

Emotional regulation and cultural background: a pilot study comparing two clinical samples of adolescents

Regolazione emotiva e *background* culturale: studio pilota comparativo su due campioni clinici di adolescenti

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Abstract

Background: emotion regulation plays a key role in adolescent psychological development. Beliefs about emotions and cultural background may significantly influence the regulation process, yet their role in clinical populations remains under-explored.

This pilot study aimed to investigate emotion regulation processes in a clinical sample of adolescents, comparing Italian-born participants with peers from diverse cultural backgrounds. Secondary objectives included exploring the relationships between emotion regulation difficulties, beliefs about emotions, and emotional-behavioral symptoms.

Materials and Methods: nineteen adolescents (mean age =15.26; 79% female) with International Classification of Diseases, 10th Revision (ICD-10) affective syndromes were recruited from the Psychology Unit of the University Hospital of Alessandria. Participants were categorized into two groups based on nationality. Participants completed three standardized self-report measures: the Youth Self Report (YSR), the Difficulties in Emotion Regulation Scale (DERS-18), and the Emotion Beliefs Questionnaire (EBQ). All participants and their parents provided written informed consent prior to enrollment.

Results: no statistically significant differences in emotion regulation or emotional-behavioral symptoms were found between the Italian and non-Italian groups. However, a borderline-significant positive correlation was observed between externalizing problems and emotion regulation difficulties, particularly in the non-Italian group. Further exploratory correlations suggested potential links between depressive symptoms and beliefs about the uselessness of negative emotions.

Conclusions: the study highlights the need to consider cultural, relational, and psychological variables in emotion regulation research. Future studies with larger samples are needed to better understand the complex interplay between emotional functioning and cultural context in adolescent mental health.

Background: la regolazione emotiva svolge un ruolo fondamentale nello sviluppo psicologico dell'adolescente ed è stata identificata come un fattore trans-diagnostico in diverse forme di psicopatologia. Le credenze sulle emozioni e il *background* culturale possono influenzare significativamente i processi di regolazione, ma il loro ruolo nelle popolazioni cliniche è ancora poco esplorato.

L'obiettivo primario del presente studio pilota è stato quello di indagare i processi di regolazione emotiva in un campione clinico di adolescenti, confrontando partecipanti nati in Italia con coetanei provenienti da contesti culturali diversi. Un obiettivo secondario è stato quello di esplorare le relazioni tra difficoltà nella regolazione emotiva, credenze sulle emozioni e sintomi emotivo-comportamentali.

Materiali e Metodi: sono stati reclutati diciannove adolescenti (età media =15,26; 79% femmine) con diagnosi di sindrome affettiva secondo la International Classification of Diseases, decima revisione (ICD-10), presso la SSA di Psicologia dell'AOU di Alessandria. I partecipanti hanno compilato tre questionari self-report standardizzati: Youth Self Report (YSR), Difficulties in Emotion Regulation Scale (DERS-18) e Emotion Beliefs Questionnaire (EBQ). Tutti i partecipanti e i loro tutori legali hanno firmato un consenso informato scritto prima dell'inizio dello studio.

Risultati: non sono emerse differenze statisticamente significative nei punteggi di regolazione emotiva o nei sintomi emotivo-comportamentali tra il gruppo italiano e quello non italiano. Tuttavia, è stata riscontrata una correlazione positiva, al limite della significatività, tra le problematiche esternalizzanti e le difficoltà di regolazione emotiva, in particolare nel gruppo non italiano. Ulteriori correlazioni esplorative hanno suggerito possibili legami tra sintomi depressivi e credenze relative all'inutilità delle emozioni negative.

Conclusioni: lo studio sottolinea l'importanza di considerare variabili culturali, relazionali e psicologiche nella ricerca sulla regolazione emotiva. Studi futuri con campioni più ampi sono necessari per comprendere meglio la complessa interazione tra funzionamento emotivo e contesto culturale nella salute mentale adolescenziale.

Key words: emotional regulation, cultural background, adolescence.

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Introduction

Interest in emotion regulation is longstanding. Since the 1st century A.D., emotions have occupied a central place in philosophical thought, highlighting their essential role in understanding and describing human behavior and the psyche. In contemporary psychology, emotions are understood as complex psychological states comprising subjective experiences, behavioral expressions (verbal, non-verbal, and bodily), and physiological responses.¹ In line with this, the term emotion regulation refers to the processes by which individuals influence the emotions they have, when they have them, and how they experience and express them.² According to this view, emotional responses are elicited by an individual's interpretation of an event or context, while emotion regulation takes place during the evaluation and modulation of that emotional response. However, emotional responses are not always appropriate to the context and may be maladaptive. If the mechanisms underlying these processes are impaired or dysfunctional, we speak of emotional dysregulation: a transdiagnostic phenomenon that reflects maladaptive responses to psychological or environmental stimuli.³ It has recently been hypothesized that poor emotion regulation represents a transdiagnostic factor associated with multiple forms of psychopathology.⁴ In this context, adolescence represents a particularly sensitive period for studying emotion regulation. Moreover, adolescence, a critical developmental period, has been identified as a key stage for examining the interplay between emotion regulation abilities and mental health outcomes.⁴ During this phase, emotional experiences become more intense and complex, while the maturation of brain areas responsible for cognitive control and regulation (e.g., prefrontal cortex) lags behind the development of affective systems (e.g., amygdala). This mismatch contributes to increased vulnerability to emotional dysregulation and engagement in risk-taking behaviors.^{4,5}

