

# Family Environment and Early Experiences and Their Associations with Emotion Regulation in Youth

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## Abstract

This cross-sectional study draws on the emotional climate of the family component of the tripartite model of the impact of the family context on children's emotion regulation. It aims to explore the associations between emotion regulation and early memories of warmth and safeness, parental antipathy and neglect, and parental attachment. A representative sample of 8,622 participants (52.4% girls), with ages between 12 to 21 years old ( $M = 15.5$ ,  $SD = 1.8$ ), and self-report measures were used. In the multiple regression, parental trust, maternal neglect, the female gender, maternal antipathy, early memories

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of warmth and safeness, parental alienation, and parental communication were uniquely associated with emotion regulation (in decreasing order of explanatory strength). These results support the tripartite model of the impact of the family context on children's emotion regulation by extending it to youth and emphasize the relevance of promoting emotionally intelligent and secure family contexts to increase the likelihood of youth's developing adaptive emotion regulation strategies.

**Keywords:** youth; early memories of warmth and safeness; parental antipathy and neglect; parental attachment; emotion regulation

## Contexto Familiar e Experiências Precoces: Associações com a Regulação Emocional dos Jovens

### Resumo

Partindo do clima emocional da componente familiar do modelo tripartido do impacto do contexto familiar na regulação emocional das crianças, este estudo transversal visa explorar as associações entre regulação emocional e memórias de calor e afeto na infância, antipatia e negligência parentais, e vinculação aos pais. Foram utilizadas uma amostra representativa de 8.622 participantes (52.4% do sexo feminino), com idades compreendidas entre os 12 e os 21 anos ( $M = 15.5$ ,  $SD = 1.8$ ), e medidas de autorrelato. Na regressão múltipla, a confiança parental, a negligência materna, o sexo feminino, a antipatia materna, as memórias de calor e afeto na infância, a alienação parental e a comunicação parental estiveram associadas, de forma única, com a regulação emocional (em ordem decrescente de poder explicativo). Estes resultados apoiam o modelo tripartido do impacto do contexto familiar na regulação emocional das crianças, estendendo-o aos jovens, e destacam a relevância da promoção de contextos familiares emocionalmente inteligentes e seguros para aumentar a probabilidade de os jovens desenvolverem estratégias adaptativas de regulação emocional.

**Palavras-chave:** jovens; memórias de calor e afeto na infância; antipatia e negligência parental; vinculação aos pais; regulação emocional

## INTRODUCTION

### *Emotion regulation in youth*

Emotional intelligence is a set of interrelated positive skills involving the perception/expression of emotions, the use of emotions to facilitate thinking, the understanding of emotions, and the management of emotions in oneself and other people (Mayer & Salovey, 1997). Emotionally intelligent individuals are better able to express their emotions, to recognize and evaluate emotions in themselves and others, and to regulate their own emotions (Barrett & Salovey, 2002; Mayer & Salovey, 1997). Previous research has vastly shown that high levels of emotional intelligence are negatively associated with a variety of mental health issues (e.g., anxiety, depression, stress) (for a review, see Resurrección et al., 2014) and are associated with a variety of positive outcomes, including well-being (e.g., Guerra-Bustamante et al., 2019), social skills (e.g., Poulou, 2014), and skills such as psychological flexibility (e.g., Cobos-Sánchez et al., 2022). We focus on a specific component of emotional intelligence, emotion regulation, which involves the ability to remain open to different emotions, acknowledge the value of feeling emotions in specific situations, and comprehend which strategies are most useful for managing emotions (Gross, 1998). Emotion regulation is critical during adolescence given that this developmental period often involves increased emotionality (e.g., Spear, 2013), with adolescents frequently experiencing more unpleasant and fewer pleasant emotions than children and adults (e.g., Spear, 2011). This heightened emotionality is believed to be related to the maturation differences that characterize the adolescent brain; specifically, it is known that the adolescent brain is characterized by fully developed subcortical regions related to reward-seeking (e.g., limbic system) and still maturing frontal cortical regions related to inhibitory control systems (e.g. prefrontal cortex) (e.g., Spear, 2013; Steinberg, 2005, 2008). These differences influence how adolescents think and behave, making them more prone to novel experiences, risk-taking, and emotional volatility (Spear, 2013).

