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# Disruption Management Interacts with Positive and Negative Emotions in the Classroom: Results from a Simulation-Based Study

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**Abstract:** The conduct of teachers, especially in handling disruptions, significantly impacts the comfort of students. This research investigates the correlation between preservice teachers' effectiveness in terms of managing disruptions and the emotions experienced by both engaged and disruptive students. In an experimental simulation, we crafted a classroom scenario wherein preservice teachers engaged in handling severe disruptions over a 10-min period. During the simulation, other preservice teachers assumed the roles of either engaged or disruptive students, following specific behaviour guidelines. Afterwards, the student role players completed questionnaires to gauge their perceptions of positive and negative emotions, as well as to assess the effectiveness of the teacher's management of disruptions. Notably, interaction effects were observed between preservice teachers' disruption management strategies and the students' roles (either engaged or disruptive) on their emotional responses. When preservice teachers effectively managed the classroom during the simulation, those acting as engaged students reported higher levels of positive emotions and fewer negative emotions. In contrast, when classroom management was ineffective, participants portraying disruptive students experienced more positive emotions and fewer negative emotions. The educational implications of these results are considered and discussed.

**Keywords:** preservice teachers' disruption management; classroom emotions; engaged students; disruptive students

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## 1. Introduction

> Michelle Obama writes in her biography entitled *Becoming*: "My second-grade classroom turned out to be a mayhem of unruly kids and flying erasers, which had not been the norm in either my experience or Craig's [her brother]. All this seemed due to a teacher who couldn't figure out how to assert control—who didn't seem to like children, even. I sat miserably at my desk, [. . .]—learning nothing and waiting for the midday lunch break, when I could go home and have a sandwich and complain to my mom". [1]
>
> Michelle Obama, Becoming, 2021, p. 32ff.

This quote from Michelle Obama, who refers to herself as a deeply interested and engaged learner during her school years, exemplifies the fact that classroom disruptions are strongly related to the emotions of the students involved in the classroom [2]. Such disruptions can undermine students' confidence and trust in their teachers [3,4]. The emotional impact of disruptive behaviour has the potential to inflict harm upon all participants in the learning environment over time [5,6].

Kounin [4] demonstrated as early as 1958 that a clear ripple effect exists when disruptions occur in the classroom. This implies that the manner in which a teacher manages

children's behaviour impacts not only those being corrected but also those observing. Moreover, he demonstrated that teachers with high firmness and clarity during their disruption management were capable of counteracting the ripple effect and were more successful in decreasing or stopping the disruption than overly harsh teachers. Thus, Kounin [4] provided 1958 as an early example of a broad view of the interactive effects of disruption management, showing that classroom disruptions impact students differently. However, he placed greater emphasis on behaviour than on students' emotions.

Currently, there is a lack of research specifically addressing context-specific emotions of students based on their roles during significant classroom disruptions. Marzano and Marzano [7] postulated in 2003 that there are generally two groups of students in a classroom. On the one hand, there are engaged, active students (who are interested and follow the intended activity presented by the teachers), and on the other hand, there are "high-needs students" who can be either introverted or extroverted but, in both cases, pose a significant challenge for teachers trying to include all students in classroom activities. Within this framework, we explore whether engaged students may experience different emotions compared to disruptive students, influenced by their motivation to progress and the frustration of facing obstacles to learning. Furthermore, it is likely that how effectively teachers manage disruptions impacts the emotions felt by students. Therefore, this study investigates whether the efficacy of teachers' disruption management relates differently to the emotional experiences of engaged and disruptive students.

### *1.1. Student Emotions*

Over the past two decades, educational research has increasingly turned its focus towards student emotions within dynamic learning processes and achievement scenarios [5,8,9] with a view to comprehending the impact of students' emotions on their academic, behavioural, and social outcomes, as well as on their relationship with teachers [10], and their intrinsic or extrinsic motivations [11]. Students undergo a spectrum of emotions throughout a regular school day, encompassing both positive and negative ones [12], triggered by the perception and assessment of stimuli and closely linked to motivation and academic performance within the educational environment. These academic emotions encompass myriad feelings such as joy, pride, interest, and boredom, are context-specific, highly variable [6,13], and encompass affective (core feeling), expressive (facial and body expression), cognitive (thoughts), physiological (e.g., sweating), and motivational (approach or avoidance) components [14,15].