In addition to individual regulatory capacities, beliefs about emotions, namely, the meanings individuals attribute to them, has also proven to be crucial. These beliefs likely influence people's efforts and performance at all stages of the emotion regulation process.⁶ Additionally, the literature highlights the influence of cultural background on these processes. Individuals, guided by their cultural context, develop implicit beliefs about both their external environment and internal psychological experiences.⁷ A growing body of research shows that emotions are not merely internal or personal experiences, but also culturally constructed phenomena. For instance, numerous studies have demonstrated a link between culture and beliefs about the nature of emotions, showing how emotions may be perceived as either beneficial or harmful, thus leading to different approaches to emotional control and management.⁸ These culturally shaped beliefs influence how adolescents learn to interpret and manage their emotional states.

Despite increasing interest in cross-cultural research on emo-

tion, studies examining emotion regulation in adolescents from different cultural backgrounds - particularly within clinical populations - remain scarce. To address this gap, the current pilot study aims to investigate emotion regulation processes in a clinical sample of adolescents born and raised in Italy compared with a clinical sample of adolescents from diverse cultural backgrounds. The secondary objectives involve exploring beliefs about emotions, emotional-behavioral problems, self-efficacy beliefs, and difficulties in emotional regulation processes. The primary hypothesis is that adolescents from different cultural backgrounds will exhibit significant differences in emotional dysregulation scores. A further hypothesis posits that beliefs about emotions will be significantly correlated with emotional-behavioral difficulties, potentially accounting for differences in emotion regulation between the two groups.

Materials and Methods

This study adopted an observational, retrospective-prospective design and is structured as a single-center, non-commercial pilot study. This study is the result of a collaborative effort between the Department of Clinical and Community Psychology at DISFOR, University of Genoa, and the Psychology Unit at the University Hospital "SS. Antonio e Biagio e Cesare Arrigo" of Alessandria.

Participants

This study involved patients who had accessed the Psychology Unit of the University Hospital "SS. Antonio e Biagio, e Cesare Arrigo" of Alessandria, at least once between January 2022 and September 2023. The sample was culturally heterogeneous, and participants' nationalities were not selected *a priori* based on specific criteria but were determined solely by the cases recorded during the research period. All participants received a clinical diagnosis of affective syndromes, made by a clinical psychologist, and met the diagnostic criteria according to the International Classification of Diseases, 10th Revision (ICD-10) classification. During the study period, 263 cases were recorded, distributed as follows: 25% had affective syndromes (anxiety-depressive disorders), 20% presented organic conditions, 15% had neuropsychological problems, 15% had behavioral disorders, 10% had moderate-to-severe psychopathological conditions, 5% had rare diseases, and 5% had personality-related issues. Of the total cases, 30% were patients of non-Italian origin, and 28% fell within the target age range. Participants were excluded primarily due to age (72%) or diagnosis (20%), with 15% excluded for organic conditions (e.g., diabetes, endocrinological diseases, chronic intestinal diseases) and 5% for ineligible conditions or intellectual disabilities. Ultimately, the study was presented to 20 eligible patients, 19 of whom provided informed consent. The final sample consisted of 19 participants (79% female), with a mean age of 15.26 years (range: 11-17 years). Participants were categorized into two groups based on nationality: the control group included eight

Italian-born adolescents (42%), while the experimental group comprised 11 adolescents from diverse backgrounds (6 from Albania, 3 from Ecuador, 2 from Morocco), representing 58% of the sample. Inclusion Criteria: sufficient proficiency in the Italian language, age between 11 and 17 years, at least one outpatient visit to the Psychology Unit between early 2022 and June 2023, signed informed consent and data processing authorization from parents/legal guardians. Exclusion Criteria: diagnosed intellectual disabilities, psychological and/or physical conditions preventing participation in the study. Participants were recruited either in person during ongoing psychological care or via telephone if they had completed treatment. After presenting the study objectives and procedures, an informational session on privacy and data handling was conducted, followed by obtaining consent from both underage participants and their parents or legal guardians.

