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Self-Regulation of Emotions in Relation to Students' Attitudes Towards School Life

Karla Hrbackova^{a,*}, Petr Safrankova^a

^a Department of Pedagogical Sciences, Faculty of Humanities, Tomas Bata University in Zlín, Zlín, Czech Republic

Abstract

The paper focuses on assessing, how the use of emotional regulation strategies and perceived position in formal and informal school life processes are related. The paper also aims to identify, which of the assessed school life processes are involved in the use of emotional regulation strategies, i.e. the use of adaptive emotional regulation strategies and non-adaptive emotional regulation strategies, or in the suppression of emotional manifestations. The research was carried out on a sample of 1,133 upper-primary school students using Cognitive Regulation of Emotion and Students' Attitudes to School Life questionnaires. The results imply that the degree of use of adaptive strategies is affected by a combination of predominantly strengthening stimuli in the school environment, i.e. the perception of success and opportunity, and social inclusion in peer groups. On the contrary, high-risk environmental attributes connected with a feeling of negative experience at school play a larger part in the use of non-adaptive emotional regulation strategies. A combination of two opposing stimuli, i.e. a negative experience of school life and a positive approach by the teacher towards the pupils, contributes to the suppression of emotional manifestations. The perception of position in formal and informal school life processes as an important prerequisite for the use of students' self-regulating mechanisms in the school environment.

Keywords: self-regulation of emotions, attitudes towards school life, upper-primary school children.

1. Introduction

Emotional regulation represents a key multidimensional self-regulation component (Gross, 2015; Erber, Erber, 2000; Larsen, 2000), which can be an important factor in children's social behaviour (Hrbackova, Balaban Cakirpaloglu, 2020). The systemic concept of self-regulation shows that, during its examination, one must deal with not only cognitive regulation, but also emotional regulation. Research into children's school preparedness (Blair, Diamond, 2008) showed that

* Corresponding author

E-mail addresses: hrbackova@utb.cz (K. Hrbackova)

preparedness for school attendance is affected by children's cognitive emotional state. Self-regulation develops more in children whose emotional and cognitive personality components are in balance and "collaborating", than in children in whom the ratio between these two components is unbalanced. Children who are able to regulate their emotions at an early stage maintain better attention and can collaborate better with the teacher and other students (peers) (Rubin et al., 2005). Some research points to strong evidence that children enlist emotional regulation skills to accomplish complex social and personal goals (Thompson et al., 2008). Regardless of where these skills are acquired, children who perceive and express emotion in acceptable ways are likely to have more positive relationships than others (Saarni et al., 1998).

It is the very focus on the examination of children's regulatory processes in the context of the social environment (cf. Criss et al., 2021) that we perceive as fundamental for understanding the causes and consequences of their behaviour. In this context, the paper focused on examining the relationship between emotional regulation and the school's social climate, as this is an important socialisation environment. The research is based on the assumption that students' attitudes towards school life are related to their use of emotion regulation strategies.

Theoretical Framework

In general, emotional regulation can be understood as the use of specific strategies to influence what emotions we have, when we have them, how we experience them and how we manifest ourselves (Gross, 2015). These strategies are used to intensify, reduce or maintain emotions, whether positive or negative (Gross, 2014). The objective of emotional regulation is to influence the dynamics of the emotion in such a way that adaptive reactions to the given situation take place (not to eliminate maladaptive emotions) (cf. Oschner, Gross, 2005). If optimal emotional regulation does not occur, it can lead to behaviour which is not very adaptive in the given situation (Garber, Dodge, 1991).

Emotional regulation can take place on both a conscious and unconscious level; at the same time, it can be automatic, and it can influence the course of emotion formation (Gross, Thompson, 2007; Braunstein et al., 2017).

Individual emotional regulation strategies can be divided into so-called antecedent-focused and response-focused. Antecedent-focused strategies activate before or very shortly after the activation of the full emotional response; therefore, they are "input strategies". These strategies are focused on the prevention or stimulation of the origin, stopping or starting of the emotional process (cognitive strategy). On the contrary, a response-focused strategy (so-called "output strategy") appears at the end of the emotional development process, or when the emotion itself activates some tendency to react (behavioural strategy) (Gross, Cassidy, 2019).

