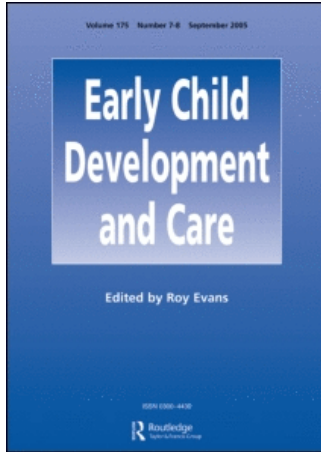


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Does a good fit matter? Exploring teaching styles, emotion regulation, and child anxiety in the classroom

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The central goal of the present study was to examine how a child's emotion regulation ability may moderate the relations between teaching styles and anxiety in childhood. Participants were 33 children (21 males, 12 females; mean age 7.5 years, standard deviation = 0.42), their mothers and teachers. Children completed the Early Adolescent Temperament Questionnaire—Revised to assess their emotion regulation, mothers completed the Child Behavior Checklist to assess their child's anxiety and teachers completed the Teaching Styles Inventory to assess various teaching styles. Results indicated different patterns of associations between teaching styles and anxiety for well-regulated versus dysregulated children. For example, it was found that children who are better able to regulate their emotions are better at coping with the potentially stressful context brought on by the expert teaching style than those children lower in regulation abilities. Preliminary evidence suggested that different teaching styles might be associated with different outcomes among children with differing regulatory characteristics. Results are discussed using the goodness-of-fit model.

Keywords: *Teaching styles; Goodness of fit; Emotion regulation; Childhood anxiety*

Introduction

Throughout life there are a multitude of environmental, social, personal and societal factors that interact to facilitate our growth and development. Of particular interest to researchers is the interaction between environmental and personal factors. For example, emotions play an important role in our development and can be influenced by any number of environmental factors such as teacher interaction. Teachers are largely responsible for the overall well-being, protection and implementation of learning opportunities and discipline for children in absence of parents. Interestingly

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enough, there is a lack of research investigating the link between teaching styles and childhood emotions. Few researchers have investigated the extent to which teacher styles interact with children's emotion regulation abilities to predict specific social developmental outcomes, such as anxiety, in childhood.

Teaching styles

Teachers play a key role in the management and recognition of anxiety in children. They are also key figures in the development and adjustment of children and leave long-lasting impressions on children's self concepts (Keogh, 1986). However, teachers are not a uniform group of individuals, each developing a unique pedagogical style. Research indicates that specific teaching styles and techniques are effective in the diffusion of anxiety in students. Emer *et al.* (2002) examined the effectiveness of group-interactive versus lecture-based formats for retention and client satisfaction in a group of adults with mental disorders. Results demonstrated that formats that allow for interaction among group members promote better learning and retention than do lecture formats. Further, results showed an increase in client functioning levels such that high-functioning clients (clients with mild levels of psychopathology) learned the most information within unstructured interactive settings. Likewise, Parker (1984) suggests that a *cooperative learning* environment, which emphasizes the development of thinking and problem-solving skills, minimizes student anxiety. This research finding supports the creation of an environment in which students feel safe to make errors and learn from mistakes. Parker (1984) suggests that cooperative learning benefits the student in the acquisition of broad-based social and academic goals. And further, Parker postulates that teachers must use their powerful 'instructor' role, to empower students to learn independently and to take responsibility for their own learning.

In an examination of teaching styles, Grasha (1996) argued that there are at least five main teaching styles that are linked to different outcomes in childhood. The *expert* possesses the information, knowledge and skills that students need; however, if this knowledge is over-used in the classroom, it may lead to students becoming intimidated by the teacher's fruitful base of knowledge (Grasha, 1996). The *formal authority* teacher focuses on a clear and methodical way of conducting class paired with firm expectations (Grasha, 1996). However, an over-investment in this style can lead to rigid, standardized and less flexible way of managing students and student concerns (Grasha, 1996). A teacher who teaches by personal example and who encourages students to observe and emulate the teacher's approach is said to utilize a *personal model* (Grasha, 1996). In this model, emphasis is placed on observation and following the teacher as a role model (Grasha, 1996). Teachers who utilize this approach tend to feel that their approach is the most effective as a means for instruction. Grasha (1996) reports that this may lead to feelings of inadequacy if the students cannot live up to such expectations and standards. The *facilitator* style is characterized by a focus on the personal nature of the student-teacher interaction (Grasha, 1996). Teachers who exhibit this style would offer a great deal of flexibility in their teaching and be