Materials

The following three standardized self-report questionnaires were administered to the participants:

Youth Self Report

This empirically based assessment system (ASEBA) was developed by Achenbach *et al.*⁹ and the Italian version was translated and adapted by Frigerio *et al.* (2001) and has been widely used in Italian samples. It demonstrates strong psychometric properties, including high internal validity ($\alpha=0.83$). The tool consists of 112 self-descriptive items rated on a Likert scale from 0 to 2 points (0= “not true”; 1= “somewhat or sometimes true”; 2= “very true or often true”). It categorizes emotional-behavioral problems into eight syndrome scales: “anxiety/depression,” “withdrawal/depression,” “somatic complaints,” “social problems,” “thought problems,” “attention problems,” “rule-breaking behavior,” and “aggressive behavior”. These scales are grouped into two broad dimensions: “internalizing” and “externalizing,” along with an overall “total” score.

Difficulties in Emotion Regulation Scale

Developed by Gratz and Roemer¹⁰ this tool has demonstrated strong psychometric properties, including good internal validity ($\alpha=0.93$). The version used in this study is the 18-item version (DERS-18), a shorter form validated by Victor and Klonsky¹¹ and translated by Sighinolfi *et al.*¹² It consists of 18 items measuring difficulties in emotion regulation, rated on a Likert scale from 1 to 5 (1= “never”; 2= “sometimes”; 3= “about half the time”; 4= “most of the time”; 5= “always”). It assesses four key dimensions: awareness and understanding of emotions, which reflects the ability to attribute communicative and motivational functions to emotions, allowing individuals to derive meaning from events or situations; acceptance of emotions, which enables individuals to recognize the dysfunctionality of emotional suppression and activate more functional regulatory strategies; impulse control and emotional self-regulation, reflecting one’s ability to maintain control in the presence of negative emotions; Use of regulatory strategies aimed at maintaining emotional well-being.¹³ In this study, the DERS-18 was used to assess potential difficulties in emotional regulation.

Emotion Beliefs Questionnaire

Developed by Becerra *et al.*,¹⁴ this 16-item measure evaluates beliefs about the controllability and usefulness of emotions and demonstrates good internal consistency ($\alpha=0.88$). Items are rated

on a 7-point Likert scale (1= “strongly disagree” to 7= “strongly agree”), with higher scores indicating stronger beliefs that emotions are uncontrollable and unhelpful. The questionnaire includes four subscales: negative controllability, positive controllability, negative uselessness, and positive uselessness. In this study, the EBQ was used to assess participants’ implicit beliefs about their emotional experiences.¹⁵

Additionally, parents were asked to complete a brief questionnaire assessing demographic variables such as age, gender, nationality, education level, and socioeconomic status, as well as the parent-reported version of the assessment.

Methodology and analysis

Data collection was carried out using two modalities: for 11 participants, measures were administered in person during a clinical interview; for the remaining 8 participants, data were collected online via the EuSurvey platform. The study was conducted in accordance with the ethical principles outlined in the Declaration of Helsinki. Ethical approval was granted by the Ethics Committee of the University of Genoa and the Azienda Ospedaliera Universitaria “SS. Antonio e Biagio e Cesare Arrigo” of Alessandria and (approval no. ASO.Psginf.23.01 del CE 25/05/2023). Written informed consent was obtained from all participants prior to their inclusion in the study.

All statistical analyses were conducted using IBM Statistical Package for Social Sciences (SPSS) for Windows, version 25 (IBM Corp.; Armonk, USA). Data analysis was conducted on the entire sample as well as separately for the two groups (control and experimental). Descriptive statistics included frequencies and percentages for categorical variables, and means with standard deviations for pseudo-continuous variables. Group differences in categorical variables were examined using the Pearson Chi-square test, while independent samples t-tests were used for pseudo-continuous variables.

To investigate differences between groups across multiple dependent variables simultaneously, a Multivariate Analysis of Variance (MANOVA) was performed, evaluating variations in group means and standard deviations. Additionally, to explore the strength and direction of potential associations among the assessed dimensions within each group, Pearson’s correlation coefficient (r) was computed. The threshold for statistical significance was set at $p<0.05$.

Results

Sample characteristics

Statistical analyses using the Chi-Square Test confirmed no significant differences between the control and experimental groups in terms of gender (Pearson $\chi^2=0.608$, $p=0.603$), education level (Pearson $\chi^2=3.822$, $p=0.431$), or economic status (Pearson $\chi^2=0.369$, $p=0.832$). The mean age of the control group was 15.38 years (Standard Deviation, $SD=1.408$), while the experimental group had a mean age of 15.18 years ($SD=1.940$). A t-test for independent samples revealed no significant age difference between the groups ($F=1.978$, $p=0.804$).

Hypothesis testing

To test the primary hypothesis, a MANOVA was conducted, including the following dependent variables: total score of the

DERS scale, the Depression and Externalizing subscales of the YSR, as well as the Negative Controllability and Negative Usefulness subscales of the EBQ. The overall MANOVA result was non-significant (Pillai's Trace =0.952, p=0.454), indicating no significant group differences across the included variables.