Previous research has found that adolescent boys and girls do not differ in their levels of emotion regulation (Duarte et al., 2015). This skill has been consistently found to be associated with an array of positive outcomes, including lower engagement in self-harm and suicidal ideation (e.g., Barreto Carvalho et al., 2023b), lower impulsivity (e.g., Barreto Carvalho et al., 2023a; Hasking & Claes, 2020), higher perceived social support (e.g., Verzeletti et al., 2016), and higher student engagement (e.g., Santos et al., 2021).

### *Family Environment and Emotion Regulation*

As the first sources of socialization for children, their primary caregivers have a strong influence on their children's socioemotional development (e.g., Gilbert & Perris, 2000). Particularly, the tripartite model of the impact of the family context on children's emotion regulation posits that the primary caregivers, often within the family environment, strongly influence the development of their children's emotion regulation skills via three mechanisms: their exposure to how their caregivers regulate their own emotions (e.g., reappraisal, suppression), parenting practices involving emotions (i.e., emotion parenting, such as discussing emotions and responding to children's emotional expression), and the emotional context of the family (e.g., childhood emotional abuse, family contexts where emotions are freely expressed in an adaptive manner) (Morris et al., 2007). We focus on the role of some aspects of the latter on emotion regulation, including early memories of warmth and safety, parental attachment, and parental antipathy and neglect. Early memories of warmth and safety translate into the recall of positive feelings and experiences of safety and care in childhood (Richter et al., 2009). Moreover, positive, stable, and consistent early relationships with one's parents/caregivers likely lead to a sense of secure parental attachment (Bowlby, 1969). Indeed, by validating their children's emotions, parents/caregivers help them manage their emotions and adapt to situations while developing a sense of competence. The emotional response of parents/caregivers to their children's emotional expressions has key consequences, both for social and emotional development, psychophysiological regulation, coping, and the quality of their children's friendships (Barry & Kochanska, 2010). Lastly, on the other hand, negative experiences of early rearing/parenting may take extreme forms such as childhood abuse (e.g., antipathy) and neglect that likely leads to disruption on child/adolescent development (e.g., lack of social skills, suicidality) (e.g., Donath et al., 2014; Pierce et al., 2022). Regarding gender differences, studies have found no differences in early memories of warmth and safety (Santos et al., 2023; Vagos et al., 2017), while another study found that girls have higher levels of these memories (e.g., Tahirović & Jusić, 2016); on the other hand, girls have shown higher levels parental attachment (e.g., Oldfield et al., 2016).

The literature vastly shows that early experiences, particularly those in the family environment, are crucial for the development of (mal)adaptive emotion regulation skills in childhood and adolescence. For example, it has been found that the recall of parental warmth is positively associated with being able to be self-reassuring in stressful situations (Irons et al., 2006), which is an adaptive emotion regulation process (Marta-Simões et al., 2017), with early memories of warmth and safety having been directly associated with adaptive emotion regulation (Barreto Carvalho

et al., 2023b). In line with this, parental attachment has been positively associated with adaptive emotion regulation in youth (Gong & Paulson, 2017; Gresham & Gullone, 2012; Kullik & Petermann, 2013; Murphy et al., 2015) and adolescents' perceptions of a cohesive and supportive family have been linked with emotion regulation through parental support, even in high-risk environments such as exposure to neighborhood violence (Houlberg et al., 2012). Conversely, experiences of childhood emotional abuse and neglect have been found to be negatively linked with adaptive emotion regulation in adolescence (e.g., Barreto Carvalho et al., 2023c; Gruhn & Compas, 2020; Peh et al., 2017) and an insecure parental attachment has been positively associated with emotional dysregulation (Brenning et al., 2012). Taken together, these findings suggest that adolescents are more likely to be exposed to opportunities where they can learn from their caregivers how to regulate their emotions adaptively when their family environment is supportive, warm, and cohesive (and the adolescents perceive it as such).