more prone to a 'student-centered' approach, paired with a willingness to explore alternate ways of completing tasks (Grasha, 1996). However, this approach, if not executed in a positive and affirming manner, may lead to students feeling uncomfortable in the classroom due to general uncomfortable feelings in response to the open and expressive atmosphere (Grasha, 1996). Finally, Grasha (1996) states that the *delegator* style does much to emphasize the student as an independent learner, but the style can be time consuming and may result in misreading of students' readiness to take on independent work. Grasha (1996) cautions that the *delegator* may contribute to student anxiety as the student may be given too much autonomy before they are ready to take it on. Therefore, it would seem from Grasha's findings that various teaching styles can either aid or hinder the learning process. One prevalent outcome for students is childhood anxiety.

Anxiety

Anxiety is a common response to a variety of life events. But for millions of people, anxieties and fears are overwhelming and persistent, and therefore interfere with daily life. These people suffer from anxiety disorders, a widespread group of psychiatric disorders that have the potential to hinder 'normal' development (Anxiety Disorders Association of America, 2001). In general, anxiety has been defined as an ominous sense of being menaced by an unspecified threat and shares many of the same physical characteristics as fear such as muscle tension and perspiration (Comer, 1996). Furthermore, anxiety is a problem affecting all people regardless of ethnicity, gender or sexuality. Mash and Barkley (1996) report that, in two cross-sectional studies, 21% of children sampled reported symptoms consistent with the diagnosis of a generalized anxiety disorder.

The *Diagnostic and Statistical Manual of Mental Disorders—4th edition—TR* has defined an individual suffering from Generalized Anxiety Disorder as having at least six months of persistent and excessive anxiety and worry that can be provoked by a variety of issues (American Psychiatric Association, 2000). In addition, the National Anxiety Association (2001) reports that the baseline anxiety levels of an individual suffering from an anxiety disorder are higher than usual. Also, these same individuals worry excessively over trivial issues that may lead to physical symptoms such as tension, nausea, fatigue and headaches. For some younger individuals, perfectionism may be at the root of the disorder. These young perfectionists may spend hours completing and redoing homework or other tasks, and often present with other difficulties such as restlessness, fatigue, difficulty concentrating, irritability, muscle tension, sleep disturbance and feeling on edge (Anxiety Disorders Association of America, 2001).

In all, anxiety can be conceptualized as existing in at least two different ways: anxiety that is experienced in a specific situation (state anxiety), and a general, overall predisposition to anxious feelings (trait anxiety). For the purposes of this study, anxiety represents generalized anxiety disorder, or general feelings of worry over a period of time (i.e. trait anxiety).

Teaching styles and anxiety

There has been some research that clearly elaborates on aspects of teaching styles and the success of anxious students. Hancock *et al.* (2000) found that highly anxious students perform best with teacher-centered instruction (instruction that does not require significant student interaction), while less anxious students perform best with student-centered instruction (instruction that promotes and fosters participatory learning). Further, it has been found that students who learn in a classroom that is under the direction of a democratic, student-centered (indirect) teacher display better adjustment, more positive attitudes toward learning, better work habits, more self-initiated activities and higher achievement than students who learn in a classroom that is under the direction of an autocratic, teacher-centered (direct) teacher (Anderson & Brewer, 1946; Flanders, 1959, 1967, 1968; Amidon & Flanders, 1967; Lewin *et al.*, 1967).

Duffey and Martin (1973) examined the interactive effects of direct and indirect teaching and varying levels of anxiety in students. It was found that levels of anxiety in students varied according to the teaching style employed. Direct instruction (autocratic, teacher-centered teachers) was found to illicit higher levels of anxiety in the high trait-anxiety group (when compared with baseline levels—pre-direct instruction) and was also found to produce higher levels of anxiety in the low trait-anxiety group (when compared with baseline anxiety levels—pre-direct instruction). Therefore, it was found that teachers who employ an autocratic and teacher-centered approach to teaching produce higher levels of anxiety in both anxious and non-anxious students.

Having said this, it is natural to hypothesize that teacher instructional methods would play a role in a student's level of anxiety in a given situation. It is further hypothesized that teaching styles with authoritarian-like characteristics (expert and formal authority) will be linked to anxiety in children. Teaching styles, however, are not the sole contributors to anxiety in children. Much of the emotional control rests within the children themselves. The ability of the child to control and regulate emotion plays a key role in this investigation.