Pekrun [12] postulates in his control-value theory that the positive achievement-related emotion of joy is triggered by the learning or teaching context and is connected to the student's assessment of the significance and utility of the subject matter. Additionally, it is influenced by whether the situation is perceived as controllable, either intrinsically or extrinsically. Conversely, when a student perceives that success or failure is not within their control, they may experience a negative achievement emotion, such as anger, particularly when these outcomes are attributed to external factors, such as the actions of other individuals [16] or "if the activity is perceived as being controllable, but is negatively valued (e.g., when the effort required by the activity is experienced as aversive" [12] (p. 323).

In line with theoretical approaches and empirical findings, teaching has a crucial impact on student emotions in the classroom [17–19]. As demonstrated by Michelle Obama's diary entry (see above), effective teaching and learning cannot take place in a badly managed classroom [7,20,21]. Indubitably, teachers are the most influential triggers of student emotions, given that they are not only experts in a variety of teaching approaches, strategies, and designs [22] but are also capable of enhancing participation through classroom management [23]. As a case in point, various research findings indicate that positive emotions in students are prompted by teachers who can establish a favourable classroom atmosphere and encourage supportive social engagements [17–19]. In addition, Gläser-Zikuda and Seifried [24] illustrated that overall teacher competencies, such as clarity in instruction, motivational quality, compassion, and diagnostic abilities, are strongly associated with positive emotions in students, albeit not with negative emotions.

However, other studies also confirm the relationship between negative student emotions and teachers' classroom management. For example, in 2020, Goetz et al. [6] examined the dynamics of real-time classroom emotions and found that students' appraisal of the teaching quality correlates with their negative and positive emotions. This result was underlined by Frenzel et al. [2], who, by means of the methods of multilevel analysis, proved that the students perceived teaching quality in mathematics relates significantly to their positive or negative emotions.

Effective classroom management is crucial in cultivating both positive and negative emotions among students, ultimately enhancing their academic performance [25]. However, there is a paucity of publications explicitly addressing classroom disruptions associated with students' emotions, particularly in relation to different classroom behaviours, such as engaged versus disruptive students. In this study, we classify "disruptive students" not only as those who actively disturb but also as those who are disengaged (e.g., passive, aggressive, attention problems, socially inept), drawing on Marzano and Marzano [7], who introduced in 2003 the term "high-needs students" for this behaviour. Thus, we aim to examine the aspect of positive and negative classroom emotions during disruptions more closely, based on the theoretical framework of Marzano and Marzano [7].

### *1.2. Teachers' Disruptions Management*

Doyle [26] stated in 2013 that classroom disruptions can impair learning processes and threaten the social order of the classroom. How teachers deal with teaching disruptions is of crucial importance not only for the learning outcomes of students [27,28] but also for the teachers' well-being. This implies that knowledge and competencies in classroom management denote salient factors influencing the quality of teaching [29,30]. According to Kunter et al. [22], knowledge about classroom management is a facet of pedagogical knowledge, and understanding disruptions is one aspect of knowledge about classroom management [31]. In 2018, Praetorius et al. [32] defined classroom management as a generic dimension of teaching quality, encompassing four subdimensions: disruptions and discipline problems, time use, respectively, time on task, monitoring or whiteness, and clear rules and routines. Thus, disruptions and discipline problems are subdimensions of classroom management within the framework of Praetorius et al. [32].

Teaching quality is also reflected in the literature, which indicates that three central factors seemingly impact students' perception of a good teacher. First, the teacher's ability to establish positive relationships, demonstrate care, and foster mutual respect [33]. Second, providing a supportive classroom structure without being harmful, rigid, or punitive [10,33,34]. Third, the capacity to make learning enjoyable through creative and innovative didactic and pedagogic strategies [35]. Unsurprisingly, these factors pose a particular challenge when a teacher encounters and attempts to manage instances of classroom disruption.

When handling classroom disruptions, educators must make quick decisions under pressure, often without fully understanding the underlying causes of disruptive behaviour. Moreover, they must manage multiple incidents simultaneously and continuously assess and potentially adjust their strategies. It is also crucial to promptly address disruptions, as any delay could result in missed learning opportunities [36].