Emotional regulation can be described using a process model which contains four phases (Koole et al., 2011). In the first phase, the people are exposed to a situation which can (has the potential to) cause an emotional reaction. It means choosing a situation involving behaviour which leads to coming closer to, or avoiding, certain people, places or things. In the second phase, Gross (1998) talks about the so-called modification of a situation where the individual can change the situation's emotional impact with their behaviour. One emotional regulation option is the use of focus of attention. The third phase involves a so-called cognitive change; i.e., on the basis of cognitive processes, the individual assesses the situation which causes the emotional reaction. The last phase involves the modulation of a response, where the individual expresses their emotions by their behaviour. Each of these phases can be the subject of regulation.

The relationship between cognitive control and self-regulation can be specified on the basis of two main approaches: 1. Reciprocal relationship (i.e. when one is active, the other is less active); 2. Equal relationship (i.e. should lead to a balance between emotions and cognitive control) (cf. Blair, Diamond, 2008).

Emotional regulation is mostly connected with emotions which cause negative reactions in the individual or the people around them. Hofmann and Kashdan (2010) divide individual emotion regulation strategies into three broad categories (1) strategies that aim to suppress the emotion; (2) strategies that aim to change the emotion; and (3) strategies that aim to tolerate the emotion. A manifestation of emotional regulation is the effort to prevent situations which the individual expects to arouse a negative (undesirable) emotional reaction in them. Gross (2014) describes two basic forms of emotional regulation, i.e. the suppression of emotional manifestations (a behaviourally oriented form of emotional regulation), within whose scope the individual reduces or prevents manifestations of experienced emotions, and the cognitive reappraisal of emotions

(a cognitively oriented form of emotional regulation), where the individual tries to think of the situation in a manner which leads to a change of emotional reaction (cf. [Webb et al., 2012](#)). Garnefski et al. (2002) differentiate among the following nine (conscious) cognitive emotion regulation strategies: self-blame; acceptance; rumination; positive refocusing; planning, or thinking about what to do to cope with the situation; positive reappraisal (e.g. ascribing positive meaning); putting into perspective (e.g. downplaying the severity); catastrophizing; other-blame (blaming the situation on others) (cf. [Garnefski, Kraaij, 2007](#)).

The repeated use of cognitive reappraisal is usually connected with healthier social and emotional adaptation and experience, compared to the suppression of emotional manifestations, which is usually connected with cognitive and physiological losses and negative experience ([Ehring et al., 2010](#); [Hofmann et al., 2009](#)).

Emotional regulation strategy can be divided into adaptive, whose use is effective and beneficial for us, and, on the contrary, non-adaptive. Adaptive emotional regulation strategies require 1. awareness of one's own emotions in a specific context; 2. awareness of the goal one wants to achieve; 3. selection of a strategy towards that goal ([Gross, Jazaieri, 2014](#)). In addition to the context mentioned (and specified below), the intensity of individual emotions at a given time may play an important role in emotion regulation. Lennarz et al. (2019), in their study examining the daily lives of adolescents, found that it is the intensity of negative emotions that is positively related to the number of strategies used. It was also found that the likelihood of using strategies such as distraction, rumination, avoidance, problem solving suppression, and social support increased with increasing intensity of emotion. In contrast, the strategy of acceptance was more likely to be used in response to less intense negative events ([Lennarz et al., 2019](#)).

For example, non-adaptive strategies include rumination, catastrophizing and self-blame, while on the contrary Garnefski et al. (2002) refer to the so-called “protective” strategies, being positive reappraisal and positive refocusing (cf. [Gross, 2014](#)). From a long-term perspective, adaptive regulation should contribute to a more positive emotional experience, while non-adaptive regulation should contribute to a more negative emotional experience.

In their analysis, Marroquín et al. (2017) point to the results of research on coping, emotion regulation, and personal well-being and divide emotion regulation strategies into avoidant strategies, which are more maladaptive (non-adaptive) in nature, and approach-oriented strategies, which appear to be adaptive. Among the so-called maladaptive emotion regulation strategies, the authors include suppression of external displays of emotions and thoughts, cognitive and behavioural avoidance, denial, rumination and worry. On the other hand, according to the authors, adaptive strategies of emotion regulation in a certain context include problem solving, seeking social support, cognitive reappraisal or positive reframing of the situation, active acceptance of the situation, as well as awareness and expression of experienced emotions (cf. [Moreno et al., 2021](#)).