### *Present Study*

In line with the tripartite model of the impact of the family context on children's emotion regulation (Morris et al., 2007), the literature vastly shows that the emotional climate of the family – including positive (e.g., recall of parental warmth) and negative (e.g., childhood emotional abuse or neglect) related experiences/memories – plays a pivotal role in youth's development of (mal)adaptive emotion regulation skills (e.g., Barreto Carvalho et al., 2023b,c; Gong & Paulson, 2017; Houlberg et al., 2012). However, no previous study, to our knowledge, has examined the relative contribution of multiple family experiences/memories to the explanation of emotion regulation in youth. Therefore, drawing on the emotional context of the family component of the tripartite model of the impact of the family context on children's emotion regulation (Morris et al., 2007), we aim to explore the associations between emotion regulation and early memories of warmth and safety, parental antipathy and parental neglect, and parental attachment. Consistent with previous research, we hypothesize that emotion regulation will be positively associated with early memories of warmth and safety (e.g., Barreto Carvalho et al., 2023b; Irons et al., 2006; Marta-Simões et al., 2017) and parental attachment (e.g., Gong & Paulson, 2017; Murphy et al., 2015), as well as negatively linked with parental antipathy and parental neglect (e.g., Barreto Carvalho et al., 2023c; Gruhn & Compas, 2020). Lastly, we secondarily aim to examine gender differences in all study variables. We hypothesize that girls will show higher parental communication and trust, as well as lower parental alienation (i.e., higher parental attachment) (e.g., Oldfield et al., 2016).

## METHOD

### *Participants*

The sample comprised a total of 8,622 participants, of which 47.1% identified with the male gender and 52.4% with the female gender and with ages ranging from 12 to 21 years ( $M = 15.5$ ,  $SD = 1.8$ ), enrolled in public schools in the Autonomous Region of the Azores (Portugal). Most participants were either in 9<sup>th</sup> grade (24.5%), 7<sup>th</sup> grade (22.5%), or 8<sup>th</sup> grade (20.7%) and had never failed a school year (63.3%). The sociodemographic characteristics of the sample are presented in Table 1.

**Table 1**

*Sample sociodemographic characteristics (N = 8,622)*

Sociodemographic characteristics	Sample	
	<i>n</i>	%
<b>Gender</b>		
Male	4,063	47.1
Female	4,520	52.4
<b>Age</b>		
12 years	86	1
13 years	1,185	13.7
14 years	1,404	16.3
15 years	1,713	19.9
16 years	1,386	16.1
17 years	1,108	12.9
18 years	802	9.3
19 years	327	3.8
20 years	117	1.4
21 years	37	0.4
<b>School year<sup>a</sup></b>		
6th grade (11 years old)	56	0.7
7th grade (12 years old)	1937	22.5
8th grade (13 years old)	1785	20.7
9th grade (14 years old)	2112	24.5
10th grade (15 years old)	1202	13.9
11th grade (16 years old)	851	9.9
12th grade (17 years old)	669	7.8

*Note:* <sup>a</sup> The ages most commonly associated with each Portuguese school year are presented in parentheses.

**Table 1 (Continuation)***Sample sociodemographic characteristics (N = 8,622)*

Sociodemographic characteristics	Sample	
	<i>n</i>	%
<b>Ever failed a school year</b>		
Yes	2,858	36.2
No	5,032	63.3

*Note:* \* The ages most commonly associated with each Portuguese school year are presented in parentheses.