Child emotional regulation

Successful emotional regulation may consist of the ability to maintain or prolong happy and enjoyable moments or moods, as well as to handle unpleasant or unhappy emotions that arise from negative experiences (Lagacé-Séguin, 2001). Emotional regulation can be operationalized as the ability of a child to perform some action, even when there is a tendency to avoid it (i.e. activation) and/or their ability to plan and likewise suppress inappropriate responses to external or internal stimuli (e.g. inhibitory control) (Rothbart, 1996). Specifically, Eisenberg *et al.* have described emotional regulation as 'the process of initiating, maintaining, modulating, or changing the occurrence, intensity, or duration of internal feeling states, emotion-related physiological processes, and the behavioral concomitants of emotion (e.g., facial expressions) in the service of accomplishing goals' (2001, p. 1114). According to Eisenberg *et al.* (2001), emotional regulation is a form of control. Individuals with

well-adapted ability to control emotions would have the ability to respond to the continually changing demands of experience with a range of socially acceptable responses. Such responses would be flexible to allow for spontaneous reaction or inhibition of behaviors (Eisenberg *et al.*, 2001).

Well-regulated individuals are less likely to be subject to over-control or under-control and they have the ability to balance reactions to fluctuating experiences. It is important to note that regulation is generally viewed as adaptive. It is differentiated from a child's behavioral control, which may be either adaptive or maladaptive (Block & Block, 1980; Thompson & Calkins, 1996). The ability of a child, presented with an unpleasant experience, to regulate and control their emotions is important to successful socialization. When children do not have the ability to regulate emotions successfully, they lack the ability to adapt successfully to the classroom environment (Eisenberg *et al.*, 2001). Further, Garcia (2002) found that children with diagnosed anxiety disorders are less able to regulate sadness and anger than other children. However, children with anxiety disorders are, on the other hand, better able to regulate anger and sadness than children with other types of psychopathology (Garcia, 2002).

Teaching styles, child emotional regulation and anxiety: goodness of fit

As previously discussed, teaching styles, as well as children's ability to regulate emotions, are theoretically and empirically individually related to specific outcomes such as anxiety in childhood. However, the combination of these relations can be conceptualized within a goodness-of-fit model. According to Thomas and Chess (1977), the goodness of fit between child temperament and the child's environment is a significant factor in child adjustment. For example, in parenting research it is important to determine the extent to which a child's temperament and a parent's parenting style interact to predict childhood adjustment. Lagacé-Séguin (2001) further explains that:

in terms of a parent-child paradigm, goodness of fit refers to the extent to which parenting characteristics and child characteristics are well matched. If a child possesses the characteristics that help him/her cope adequately with the expectations of the environment then a 'good fit' would be present. (p. 97).

Paterson and Sanson (1999) argue that if a 'good fit' exists, then the outcome would be a positive one. Further, if a 'good fit' does not exist, then negative outcomes would follow. Paterson and Sanson (1999) found that the fit between parental style and child temperament influence children's social adjustment. Further, Prior *et al.* (1993) studied the relationship between temperament styles in children and parenting styles. They found that certain temperamental characteristics dimensions (i.e. inflexibility and persistence) as well as punitive parenting styles had an immediate and future influence on children's development. Overall, the research suggests a link between child temperament and parenting styles in child development.

It seems evident that in research examining child temperament, the focus tends to be on parent-child and family-child contexts. Keogh (1986) notes that the omission

of teacher–child interactions in the literature is quite alarming given that school is an important aspect of a child’s life. Also, she reports that school experiences paired with internal characteristics of the child impact on a child’s social and emotional development. Therefore, the ‘goodness-of-fit’ model has been applied to classrooms as well. That is, the characteristics of the child need to be conducive to the classroom environment in so far as to allow the child to properly adapt to the expectations of the classroom. As in the parenting literature, it is assumed that the child’s ability to regulate and control emotion would act as a moderator in the relations between distinctive teaching styles (as parenting styles) and child achievement and success in the classroom. Some connections between teaching styles and outcomes in childhood have been found. However, the focus of these studies has been the teacher–child relationships and academic achievement, not emotional well-being. For example, it has been found that teaching styles that are similar to the authoritative (warm and supportive) parenting style are positively related to student motivation and feelings of academic competence (Moos, 1978; Ryan *et al.*, 1994; Wentzel, 1997). However, there appears to be no formal examination of the role of teaching style and emotion regulation in the prediction of anxiety in childhood.