Parallel with the afore-mentioned emotional regulation strategies, one must always perceive these processes within the scope of the specific social context in which they take place. The social environment in which the individual operates can lead to the activation of the development of self-regulation abilities or, on the contrary, to stagnation and the inability to develop self-regulation. ([Hiekkaranta et al., 2021](#); [Criss et al., 2021](#)) Social context (or the quality of interpersonal relationships) may influence the choice of emotion regulation strategy ([Marroquín, Nolen-Hoeksema, 2015](#); [Marroquín et al., 2017](#); [Zaki, Williams, 2013](#)). Reciprocally, emotion regulation strategies also influence interpersonal relationships (e.g., reappraisal may reduce emotional experience and lead to improved social functioning; conversely, expressive suppression may have negative social consequences) ([Goldin et al., 2008](#); [Butler et al., 2003](#)). In a positive, supportive and stimulating social environment, it can be expected that the individual will be able to develop their self-regulation to a greater degree ([Blair, Diamond, 2008](#)).

The school's social climate, as a micro-social environment, can be specified as the stabilized processes of the perception, experience, reaction to and evaluation of what took place, or is taking place right now, in the school environment. These are the opinions and perceptions of the given social reality of all the participants in the school environment ([Adams et al., 2016](#)). The school's social climate can influence students' behaviour and their optimal development (including their motivation to learn, creativity, resilience etc.), effectiveness of teaching, students' results (cf. [Adams et al., 2016](#)), and children's satisfaction in school, but also the occurrence of high-risk behaviour (cf. [Kauffman, 2005](#); [Vojtova, 2010](#)). A positive social climate within the scope of formal and informal processes offers children the opportunity to experience success and joy, which

supports their optimal development and positive self-perception (Burns, Hoagwood, 2002). Similarly, experiencing good collaboration and acceptance in social relationships affects the development of social competencies important for functional conduct and behaviour in the given environment. Therefore, the social relationships within the scope of the given environment can significantly influence the self-regulation process, in both a positive and a negative direction (Adams et al., 2016; Finkel, Fitzsimons, 2011). It can be assumed that the school environment's social climate can significantly influence the process of emotional regulation of children for whom this environment is an important socialisation factor.

The research focuses on the findings what emotion regulation strategies students use depending on their attitude towards school life. The main aim of the research is to clarify the relationship between the extent to which emotion regulation strategies are used and perceived position in the formal and informal processes of school life. Another aim is to determine which of the school life processes assessed play a role in the use of emotion regulation strategies, i.e., the use of adaptive emotion regulation strategies and non-adaptive emotion regulation strategies, or the suppression of emotional expressions.

2. Methods

The research sample comprised 1,133 students from 11 primary school in the Czech Republic (students in grades 6-9) consisting of 596 boys and 537 girls aged 11 to 16 years ($M = 13.29$, $SD = 1.293$).

Primary schools were randomly selected (random number generator) from all primary schools in the Czech Republic.¹

Students' emotion self-regulation was measured using the Cognitive Emotion Regulation Questionnaire. This questionnaire was adapted from the CERQ (Garnefski, Kraaij, 2006) and the ERQ (Gross, John, 2003). This questionnaire focuses on the methods or strategies of regulating one's own emotions (emotion regulation strategies) that students use when dealing with a stressful or unpleasant situation.

Factor analysis identified 5 factors explaining 51.65% of the variance. These are strategies of Rumination (F1), Acceptance and Positive Reappraisal (F2), Positive Refocusing (F3) and Blame (F4). We also identified a factor relating to the suppression of emotional manifestations (F5).

In terms of the effectiveness of emotional regulation strategies, the strategies Acceptance and Positive Reappraisal (F2) and Positive Refocusing (F3) are described as adaptive strategies. Rumination (F1) and Blame (F4) are considered as non-adaptive/maladaptive strategies.

Based on low factor scores (below 0.40), a total of 2 items were excluded; the final version of the questionnaire included a total of 18 items. Students evaluate each statement with one choice on a five-point scale expressing frequency of occurrence from 1 (almost never) to 5 (almost always). In the case of individual strategies, we work with the arithmetic mean of all of the items appertaining to it. A higher score represents a greater degree of use of the specific strategy.