## Measures

### *Early Memories of Warmth and Safeness*

The Early Memories of Warmth and Safeness Scale for Adolescents (EMWSS-A; original version by Richter et al., 2009; Portuguese adolescent version by Cunha et al., 2014) was used to measure these positive early emotional memories. It is a self-report measure comprising 21 items developed to measure the recall of feeling warm, safe, and cared for during childhood (e.g., “I felt safe and secure”). Each item is rated on a five-point Likert scale ranging from 0 = *No, never* to 4 = *Yes, most of the time*. Higher scores indicate higher levels of early memories of warmth and safeness. Excellent internal consistency values were found in the original version (Richter et al., 2009),  $\alpha = .97$ , as well as in the Portuguese version (Cunha et al., 2014),  $\alpha = .95$ , and in the present study,  $\alpha = .98$ .

### *Childhood Experiences of Care and Abuse*

The Childhood Experience of Care and Abuse Questionnaire (CECA.Q; original version by Bifulco et al., 2005; Portuguese version by Carvalho et al., 2011) was used to measure parental antipathy and neglect. This measure is based on an interview measure, the Childhood Experiences of Care and Abuse (CECA; Bifulco et al., 1994). It includes screening questions for sexual (e.g., “When you were a child or teenager did you ever have any unwanted sexual experiences?”) and physical abuse (e.g., “When you were a child or teenager were you ever hit repeatedly with an implement [such as a belt or stick] or punched, kicked, or burnt by someone in the household?”), neglect (e.g., “He/she neglected my basic needs [e.g., food and clothes]”) and antipathy (e.g., “He/she was critical towards me”) scales that are scored separately for each parent. In the present study only the parental antipathy and the parental neglect subscales were used. These two subscales have eight items

each and all items are scored on a Likert scale ranging from 1-2 = *Not at all* to 4-5 = *Yes, totally*. In the original version of the scale (Bifulco et al., 2005), all subscales showed very good internal consistencies,  $\alpha = .80$  for parental antipathy and  $.81$  for parental neglect. Similarly, in the Portuguese version (Carvalho et al., 2011) the subscales revealed acceptable to excellent internal consistencies, as ranging from  $.77$  for maternal antipathy to  $.95$  for maternal neglect. In this study, these subscales revealed very good to excellent internal consistencies, as ranging from  $.82$  for maternal antipathy to  $.90$  for maternal neglect.

### *Parental Attachment*

The Inventory of Parent and Peer Attachment (IPPA; original version by Armsden & Greenberg, 1987; Portuguese version by Machado & Oliveira, 2007) is a self-report scale comprising two dimensions that measure participants' perceptions of their positive and negative affective/cognitive dimension of the relationships with their parents and peers, respectively. In this study, given the focus on family experiences, only the parental attachment subscale was used. The parental dimension comprises 28 items grouped into three subscales: parental trust, which refers to the adolescents' feelings and beliefs that parents understand and respect their needs and desires (10 items; e.g., "My parents respect my feelings"); parental communication, which refers to adolescents' perceptions that parents are sensitive and responsive to their emotional states and the extent and quality of involvement and verbal communication with them (10 items; e.g., "My parents sense when I'm upset about something"); and parental alienation, which captures adolescents' feelings of isolation, anger, and detachment experienced in relation to their parents (eight items; e.g., "My parents don't understand what I'm going through these days"). All items are scored on a Likert scale ranging from 1 = *Almost never or never* to 5 = *Almost always to always*. In the original study (Armsden & Greenberg, 1987), the overall scale revealed an excellent internal consistency,  $\alpha = .93$ , and the Portuguese version (Machado & Oliveira, 2007) exhibited very good internal consistency,  $\alpha = .87$ . Similarly, in the present study all subscales showed very good to excellent internal consistencies, as ranging from  $.87$  for parental trust and parental alienation to  $\alpha = .91$  for parental communication.