No statistically significant mean differences were observed between the control group (Group 1) and the experimental group (Group 2). Consequently, the primary hypothesis was not supported, as the two groups did not exhibit significant differences in the analyzed variables (Table 1).

To test the second hypothesis, correlation analyses were conducted on both the total sample and each group separately. As shown in Table 2, no statistically significant correlations emerged in the total sample, with the exception of a moderate positive correlation between the Externalizing subscale of the Youth Self-Report (YSR EXT) and total DERS scores (r=0.40), which approached significance (p=0.051). A weak, non-significant positive correlation was also found between the Depression subscale of the YSR and total DERS scores (p=0.458). Additionally, a weak

positive correlation (r=0.28) was observed between the Negative Usefulness and Negative Controllability subscales of the Emotion Beliefs Questionnaire (EBQ), although this result did not reach statistical significance (p=0.243).

The Negative Controllability subscale of the EBQ showed a weak negative correlation with total DERS scores (r=-0.13; p=0.594), while a weak negative correlation was also found between the YSR Externalizing subscale and the EBQ Negative Usefulness subscale (r=-0.24; p=0.316), neither of which were statistically significant.

Overall, these results do not support the second hypothesis, as no significant associations were found among the examined variables.

To further explore potential relationships, correlation analyses were conducted separately for the two samples. In the experimental group (Table 3), most correlations did not reach statistical significance. However, a strong positive correlation was found between the YSR Externalizing subscale and total DERS scores (r=0.6), with a marginally acceptable significance level (p=0.052).

Table 1. MANOVA test, means, and Standard Deviations (SD) for scores in the variables of interest.

	Group 1 Means (SD)	Group 2 Means (SD)	F	p
DERS TOTAL	53.25 (12,81)	70.18 (83,3)	0.32	0.579
YSR DEPR SCALE	6.00 (2,82)	7.36 (4,05)	0.664	0.426
YSR EXT	16.12 (6,7)	40.63 (87,78)	0.611	0.445
EBQ CONTR NEG	11.62 (5,62)	30.89 (57,9)	0.86	0.367
EBQ NEG USE	13.5 (4,5)	12.63 (4,9)	0.154	0.700

DERS TOTAL, Difficulties in Emotion Regulation Scale, total score; EBQ CONTR NEG, Emotion Beliefs Questionnaire, negative controllability scale; EBQ NEG USE, Emotion Beliefs Questionnaire, negative uselessness scale; YSR DEPR, Youth Self Report, depressive scale; YSR EXT, Youth Self Report, externalizing dimension scale

Table 2. Correlations between analyzed variables in the total sample.

	YSR EXT r (p)	YSR DEPR r (p)	EBQ CONT NEG r (p)	EBQ NEG USE r (p)	DERS TOTAL r (p)
YSR EXT	-	-0.098 (0.689)	-0.01 (0.963)	-0.24 (0.316)	0.4 (0.051)
YSR DEPR	-	-	-0.016 (0.950)	0.07 (0.776)	0.18 (0.458)
EBQ CONTR NEG	-	-	-	0.28 (0.243)	-0.13 (0.594)
EBQ NEG USE	-	-	-	-	0.08 (0.723)
DERS TOTAL	-	-	-	-	-

DERS TOTAL, Difficulties in Emotion Regulation Scale, Total Score; EBQ CONTR NEG, Emotion Beliefs Questionnaire, Negative Controllability Scale; EBQ NEG USE, Emotion Beliefs Questionnaire, Negative Uselessness Scale; YSR DEPR, Youth Self Report, Depressive Scale; YSR EXT, Youth Self Report, externalizing dimension scale.

Table 3. Correlations between analyzed variables in the experimental group.

	YSR EXT r (p)	YSR DEPR r (p)	EBQ CONT NEG r (p)	EBQ NEG USE r (p)	DERS TOTAL r (p)
YSR EXT	-	-0.38 (0.244)	-0.02 (0.936)	-0.28 (0.390)	0.6 (0.052)
YSR DEPR	-	-	-0.007 (0.984)	0.53 (0.094)	0.22 (0.507)
EBQ CONTR NEG	-	-	-	0.13 (0.697)	0.11 (0.748)
EBQ NEG USE	-	-	-	-	0.16 (0.630)
DERS TOTAL	-	-	-	-	-

DERS TOTAL, Difficulties in Emotion Regulation Scale, total score; EBQ CONTR NEG, Emotion Beliefs Questionnaire, negative controllability scale; EBQ NEG USE, Emotion Beliefs Questionnaire, negative uselessness scale; YSR DEPR, Youth Self Report, depressive scale; YSR EXT, Youth Self Report, externalizing dimension scale.