Teachers refer to classroom disruptions as talking out of turn, hindering others, idleness, disobedience, unnecessary noise, aggression, unpunctuality, untidiness, out of seat, and eating [37–39]. They vary in severity, frequency [38,40], and the extent to which the disruption spreads [41]. Researchers [42] suggest that there is a distinction made between various types of problem behaviour in the classroom. These are inclusive of minor problem behaviours, which have minimal impact on the class; major problem behaviours, characterised by significant disruption and rule violations; escalating and spreading problem behaviours, involving frequent and serious rule violations that spread within the classroom; and massive disruptive behaviours, often perceived by teachers as a challenge to their professional authority and personal integrity [43–47].

Effective classroom management includes both preventive and reactive teacher strategies [41,42] to establish a learning environment that, in turn, enables all students to benefit from the lessons [25,48]. The present study exclusively focuses on reactive strategies when one or more disruptions are actively occurring in the classroom.

The effectiveness of teachers' reactive disruption management is strongly predicated on the nature of the disruption. While it is possible to effectively manage minor problem behaviours [42] by ignoring them, major or escalating problem behaviours [42] necessitate alternative adaptive disruption management strategies. As a result, the effectiveness of the reactive strategy and how a disruptive student perceives it are pivotal factors in determining whether the teacher mitigates, exacerbates, halts, or remains unaffected by a classroom disturbance.

### *1.3. Previous Research on Disruption Management*

Several video experiments based on real-life cases were conducted over the past decade to investigate the teachers' emotions, cognitions, and emotion regulation in the context of severe classroom disruptions [44,45]. In these experiments, teachers were asked to take on the perspectives of their role models in the videos. The authors of these studies identified perspective-taking as an essential and crucial strategy for training preservice teachers in effective disruption management.

In teacher education, many programs are known to leverage video-based learning arrangements in order to foster the professional vision of teachers while interacting in the classroom [49]. As a case in point, preservice teachers can reflect on examples of filmed, prestaged disruptions. Through this process, they can cultivate alternative strategies to respond to and manage challenging situations in the classroom [49]. However, Blömeke et al. [50] emphasised a current lack of learning arrangements to increase teaching competencies that explicitly focus on observable behaviour.

Accordingly, the objective is to construct a learning arrangement that provides a basis to practice teaching strategies through behavioural training. Addressing Blömeke and colleagues [50] research desideratum, Kumschick has dedicated the past five years to working with in-situ simulations [51,52]. Within this behavioural learning setting, preservice teachers can practice disruption management in realistic contexts whilst also benefitting from the opportunity to exercise perspective-taking by directly assuming the roles of disruptive or engaged students.

This learning arrangement, labelled affective-behavioural-cognitive training for dealing with classroom disruption (abc training), is aimed at training preservice teachers in disruption management strategies within a simulated classroom setting. This includes exploring negative emotions that arise when attempting to stop a disruption [51–54] examining the ramifications of myriad various classroom management strategies on students' academic, behavioural, socio-emotional, as well as motivational outcomes through group discussions [55], and gaining insights into the student perspective by assuming their role.

Perspective-taking plays a pivotal role in the preservice teachers' learning process because previous research has demonstrated that it promotes teachers' emotional regulation [44,45]. Kumschick et al.'s studies place emphasis on the importance for preservice teachers to understand how to cognitively interpret and regulate emotional challenges during severe classroom disruptions. It is imperative for them to learn to think and behave in a controllable and activity-based manner [45]. The abc training lends support to this process by providing preservice teachers the opportunity to gain knowledge about cognitive and emotional processes in the classroom and apply, examine, and practice this knowledge in in-situ training.

### *1.4. The Current Study*

Past studies have demonstrated the significant relevance of teachers' emotion regulation in managing disruptions, which in turn contributes to reducing negative emotions among students in the classroom. Moreover, positive emotion regulation has been observed to be influenced by the ability to take on different perspectives [44,45]. Findings from prior

research have suggested a trend wherein engaged students tend to undergo more negative emotions, such as feelings of helplessness and anger, in comparison to disruptive students during instances of severe classroom disruptions [51,52]. However, it remains unclear whether disruptive students, on the other hand, experience heightened positive emotions during instances of ineffective disruption management (such as fun, satisfaction, and joy). Additionally, it is uncertain whether certain factors, such as effective or ineffective teachers' disruption management, could enhance positive emotions among engaged students.

Therefore, this study aims to investigate how preservice teachers' management of disruptions interacts with the amplification or reduction of positive or negative emotions in the classroom. Specifically, the research will explore the correlations between preservice teachers' handling of disruptions and the emotions experienced—both positive and negative—by students in their roles as either engaged or disruptive. Thus, this study attempts to check whether the described experience of Michelle Obama [1] indeed had a universal character.