### *Emotion Regulation*

The Situational Test of Emotional Management - Brief (STEM-B; original version by Allen et al., 2015; Portuguese version by da Motta et al., 2021) was used to measure emotion regulation, the fourth branch of Mayer and Salovey's (1997) model of emotional intelligence. The STEM-B comprises a total of 18 items, each



describing a hypothetical emotional situation (e.g., “Joana and Marina shared an office for years, but Joana got a new job and Marina lost touch with her”), where subjects are required to select the most effective response to manage the situation (e.g., “Contact Joana and invite her for a chat, but also make friends with the person who replaced her at the office”), with one response being scored as 1 and the other options as 0, based on the scoring weights determined by the percentage of experts who selected the most adequate answer in the original study. The STEM-B showed very good internal consistency,  $\alpha = .84$ , in the original study (Allen et al., 2015). In the Portuguese version (da Motta et al., 2021) and in this study, the scale displayed an acceptable internal consistency,  $\alpha = .60$  and  $.62$ , respectively.

### *Procedure and Ethics*

This study is part of a research project aimed to explore individual (e.g., disruptive emotional experiences, emotion regulation) and sociocultural variables influencing substance use by adolescents in Portugal. This study was approved by the Ethics Committee of a regional Portuguese university and the Portuguese Data Protection Authority (nº 13953/2017). A research protocol was devised using a variety of self-report measures, four of which were used for this study. Under the supervision of some members of the research team as well as teachers, the study protocol was administered to nearly all students at the public schools of a Portuguese region using a paper and pencil format. The protocol was administered in the classroom in two different time periods to prevent possible effects of fatigue on participants’ responses.

All international ethical standards regarding research involving human participants (e.g., Declaration of Helsinki) were complied with (e.g., anonymity and confidentiality of data, voluntary participation). Lastly, all participants above the age of 18 and all underage participants’ parents or legal guardians provided a signed informed consent form.

### *Data Analysis*

SPSS Statistics version 27 was used to analyze all data. Means and standard deviations were computed for all study variables and independent samples t-tests were conducted to examine gender differences in all variables. Pearson correlations were conducted to explore the associations between emotion regulation and all family-related variables (i.e., early memories of warmth and safeness, parental antipathy and parental neglect, parental attachment). Lastly, a multiple regression using the enter method was conducted with gender and all family-related variables as the explanatory variables and emotion regulation as the outcome variable

to examine the relative role of each of the former variables in the explanation of emotion regulation. Correlation coefficients lower than .20 were considered weak, those between .20 and .50 were considered moderate, and those greater than .50 were considered strong (Ferguson, 2009). As suggested by Cohen's (1988), effect sizes were considered small if  $0.20 \geq d < 0.50$  or  $f^2 \geq 0.02$ , medium if  $0.50 \geq d < 0.80$  or  $f^2 \geq 0.15$ , and large if  $d \geq 0.80$   $f^2 \geq 0.35$ . The level of significance used for all analyses was  $p < .05$ .

## RESULTS

Based on the midpoint of the CECA.Q subscales (i.e., score of three), the sample showed low to moderate levels of these adverse experiences. There were gender differences in all variables except for parental alienation. More specifically, boys reported higher early memories of warmth and safeness, maternal antipathy, maternal neglect, and paternal neglect. Conversely, girls showed higher emotion regulation, parental trust, and parental communication. The means and standard deviations for all study variables by gender, including the mean comparison tests, are presented in Table 2.

**Table 2**

*Early memories of warmth and safeness, parental antipathy, parental neglect, parental communication, parental trust, parental alienation, and emotion regulation by gender*

Variables	Total sample <i>M (SD)</i>	Gender		<i>t</i>	Cohen's <i>d</i>
		Male <i>M (SD)</i>	Female <i>M (SD)</i>		
EMWS	2.6 (1)	2.6 (1)	2.6 (1)	2.31*	0.980
Maternal antipathy	2.2 (0.6)	2.3 (0.6)	2.2 (0.6)	10.50***	0.584
Maternal neglect	2.3 (0.7)	2.4 (0.8)	2.2 (0.7)	13.40***	0.725
Paternal antipathy	2.3 (0.6)	2.4 (0.6)	2.2 (0.6)	8.79***	0.623
Paternal neglect	2.5 (0.8)	2.6 (0.8)	2.4 (0.8)	8.48***	0.787
Parental communication	3.6 (1)	3.6 (1)	3.7 (1)	2.31***	1.011
Parental trust	3.6 (0.7)	3.6 (0.7)	3.7 (0.8)	4.46***	0.733
Parental alienation	3.4 (1)	3.4 (1)	3.4 (1)	-0.56	0.966
Emotion regulation	8.7 (3)	8.1 (3.1)	9.3 (2.8)	-17.76***	2.953