Additionally, a strong positive correlation was observed between the YSR Depressive subscale and the EBQ Negative Uselessness subscale ($r=0.53$), though the significance level was slightly outside the acceptable threshold ($p=0.094$). Further analyses revealed a moderate negative correlation between the YSR Externalizing and Depressive subscales ($r=-0.38$), but this result did not reach significance ($p=0.244$). Similarly, a weak positive but non-significant correlation was found between the YSR Depressive subscale and total DERS scores ($r=0.22$; $p=0.507$). Notably, contrary to the findings in the total sample, the experimental group exhibited a weak positive correlation ($r=0.11$) between the EBQ Negative Controllability subscale and total DERS scores, but with an unacceptable significance level ($p=0.748$). Consistent with the total sample findings, a weak positive correlation ($r=0.13$) was observed between the EBQ Negative Uselessness and Negative Controllability subscales, though this result was also not statistically significant ($p=0.697$). Finally, a weak negative but non-significant correlation was found between the YSR Externalizing subscale and the EBQ Negative Uselessness subscale ($r=-0.28$; $p=0.390$), aligning with the results observed in the total sample. These findings indicate that, although some trends emerged, the lack of statistically significant results suggests that the hypothesized relationships were not strongly supported within the experimental group.

Regarding the analyses conducted on the control group, no globally significant results emerged (Table 4). The only notable finding is a strong negative correlation between the scores on the EBQ negative controllability scale and the total DERS scores ($r=-0.62$; $p=0.096$). Additionally, a negligible negative correlation ($r=-0.01$) was observed between the YSR Externalizing subscale and total DERS scores, which was not statistically significant ($p=0.978$). This contrasts with the findings from the experimental group and the analyses conducted on the total sample. Furthermore, a moderate negative correlation was observed between the scores on the YSR externalizing scale and the EBQ negative uselessness scale ($r=-0.35$; $p=0.396$), consistent with previous analyses. Similarly, in line with earlier findings, a weak positive but non-significant correlation was noted between total DERS scores and the YSR Depressive subscale ($r=0.22$; $p=0.586$). Finally, a moderate positive correlation was found between the EBQ Negative Controllability and Negative Uselessness scales ($r=0.41$; $p=0.31$), though this relationship did not reach statistical significance. Overall, while some trends emerged, no statistically significant results were identified in the control group, further reinforcing the absence of robust associations between the analyzed variables.

Discussion

The first research hypothesis regarding the existence of differences in emotional regulation processes - and consequently, differences in emotional dysregulation scores between the two samples - was not confirmed. The lack of significant results may be linked to the absence of differences in emotional regulation processes between the group of Italian subjects and the group of non-Italian subjects. However, the small sample size could have limited the ability to detect potential differences, if they existed. Additionally, within the foreign sample, only one participant was born in their country of origin, and 20% had only one foreign parent, indicating that the cultural backgrounds of participants in the experimental group might be more aligned with those of the Italian group than initially assumed. Another key factor is schooling, which plays a central role in socialization. An educational trajectory that begins and develops within a specific cultural context facilitates adaptation to the values, beliefs, and norms of that environment. Furthermore, it is important to acknowledge that cultures are not static or homogeneous; rather, they encompass significant internal variability, making broad cultural comparisons inherently complex.

Regarding the second research hypothesis, some notable findings emerged. A borderline-significant positive correlation was observed between externalizing behavioral disorders and difficulties in emotional regulation. The correlation was positive, strong, and significant in both the total sample and the foreign sample, but negative, negligible, and non-significant in the Italian sample. These results align with previous research, which has consistently linked externalizing disorders with emotional dysregulation.¹⁶ Maladaptive emotion management and impulsive behaviors may stem from misinterpretation of social cues, poor behavioral control strategies, and an inability to inhibit responses.¹⁷ Additionally, some studies indicate that emotion regulation difficulties are more strongly associated with externalizing tendencies - particularly in individuals with high negative emotionality.¹⁸

To further clarify these patterns of emotional functioning, emerging from the correlational findings, it may be useful to consider clinically plausible examples. Adolescents presenting with externalizing behaviors may experience intense negative emotions that are poorly regulated and rapidly expressed through impulsive or oppositional behaviors.¹⁸ For example, an adolescent who perceives anger or frustration as overwhelming and difficult to modulate may react through verbal aggression, rule-breaking behaviors, or acting-out responses. In such cases, behavioral dysregulation may function as an immediate, albeit maladaptive, strategy to reduce emotional

Table 4. Correlations between variables analyzed in the control group.