Therefore, this paper examines an important issue in the development of children. Of specific interest is examining students’ self-reports of general feelings of anxiety and to link these with specific teaching styles. Furthermore, the ability of children to regulate their own emotions will be examined as a moderated variable in this relationship. It is hypothesized that there will be an interaction between teaching styles and emotional regulation in the prediction anxiety. For example, it may be that children who are high regulators are buffered from the negative outcomes associated with a formal authority teaching style. In all, the complex relations between teaching styles, regulation and anxiety will be addressed. It is important to note that this is a relatively new area of research, and therefore the hypotheses are primarily exploratory in nature.

Methods

Participants

Participants were 21 males and 12 females (mean age 7.5 years, standard deviation = 0.42) recruited from two grade four classrooms and a grade two classroom in a small private parochial elementary/middle school in the Northeastern United States. Given that this study was based on a random sample design, a variety of households were represented (married, $n = 28$; divorced, $n = 3$; single, $n = 2$), as were levels of parental education (high school, $n = 6$; some college, $n = 4$; associates degree, $n = 7$; bachelor degree, $n = 13$; graduate degree, $n = 2$; and other, $n = 1$).

Measures

Teaching Style Inventory. Teachers were given a revised version of the Teaching Styles Inventory (TSI) (Grasha, 1996). The TSI is a 40 item measure that examines

a number of teacher characteristics. The instrument assesses a teacher's teaching style and yields an individual score on five distinct teaching styles (expert, formal authority, personal model, facilitator, and delegator). Grasha (1996) reports acceptable reliability ($\alpha = 0.68\text{--}0.75$ on individual scales, and $\alpha = 0.72$ for the entire test) and validity. The psychometric findings for the TSI in this study were similar of those of Grasha (1996).

Early Adolescent Temperament Questionnaire—Revised. The students were given the Early Adolescent Temperament Questionnaire—Revised (EATQ-R) (Rothbart, 1996). The EATQ-R is a measure that examines regulation in children on a number of constructs (behavioral, temperamental, etc.). This scale has been developed for children as young as six and a half years old. For the purposes of this study, the eight-item activation control scale, which examines 'the capacity to perform an action when there is a strong tendency to avoid it' (Rothbart, 1996, p. 1), and the 11-item inhibitory control scale, which measures the child's 'capacity to plan, and to suppress inappropriate responses' (Rothbart, 1996, p. 1), were used to assess emotional regulation. Rothbart (1996) reports alpha coefficients for these subscales as $\alpha = 0.73$ (activation control) and $\alpha = 0.77$ (inhibitory control), respectively. This study found similar alpha levels.

Child Behavior Checklist. To measure anxiety, parents were also given the Child Behavior Checklist (CBCL) (Achenbach, 1991). The CBCL is a rating scale used to screen for a variety of potential problem behavior areas. It examines how a child generally behaves in a wide range of circumstances, representing two main areas: competency scales and problem scales. The competency scales are used to evaluate a child's adjustment and participation in extra-curricular activities, social interactions and school performance. The problem scales are used to evaluate a child on social, attentional and behavioral problems. The CBCL has good test-re-test reliability (competency items $r = 0.99$; problem items $r = 0.95$) and has good content validity, construct validity and criterion-related validity. Again, this study found similar psychometrics for the CBCL.

Procedure

Data collection. The EATQ-R was administered within the classroom. Administration took approximately 30 minutes and all questions were presented verbally to the group. Simultaneously, teachers were asked to complete the TSI in the faculty lounge to control for potential teacher/student influence on individual responses.

The parents received a package containing a demographic questionnaire, and the CBCL. Each parent was also given a cover letter outlining instructions for completing the questionnaires. Parents were asked to complete the questionnaires in a quiet setting away from their children (again to control for potential influences in responses).

Results

The primary goal of the study was to identify predictive pathways to anxiety from teaching styles with emotional regulation used as a moderating variable. Within this section, sophisticated hierarchical regression analyses are presented to examine the interactive relations.

