**SUPPLEMENTARY MATERIALS**

To streamline the article, we found it preferable to present in this document (and specify in the article):

- The main correlation matrix with the consciousness factor.

- The centrality indices for the network analysis proposed in the article.

- Network analysis and centrality indices of the main variables, maintaining the consciousness subscale.

- The exclusion criteria used through questionnaires in more detail.

- The planned moderation mediation analyses specified in OSF that did not yield significant results.

- Additional analyses on gender differences in our sample.

- The analyses of the curvilinear relationship between anxiety and our variables, as all analyses indicate a linear relationship.

- Additional analyses of the sample with a diagnosis. Conducting an analysis excluding these participants highlighted the robustness of our findings.

1. **The main correlation matrix with the consciousness factor.**

| **Table 1.** Pearson's Partial Correlations |
| --- |
| **Variable** |  |  **1.** | **2.** | **3.** | **4.** | **5.** |
| 1. School Average |  | Pearson's r |  | — |  |  |  |  |  |  |  |  |  |
|  |  | Upper 95% CI |  | — |  |  |  |  |  |  |  |  |  |
|  |  | Lower 95% CI |  | — |  |  |  |  |  |  |  |  |  |
| 2. Anxiety |  | Pearson's r |  | **-.184** | **\*\*** | — |  |  |  |  |  |  |  |
|  |  | Upper 95% CI |  | -.064 |  | — |  |  |  |  |  |  |  |
|  |  | Lower 95% CI |  | -.306 |  | — |  |  |  |  |  |  |  |
| 3. ERSm |  | Pearson's r |  | -.040 |  | **.570** | **\*\*\*** | — |  |  |  |  |  |
|  |  | Upper 95% CI |  | .093 |  | .648 |  | — |  |  |  |  |  |
|  |  | Lower 95% CI |  | -.157 |  | .490 |  | — |  |  |  |  |  |
| 4. ERSa |  | Pearson's r |  | **.123** | **\*** | -.087 |  | .083 |  | — |  |  |  |
|  |  | Upper 95% CI |  | .251 |  | .026 |  | .204 |  | — |  |  |  |
|  |  | Lower 95% CI |  | -.001 |  | -.199 |  | -.033 |  | — |  |  |  |
| 5. MCQtot |  | Pearson's r |  | -.047 |  | **.552** | **\*\*\*** | **.523** | **\*\*\*** | **.141** | **\*** | — |  |
|  |  | Upper 95% CI |  | .092 |  | .630 |  | .612 |  | .259 |  | — |  |
|  |  | Lower 95% CI |  | -.184 |  | .466 |  | .425 |  | .019 |  | — |  |
| 6. EF |  | Pearson's r |  | **-.359** | **\*\*\*** | **.468** | **\*\*\*** | **.274** | **\*\*\*** | **-.161** | **\*\*** | **.280** | **\*\*\*** |
|  |  | Upper 95% CI |  | -.250 |  | .563 |  | .377 |  | -.049 |  | .399 |  |
|  |  | Lower 95% CI |  | -.469 |  | .361 |  | .159 |  | -.273 |  | .161 |  |
|  |
| *Note.*  Conditioned on variables: Sex, Age. Confidence intervals based on 1000 bootstrap replicates. ERSm = Emotion Regulation Strategies maladaptive; ERSa = Emotion Regulation Strategies adaptive; MCQtot = MetaCognition Questionnaire total; EF = Executive Functioning. \* p < .05, \*\* p < .01, \*\*\* p < .001 |
|  |

| 1. **Network analysis proposed in the article.**

**Table 2.** Centrality measures per variable |
| --- |
|  | **Network** |
| **Variable** | **Betweenness** | **Closeness** | **Strength** | **Expected influence** |
| School Average |  | -0.643 |  | -0.212 |  | -0.808 |  | -1.193 |  |
| ERSm |  | -0.643 |  | 0.084 |  | 0.197 |  | 0.555 |  |
| ERSa |  | -0.643 |  | -1.825 |  | -1.460 |  | -0.755 |  |
| Executive Functioning |  | 1.434 |  | 0.891 |  | 0.250 |  | -0.649 |  |
| Trait Anxiety |  | 1.137 |  | 0.891 |  | 1.389 |  | 1.329 |  |
| Metacognitive beliefs |  | -0.643 |  | 0.172 |  | 0.432 |  | 0.713 |  |
|  |

1. **Network analysis on the main variables, maintaining the consciousness subscale.**

**Figure 1.** Network analysis Network analysis of our main variables without the consciousness factor. Each node represents a variable of interest, and each edge represents the zero-order correlation between two variables. The thickness of an edge reflects the magnitude of the association. Solid lines indicate positive correlations, while dotted lines represent negative correlations. MCQ = Meta-Cognition Questionnaire without Consciousness factor; ERSm = Emotion Regulation Strategies maladaptives ; ERSa = Emotion Regulation Strategies adaptives; EF = Executive Functionning; Anx = Trait Anxiety; SchA = School Average.