	YSR EXT r (p)	YSR DEPR r (p)	EBQ CONTR NEG r (p)	EBQ NEG USE r (p)	DERS TOTAL r (p)
YSR EXT	-	0.4 (0.333)	0.08 (0.844)	-0.35 (0.396)	-0.01 (0.978)
YSR DEPR	-	-	-0.15 (0.711)	-0.43 (0.28)	0.22 (0.586)
EBQ CONTR NEG	-	-	-	0.41 (0.310)	-0.62 (0.096)
EBQ NEG USE	-	-	-	-	-0.08 (0.853)
DERS TOTAL	-	-	-	-	-

DERS TOTAL, Difficulties Emotion Regulation Scale, Total score; EBQ CONTR NEG, Emotion Beliefs Questionnaire, Negative Controllability scale; EBQ NEG USE, Emotion Beliefs Questionnaire, Negative Usefulness scale; YSR DEPR, Youth Self Report, Depressive scale; YSR EXT, Youth Self Report, Externalizing dimension scale.

arousal when cognitive regulatory resources are insufficient or underdeveloped.⁴

Conversely, adolescents with more internalizing profiles may be more likely to suppress or disengage from negative emotional experiences, particularly when such emotions are perceived as useless or meaningless.² For instance, an adolescent who believes that sadness or fear has no functional value may avoid emotional expression and rely on withdrawal or rumination, increasing vulnerability to depressive symptomatology. This pattern may contribute to emotional withdrawal, rumination, and depressive symptomatology, especially in contexts where negative emotions are not adequately recognized or validated.

These examples are not intended to be exhaustive, but rather to illustrate how emotion regulation difficulties may manifest differently depending on symptom profiles and emotional beliefs.

Within this framework, cultural background may further modulate these emotional processes by shaping beliefs about the acceptability, controllability, and function of emotions. For example, in cultural or familial contexts where emotional expression is discouraged or associated with weakness, adolescents may learn to minimize or suppress negative emotions, potentially increasing internalizing difficulties.^{7,14}

Conversely, contexts that allow emotional expression but provide limited guidance on regulation strategies may expose adolescents to emotional overload, increasing the risk of externalizing behaviors.¹⁷ A substantial body of literature has also highlighted a greater tendency toward the somatization of psychological distress in Western societies. Without resorting to oversimplified generalizations, research has documented cross-cultural differences in the somatic expression of distress, suggesting that these variations may reflect culturally shaped modes of symptom interpretation and response, influenced by value systems, social norms, stigma, beliefs, and shared stereotypes.¹⁹

From a clinical perspective, these findings suggest that adolescents with similar diagnostic profiles may nonetheless display distinct patterns of emotional functioning depending on their beliefs about emotions and their sociocultural context. Explicitly assessing emotion-related beliefs may therefore represent a clinically relevant target for intervention, beyond symptom severity alone.

Interestingly, in the Italian sample, a strong negative correlation was found between DERS scores and the EBQ scale assessing the controllability of negative emotions. This suggests that emotional regulation difficulties tend to increase when negative emotions are perceived as uncontrollable. Conversely, perceiving negative emotions as uncontrollable appears to be associated with lower levels of dysregulation. This finding is consistent with studies suggesting that recognizing an emotion as negative may increase the likelihood of engaging in regulation strategies, leading to the use of adaptive and functional coping mechanisms. Additionally, cognitively processing a negative emotion might enhance metacognitive reflection, thereby improving emotion regulation abilities.²⁰ However, these findings also contradict other theoretical perspectives, which argue that perceiving emotions as uncontrollable may hinder the activation of regulatory processes, increasing the risk of emotional dysregulation and disengagement. Some studies suggest that the belief in the uncontrollability of emotions might actually reduce self-judgment regarding one's own emotional experiences, fostering greater acceptance and openness toward emotions traditionally perceived as negative.²¹

Another intriguing result concerns the negative correlations - though not statistically significant - between externalizing behavior

scores (YSR) and the EBQ scale assessing the perceived uselessness of negative emotions. This suggests that externalizing disorders may be linked to the belief that negative emotions serve a purpose. These findings gain additional relevance when compared to another result in the study: higher scores on the perceived uselessness of negative emotions scale correlated positively (albeit with borderline significance) with depressive symptoms (YSR) in the foreign sample, but in the Italian sample, this correlation was negative and non-significant. This pattern suggests a potential differentiation in emotional processing between the two groups: first externalizing disorders appear to be associated with the belief that negative emotions are useful. Secondly, internalizing disorders and depressive symptoms in the non-Italian sample seem to correlate with the belief that negative emotions are useless. This is consistent with research suggesting that depressive symptoms are often linked to difficulties in emotional regulation, particularly concerning negative emotions.²²

Finally, the study found weak and non-significant correlations between emotional regulation difficulties (DERS) and depressive symptoms (YSR) in both the total sample and the individual groups. These results contradict the majority of studies in the literature, which largely support the idea that depressed individuals struggle with emotion regulation strategies and that emotional dysregulation may even precede the onset of depressive symptoms.²³⁻²⁵