Note: EMWS = Early memories of warmth and safeness. \* $p < .05$ ; \*\*\* $p < .001$

Pearson correlation analyses were conducted between all study variables (i.e., emotion regulation, early memories of warmth and safeness, parental antipathy

and parental neglect, parental attachment). Emotion regulation was positively, yet weakly, associated with early memories of warmth and safeness, parental communication, and parental trust. On the other hand, emotion regulation was negatively, yet weakly as well, correlated with both dimensions of parental antipathy, both dimensions of parental neglect, and parental alienation. All correlation coefficients are presented in Table 3.

**Table 3**

*Correlations between emotion regulation and parental variables*

	Emotion regulation
Early memories of warmth and safeness	.19***
Maternal antipathy	-.25***
Maternal neglect	-.29***
Paternal antipathy	-.21***
Paternal neglect	-.23***
Parental communication	.20***
Parental trust	.25***
Parental alienation	-.11***

\*\*\* $p < .001$

### *Multiple Regression*

A multiple regression using the enter method containing gender and all family-related variables (i.e., early memories of warmth and safeness, parental antipathy and parental neglect, parental attachment) as explanatory variables and emotion regulation as the outcome variable was conducted to explore the relative contributions of the family-related variables in the explanation of emotion regulation, as well as the portion of variance in emotion regulation explained by these variables. The regression model was significant,  $F(9, 4770) = 88.1$ ,  $p < .001$ , and explained 14.1% of the variance in emotion regulation (based on the adj.  $R^2$  value), with Cohen's  $f^2$  value (0.15) suggesting a medium effect size. Parental trust ( $\beta = 0.17$ ) was the strongest explanatory variable of emotion regulation, followed by maternal neglect ( $\beta = -0.15$ ) and the female gender ( $\beta = 0.14$ ). Paternal antipathy ( $\beta = 0.01$ ) and paternal neglect ( $\beta = -0.04$ ) did not emerge as significant explanatory variables of emotion regulation. This multiple regression, including all unstandardized and standardized coefficients, is summarized in Table 4.

**Table 4**

*Multiple regression of emotion regulation on gender, early memories of warmth and safeness, parental antipathy, parental neglect, parental communication, parental trust, parental alienation*

	<i>B</i>	<i>B</i> error	$\beta$	<i>t</i>	<i>p</i>	<i>F</i>	<i>p</i>	Adj. <i>R</i> <sup>2</sup>
Overall model						88.11	< .001	.141
Gender	0.85	0.08	0.14	10.49	< .001			
Early memories of warmth and safeness	0.26	0.05	0.08	5.30	< .001			
Maternal antipathy	-0.58	0.11	-0.11	-5.31	.005			
Maternal neglect	-0.62	0.09	-0.15	-6.97	.010			
Paternal antipathy	0.02	0.10	0.01	0.24	.810			
Paternal neglect	-0.14	0.08	-0.04	-1.74	.082			
Parental communication	0.19	0.08	0.06	2.20	.028			
Parental trust	0.68	0.14	0.17	4.86	< .001			
Parental alienation	-0.22	0.07	-0.07	-3.37	< .001			

*Note:* The dependent variable was emotion regulation.

## DISCUSSION

Previous studies have found that emotion regulation is associated with a variety of variables related to early experiences/the family context, such as recall of parental warmth, parental attachment, and childhood abuse and/or neglect. However, there is a paucity of research examining the relative contribution of early memories of warmth and safeness, parental attachment, parental antipathy and neglect in the explanation of emotion regulation in youth. Therefore, drawing on the emotional context of the family component of the tripartite model of the impact of the family context on children's emotion regulation (Morris et al., 2007), and using a representative sample of Portuguese youth, we found that parental trust, maternal neglect, and the female gender were the strongest explanatory variables of emotion regulation.