**Figure 2.** Centrality index graphs. ERSm = Emotion Regulation Strategies maladaptives; ERSa = Emotion Regulation Strategies adaptives; EF = Executive Functioning; MCQ = MetaCognition Questionnaire

1. **Exclusion criteria (details):**

**The score of the Lie scale of the RCMAS** measures the social desirability of the adolescent. There is no threshold at which a raw score can be considered high or low. For our age group, a raw score of 4 or 5 corresponds to a T-score of 10 or 11 (in the average range) based on the 1999 normative sample. The average score in our sample is acceptable (M = 3.50, SD = 2.45). Conversely, a raw score of 8 corresponds to a percentile range of 88 to 91, which is considered a cutoff. Any score above this range is deemed unacceptable. Twelve participants had a score of 8, and 2 had a score of 9. We chose to exclude these two participants.

We chose to exclude 2 participants based on the RCMAS and its lie scale. This scale helps determine if there is a bias towards social desirability or avoidance in the subject responding to the questionnaire. In the French manual of the RCMAS, a high score would indicate imprecision of self-image rather than a deliberate intent to deceive. This does not necessarily question the relevance of their responses on other scales, but it is likely that they may attempt to appear less anxious to conceal their vulnerability. However, in our sample, there is a tendency toward less lying (i.e., greater honesty) among individuals who exhibit higher levels of anxiety on the RCMAS. In this regard, several studies have shown a significant negative relationship between total anxiety and the lie scale [1,2]. Joiner et al. [1] suggest that anxiety is more socially acceptable than other disorders, such as depression. This suggests that anxious individuals are more inclined to disclose their true feelings, concerns, and experiences rather than conceal them or respond in a socially desirable manner. Although our results are similar to this study, which found a correlation of r = -0.21, our population was different as the RCMAS was completed by children hospitalized in a psychiatric setting. Our findings suggest that the impact of the lie scale on anxiety should be considered for all populations evaluated with this questionnaire, but it does not justify restructuring the sample based on this variable.

**The Negativity scale of the BRIEF** indicates whether the parent responded with a overly negative perspective on their child. A score of 4 or below is considered acceptable according to the BRIEF manual. The average score in our sample falls within the acceptable range (M = 0.73, SD = 1.10). Only two participants had questionnaires with scores of 5 and 6. A score of 6 is considered high, and scores above this range are considered very high. We chose to retain all participants based on this information.

**The Inconsistency scale of the BRIEF** indicates the overall consistency of the parents' responses (M = 3.79, SD = 2). Double-scored items, which have the same meaning but are formulated differently, are distributed throughout the questionnaire. The sum of the differences between these items yields an inconsistency score. A score of 6 or below is considered acceptable, scores between 7 and 8 are considered borderline (30 participants), and scores above 8 are considered inconsistent (10 participants). These last 10 participants were removed from our analysis.

1. **Analysis of mediation with moderation (Stated model in OSF)**

We conducted two mediation analyses between trait anxiety and executive functioning, as previously declared in OSF. Emotion regulation strategies were found to mediate the relationship between anxiety and executive functioning. The variable of metacognition was included as a moderator of the relationship between anxiety and emotion regulation strategies. Two separate analyses were conducted, with adaptive strategies as the mediator in one analysis and maladaptive strategies as the mediator in the other analysis.

| **Table 3.** *Mediation Analysis with Moderation (Emotion Regulation Strategies - maladaptive)* |
| --- |
|  | 95% Confidence Interval |
| Predictor | Outcome |   | ß (SE) | z-value | p | Lower | Upper |
| EF |  | School average |  | -.031 (.005) | -6.198 | < .001 | -.041 | -.021 |
| Anxiety |  | EF | c1 | 1.546 (.265) |  5.839 | < .001 | 1.027 | 2.065 |
| ERS mal |  | EF | b1 | .128 (.172) | .742 | .458 | -.210 | .366 |
| Anxiety |  | ERS mal | a1 | .209 (.407) | .513 | 608 | -.590 | 1.007 |
| Metacog |  | ERS mal | a2 | .196 (.087) | 2.270 | .023 | .027 | .366 |
| Anx\*Meta |  | ERS mal | a3 | .006 (.006) | .990 | .322 | -.006 | .019 |

*Note*. ERS mal = Emotion Regulation Strategies maladaptive; Anx = Trait Anxiety; Metacog or Meta = Metacognitive beliefs.