In reporting our study, we use the following terms for ease of reading: (a) "teacher" refers to a preservice teacher in the role of a teacher, (b) "engaged student" signifies a preservice teacher in the assigned role of an engaged student, and (c) "disruptive student" denotes a preservice teacher in the role of a disruptive student.

### *1.5. Research Question and Hypotheses*

Our research question is as follows: "How is the effectiveness of a teacher's disruption management related to the emotions of engaged versus disruptive students?" Drawing from the previously discussed literature, we expected a significant interaction effect between the teacher's handling of disruptions and the student's behaviour within the classroom. Specifically, we anticipate the following hypotheses (for an overview, see Table 1):

**Hypothesis 1.** *Engaged students will experience higher positive emotions than disruptive students when teachers can stop or minimise the disruption.*

**Hypothesis 2.** *Disruptive students will experience higher positive emotions than engaged students when teachers have no influence on the students' disruption or even increase it.*

**Hypothesis 3.** *Engaged students will experience higher negative emotions than disruptive students when teachers have no influence on the students' disruption or even increase it.*

**Hypothesis 4.** *Disruptive students will experience higher negative emotions than engaged students when teachers can stop or minimise the disruption.*

**Table 1.** Overview of the hypothesis.

| **Teacher Did . . .** | **Engaged Students Perceive More . . .** | | **Disturbing Students Perceive More . . .** | |
|---|---|---|---|---|
| | **Positive Emotions** | **Negative Emotions** | **Positive Emotions** | **Negative Emotions** |
| . . . stop the disturbance | «+» | «−» | «−» | «+» |
| . . . minimize the disturbance | «+» | «−» | «-» | «+» |
| . . . not influence the disturbance | «−» | «+» | «+» | «−» |
| . . . increase the disturbance | «−» | «+» | «+» | «−» |

Note: «+» = more; «−» = less.

## 2. Methods

### *2.1. Abc Training*

The objective of the abc training is to enhance the management of classroom disruptions (e.g., major problem behaviour or spreading problem behaviour) from the emotional, behavioural, and cognitive perspectives [42]. This objective is accomplished via simulation training, which has been established as a proven method for emergency training in fields such as medicine [54] and aviation [56].

Applying a systematic approach to deal with disruptions, Mahvar et al. [57] reviewed and classified techniques used by teachers. They identified three basic ways in which teachers handle teaching disruptions, which are introduced in the training:

(a) Revengeful and punitive behaviour: This uncooperative approach involves immediately following disruptive behaviour with (unreasonably severe) punishment. The interaction is usually aimed at achieving a victory or defeat of the opponent.
(b) Avoiding and evasive behaviour: This approach is characterised by the teacher's withdrawal, ignoring major disruptions, attempting to evade disruptive students, and avoiding taking a position.
(c) Problem-solving-supportive behaviour: This approach involves calling out the violation of the rule as unacceptable while simultaneously making an effort to support a behaviour change.

In abc training, it is emphasised that revengeful-punitive reactions to disruptions do not lead to a lasting change in students' disruptive behavior, and it is better to focus on constructive assertiveness [31,51]. Furthermore, in the first lesson of the training, students receive a checklist measuring effective strategies to deal with disruptions [31]. Table 2 outlines the framework of this training.

**Table 2.** The framework of the abc training.

| Topic | Description |
| --- | --- |
| Name | Affective-behavioural-cognitive training (abc training) to foster disruption management in preservice teachers. |
| Target Recipient | Advanced preservice teachers enrolled in a master's degree course for secondary school teachers at the University of Teacher Education Lucerne (CH) |
| Duration | 6-weeks program. |
| Characteristic | Compressed intervention with theoretical input in the first two lessons on the topic of disruption management strategies, emotions, and emotion regulation. |
| Agreement | Preservice teachers sign a confidentiality agreement in advance to create a protected climate, pledging not to disclose the contents of the seminar to external parties in order to protect all individuals participating in the training. |
| Theoretical Background | Five-Components-Model of Emotion [14,15] and Model of Five Strategies of Emotion Regulation [58]. |
| Teaching Method | Simulations: Classroom disruptions are simulated after the theoretical input. Preservice teachers take on different roles: teacher or engaged/disturbing student. Immediately after the simulation, all preservice teachers are requested to fill out a questionnaire * in their respective roles, indicating personal perceptions regarding emotions, cognitions, behaviour, and how the disruption management worked. |

Note: The main task of the project leader is essentially to initiate and accompany the affective-behavioural-cognitive processes during the training. * The data analysed in this manuscript were obtained exclusively from these questionnaires.