Factor 1, Rumination, explains 18.69 % of the variance and includes 4 items with a factor weight of .64 to .79. This factor expresses the effort to manage negative emotions by returning to the description and analysis of negative experiences, constant rumination over the problem, and exaggeration of the given situation.

Factor 2, Acceptance and Positive Reappraisal, expresses the purposeful search for the positive aspects of the given situation, and viewing the problem as an opportunity for personal growth. At the same time, there is an evident effort to accept the given situation, and to see the given situation with an overview. This factor includes 5 items with a factor weight of .49 to .62, and explains 12.91 % of the variance.

Factor 3, Positive Refocusing, is connected with a change in the focus of attention, i.e. purposeful focus on positive experience. At the same time, there is an evident effort to think of more pleasant things, or an effort to manage the given situation as well as possible. This factor includes 3 items with a factor weight of .59 to .78, and explains 7.41 % of the variance.

¹ Ministry of Education, Youth and Sport of the Czech Republic register of school and school facilities, situation as on 26/ 04/ 2017 (incomplete, mixed-grade, special and practical schools were eliminated from the list).

Factor 4, Blame, contains 4 items with a factor weight of .52 to .72, and explains 6.96 % of the variance. This factor is connected with the effort to deal with negative emotions by blaming other people, or situational and contextual variables.

Factor 5, Expressive Suppression, includes 2 items with factor weights of .83 and .85, and explains 5.68 % of the variance. This factor expresses the effort to inhibit the manifestation of the given emotion, where the individual prevents or reduces visible manifestations of experienced emotions.

The internal consistency of all 18 items in the questionnaire, measured using Cronbach's coefficient, attains a value of $\alpha = .74$, which represents an acceptable degree of reliability.

Perceptions of their own position in formal and informal processes of school life were measured using the Students' Attitudes to School Life questionnaire (Vojtova, 2009). This questionnaire measures students' attitudes to school life, and defines the areas of school life which are supportive for their learning, and those which are high-risk. The original instrument contains 38 items and is based on The Quality of School Life Scale – School Life Quality Questionnaire (Williams, Batten, 1981) and on the theory of the authorial collective of Binkley et al. (1996). Factor analysis identified 5 factors explaining 48.04% of the variance. This includes factors related to success and opportunity (F1), as well as the factors of social inclusion in peer groups (F2), negative experience (F3), teacher's approach to students (F4) and school status (F5). Based on low factor scores (below 0.40) and significant saturation of more than one factor, a total of 5 items were discarded, with the final version of the questionnaire containing a total of 33 items. The students evaluate each statement with one choice on a four-point scale expressing the degree of agreement or disagreement. In individual dimensions of school life, we work with the arithmetic mean of all of the items appertaining to it. A higher score represents a more positive attitude to school life.

Factor 1, Success and Opportunity, explains 28.17 % of the variance, and includes 10 items with a factor weight from .54 to .75. This factor reflects the students' opinion of their own position in learning processes, and of the opportunities which they receive in them. The positive results in all the items show that the schooling and learning correspond to their expectations. They regard school as a place which positively stimulates them to learn, and where they perceive their ability to achieve good results in school work.

Factor 2, Social Inclusion in Peer Groups, expresses how students perceive their involvement in informal activities and student groups in school life. Positive results in this dimension indicate students' good feelings from their own involvement in informal social peer networks (relationships among students). This factor includes 6 items with a factor weight of .62 to .75, and explains 7.28 % of the variance.

Factor 3, Negative Experience of school life, is connected with negative feelings such as loneliness and worry. The items in this factor are inverted, and are renumbered in order to ascertain the overall attitude to school life. Factor 3 includes a total of 5 items with a factor weight of .53 to .66, and explains 4.95% of the variance.

Factor 4, Teacher Approach, contains 9 items with a factor weight of .52 to .75, and explains 4.6 % of the variance. If the results of this evaluation reach the positive parts of the spectrum, then they perceive the teacher as a person who provides them with interest, support and assistance, who is fair, on whom they can rely, and who respects the students' needs.

Factor 5, School Status, includes 3 items with a factor weight of .43 to .58, and explains 3.03 % of the variance. This factor expresses how the students perceive their position in school life processes, with an awareness of their own value and importance. The positive results indicate that others (both fellow students and teachers) value their person and regard them as important. They can therefore regard school as a safe social space in which they are firmly anchored, and which provides them with support in case of need.