Significant relationships were found between anxiety and executive functioning, executive functioning and grade point average, and metacognitive beliefs and maladaptive ER strategies. These associations were in the expected direction, as anxiety accounted for problematic behaviors, with the strongest relationship observed in the overall model. To a lesser extent, metacognitive beliefs explained the use of maladaptive ER strategies. Lastly, higher levels of executive functioning difficulties were associated with lower academic achievement. The remaining relationships were not significant (see Table 3).

Metacognitive beliefs

.196\* (.087) (.123)

ERS maladaptive

.006 (.006)

.128 (.172)

.209 (.407)

School average

Executive functioning

Trait Anxiety

-.031\*\* (.005)

1.546\*\* (.265)

**Figure 3.** Maladaptive ERS mediate the association between trait anxiety and executive functioning, with metacognitive beliefs in moderation. The figures represent coefficients standardised with the standard error. \*<.05 \*\* < .001

| **Table 4.** *Mediation Analysis with Moderation (Emotion Regulation Strategies - adaptive)* |
| --- |
|  | 95% Confidence Interval |
| Predictor | Outcome |   | ß (SE) | z-value | p | Lower | Upper |
| EF | School Ave. |  | -.031 (.005) | -6.198 | <.001 | -.041 | -.021 |
| Trait Anxiety |  | ERS adapt | a1 | .547 (.798) | .685 | .493 | -1.017 | 2.110 |
| Metacognition |  | ERS adapt | a2 | .602 (.169) | 3.552 | <.001 | .270 | .934 |
| Anx\*Meta |  | ERS adapt | a3 | -.019 (.013) | -1.512 | .131 | -.043 | -.006 |
| Trait Anxiety |  | FE | c1 | 1.612 (.219) | 7.370 | < .001 | 1.184 | 2.041 |
| ERS adapt |  | FE | b1 | -.178 (.089) | -1.996 | .046 | -.353 | -.003 |

*Note*. ERS adapt = Emotion Regulation Strategies - adaptive; Anx = Trait Anxiety; Meta or metacognition = Metacognitive beliefs

The second mediation analysis overall supported our hypotheses (Table 4). We found a strong relationship between trait anxiety and executive functioning (p < .001), and executive functioning significantly predicted academic performance. Metacognitive beliefs were found to explain the use of adaptive ER strategies. In other words, adolescents with stronger metacognitive beliefs were more likely to employ adaptive ER strategies.

Interestingly, adaptive ER strategies showed a significant and inverse relationship with problematic behaviors in adolescents. Trait anxiety did not show a significant relationship with adaptive ER strategies, and metacognitive beliefs did not moderate the relationship between anxiety and ER strategies.

These findings suggest that executive functioning plays a crucial role in the relationship between trait anxiety and academic performance. Furthermore, metacognitive beliefs appear to influence the use of adaptive ER strategies among adolescents. However, the lack of a significant relationship between trait anxiety and adaptive ER strategies, as well as the non-moderating effect of metacognitive beliefs, suggests the need for further investigation to better understand the complex interplay among these variables.

Metacognitivesbeliefs

.602\*\* (.169)

ERS

Adaptive

-.019 (.013)

-.178\* (.089)

.547 (.798)

Executive functioning

Trait Anxiety

School Average

-.031\*\* (.005)

1.612\*\* (.219)

\* < .05 \*\* < .001

**Figure 4.** Adaptive ERS mediate the association between trait anxiety and executive functioning, with metacognition in moderation. The figures represent coefficients standardised with the standard error.

1. **Curvilinear Relationship of Anxiety**

Prior to conducting our correlation and regression analyses, we performed analyses considering anxiety based on its intensity: low, moderate, and high. We used the "Percentile" function in Excel and associated the command 1/3 (8) and 2/3 (14) to obtain the median values of our sample on the RCMAS Total. The sample with a RCMAS Total score greater than or equal to 14 consisted of 100 participants, between 8 and 13 consisted of 84 participants, and below 8 consisted of 91 participants.