To implement a realistic simulation training approach, the project leader created an emotional scenario centred around a classroom disturbance. This disruption was modelled on a 10-min lesson plan crafted by a preservice teacher who would lead the session with their peers. During the lesson, these peers took on roles either as engaged students or as disruptive ones. The disruptive students received specific instructions from the instructor on how to conduct themselves during the session. This included behaviours such as speaking out of turn, hindering others, being passive, disobedient, generating unnecessary noise, showing aggression, arriving late, being untidy, standing without permission, and eating [37–39]. This method elicits emotions not only in the teacher, striving to quell the disruption, but also in both engaged and disruptive students within the classroom scenario. Previous research has demonstrated that such simulations profoundly affect the emotions of preservice teachers playing the role of educators, as well as those portraying disruptive or engaged students. Participants noted a strong sense of realism and authenticity in the emotions they experienced during these simulations [52].

### 2.2. Procedure and Participants

In the spring of 2022 and 2023, the abc training was conducted during regular classes for two cohorts of preservice teachers enrolled in a master's degree course for secondary school teachers at the University of Teacher Education Lucerne (CH). Data collection by means of paper-pencil questionnaires was conducted at the conclusion of each training session. All participants completed self-administered questionnaires in accordance with their assigned roles by the project leader: teacher-engaged student or disruptive student. Each session comprised one participant in the role of a teacher and nine to ten participants in the role of a student divided into two categories: engaged and disruptive (the number of observers varied depending on the number of students enrolled in the course and participating in the specific session). Participants assumed different roles in each session.

This study sample analysed data from 168 participants in the student role and their corresponding 17 participants in the teacher role. The analysis excluded the data from one preservice teacher enrolled in the course in the spring of 2023 due to missing data in all study variables. The study involved data from 81 engaged students (with a range of 2–7 per training session, M = 4.76, SD = 1.30) and 87 disruptive students (with a range of 3–7 per training session, M = 5.12, SD = 1.27).

### 2.3. Measures

Participants responded to all items on a 4-point Likert scale ranging from of 1 (not at all true) to 4 (true).

The dependent variable, students' emotions, was measured using the German-translated short version of the Positive and Negative Affect Schedule (PANAS) [59]. Participants rated ten adjectives on the basis of how they felt during the training session (positive affect: determined, attentive, alert, inspired, active; negative affect: afraid, nervous, upset, ashamed, hostile). The scale produced two subscales, each with five items: positive affect (McDonald' Omega = 0.87) and negative affect (McDonald' Omega = 0.82).

The independent variable, disruption management, was operationalised by four different appraisals of teachers' disruption management as viewed by their students, each measured with three items. The measure was developed in the context of this research project and pretested with preservice teachers enrolled in a prior class of a master's degree course for secondary school teachers. Disruption stopped refers to the teachers' ability to end the students' disruptive behaviour (McDonald' Omega = 0.78), as exemplified by the item "The teacher's intervention was successful". Disruption minimised implies that the teacher was able to reduce the student's disruptive behaviour, even if it cannot be completely eliminated. This scale excluded one item due to a negative average covariance among the items (McDonald's Omega = 0.65). An example item is "The teacher has minimised the disruptive behaviour". Disruption unaffected implies that the teacher had not shown any disruption management or was unable to influence the student's disruptive behaviour (McDonald' Omega = 0.60). To illustrate, "The disruptive students did not react to the teacher". Disruption increased indicates that the teacher's response had inadvertently reinforced the students' disruptive behaviour (McDonald' Omega = 0.66). For instance, one item stated that "After the teacher's reaction, the students were even more disruptive". The whole scale can be found in Appendix A.

The moderator variable student role was dichotomous, with two values: 0 for engaged students and 1 for disruptive students. The project leader randomly assigned the student roles prior to the commencement of each session. Before the training session, the project leader provided the preservice teachers with instructions concerning the behaviour expected from them during the class, according to their assigned roles. A pretest conducted with a previous master's degree course class for secondary school teachers demonstrated that the participants were able to adopt their respective perspectives.

