

**Background:** Prior work has suggested a lack of emotional regulation skills in adolescents engaged in traditional bullying (Zych et al., 2017). However, there are still gaps in knowledge regarding relationships between social-emotional skills and the involvement of adolescents in traditional bullying.

An important factor in the onset of psychological distress is the **cognitive emotion regulation (CER) strategies** use to keep control over the emotions during or after the experience of threatening or stressful events (Garnefski et al., 2002). Considering that emotion regulation is critical in initiating and in preventing stressful levels of negative emotions and maladaptive behavior (Cicchetti, Ackerman, & Izard, 1995), **knowing which specific emotion regulation strategies may represent an important issue in the explanation and prevention of bullying.**

Adaptive strategies	Maladaptive strategies
Acceptance	Selfblame
Positive Reappraisal	Otherblame
Positive Refocusing	Rumination
Planning	Catastrophizing
Putting into Perspective	



**Objective:** Examining differences of cognitive emotion regulation (CER) strategies in relation to the involvement in bullying roles (i.e. perpetrators, victims, bully-victims and uninvolved students).

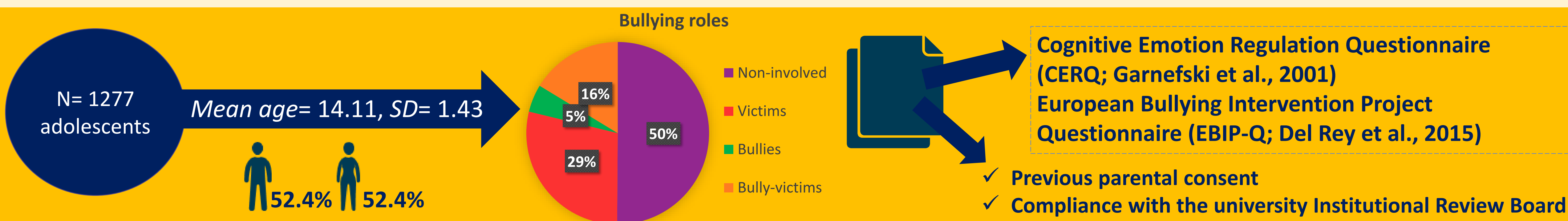


Table 1. Analysis of variance.

Variable	(1)	(2)	(3)	(4)	F
	Uninvolved (n=639)	Victims (n=366)	Perpetrators (n=63)	Bully-victims (n=208)	
Acceptance	3.24(0.83)	3.31(0.78)	3.20(0.90)	3.30(0.79)	0.842
Catastrophizing	2.36(0.89)	2.57(0.88)	2.51(0.89)	2.65(0.90)	7.576***
Planning	3.56(0.90)	3.61(0.91)	3.33(0.97)	3.59(0.76)	1.853
Putting into Perspective	3.23(0.94)	3.24(0.93)	3.03(0.87)	3.40(0.89)	3.100*
Positive Reappraisal	3.21(0.92)	3.16(0.95)	3.12(1.03)	3.21(0.90)	0.387
Positive Refocusing	2.76(1.08)	2.71(1.15)	2.92(1.19)	2.92(1.10)	1.932
Rumination	3.02(0.89)	3.36(0.97)	2.98(0.96)	3.29(0.87)	13.254***
Otherblame	2.17(0.76)	2.29(0.81)	2.47(0.82)	2.61(0.86)	17.226***
Selfblame	2.71(0.72)	3.03(0.80)	2.72(0.71)	2.92(0.73)	16.443***

Note. \* p < .05; \*\*\*p < .001.

**RESULTS FROM ANALYSIS OF VARIANCE (ANOVA):**

- There were **significant differences in maladaptive strategies** between involved and uninvolved students.
- Bullies, bully-victims and victims scored high in maladaptive cognitive coping (i.e. rumination, self-blaming, otherblaming and catastrophizing) compared to uninvolved peers.

**RESULTS FROM SCHEFFÉ POST HOC TESTS:**

- Catastrophizing: 1-2, 1-4
- Rumination: 1-2, 1-4, 2-3
- Otherblame: 1-3, 1-4, 2-4
- Selfblame: 1-2, 1-4, 2-3

**RESULTS FROM LOGISTIC REGRESSION ON DIFFERENT BULLYING ROLES PREDICTED BY CER STRATEGIES:**

- High otherblame and high self-blame were found to be significant predictors of victim and bully-victim roles.
- High otherblaming was found to be a significant predictor of bully role.
- Rumination was found to be a statistical tendency for predicting victim role.

Table 2. Logistic regression.

	Victim					Bully					Bully-victim				
	B	SE	Wald	p	OR	B	SE	Wald	p	OR	B	SE	Wald	p	OR
Sex	0.33	0.14	5.31	0.02	1.39	-0.52	0.29	3.34	0.07	0.59	-0.45	0.18	6.43	0.01	0.64
Age	-0.03	.06	0.36	0.55	0.97	0.07	0.11	0.47	0.49	1.08	0.15	0.07	4.90	0.03	1.17
Catastrophizing	0.02	0.09	0.04	0.84	1.01	0.11	0.17	0.41	0.52	1.12	0.08	0.11	0.51	0.48	1.08
Rumination	0.17	0.09	3.82	0.05	1.18	-0.12	0.18	0.44	0.51	0.89	0.18	0.11	2.44	0.12	1.20
Otherblame	0.26	0.09	7.97	0.01	1.30	0.40	0.18	5.23	0.02	1.49	0.62	0.11	32.15	0.00	1.86
Selfblame	0.52	0.10	24.87	0.00	1.68	0.03	0.21	0.03	0.88	1.03	0.34	0.13	4.90	0.03	1.17

Note. The reference group is uninvolved students (0) versus each bullying role (1).

**Conclusions:** These findings underline the **relevance of cognitive emotion regulation strategies in bullying roles**. Although more studies are required, these findings suggest that the assessment of CER strategies and the **prevention of maladaptive strategies** might protect adolescents against being involved in bullying. Thus, working on CER strategies could be a **useful component of anti-bullying programs** and should be included in educational practice and policy. However, the cross-sectional design makes it impossible to study causality and further analyses are needed.