Several ANOVAs were conducted in JASP to examine the relationships between anxiety intensity and the main variables. Given the significant differences observed earlier, gender was systematically entered as an independent variable.

Regarding the mean, only an effect of anxiety intensity on the mean was found (F(2) = 4.244; p = .015). The Tukey post hoc test revealed a significant difference between low and high anxiety intensity compared to the mean, favoring the former (Mean difference = .921; SE = .337; t = 2.737; p = .018). A trend effect was found between moderate and high anxiety intensity on the mean (Mean difference = .742; SE = .340; t = 2.183; p = .076).

Regarding emotion regulation strategies (ERS), a main effect of anxiety on maladaptive strategies (F(2) = 44.906; p < .001) was found, but no other effects were observed for adaptive strategies. According to the Tukey post hoc test, maladaptive strategies showed a linear and increasing relationship with anxiety for both boys and girls. In other words, the higher the anxiety, the more maladaptive strategies were used. However, moderately anxious boys did not differ from highly anxious boys in terms of maladaptive strategies. Similarly, slightly anxious girls did not use more maladaptive strategies compared to moderately anxious girls.

Regarding metacognition, anxiety had a significant impact on metacognition (F(2) = 42.648; p < .001). According to the Tukey post hoc test, the main effect of this ANOVA revealed that higher anxiety was associated with more pronounced metacognitive beliefs. Each difference was significant (p ≤ .001). There was no effect of gender on metacognition or on the interaction between gender and anxiety intensity. However, girls with low anxiety did not differ from those with moderate anxiety, unlike those with high anxiety who used significantly fewer metacognitive beliefs (p < .001). The higher the anxiety in boys, the stronger the metacognitive beliefs (p < .05).

Regarding executive functioning, the ANOVA revealed that gender (F(1) = 13.888) and anxiety (F(2) = 27.730) independently had a significant impact on executive functioning (p < .001). Girls had less problematic executive functioning than boys (Mean difference = -10.800; SE = 2.898; t = -3.727; p < .001). The higher the intensity of anxiety, the more problematic the executive functioning. The differences were more pronounced between moderate and high anxiety (Mean difference = -15.363; SE = 3.533; p < .001) than between low and moderate anxiety (Mean difference = -10.593; SE = 3.601; t = -2.941; p = .010). Despite the lack of interaction effect in our ANOVA, it is worth noting that the Tukey post hoc test revealed a significant difference between highly anxious girls and boys (Mean difference = -15.662; SE = 4.870; p = .018).

1. **Additional analyses on gender differences in our sample.**

**Introduction**: About the link between ERS and Gender, before delving into the various studies conducted on ERS, anxiety, EF, and academic achievement, it is important to highlight that ERS have also been studied to explain the observed difference in anxiety expression between girls and boys. Indeed, literature data consistently show that girls experience higher levels of anxiety compared to boys, e.g. [3,4] using various anxiety measures, such Revised Children's Manifest Anxiety Scale (R-CMAS) [5] or Trait Anxiety and State Anxiety (STAIC) [6]. Using the CERQ, Zlomke and Hahn [7] highlighted differences in the use of ERS between 1,080 young adults of both genders. The most significant differences were found in rumination, putting things into perspective, and blaming others. Female participants reported higher use of putting things into perspective and rumination in response to unpleasant events, while males showed a preference for "blaming others." These results partially align with the French validation study of the CERQ conducted by d'Acremont and Van der Linden [8] with adolescents aged 13 to 19, which revealed significant effects on rumination use among girls (rpb = –.16\*, CI = [-.29,-.03]) and significant use of the "blaming others" strategy among boys (rpb = .14\*, CI = [.01, .27]). However, not all studies agree with these findings. Sanchis-Sanchis and al. [9] reported no significant differences on the CERQ scale in a sample of 254 Spanish children aged 9 to 16. Studies can also contradict each other. Martin and Dahlen [10] found that American females used more adaptive ERS than males, while Esmaeilinasab and al. [11] reported the opposite among Iranians. One possible explanation is the presence of differences between Western and Eastern cultures [12]. Despite the different use of ERS between genders, the effects of ERS on anxiety have been identified in numerous studies.