### 2.4. Data Analysis

To address the research questions, we analysed the data using multilevel models in the open-source statistical software R 4.3.1 due to the nested data within the training sessions. All variables of interest were treated as Level 1, with the training session serving as the Level 2 unit. Initially, null models were computed for both dependent variables, positive affect and negative affect. Subsequently, we developed four random intercept models for each dependent variable. Each model incorporated one measure of disruption management appraisal, the student role as the moderator, and an interaction term as predictors. The disruption management variables and the student role were grand mean-centred to mitigate collinearity issues arising from the interaction term.

Model $R^2$-Marginal [60] and Akaike Information Criterion (AIC) were reported for model comparison. A lower relative AIC value indicates a better model fit [61]. A relevant difference is considered to be at least $\geq 2$ [62].

## 3. Results

Table 3 reports the means, standard deviations, and correlations of all study variables.

**Table 3.** Descriptive statistics and Pearson correlations between the study variables.

| Variables | M (SD) | Ω [b] | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|
| 1. Positive Affect | 2.47 (0.70) | 0.82 | | | | | | |
| 2. Negative Affect | 1.80 (0.63) | 0.70 | −0.53 *** | | | | | |
| 3. Student role [a] | 0.49 | | 0.23 ** | −0.13 | | | | |
| 4. Disruption stopped | 2.69 (0.67) | 0.78 | −0.04 | 0.07 | −0.05 | | | |
| 5. Disruption minimised | 3.06 (0.61) | 0.65 | −0.08 | 0.10 | −0.10 | 0.65 *** | | |
| 6. Disruption unaffected | 2.36 (0.63) | 0.60 | 0.08 | −0.01 | 0.11 | −0.63 *** | −0.54 *** | |
| 7. Disruption reinforced | 2.04 (0.54) | 0.66 | 0.01 | 0.05 | 0.01 | −0.41 *** | −0.37 *** | 0.47 *** |

Note. $N = 168$. [a] Dummy-coded variable: 0 = engaged students, 1 = disruptive students. [b] McDonald' Omega. ** $p < 0.01$; *** $p < 0.001$.

Table 4 displays the multilevel models with positive affect as the dependent variable. The null model indicated that no variance was attributed to Level 2 (ICC = 0.000). This was not problematic for this study, as our focus did not involve random slope effects. Nevertheless, we opted for multilevel analysis due to the nested nature of the data within the training sessions.

The analysis revealed a significant main effect of the student role on positive affect, with the disruptive role demonstrating higher levels of positive affect. However, the second main effect, appraisal of disruption management, did not yield a significant effect in any of the models. It is noteworthy that the interaction term was significant in all four models, thus supporting Hypotheses 1 and 2 (role × disruption stopped: B = −0.55, β = −0.26, $p < 0.001$; role × disruption minimised: B = −0.51, β = −0.22, $p < 0.01$; role × disruption unaffected: B = 0.49, β = 0.22, $p < 0.01$; role × disruption increased: B = 0.66, β = 0.25, $p < 0.001$). According to Hypothesis 1, the results suggest that engaged students reported experiencing higher levels of positive emotions compared to disruptive students when they perceived the teachers' disruption management as effective (see Figure 1a,b). However, in congruence with Hypothesis 2, the engaged students reported experiencing fewer positive emotions compared to disruptive students upon perceiving the teacher's disruption management as ineffective (see Figure 1c,d). The fixed effects accounted for 10–12% of the variance (see Table 4 for $R^2$-Marginal). Based on the AIC, the random intercept models were found to fit the data better than the null model.

Table 5 illustrates the multilevel models with negative affect as the dependent variable. The null model revealed that 1.2% (ICC = 0.012) of the variance was explained by the training session.