The internal consistency of all 33 items in the questionnaire, measured using Cronbach's coefficient, attains a value of $\alpha = .91$, which represents a sufficient degree of reliability.

The overall evaluation of school life is expressed by the mean of the evaluation of all the items and the items in the individual dimensions. At the same time, we also worked with the distribution of the students into subgroups according to the character of the prevailing nominations (students with a prevailing positive evaluation of school life, students with ambivalent attitudes and students

with negative attitudes). We defined these subgroups within a range of ± 1 of a determinant deviation (standard deviation) from the mean¹.

The data was collected from students during classes using the paper-pencil form. Questionnaires were filled out by students on the basis of teacher’s instructions. In order to find out what emotion regulation strategies students use depending on their attitude towards school life, the one-way ANOVA was proposed. Before applying the analysis, it was verified that there were no extreme outliers, and then the assumption of normality was evaluated for the distribution of each variable according to comparable groups. For this, the Kolmogorov-Smirnov test with Lilliefors coding was used. Subsequently, the assumption of homogeneity of variance was evaluated; Levene's test was used for this purpose. Pearson's correlation coefficient and multiple linear regression were used to clarify the relationship between the degree of use of emotion regulation strategies and perceived position in the formal and informal processes of school life. The mixed stepwise method was used to test the fit of the models; normality of residuals was evaluated with the Kolmogorov-Smirnov test with the Lilliefors modification; then the homoscedasticity of the residuals and multicollinearity were evaluated. The data was processed using the IBM SPSS software vers. 24.

3. Results

From the results of the analysis, it follows (Table 1) that, for regulating their own emotions, students utilise a positive refocusing ($M = 3.41$, $SD = 1.03$) to the greatest degree (on a scale of 1-5), which means that they purposefully focus on positive experience. Of the non-adaptive strategies, students utilise rumination ($M = 3.10$, $SD = 1.04$) to the greatest degree, which means that they return to descriptions and analyses of negative experiences, or they exaggerate the experienced situation. At the same time, it is evident that students also suppress manifestations of their own emotions ($M = 3.28$, $SD = 1.17$), which indicates that they prevent or reduce visible manifestations of experienced emotions.

It was found that adaptive emotional regulation strategies are dependent on students’ attitudes to school life, whereas students utilise non-adaptive strategies to a similar degree regardless of their attitude to school life.

Students with a predominantly positive attitude to school life utilise a positive refocusing to a greater degree ($M = 3.66$, $SD = .97$) than students with a predominantly ambivalent attitude ($M = 3.42$, $SD = 1.00$) and students with a negative attitude to school life ($M = 3.03$, $SD = 1.12$). Acceptance and positive reappraisal is utilised by students with a positive attitude to school life to a greater degree ($M = 3.40$, $SD = .70$) than students with an ambivalent attitude ($M = 3.16$, $SD = .71$) and students with a negative attitude to school life ($M = 2.86$, $SD = .76$).

Table 1. Differences in students’ use of emotional regulation strategies depending on their attitude towards school life

	Positive		Ambivalent		Negative		Total		<i>F</i>	<i>p</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Rumination	3.03	1.10	3.14	1.01	3.03	1.10	3.10	1.04	1.273	.280
Acceptance and positive reappraisal	3.40	.70	3.16	.71	2.86	.76	3.16	.73	25.099	< .001
Positive refocusing	3.66	.97	3.42	1.00	3.03	1.12	3.41	1.03	17.915	< .001
Blame	2.94	.73	2.94	.78	3.03	.83	2.96	.78	.916	.400
Expressive suppression	3.39	1.17	3.24	1.15	3.33	1.25	3.28	1.17	1.434	.239

¹ A range of ± 1 of a determinant deviation from the mean is defined as from 2.4 to 3.3 of a point ($M = 2.8$, $SD = .44$). Students with negative attitudes fall under a value of 2.4 points, while students with a prevailing positive evaluation of school life fall above a value of 3.3 points.

The results of the correlation analysis show which of the assessed areas of school life are related to the use of sub-strategies of emotion regulation (Table 2).