**Results:** When conducting T-tests, we chose to use Welch's test, as recommended by Delacre, Lakens, and Leys [13].

**Table 5.**

Welch's t-test comparing boys and girls on anxiety levels

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  | 95% CI for Cohen's d |
| Variable | t | df | Cohen’s d | Lower | Upper |
| Physiological Anxiety | 4.178\*\* | 272.987 | .528 | .286 | .768 |
| Worry / Oversensitivity | 4.599\*\* | 271.202 | .503 | .262 | .743 |
| Concentration / Social worries | 1.842\* | 270.978 | .555 | .313 | .796 |
| Total Anxiety | 4.386\*\* | 272.925 | .222 | -.015 | .460 |

Note. \* p = .067  \*\* p < .001

We conducted a Welch's t-test to determine if there were differences in anxiety levels based on the participants' gender (Table 5). Our results indicate that girls reported significantly higher levels of anxiety (M = 12.767; SD = 6.57) compared to boys (M = 9.51; SD = 5.70). The subscales "Physiological anxiety" and "Worry/Oversensitivity" contribute to this difference. Specifically, the difference in the "Concentration/Social worries" subscale was half as small, and the difference was only trending.

We conducted a Welch's t-test to determine if ERS varied depending on the participants' gender. The results did not indicate any differences in the use of adaptive and maladaptive ERSs between boys and girls. However, we found that boys significantly used the maladaptive strategy of "blaming others" more frequently (M = 8.53; SD = 3.26) compared to girls (M = 7.24; SD = 3.14; t = -3.376; p < .001, d = -.408, 95% CI [-.647, -.169]). Girls, on the other hand, utilized the maladaptive strategies of "rumination" (M = 10.95; SD = 3.88) and "self-blame" (M = 10.11; SD = 3.99) more frequently than boys (M = 9.99; SD = 4.09; t = 2.085 ; p < .05 ; d = .252 ; 95% CI [.014, .490] ; and M = 9.06; SD = 3.15; t = 2.251; p < .05 ; d = 270 ; 95% CI [.032, .508] respectively).

**Discussion:** Regarding several of our studied variables, the literature consistently highlighted significant differences between girls and boys. For anxiety, girls express more anxiety than boys, e.g., [4–6], which was also the case in our sample. The differences were significant for total anxiety and the subscales "Worry-Oversensitivity" and "Physiological anxiety," but less pronounced on the "Concentration-Social worries" scale (trend effect). Numerous studies have shown that girls report more worries than boys in both adults [14] and pre-adolescents [15]. Some have attempted to understand this difference by distinguishing the content of negative and repetitive thoughts that characterize worry. However, the data are contradictory, as Oorton [16], for example, found no significant difference for school-related worry, while Silverman et al. did [15]. Another explanation could be that girls may have lower self-confidence, leading to higher levels of worry. However, our results do not support this hypothesis, as no difference was found on the MCQ subscale evaluating confidence in one's own cognitive abilities. This absence, however, does not exclude the possibility of a lack of confidence in specific domains, but it reduces their likelihood. In this regard, a meta-analysis on the subject found significant differences with higher confidence in men compared to women regarding physical appearance, personal self, athleticism, and self-satisfaction. On the contrary, women had higher self-esteem regarding behavior and moral-ethics. However, no differences were found in self-esteem for academics, social acceptance, family, and affect [17]. While self-esteem provides little explanation for the observed difference in worry, it may shed light on the smaller difference between boys and girls on the "social concern/concentration" scale. Studies seem to agree that girls are more concerned about social skills than boys [15,16], but self-esteem in terms of social acceptance (friendship, peer relationships, and social recognition) does not differ. This suggests that girls may be concerned about how they manage their relationships but are generally satisfied with their social acceptance. This interpretation is dependent on socio-cultural considerations, e.g., [18] and could be the subject of further study. Regarding physiological anxiety, there is evidence that women more frequently and intensely experience negative emotions and experience more distress in response to stress-generating experiences than men [19–21]. This difference may be more related to women's tendency to perceive events as stressful rather than a physiological difference in terms of autonomic arousal and cortisol reactivity [20].