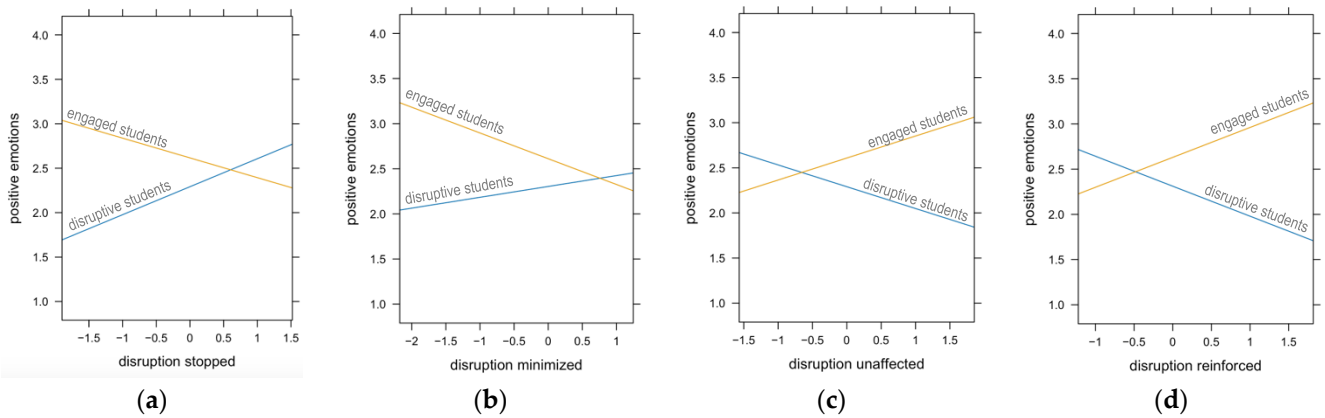


**Figure 1.** The interaction effects of role on the relationship between disruption management and students' positive emotions. (**a**) Interaction term: role × disruption stopped; (**b**) Interaction term: role × disruption minimised; (**c**) Interaction term: role × disruption unaffected; (**d**) Interaction term: role × disruption reinforced. Note: The blue line = engaged students, and the orange line = disruptive students.

While none of the models predicted the negative effect of the student role and the appraisal of disruption management, the interaction term was significant in three out of four models (role × disruption stopped: B = −0.29, β = 0.15, $p < 0.05$; role × disruption unaffected: B = 0.31, β = 0.16, $p < 0.05$; role × disruption increased: B = −0.35, β = −0.15, $p < 0.05$). For the term "role × disruption minimised" (B = 0.14, β = 0.07, $p > 0.05$), no significant interaction was found. These results support Hypothesis 3, suggesting that engaged students encounter greater negative emotions than disruptive students do when they perceive the teacher's disruption management as ineffective (see Figure 2b,c). Additionally, our findings offer partial validation for Hypothesis 4, proposing that disruptive students undergo more negative emotions when compared with engaged students when they perceive the teacher's disruption management as effective (see Figure 2a). The multilevel models explained 3–4% of the variance through the fixed effects (see Table 5 for $R^2$-Marginal). Nonetheless, the comparison of the AIC between the null model and the multilevel model did not exhibit any relevant differences, indicating that the moderation effects were low.

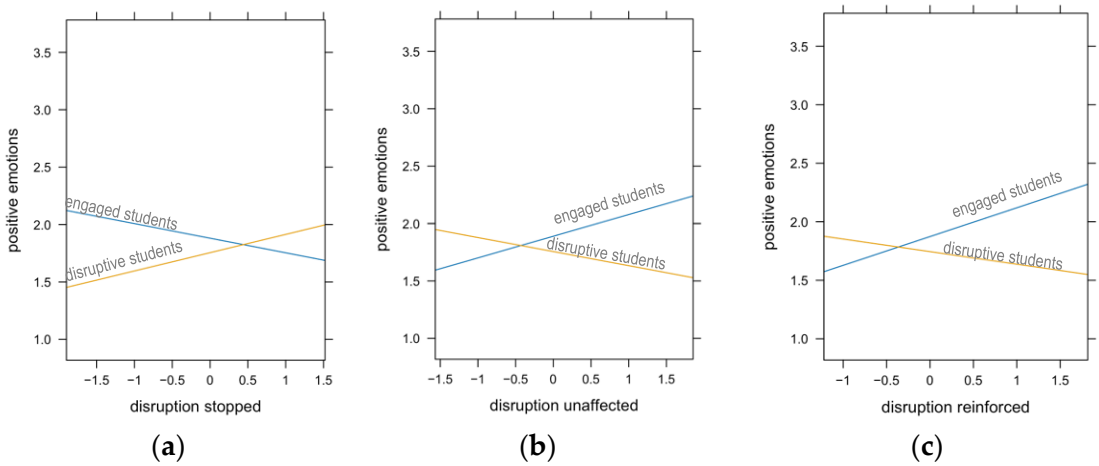


**Figure 2.** The interaction effects of role on the relationship between disruption management and students' negative emotions. (**a**) Interaction term: role × disruption stopped; (**b**) Interaction term: role × disruption unaffected; (**c**) Interaction term: role × disruption reinforced. Note: The blue line = engaged students, and the orange line = disruptive students.

