $\beta = .17$ ; p < .01), and between Promotion of Volitional Functioning and Self-Esteem through trait EI ( $\beta = .13$ ; p < .05).

# 4. Discussion

The first objective of the present study was to verify the relation between the two dimensions of parental autonomy support, Promotion of Independence (PI) and Promotion of Volitional Functioning (PVF), and adolescents' trait Emotional Intelligence (trait EI). Correlational analyses showed that both the maternal and paternal PI and PVF were related to trait EI, confirming and expanding literature results with respect to the relation between parenting and trait EI (Argyriou et al., 2016). In fact, as it has been shown that psychological control (as parental practice opposed to autonomy support) undermines the construction of a functional trait EI (Gugliandolo et al., 2015a), so the autonomy support, in both its dimensions, favours higher levels of trait EI (Costa et al., 2018). Parents high in PI as in PVF, acknowledging the psychological world of the adolescent, support his autonomy, either by favouring an

independent decision or by helping him to recognize his own inclinations and emotions: all this clearly helps offspring to develop a higher self-consciousness and emotional intelligence.

The second objective of this study was to confirm the relation between trait EI, self-esteem and depression: as it was expected, trait EI is a strong protective factor against depression (Mavroveli et al., 2007) and in favour of self-esteem among offspring (Kong et al., 2012). Adolescents with higher levels of trait EI are characterized by positive self-judgments and are able to deal with the stressors of life in a more functional way, reducing consequently the risk of depressive experiences.

This study also hypothesized an effect of trait EI as a mediator in the relation between parental autonomy support, in both its components and adolescent depression and self-esteem. Results clearly confirmed the role of trait EI as a mediator for depression and self-esteem, and are in line with the previous literature that found similar mediating mechanisms between parenting and other psychological outcomes in adolescents (Gugliandolo et al., 2015b; Huang et al., 2017). These results constitute an advancement in the study of the mechanisms underlying some typical psychological outcomes of adolescence, highlighting how some contextual variables, such as parenting practices, can act on adolescent's self-esteem and depression through the mediation of trait EI, which just during the adolescent phase is forming and consolidating (Gugliandolo et al., 2015b; Petrides et al., 2016). Important applied implications should therefore be considered, especially in reference to interventions for preventing adolescent maladjustment: it will therefore be important to provide for both parent training, to teach parents to promote autonomy and volitional functioning and to pay particular attention to the adolescent's emotional sphere, and for interventions focused on emotional psychoeducation of offspring (Argyriou et al., 2016).

Moreover, some interesting differences between maternal and paternal data should be discussed. Specifically, in the maternal model, the PI was the stronger predictor of trait EI, while in the paternal model both PI and PVF predicted trait EI, that in turn fully mediated their relation with depression and self-esteem. In the present study emerged a different contribution that maternal and paternal PI and PVF had towards the adolescents' trait EI; this suggests that the gender of the parent has a different effect in the field of adolescents' self-regulation skills and emotional awareness (Kiel & Kalomiris, 2015). Probably, the middle adolescents benefit in their emotional development especially from mothers who support independence, above all for the emotional component, while they prefer from fathers an equal dose of promotion of independence and volitional functioning.

These findings should be considered and understood within the particular cultural context in which they were collected. In fact, as Manzi et al. (2012) attested, culture moderates the impact of promotion of autonomy on wellbeing of offspring, and significant differences were found between Italian families and families from US, Belgium and China. Italian families and, especially, southern families are characterized by the "autonomous relatedness" pattern of relationship: parents tend to engage in parental practices in which volitional goals and strong interdependence are both favoured (Liga et al., 2018), since they often struggle to consider their children as adults, even when they are over 18 years old. This could explain why perceiving a greater promotion of independence from the southern mothers, notoriously more likely to be extremely involved than fathers (Lo Cricchio et al., 2019; Scabini, 2000), could be useful for adolescents in encouraging the emergence of a more functional emotional intelligence, and consequently greater self-esteem with less risk of depressive experiences. Instead, perceiving the promotion of volitional functioning from fathers turns out to be equally important than the promotion of independence, emphasizing how it is necessary for fathers to pay attention to the real inclinations and desires of their children, helping them to make decisions in line with their own values. These results underline the importance of a more active and profound involvement of fathers in the emotional and psychological development of adolescents (Zhang et al., 2015).

Subsequent studies will clearly need to go deeper into these results and shed more light on the influence that these two components of autonomy support, differently for fathers and mothers, can have on adolescent emotional development.

This study has significant strengths that need to be considered: first of all, it broadens the previous results within the research line on the relation between parenting and trait EI (Alegre, 2011; Argyriou et al., 2016; Costa et al., 2018), underlining how autonomy supportive practices are fundamental for a healthy and adequate development of emotional intelligence in adolescents. This leads to some important applicative implications, connected above all with the need to intervene on parental factors, promoting autonomy supportive practices, in order to improve the emotional competences and self-regulating abilities of the adolescents and to consequently favour their psychosocial adaptation (Gugliandolo et al., 2015b). Furthermore, the present study has the merit of having expanded the research on the two components of autonomy support (PI and PVF), emphasizing how useful it is to distinguish the two constructs, since, although they are both fundamental, they can predict different psychological outcomes in adolescents (Soenens et al., 2007, 2009). Finally, considering the parenting practices of mothers and fathers separately represents another strong point, highlighting how it is especially useful to consider the independent contributions of both parents, that could predict different psychological outcomes in adolescents.

This study has also some limitations that need to be overcome in future studies. First, it is a mono-respondent study; in the future it will be necessary to have cross-informant ratings, and not only perceptions of adolescents. Furthermore, to verify the direction of the relations found, it will be necessary to collect the data longitudinally. Finally, it appears useful in the future to test this model even on different age groups, such as the late adolescents in which the component of Independence could be even stronger, and with different cultures.

In conclusion, the results of this study appear to be fundamental for the progress of knowledge on the contextual and individual mechanisms underlying the psychological adaptation of adolescents, and consequently for directing reflection on application interventions in this delicate age group.

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All the authors declare that they have no conflict of interest.

#### **Compliance with Ethical Standards**

Ethical approval: All procedures performed in studies involving human participants were in accordance with the 1964 Helsinki declaration and its later amendments or comparable ethical standards and were approved by the Department of the University.

Informed consent: Informed consent was obtained from all participating parents.

# **Conflict of Interest Statement**

The authors declare that the research was conducted in the absence of any potential conflict of interest.

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