For ERS, girls did not differ from boys in the use of adaptive and maladaptive ERSs. However, boys more frequently used the "blaming others" strategy, while girls used "rumination" and "dramatization" more frequently. Our results are consistent with several other studies using the CERQ for the first two strategies [7,8] and with a meta-analysis for the latter [22]. Zlomke and Hahn found a significant difference in the use of "putting into perspective" among women in young adults, while we found a trend effect in favor of boys in adolescents. Putting into perspective is a way to minimize the severity of an unpleasant event or relate it to other events [23]. However, we suspect that minimizing and relativizing the event reflect two different postures. Relativizing requires relating the experienced event to another event. Comparing these unpleasant events activates an experiential or purely semantic referential framework to judge the seriousness of the situation. It involves the use of high-level elaboration abilities such as abstraction, memory, or reasoning. Minimizing, on the other hand, simply involves reducing the representative dimension of the event without necessarily seeking to determine its real impact on our lives. According to Sakakibara and Kitahara [24], putting into perspective is a way of accepting that the situation is "still good," which does not modify the evaluation or the meaning of the situation itself. Just as Wilson [25] could distinguish between an active and passive dimension of acceptance, we believe it is likely that this also applies to putting into perspective. This argument is even stronger given that (1) acceptance is tendentially more used by boys and (2) the use of the "blaming others" strategy involves similar mechanisms. Indeed, blaming others is a way of shifting the responsibility for the unpleasant event to an external cause. This strategy implies a skewed objectivity, a minimization of one's involvement in the event in question. That is why this ERS is less frequently implicated in anxiety compared to the other three [24]. Our results support this notion as "blaming others" was not predicted by anxiety. However, additional analyses revealed a significant correlation between the ERSs "putting into perspective" and "acceptance" and problematic behaviors related to EF (r = -.153; r = -.137, respectively, with p < .05). This moderates our argument and that of Wilson [25] since behavioral regulation and metacognition abilities (measured through the GEC) are present in individuals reporting the use of acceptance and putting into perspective. This implies that individuals refer to the active dimension of these two adaptive ERSs. Nevertheless, the absence of a relationship in our study between these three ERSs and trait anxiety leaves some doubts.

For EF, we observed a significant difference (p = .055) between girls, who displayed less problematic behaviors than boys. These results are consistent with a recent analysis of the BRIEF on a French sample [26] or other versions of the BRIEF [27].

For MCQ, the only difference that emerged between girls and boys was on the subscale "Negative metacognitive beliefs" (MCneg). Girls had more metacognitive beliefs than boys, which could explain their higher anxiety levels. In a systematic review, Myers et al. [28] noted that sex differences on this scale are small and may not be present or may be weak. Esbjørn et al. [29] found that girls aged 9 to 17 expressed more metacognitive beliefs on the total scale than boys. However, this effect disappeared once anxiety was controlled for, suggesting that higher anxiety symptoms in girls may have caused this difference. We conducted an additional analysis, entering negative metacognitive beliefs as the dependent variable, sex as a fixed factor, and trait anxiety as a covariate in an ANCOVA using JASP, which confirmed the results of Esbjørn et al. [29] - F(272) = .686; p = .408.

1. **Without diagnoses**

We conducted additional analyses as we identified a significant presence of participants with one or more diagnoses (n = 77). We performed a Welch's t-test to determine if there were differences between the clinical and non-clinical samples. We chose not to exclude these data as we believe that including participants with diagnoses is more representative of the adolescent population than if we had removed them. Not surprisingly, significant differences were found for all variables except for adaptive ER strategies (Table 4). There was a slight difference between participants with and without a diagnosis regarding metacognitive beliefs (p = .085), with those having a diagnosis scoring slightly higher. Given these discrepancies, we replicated the results by removing all individuals with a diagnosis. Some minor discrepancies emerged but remained inconsequential. We have included the JASP file with the analyses. The major changes observed are as follows:

* Welch's t-test: Loss of difference between boys and girls in self-blame and rumination.
* Correlation between Executive functioning and adaptive ERS: Refocusing on planning is the only one close to the significance threshold (*p* = .056), Catastrophizing had a positive but non-significant relationship, while blaming others had a positive and significant relationship.
* The relationships between adaptive ERS and academic average, as well as executive functioning, were no longer significant.