The use of the strategy of acceptance and positive reappraisal is connected with the perception of success and opportunity ($r = .188, p < .001$), with social inclusion in peer groups ($r = .184, p < .001$), with the teacher’s approach to students ($r = .177, p < .001$) and with school status ($r = .131, p < .001$). Similarly, a positive refocusing is connected with the perception of success and opportunity ($r = .180, p < .001$), with social inclusion in peer groups ($r = .241, p < .001$), with the teacher’s approach to students ($r = .151, p < .001$) and with school status ($r = .136, p < .001$). It means that students who utilise the strategies of acceptance and positive reappraisal or positive refocusing to a greater degree during emotional regulation regard school as a place which positively stimulates them to learn and where they experience success, where they have a good feeling from their own inclusion in informal peer groups, where they perceive the teacher as a person who provides them with positive support, assistance and interest, and at the same time regard school as a place where they are aware of their own value and importance.

From this it follows that the greater the degree of use of adaptive emotional regulation strategies, the stronger (more positive) the perceived position in formal and informal school life processes (and vice versa).

The degree of use of adaptive strategies is not connected with a negative experience of school life ($p > .05$).

On the contrary, non-adaptive emotional regulation strategies, i.e. rumination, strongly correlate with a negative experience of school life ($r = .152, p < .001$) and with school status ($r = -.097, p = .001$). Similarly, expressive suppression is significantly connected with a negative experience of school life ($r = .110, p < .001$). This means that students who experience feelings of loneliness and worry at school return more frequently to the negative situation which they experienced, think about it constantly or exaggerate it, or end up suppressing the manifestations of their emotions. At the same time, it is evident that students who think about the situation they experienced to a greater degree, and analyse and exaggerate it, experience a far lesser degree of awareness of their own value and importance at school.

From the results of the research, it also follows that whether students deal with negative emotions by blaming other people (or situational and contextual variables) is not connected with their perceived position in formal and informal school life processes, i.e. their attitude toward school life ($p > .05$).

Table 2. The relationship between the degree of use of emotion regulation strategies and students’ attitudes towards school life

	Correlations (r)				
	Success	Social inclusion	Negative experience	Teacher approach	School status
Rumination	.055	.005	.152**	.044	-.097*
Acceptance and positive reappraisal	.188**	.184**	-.036	.177**	.131**
Positive refocusing	.180**	.241**	-.030	.151**	.136**
Blame	-.050	-.017	-.032	-.005	.044
Expressive suppression	.021	.001	.110**	.056	-.053

N = 1,133; **p < .001

To ascertain which of the assessed school life processes plays a part in the use of emotional regulation strategies, i.e. the use of adaptive emotional regulation strategies, non-adaptive emotional regulation strategies or suppression of emotional manifestations, we looked for the model which would best explain the degree of variability of the dependent variable, i.e. the degree of use of emotional regulation strategies (Table 3).

Table 3. Effect of students' attitudes towards school life in the use of emotion regulation strategies

		B	SE_B	β	Sig.
Adaptive	Social inclusion	.227	.039	.184	.001
	Success and opportunity	.199	.039	.162	.001
Non-adaptive	School status	-.068	.035	-.072	.049
	Negative experience	.123	.031	.127	.001
Suppression	Negative experience	.238	.066	.114	.001
	Teacher approach	.185	.077	.098	.017

From the regression analysis it follows that, when explaining the degree of use of adaptive emotional regulation strategies, the relevant variables are social inclusion in peer groups ($p < .001$) and perception of success and opportunity ($p < .001$). The created model, with two independent variables, explains 8.5 % of the variability of the dependent variable, i.e. adaptive emotional regulation strategies (R Square = .085, $p < .001$). In connection with the perceived position in formal and informal school life processes, it is primarily strengthening stimuli connected with the perception of school as a place where students experience feelings of success and opportunity to learn, and where they feel they are included in social peer networks, which play a part in the degree of use of adaptive emotional regulation strategies. The more school corresponds to students' expectations (they enjoy learning, like going to school and experience success there), and the more students are included in informal activities and students' groups, the greater the degree of their use of adaptive emotional regulation strategies.

When explaining the degree of use of non-adaptive emotional regulation strategies, the relevant variables are school status ($p < .049$) and negative experience of school life ($p < .001$). The created model, with two independent variables, explains 1.6 % of the variability of the dependent variable, i.e. non-adaptive emotional regulation strategies (R Square = .016, $p < .001$). It can be said that high-risk environmental attributes connected with a feeling of negative experience play a greater part in the use of non-adaptive emotional regulation strategies. The more students experience feelings of loneliness and worry at school, and the lower their awareness of their own value and importance, the greater the degree of use of non-adaptive emotional regulation strategies.