The literature suggests that individuals' participation in their own culture appears to be associated with the ability to modify core psychological processes, including those related to the appraisal and regulation of emotions.²⁶ For example, the strategy of emotional acceptance, which may counteract the emergence of depressive and anxious disorders during adolescence, consists of allowing emotions to arise without resistance and with understanding; this process is certainly constrained by the cultural context and social desirability.²⁷

When considering the mechanism of social reappraisal in adolescence, in which peer social relationships become the primary relational context for adolescents - allowing them to regulate their emotional and behavioral responses - it becomes evident that the meanings attributed to significant social contexts are involved in the process of regulating affects and emotions.²⁸

Taken together, these findings highlight the complex interplay between emotion regulation, externalizing and internalizing tendencies, and cultural influences. While some results align with existing theoretical frameworks, others should be interpreted with caution, as the limited size and heterogeneity of the foreign subgroup may have contributed to variability in emotional functioning patterns that could not be fully disentangled in the present study.

Conclusions

This study serves as a pilot investigation, providing an initial foundation for future research aimed at addressing its primary limitations, particularly sample size and representativeness. Future studies should seek to refine these aspects while further exploring the clinical and theoretical implications suggested by these findings. A promising direction for future studies lies in examining whether specific aspects of emotional dysregulation are influenced by cultural context or whether they reflect more universal psychological patterns. Likewise, investigating beliefs about negative emotions across diverse cultural settings may yield valuable insights into how these beliefs shape both psychopathological processes and adaptive emotional functioning. It is essential to acknowledge that even within a

single cultural context, multiple factors and variables may play a crucial role in the correlations between emotional beliefs, self-efficacy, emotional-behavioral issues, and emotional dysregulation. These factors may include personal characteristics (e.g. gender, age, socio-demographic background), psychological variables (e.g. clinical symptomatology, temperament), and relational dynamics (e.g. attachment patterns, interpersonal relationships, and internal working models of attachment). A particularly relevant avenue for further investigation is the role of emotional availability and responsiveness of caregivers in the manifestation of emotional dysregulation. Research suggests that early caregiver-child interactions, shaped by parenting styles and past experiences, play a critical role in shaping emotional beliefs and regulatory capacities.³⁰ This study also underscores the importance of considering both intercultural and intracultural differences in psychological research. While traditional cross-cultural studies often rely on broad categorical comparisons (e.g., Western vs. non-Western), such frameworks risk oversimplifying the intricate relationship between culture and psychological development. From this perspective, cultural influence is not reducible to a fixed set of traits or behaviors but emerges from contextually embedded practices, relational systems, and collective meaning-making processes. Rather than assuming a direct link between cultural identity and psychological functioning, future research should explore how cultural variables interact with individual experiences to shape emotional development, regulatory strategies, and behavioral outcomes. All these elements are culturally embedded, meaning they are, to some extent, constructed, shaped, or given meaning by a particular context. Having recognized the relevance of the cultural variable within psychological dynamics, and consistent with the construct investigated in this work, it is interesting to deepen and analyze the connections and links between emotions and the cultural context. It has emerged that there is indeed a difference in the quality, level, and recognition of emotions between subjects belonging to different ethnicities compared to those from the same cultural contexts.²⁰ Regarding emotion regulation processes, it can be considered that some cultural and environmental aspects may determine what is appropriate to feel and express through values, principles, and social expectations.³¹ This finding demonstrates how cultural aspects influence the meaning attributed to an emotion; this meaning then influences the goals of emotional regulation (an emotion judged positively will be freely expressed, while an emotion evaluated as negative will be regulated through strategies such as suppression).

Ultimately, the intersection of individual experiences and broader cultural frameworks creates unique pathways for emotional regulation, behavioral expression, and psychological resilience. Identifying commonalities, differences, vulnerabilities, and strengths across these diverse trajectories may offer new perspectives on how individuals navigate their emotional worlds within the broader socio-cultural landscape.

The study presented here can be considered a pilot study, aiming to lay the groundwork for future research that may overcome its limitations and identify both clinical and research implications. Despite the many limitations, this research also highlights several promising directions that warrant further investigation. A central reflection for future research stemming from this work is the idea that cultural differences may not be the primary source of variation in the psychological variables under investigation. Instead, it may be the personal, psychological, and relational factors - which are themselves culturally shaped and informed - that influence and produce differences in psychological processes such as emotional regulation. This perspec-

tive suggests a shift in the analytical paradigm: rather than starting from cultural clusters and expecting certain psychological patterns to emerge, research should first identify the variables most strongly correlated with difficulties in emotional regulation, and then explore, connect, and interpret them through a culturally and anthropologically informed lens.