Girls showed higher emotion regulation, not in line with previous research that found no gender differences (Duarte et al., 2015), which may be linked with the measures used to assess emotion regulation. Duarte et al. (2015) used the Cognitive Emotion Regulation Questionnaire (CERQ), which assesses cognitive strategies for emotion regulation, whereas the measure used in the present study (i.e., STEM-B) does not allow for an assessment of the strategies used to respond to the different hypothetical emotional situations; nevertheless, in order to respond to the emotional situations that composed the STEM-B it is expect that participants use some source of strategies and it is known that girls tend to use more emotional

regulation strategies than boys (e.g., Sanchis-Sanchis et al., 2020). Moreover, the gender differences found in emotion regulation may also be related to traditional gender roles according to which the female gender is socially perceived as having a higher tendency to express and being more capable of regulating their affective states, and the male gender's emotional inhibition is culturally reinforced (e.g., Shields et al., 2006).

Additionally, girls exhibited higher parental attachment (i.e., parental trust, and parental communication), in line with previous studies (e.g., Oldfield et al., 2016) and with previous findings that parents/caregivers are more available to listen, validate, and allow the emotional expression of their daughters compared to their sons, which may contribute to the development of a relationship characterized by greater closeness, trust, and communication. In line with this, boys showed higher exposure to parental antipathy and neglect, which may be explained by the idea that the relationships between parents/caregivers and their sons tend to be characterized by lower closeness and affection compared to the relationships between parents/caregivers and their daughters. On the other hand, an apparently counterintuitive finding was that boys also showed higher early positive emotional memories, not in line with previous research (e.g., Santos et al., 2023; Tahirović & Jusić, 2016; Vagos et al., 2017). In this case, it may be hypothesized that this finding is related to the greater tendency that girls have to perceive others as less warming and caring (Santos et al., 2021). Additionally, given that boys also displayed higher exposure to parental antipathy and neglect, it can be hypothesized that these memories likely derive from early positive experiences in other contexts (e.g., school, peers).

As hypothesized, emotion regulation was associated with all variables related to early experiences and the family environment. More specifically, it was positively associated with early memories of warmth and safeness, parental communication, and parental trust; on the other hand, this skill was negatively correlated with both dimensions of parental antipathy, both dimensions of parental neglect, and parental alienation. This is consistent with previous research examining the associations between emotion regulation and these variables related to the family environment/early experiences separately (e.g., Barreto Carvalho et al., 2023b; Gong & Paulson, 2017; Murphy et al., 2015; Gruhn & Compas, 2020; Peh et al., 2017), and is in line with the fact that early experiences with parents/caregivers have a strong impact on children's socioemotional development (e.g., Gilbert & Perris, 2000), and particularly with the tripartite model of the impact of the family context on children's emotion regulation, according to which it strongly influences the development of emotion regulation skills (Morris et al., 2007). Indeed, family environments that provide youth with adaptive responses to emotional situations

are more likely to have a positive impact on their socioemotional developmental outcomes (e.g., emotion regulation) (Barry & Kochanska, 2010).