Moderated regression analyses

To examine moderated (interactive) pathways in the prediction of anxiety, interactions between predictor variables (teaching style and emotional regulation) were explored using multiple regression analyses. Cohen's partialled products technique (Cohen, 1978; Cohen & Cohen, 1983) was employed where independent variables are first entered into the regression equation as a block, followed by the interaction terms (as represented by their multiplicative products). At each step, the significance in R^2 change was assessed to determine whether each main effect or interaction added to the productiveness of the overall equation. Where significant interactions were detected (i.e. a significant in R^2 change), follow-up analyses were conducted.

Teaching styles and emotional regulation to predict parent-reported anxiety

There were no significant interactions between either the personal model or delegator teaching style and emotional regulation in the prediction of parent-reported anxiety. However, results from the regression analyses revealed a significant interaction between expert teaching style and emotional regulation to predict parent-reported anxiety ($R^2_{\text{CHANGE}} = 0.15$, $F_{\text{CHANGE}}(1, 28) = 6.83$, $p < 0.05$) (see Table 1).

Interactions were explored by re-computing the regression analyses separately for groups of children scoring above and below the median in terms of emotional regulation (i.e. high regulation and low regulation). Similar procedures to examine interactions and simple effects have been outlined by many different researchers (for example, Aiken & West, 1991; Gottman *et al.*, 1997; Calkins *et al.*, 1999; Rubin *et al.*, 2001). The first interaction was between the expert teaching style and emotional regulation to predict parent-reported anxiety. Results from follow-up analyses

Table 1. Prediction of parental-reported anxiety from teaching style (expert) and emotional regulation

	Dependent variable: CBCL anxiety	
	Main effects (β)	Interaction term (ΔR^2)
Expert teaching style	-0.43	
Emotional regulation	-0.12	
Expert \times emotional regulation		0.15*

* $p < 0.05$.

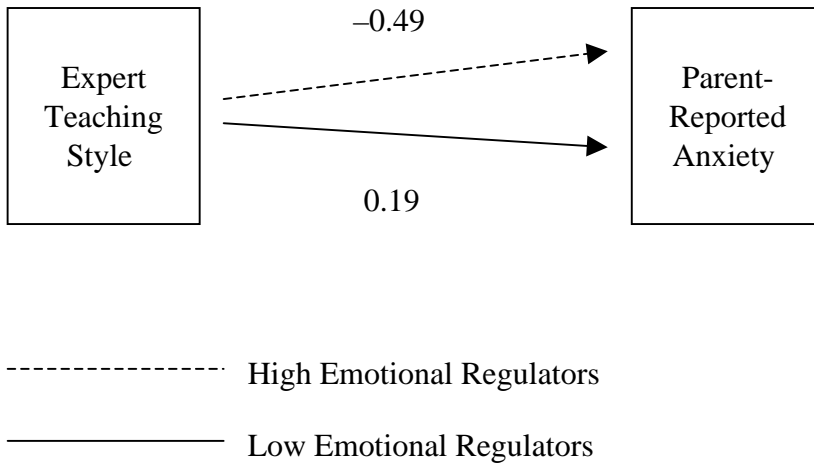


Figure 1. Simple effects testing of a moderated relationship between the expert teaching style and emotional regulation to predict parent-reported anxiety. $*p < 0.05$

indicated that the expert teaching style was not associated with parent-reported anxiety in children with low regulation ($\beta = 0.19$, $t = 0.72$, not significant), but was significantly and negatively associated with anxiety for those children with high regulation ability ($\beta = -0.49$, $t = -2.17$, $p < 0.05$) (Figure 1).

Results from the regression analyses also revealed a significant interaction between the facilitator teaching style and emotional regulation to predict parent-reported anxiety ($R^2_{\text{CHANGE}} = 0.18$, $F_{\text{CHANGE}}(1, 28) = 7.49$, $p < 0.05$) (Table 2).

Interactions were again explored by re-computing the regression analyses separately for participants with low and high regulation levels. It was found that the facilitator teaching style was not associated with parent-reported anxiety in children with low regulation ($\beta = 0.20$, $t = 0.77$, not significant) or children with high regulation ($\beta = -0.35$, $t = -1.44$, not significant). However, children displaying either high or low regulation were significantly different from one another, as was displayed in the significant interaction (Figure 2).

Table 2. Prediction of parental-reported anxiety from teaching style (facilitator) and emotional regulation

	Dependant variable: CBCL anxiety	
	Main effects (β)	Interaction term (ΔR^2)
Facilitator teaching style	-0.31	
Emotional regulation	-0.08	
Facilitator \times emotional regulation		0.18*

* $p < 0.05$.