| **Table 4. Independent Samples t-Test**  |
| --- |
|  | **95% CI** |  |
|  | **t** | **df** | **Mean Diff** | **SE Diff** | **Lower** | **Upper** | **Cohen's d** |
| SchoA |  | 3.903\*\* |  | 115.321 |  | 1.265 |  | 0.324 |  | 0.623 |  | 1.907 |  | 0.551 |
| Anxiety |  | -3.038\*\* |  | 129.108 |  | -2.656 |  | 0.874 |  | -4.385 |  | -0.926 |  | -0.415 |
| ERSm |  | -2.612\* |  | 142.024 |  | -3.360 |  | 1.286 |  | -5.903 |  | -0.817 |  | -0.349 |
| ERSa |  | 1.457 |  | 150.355 |  | 2.943 |  | 2.020 |  | -1.049 |  | 6.935 |  | 0.192 |
| MCQtot |  | -1.737 |  | 133.169 |  | -2.644 |  | 1.521 |  | -5.653 |  | 0.366 |  | -0.236 |
| EF |  | -4.821\*\* |  | 117.735 |  | -17.193 |  | 3.566 |  | -24.255 |  | -10.131 |  | -0.675 |
|  |
| *Note.*  Welch's t-test. SchoA = School Average; ERSm = Emotion Regulation Strategies maladaptives, ERSa = Emotion Regulation Strategies adaptives; MCQtot = MetaCognition Questionnaire total; EF = Executive Functioning. \* p = .010 \*\* p ≤ .003 |

**References**

1. Joiner Jr, T.E.; Schmidt, K.L.; Schmidt, N.B. Low-End Specificity of Childhood Measures of Emotional Distress: Differential Effects for Depression and Anxiety. *Journal of Personality Assessment* **1996**, *67*, 258–271.

2. Pina, A.A.; Silverman, W.K.; Saavedra, L.M.; Weems, C.F. An Analysis of the RCMAS Lie Scale in a Clinic Sample of Anxious Children. *Journal of Anxiety Disorders* **2001**, *15*, 443–457, doi:10.1016/S0887-6185(01)00075-5.

3. Bender, P.K.; Reinholdt-Dunne, M.L.; Esbjørn, B.H.; Pons, F. Emotion Dysregulation and Anxiety in Children and Adolescents: Gender Differences. *Personality and Individual Differences* **2012**, *53*, 284–288.

4. Lewinsohn, P.M.; Gotlib, I.H.; Lewinsohn, M.; Seeley, J.R.; Allen, N.B. Gender Differences in Anxiety Disorders and Anxiety Symptoms in Adolescents. *Journal of abnormal psychology* **1998**, *107*, 109.

5. Turgeon, L.; Chartrand, É. Reliability and Validity of the Revised Children’s Manifest Anxiety Scale in a French-Canadian Sample. *Psychological assessment* **2003**, *15*, 378.

6. Turgeon, L.; Chartrand, É. Psychometric Properties Of The French Canadian Version Of The State-Trait Anxiety Inventory For Children. *Educational and Psychological Measurement* **2003**, *63*, 174–185, doi:10.1177/0013164402239324.

7. Zlomke, K.R.; Hahn, K.S. Cognitive Emotion Regulation Strategies: Gender Differences and Associations to Worry. *Personality and individual Differences* **2010**, *48*, 408–413.

8. d’Acremont, M.; Van der Linden, M. How Is Impulsivity Related to Depression in Adolescence? Evidence from a French Validation of the Cognitive Emotion Regulation Questionnaire. *Journal of adolescence* **2007**, *30*, 271–282.

9. Sanchis-Sanchis, A.; Grau, M.D.; Moliner, A.-R.; Morales-Murillo, C.P. Effects of Age and Gender in Emotion Regulation of Children and Adolescents. *Frontiers in psychology* **2020**, *11*, 946.

10. Martin, R.C.; Dahlen, E.R. Cognitive Emotion Regulation in the Prediction of Depression, Anxiety, Stress, and Anger. *Personality and Individual Differences* **2005**, *39*, 1249–1260, doi:10.1016/j.paid.2005.06.004.

11. Esmaeilinasab, M.; Khoshk, A.A.; Makhmali, A. Emotion Regulation and Life Satisfaction in University Students: Gender Differences. *European Proceedings of Social and Behavioural Sciences EpSBS* **2016**, *82*, 798–809.

12. Urano, Y.; Kobayashi, R.; Sakakibara, R. Revision and Validation of the Japanese-Version Cognitive Emotion Regulation Questionnaire: Psychometric Properties and Measurement Invariance across Gender. *Cogent Psychology* **2022**, *9*, 2064790.