Early memories of warmth and safeness, parental communication, and parental trust emerged as significant positive explanatory variables of emotion regulation, with parental alienation being negatively associated with this skill. Indeed, the recall of parental warmth is associated with an adaptive emotion regulation process (i.e., the ability to self-reassure and self-soothe oneself in the face of stress) (Irons et al., 2006), positive parenting often leads to feelings of safeness associated with the ability to regulate one's emotional states (e.g., Gilbert et al., 2006), and parental support has been found to act as a key mechanism linking perceptions of a supportive family environment in adolescence with adaptive emotion regulation (e.g., Houlberg et al., 2012). Moreover, maternal antipathy and neglect were negatively associated with emotion regulation, which is supported by previous findings that lower emotion regulation in adolescence is associated with maternal rejection (e.g., Saritaş et al., 2013) and harsh mothering (e.g., Wang & Wang, 2018). On the other hand, the paternal components of these experiences were not linked with emotion regulation, which may be explained by the traditional gender roles that assign the mother as the children's primary caregiver, in turn increasing the likelihood that their relationship will face more emotionally challenging situations, where there will be opportunities to be exposed to (mal)adaptive ways to regulate emotional states. Therefore, the situations of childhood emotional abuse and/or neglect perpetrated by the maternal figure may lead to more severe socioemotional negative outcomes, including difficulties in emotion regulation. Regardless, all primary caregivers (e.g., mother, father) should have an active role in being a source of care, support, and warmth for their children, leading to a secure attachment and a healthy development of their emotion regulation strategies. Lastly, the female gender was also uniquely associated with higher emotion regulation, in line with the gender differences found in this study and, as said earlier, with traditional gender roles that attribute girls and women a higher tendency to express and regulate their emotional states (e.g., Shields et al., 2006).

Taken together, these findings contribute to the tripartite model of the impact of the family context on children's emotion regulation (Morris et al., 2007), particularly extending the relevance of the emotional context of the family component to emotion regulation in youth. In other words, these results highlight the role that the family context/early experiences play in youth's socioemotional development. In terms of practical implications, the results emphasize the need to create positive and secure family environments by promoting socioemotional skills (e.g., emotion regulation, assertiveness) in programs/interventions targeting positive parenting skills, which will likely increase the caregivers' ability to respond to their children's emotional

situations in an adaptive manner, in turn leading to higher emotion regulation in youth. Moreover, the school environment and the other contexts that children/youth are involved in (e.g., extracurricular activities, neighborhood) should have a linking role between them and their family context; specifically, they should pay attention to possible indicators (e.g., safeness, warmth, attachment) of how children/youth feel or think about their family environment. Particularly, these contexts should report possible situations of abuse or neglect perpetrated by caregivers so that the legal system may determine whether the mandatory participation in the previously mentioned programs/interventions is warranted.

## LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDIES

This study has some limitations, such as its cross-sectional design, which does not allow for the inference of causal relationships between the variables related to the family environment/early experiences and the development of emotion regulation; so future studies should use longitudinal designs to examine these causalities. Some other limitations include the use of self-report and retrospective measures, which may have a negative impact on the findings, and the use of a long research protocol with the risk of causing fatigue in participants, even though participation occurred in two different moments. Moreover, the measure used to explore parental antipathy and neglect (i.e., CECA.Q) only captures instances of abuse and neglect perpetrated by the maternal figure and the paternal figure, not contemplating other family structure or environment where children/youth may be raised in (e.g., foster care). Future studies should use more recent measures that examine form of abuse and neglect perpetrated by a wider variety of caregivers. Lastly, another limitation is the assessment of only one component of the tripartite model of the impact of the family context on children's emotion regulation (i.e., emotional climate of the family). Future research should also measure variables related to the two components of this model not measured in this study (i.e., children's exposure to how their caregivers regulate their own emotions, parenting practices involving emotions) (e.g., the exposure of children to their caregiver use of emotion regulation strategies such as reappraisal and suppression, emotion parenting such as discussing emotions and caregivers' responses to their children's emotional expression) to examine the relative contribution of each component of the model in the explanation of youth emotion regulation, as well as other variables that may influence the emotional climate of the family (e.g., exposure to family/parental violence, other forms of abuse).

## CONCLUSION

Drawing on the emotional climate of the family component of the tripartite model of the impact of the family context on children's emotion regulation, we found that early memories of warmth and safeness, parental communication, and parental trust were positively and uniquely associated with youth emotional regulation, and that maternal antipathy and neglect, as well as parental alienation emerged as the negative explanatory variables of this skill. Lastly, the female gender was also linked with emotion regulation in youth. These findings support this model by extending it to youth and highlight the relevance of promoting emotionally intelligent and secure family contexts to increase the likelihood of youths' developing adaptive emotion regulation strategies.

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