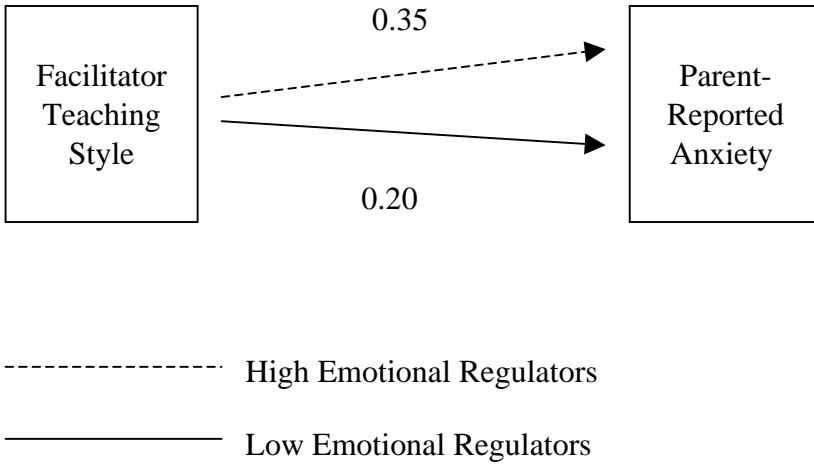


Figure 2. Simple effects testing of a moderated relationship between the facilitator teaching style and emotional regulation to predict parent-reported anxiety

Finally, results from regression analyses revealed a significant interaction between the formal authority teaching style and emotional regulation to predict parent-reported anxiety ($R^2_{\text{CHANGE}} = 0.11, F_{\text{CHANGE}}(1, 28) = 4.02, p = 0.05$) (see Table 3).

Interactions were again explored by re-computing the regression analyses separately for participants with low and high regulation levels. Follow-up analyses revealed that the formal authority teaching style was not associated with parent-reported anxiety in children with low regulation ($\beta = 0.17, t = 0.66$, not significant) or with high regulation ($\beta = -0.14, t = -0.56$, not significant). However, children displaying either high or low regulation were significantly different from one another, as was displayed in the significant interaction (Figure 3).

Discussion

Given the exploratory nature of this study, the primary goal was to establish predictive pathways to anxiety via teaching styles while accounting for child emotion regulation

Table 3. Prediction of parental-reported anxiety from teaching style (formal authority) and emotional regulation

	Dependant variable: CBCL anxiety	
	Main effects (β)	Interaction term (ΔR^2)
Step 1: formal authority teaching style	-0.14	
Step 2: emotional regulation	-0.09	
Step 3: formal authority x emotional regulation		0.11*

* $p = 0.05$.

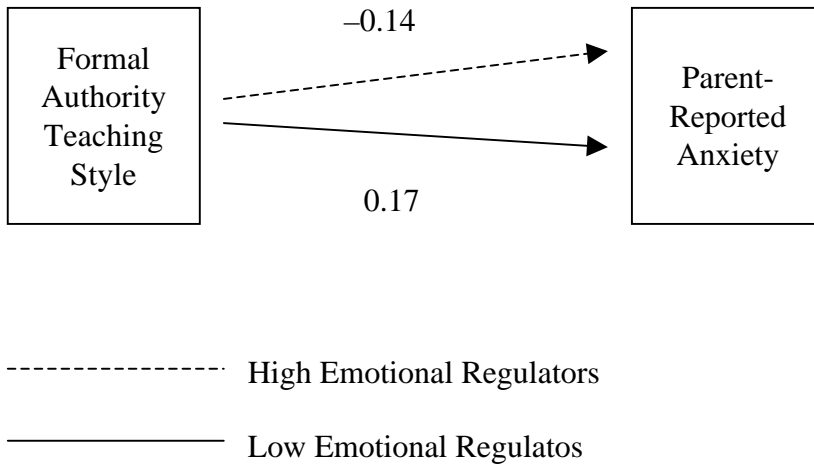


Figure 3. Simple effects testing of a moderated relationship between the formal authority teaching style and emotional regulation to predict parent-reported anxiety

abilities. Specifically, associations were explored between teaching styles (expert, formal authority, personal model, facilitator, and delegator), child emotional regulation and parent-reported anxiety in children. Results indicated three moderated relations in the prediction of parent-reported childhood anxiety.