13. Delacre, M.; Lakens, D.; Leys, C. Why Psychologists Should by Default Use Welch’s t-Test Instead of Student’s t-Test. *International Review of Social Psychology* **2017**, *30*, 92–101, doi:10.5334/irsp.82.

14. Robichaud, M.; Dugas, M.J.; Conway, M. Gender Differences in Worry and Associated Cognitive-Behavioral Variables. *Journal of anxiety disorders* **2003**, *17*, 501–516.

15. Silverman, W.K.; La Greca, A.M.; Wasserstein, S. What Do Children Worry About? Worries and Their Relation to Anxiety. *Child Development* **1995**, *66*, 671–686, doi:10.1111/j.1467-8624.1995.tb00897.x.

16. Oorton, G.L. A Comparative Study of Children’s Worries. *The Journal of Psychology* **1982**, *110*, 153–162, doi:10.1080/00223980.1982.9915336.

17. Gentile, B.; Grabe, S.; Dolan-Pascoe, B.; Twenge, J.M.; Wells, B.E.; Maitino, A. Gender Differences in Domain-Specific Self-Esteem: A Meta-Analysis. *Review of General Psychology* **2009**, *13*, 34–45.

18. Scott, E.L.; Eng, W.; Heimberg, R.G. Ethnic Differences in Worry in a Nonclinical Population. *Depression and Anxiety* **2002**, *15*, 79–82, doi:10.1002/da.10027.

19. Craske, M.G. *Origins of Phobias and Anxiety Disorders: Why More Women than Men?*; Elsevier, 2003; ISBN 978-0-08-051340-9.

20. Kelly, M.M.; Tyrka, A.R.; Price, L.H.; Carpenter, L.L. Sex Differences in the Use of Coping Strategies: Predictors of Anxiety and Depressive Symptoms. *Depression and Anxiety* **2008**, *25*, 839–846, doi:10.1002/da.20341.

21. Thomsen, D.K.; Mehlsen, M.Y.; Viidik, A.; Sommerlund, B.; Zachariae, R. Age and Gender Differences in Negative Affect—Is There a Role for Emotion Regulation? *Personality and Individual Differences* **2005**, *38*, 1935–1946, doi:10.1016/j.paid.2004.12.001.

22. Johnson, D.P.; Whisman, M.A. Gender Differences in Rumination: A Meta-Analysis. *Personality and Individual Differences* **2013**, *55*, 367–374, doi:10.1016/j.paid.2013.03.019.

23. Garnefski, N.; Kraaij, V.; Spinhoven, P. Negative Life Events, Cognitive Emotion Regulation and Emotional Problems. *Personality and Individual differences* **2001**, *30*, 1311–1327.

24. Sakakibara, R.; Kitahara, M. The relationship between Cognitive Emotion Regulation Questionnaire (CERQ) and depression, anxiety: Meta-analysis. *Shinrigaku Kenkyu* **2016**, *87*, 179–185, doi:10.4992/jjpsy.87.15302.

25. Wilson, G.T. Acceptance and Change in the Treatment of Eating Disorders and Obesity. *Behavior Therapy* **1996**, *27*, 417–439.

26. Fournet, N.; Roulin, J.-L.; Monnier, C.; Atzeni, T.; Cosnefroy, O.; Le Gall, D.; Roy, A. Multigroup Confirmatory Factor Analysis and Structural Invariance with Age of the Behavior Rating Inventory of Executive Function (BRIEF)—French Version. *Child Neuropsychology* **2015**, *21*, 379–398.

27. Huizinga, M.; Smidts, D.P. Age-Related Changes in Executive Function: A Normative Study with the Dutch Version of the Behavior Rating Inventory of Executive Function (BRIEF). *Child Neuropsychology* **2010**, *17*, 51–66, doi:10.1080/09297049.2010.509715.

28. Myers, S.G.; Solem, S.; Wells, A. The Metacognitions Questionnaire and Its Derivatives in Children and Adolescents: A Systematic Review of Psychometric Properties. *Frontiers in psychology* **2019**, *10*, 1871.

29. Esbjørn, B.H.; Sømhovd, M.J.; Holm, J.M.; Lønfeldt, N.N.; Bender, P.K.; Nielsen, S.K.; Reinholdt-Dunne, M.L. A Structural Assessment of the 30-Item Metacognitions Questionnaire for Children and Its Relations to Anxiety Symptoms. *Psychological assessment* **2013**, *25*, 1211.