The factors contributing to the greater degree to the suppression of emotional manifestations are negative experience of school life ($p < .001$) and teacher's approach to students ($p = .017$). The created model, with two independent variables, explains 2.2 % of the variability of the dependent variable, i.e. expressive suppression (R Square = .022, $p = .006$). A feeling of negative experience of school life, but also the perceived approach of the teacher to the students, plays a bigger part in the effort to inhibit manifestations of own emotions than other environmental factors. It means that the more students experience feelings of loneliness and worry at school, and simultaneously perceive the teacher as a person who is supportive and understanding, the more they prevent or reduce visible manifestations of experienced emotions. It is possible that the perception of a positive approach by the teacher, combined with the negative experience of feelings of loneliness and worry, strengthens the student's effort to manage negative emotions by suppressing emotional manifestations, i.e. not manifesting them outwardly.

We can state that a combination of predominantly strengthening stimuli in the school environment plays a part in the degree of use of adaptive strategies. It means that if the student perceives school as a place where they experience a feeling of success, and see it as an opportunity to learn, and at the same time feel they are included in social peer networks, then there is a greater probability that they utilise adaptive emotional regulation strategies. On the contrary, the degree of use of non-adaptive strategies or suppression of emotions is affected by a combination of predominantly high-risk stimuli in the school environment. It means that if the student perceives school as a place where they tend to experience negative emotions such as feelings of loneliness or worry, then there is a greater probability that they will tend to utilise non-adaptive emotional regulation strategies.

4. Discussion

From the results of the research, it follows that second-class primary school students utilise both adaptive and non-adaptive emotional regulation strategies. On the one hand, it is a good thing that students utilise a positive refocusing to a relatively large degree, i.e. that they manage to purposefully focus on positive experience, and in the effort to manage negative emotions they do not find it a problem to think of more pleasant things or about how to best manage the given situation. On the other hand, however, it is surprising that students suppress emotional manifestations to a relatively large degree, i.e. that they try to prevent or reduce visible manifestations of experienced emotions.

We regard as key the discovery that the degree of use of adaptive strategies is dependent on students' attitude to school life. This means that students with a predominantly positive attitude to school life utilise adaptive emotional regulation strategies to a greater degree than students with a predominantly ambivalent or negative attitude. These students express an effort to manage negative situations by accepting them and trying to see them with an overview; they perceive the problem as an opportunity for personal growth. At the same time, they express an effort to think of more pleasant things, and to change their attention in a more positive direction. It is evident that adaptive emotional regulation strategies correlate with strengthening stimuli in the school environment, i.e. the positive perception of own position in formal and informal school life processes. The use of adaptive emotional regulation strategies is connected with a feeling of success, opportunity to learn, a feeling of inclusion in the class collective, perceived support from the teacher, and the awareness of own value and importance which students experience in school.

In our research, we did not ascertain the type of negative situations encountered by students who, as a consequence of their position in formal and informal school life processes, experience predominantly positive feelings at school. If they experienced the same situations as students who experience negative emotions at school, the question would arise whether the emotional regulation mechanisms would manifest themselves in the same way, and whether the students would remain resilient against negative situations.

We discovered that non-adaptive emotional regulation strategies correlate with predominantly high-risk stimuli in the school environment, i.e. they are significantly connected with a negative experience of school life. Students who do not experience an awareness of their own value and importance at school (which is connected with their school status), and on the contrary experience feelings of loneliness and worry, utilise non-adaptive emotional regulation strategies to a greater degree. In their effort to manage negative emotions, these students tend to return to descriptions and analyses of the negative experiences connected with this situation, they think about them constantly or they exaggerate the given situation, or they end up suppressing their emotional manifestations.

The connection between emotional regulation strategies and the perceived position in formal and informal school life processes indicates that this social environment plays an important role in the use of emotional regulation strategies. Nevertheless, we do not know how this connection takes place. Whether it is the social environment which affects the degree or use of emotional regulation strategies (i.e. whether a positive environment strengthens students' efforts to utilise adaptive emotional regulation strategies and, on the contrary, a negative environment encourages non-adaptive emotional regulation strategies) or if it is self-regulation mechanisms (patterns of emotional reactions and responses) which influence students' attitude/approach to managing various situation which occur in a social environment.