Teaching styles, emotional regulation and parent-reported anxiety

There were three significant pathways between teaching styles, emotional regulation and parent-reported anxiety. The interaction between expert teaching style and emotional regulation was found to significantly predict anxiety in children. It has been explained that the expert style may be associated with intimidation of children (Grasha, 1996). Therefore, one would expect that the more a teacher uses an expert style in his or her instruction, paired with the more the teacher feels they possess the information, knowledge and skills that students need, the higher the overall anxiety levels in children. However, it was found that children who are better able to regulate their emotions cope with the potential stressful context brought on by the expert teaching style. That is, the more intense the expert teaching style, the lower the anxiety for children who have high emotional regulation abilities. The children who are highly regulated are, in essence, 'buffered' from the negative effects of the expert teaching style. However, children who are less equipped to control and manage emotions may be the children who are more prone to experiencing the feelings of insecurity that have previously been prescribed as outcomes for the expert teaching style. These children do not have the regulatory tools in place to cope with the expert teaching environment.

This finding can be explained using 'goodness of fit' or the extent to which the demands of the environment are congruent with a child's characteristics, capacities

and style of behaving (Thomas & Chess, 1977). Within the realm of teacher–child relationships, ‘goodness of fit’ refers to the extent that teaching characteristics and child characteristics are well matched. In this regard, within a classroom where an expert teaching style is common, the results were consistent with the notion that better emotional regulatory ability acts as a protective factor against outcomes linked with anxiety. Presumably, the fact that the higher regulator would have tools at their disposal to manage the emotions helps them cope with the potentially stressful environment linked to this type of teaching style. This situation represents a good ‘fit’.

The facilitator and formal authority teaching styles were found to interact with emotional regulation to predict anxiety. The direction of relations indicated that the higher in formal authority or facilitator style a teacher is, the lower the anxiety levels for children who are high regulators. Further, the higher in facilitator or formal authority a teacher is, the higher the levels of anxiety in children who were low regulators. These results may be a function of the child’s ability to regulate their emotions and the influence that this regulation ability has on the child’s feelings in the classroom. The facilitator teacher tends to be flexible, willing to explore alternate ways of instructing and has an overall ‘student-centered’ approach to teaching (Grasha, 1996). It could be that the open and student-centered atmosphere is what high regulators need to succeed in a classroom. The encouragement to explore and learn may actually be facilitating the ongoing well-developed regulation abilities. As the focus of the teacher is on the success of the student, the less a teacher exhibits a facilitator style, the more likely a low regulated student is apt to feel increasing levels of anxiety. It may be that reduction of an open and student-centered approach to teaching may be interpreted by the low regulator as a disinterest in their individual success as a student, thus producing feelings more consistent with anxiety.

Grasha (1996) explained that the formal authority teacher tends to be rigid, standardized and less flexible in their dealing with students. For children who are poor regulators, it would make sense that the increase in the rigid and standardized approach to instruction would also increase the levels of anxiety in children. Such an approach to a child with poor regulation abilities may be serving to heighten the child’s anxiety in the classroom. Children who are high regulators may actually respond well to the security and predictability in the classroom, thus encouraging adaptive functioning. Further research may find that as classroom stability decreases, so would the feelings of security in the high regulator, thus producing the increased anxiety levels.

Caveats and future directions

The relatively small sample size (although appropriate for our data analyses) may have influenced the results of this study. For example, sampling from a larger and more diverse demographic sample may help to illustrate a larger number of interactions and would also provide a greater breadth of information in regards to teaching style. There may have been other, external factors, which may have influenced results. For example, a teacher’s salary and class size, two variables that factor into

job satisfaction, may have a direct influence on a teacher's style, and subsequently their teaching style.

Given that this was a correlational study, causation cannot be inferred. A longitudinal study would allow researchers to examine specific causal links between variables. Likewise, given the bidirectionality of correlations, it is difficult to state with certainty the direction of the statistical correlations. For example, is it the child's emotion regulation ability driving teaching styles, or are teaching styles promoting a particular level of regulation?

This study has uncovered novel links between teaching styles, emotional regulation and anxiety in children. With future investigation, the complex associations outlined in this study will be unraveled. However, for now, the preceding findings have provided the literature with a strong start in an otherwise sparse pool of research.

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