References

- Gross JJ, Feldman Barrett L. Emotion generation and emotion regulation: one or two depends on your point of view. *Emotion Review* 2011;3:8-16.
- Gross JJ. The emerging field of emotion regulation: an integrative review. *Review of General Psychology* 1998;2:271-99.
- Ambrosini M. *Sociologia delle migrazioni*. Il Mulino; Bologna, Italy; 2005.
- McLaughlin KA, Hatzenbuehler ML, Mennin DS, Nolen-Hoeksema S. Emotion dysregulation and adolescent psychopathology: a prospective study. *Behaviour Research and Therapy* 2011;49:544-54.
- Casey BJ, Duhoux S, Cohen MM. Adolescence: what do transmission, transition, and translation have to do with it?. *Neuron* 2010;67:749-60.
- Johnston TE, McEvoy PM, Gross JJ, et al. The Emotion Beliefs Questionnaire: psychometric properties, norms, and links to affective outcomes. *Journal of Affective Disorders* 2024;356: 577-85.
- Ford BQ, Gross JJ. Emotion regulation: why beliefs matter. *Canadian Psychology* 2018;59:1.
- Tull MT, Aldao A. Editorial overview: new directions in the science of emotion regulation. *Current Opinion in Psychology* 2015;3:iv-x.
- Achenbach TM. *Manual for ASEBA school-age forms & profiles*. University of Vermont, Research Center for Children, Youth & Families; Burlington, USA; 2001.
- Gratz KL, Roemer L. Multidimensional assessment of emotion regulation and dysregulation: development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment* 2004;26:41-54.
- Victor SE, Klonsky ED. Validation of a brief version of the difficulties in emotion regulation scale (DERS-18) in five samples. *Journal of Psychopathology and Behavioral Assessment*. 2016;38:582-9.
- Sighinolfi C, Norcini Pala A, Chiri LR, et al. Difficulties in emotion regulation scale (DERS): the Italian translation and adaptation. *Psicoterapia Cognitiva Comportamentale* 2010;16: 141-70.
- Clore G.L, Schwarz N, Conway M. Affective causes and consequences of social information processing. In: Wyer RS Jr, Srull TK (Eds.), *Handbook of social cognition: basic processes; applications*. Second edition. Lawrence Erlbaum Associates Inc.; Mahwah, USA; 1994.
- Becerra R, Preece DA, Gross JJ. Assessing beliefs about emotions: development and validation of the Emotion Beliefs Questionnaire. *PLoS One* 2020;15:e0231395.
- Rimes KA, Chalder T. The Beliefs about Emotions Scale: validity, reliability and sensitivity to change. *Journal of Psychosomatic Research* 2010;68:285-92.

16. Ford JD. Traumatic victimization in childhood and persistent problems with oppositional-defiance. *Journal of Aggression, Maltreatment & Trauma* 2008;6:25-58.
17. Ford BQ, Gross JJ. Why beliefs about emotion matter: an emotion-regulation perspective. *Current Directions in Psychological Science* 2019;28:74-81.
18. Eisenberg N, Spinrad TL, Eggum ND. Emotion-related self-regulation and its relation to children's maladjustment. *Annual Review of Clinical Psychology* 2010;6:495-525.
19. Van Hemert DA, Poortinga YH, Van De Vijver FJ. Emotion and culture: a meta-analysis. *Cognition and Emotion* 2007; 21:913-43.
20. Halberstadt AG, Dunsmore JC, Bryant Jr A, et al. Development and validation of the parents' beliefs about children's emotions questionnaire. *Psychological Assessment* 2013;25:1195.
21. Folk JB, Zeman JL, Poon JA, Dallaire DH. A longitudinal examination of emotion regulation: Pathways to anxiety and depressive symptoms in urban minority youth. *Child and Adolescent Mental Health*. 2014;19:243-50.
22. Feng X, Keenan K, Hipwell AE, et al. Longitudinal associations between emotion regulation and depression in preadolescent girls: moderation by the caregiving environment. *Developmental Psychology* 2009;45:798.
23. Berking M, Wirtz CM, Svaldi J, Hofmann SG. Emotion regulation predicts symptoms of depression over five years. *Behaviour Research and Therapy* 2014;57:13-20.
24. Sheppes G, Suri G, Gross JJ. Emotion regulation and psychopathology. *Annual Review of Clinical Psychology* 2015;11: 379-405.
25. Gross JJ, John OP. Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology* 2003; 85:348.
26. Weinberg A, Klonsky ED. Measurement of emotion dysregulation in adolescents. *Psychological Assessment* 2009; 21:616.
27. Somerville LH, Jones RM, Casey BJ. A time of change: behavioral and neural correlates of adolescent sensitivity to appetitive and aversive environmental cues. *Brain and Cognition* 2010;72: 124-33.
28. Bowlby J. *Una base sicura: applicazioni cliniche della teoria dell'attaccamento*. Cortina; Milano, Italy; 1989.
29. Kim HS, Sasaki JY. Emotion regulation: The interplay of culture and genes. *Social and Personality Psychology Compass* 2012;6:865-77.

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