It is possible that the environment acts as a stimulator for the use of self-regulation mechanisms, in this case emotional regulation strategies. According to the strength model (Murtagh, Todd, 2004), self-regulation might operate like a muscle that fatigues after use and then requires a rest. We believe that the social environment acts as an inhibitor or catalyst of self-regulation mechanisms, which subsequently influence students' behaviour in this environment and their perception. Research shows that, as a consequence of social rejection, which is accompanied by the experience of so-called social pain, mechanisms which support the individual's effort to reintegrate into the group are not activated and, paradoxically, the opposite tendency occurs, i.e. a rise of selfish a self-defeating behaviour (Baumeister et al., 2005; Wood et al., 2002; Blackhart et al., 2006).

From our analysis it follows that, in connection with the perceived position in formal and informal school life processes, the degree of use of adaptive strategies is affected by predominantly strengthening stimuli connected with the perception of school as a place where students experience

feelings of success and opportunity to learn, and where they feel they are included in peer groups. The more school corresponds to students' expectations, the more they experience success there, enjoy attending school and are included in informal activities and students' groups, the higher the degree of their use of adaptive emotional regulation strategies.

On the contrary, high-risk environmental attributes connected with a feeling of negative experience play a greater part in the use of non-adaptive emotional regulation strategies. The more students experience feelings of loneliness and worry at school, and the lower their awareness of their own value and importance, the greater the degree of their use of non-adaptive emotional regulation strategies.

It is interesting that a combination of two relatively opposing stimuli contributes to the suppression of emotional manifestations. One of them is the feeling of negative experience, and the other is the teacher's approach to the students. The perception of a positive approach by the teacher, combined with the negative experience of loneliness and worry, strengthens the student's efforts to manage their emotions by suppressing emotional manifestations, and not expressing them outwardly. This means that the expressive suppression occurs to a greater degree in the case of students who experience feelings of loneliness and worry at school, but simultaneously perceive the teacher as a person who is supportive, understanding and fair, and respects the students' needs. It is possible that negative experiences at school, combined with the perception of a positive approach by the teacher, can actually intensify the student's feeling of helplessness, and lead to them suppressing their emotions.

The question arises of what causes students' negative experiences at school. If the student perceives that the surrounding environment (teacher) appears positive outwardly, it does not necessarily have to mean that this impression is positive in relation to them (the positive perception of external factors will not affect the internal feeling of negative experience). Although the findings are promising, they should be interpreted in light of certain limitations. First, the research results are based on children's self-reported information on their emotion regulation strategies and attitudes to towards school life. In this case, one must also take into account possible biases due to the current state of individuals and their susceptibility to social desirability. Secondly, the measurement of attitudes towards the school environment was carried out with one research tool and focused very specifically on areas of school life that are supportive of their learning and those that are risky. Finally, it should be emphasised that although this study was based on a large research sample, the results may or may not prove suitable for generalisation beyond the Czech context. In subsequent research, it would be interesting to focus on what are the causes of the students' negative experiences at school, and to what extent they are related to the intensity of the negative experience.

5. Conclusion

We can regard as an important finding the fact that a positive perception of position in formal and informal school life processes, specifically success and opportunity, and social inclusion in peer groups, strengthens the degree of use of adaptive emotional regulation strategies. It can be said that a supportive environment plays an important role in the emotional regulation. On the contrary, negative experience plays a greater part in the use of non-adaptive emotional regulation strategies, or the suppression of emotional manifestations.

How the students themselves perceive this environment is important. If they perceive learning as an opportunity, and experience success and good feelings from their inclusion in informal peer groups at school, then they are also able to regulate their emotions to a greater degree in this environment.

We can regard the perception of own position in formal and informal school life processes as an important prerequisite for the use/non-use of students' self-regulation mechanisms. We believe the perception of social environment can cause the strengthening or suppression of self-regulation mechanisms, i.e. also the use of emotional regulation strategies, which are key for managing stressful situations, maintaining positive relationships with others, and achieving social and personal goals.

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7. Conflict of interest

The author declared no potential conflicts of interests with respect to the authorship and/or publication of this paper.

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