**Table 4.** Hierarchical model estimates for students' positive emotions as the dependent variable.

| | **Null Model** | **Disruption Stopped** | | **Disruption Minimised** | | **Disruption Unaffected** | | **Disruption Increased** | |
|---|---|---|---|---|---|---|---|---|---|
| | **B (SE)** | **B (SE)** | **β** | **B (SE)** | **β** | **B (SE)** | **β** | **B (SE)** | **β** |
| Intercept | 2.37 (0.05) *** | 2.45 (0.05) *** | | 2.45 (0.05) *** | | 2.32 (0.06) *** | | 2.47 (0.05) *** | |
| Role [a] | | 0.32 (0.10) ** | 0.23 ** | 0.31 (0.10) ** | 0.22 ** | 0.32 (0.10) ** | 0.23 ** | 0.32 (0.10) ** | 0.23 ** |
| Disruption manag. | | 0.05 (0.08) | 0.05 | −0.03 (0.08) | −0.02 | −0.00 (0.08) | −0.00 | −0.00 (0.09) | −0.00 |
| Interaction term [b] | | −0.55 (0.16) *** | −0.26 *** | −0.51 (0.17) ** | −0.22 ** | 0.49 (0.17) ** | 0.22 ** | 0.66 (0.19) *** | 0.25 *** |
| ICC | 0.000 | 0.000 | | 0.000 | | 0.000 | | 0.000 | |
| $R^2$-Marginal | 0.000 | 0.116 | | 0.104 | | 0.100 | | 0.118 | |
| AIC | 360.2 | 345.6 | | 347.9 | | 348.6 | | 345.2 | |

Note. $N_{\text{Level 1}} = 168$ and $N_{\text{Level 2}} = 17$. [a] Dummy-coded variable: 0 = engaged students, 1 = disruptive students. [b] Interaction term: Role × disruption management. ICC = intra-class correlation. AIC = Akaike information criterion. ** $p < 0.01$; *** $p < 0.001$.

**Table 5.** The hierarchical model estimates students' negative emotions as the dependent variable.

| | **Null Model** | **Disruption Stopped** | | **Disruption Minimised** | | **Disruption Unaffected** | | **Disruption Increased** | |
|---|---|---|---|---|---|---|---|---|---|
| | **B (SE)** | **B (SE)** | **β** | **B (SE)** | **β** | **B (SE)** | **β** | **B (SE)** | **β** |
| Intercept | 1.88 (0.05) *** | 1.82 (0.05) *** | | 1.82 (0.05) *** | | 1.82 (0.05) *** | | 1.81 (0.05) *** | |
| Role [a] | | −0.14 (0.09) | −0.11 | −0.12 (0.10) | −0.10 | −0.14 (0.10) | −0.11 | −0.13 (0.09) | −0.11 |
| Disruption manag. | | 0.03 (0.07) | 0.04 | 0.10 (0.08) | 0.10 | 0.03 (0.08) | 0.03 | 0.07 (0.09) | 0.06 |
| Interaction term [b] | | 0.29 (0.15) * | 0.15 * | 0.14 (0.16) | 0.07 | −0.31 (0.16) * | −0.15 * | −0.35 (0.18) * | −0.15 * |
| ICC | 0.012 | 0.035 | | 0.029 | | 0.014 | | 0.011 | |
| $R^2$-Marginal | 0.000 | 0.041 | | 0.028 | | 0.034 | | 0.037 | |
| AIC | 323.8 | 323.1 | | 325.2 | | 324.0 | | 323.6 | |

Note. $N_{\text{Level 1}} = 168$ and $N_{\text{Level 2}} = 17$. [a] Dummy-coded variable: 0 = engaged students, 1 = disruptive students. [b] Interaction term: Role × disruption management. ICC = intra-class correlation. AIC = Akaike information criterion. * $p < 0.05$; *** $p < 0.001$.

## 4. Discussion

Classroom disruptions are a prevalent challenge for teachers, with about 10–15% of students in the Swiss context exhibiting disruptive behaviour [63]. Additionally, around 30% of secondary school students in England report disruptions during lessons [64]. Reportedly, teachers also spend more than half of their teaching time on classroom management [65]. Therefore, investigating the emotions that disruptive behaviour triggers in students assumes great significance and can lead to a better understanding of such situations. Additionally, it can provide a deeper insight into the dynamics between students and teachers in managing disruptive behaviour. While previous research primarily emphasised the role of teachers' classroom management in fostering positive student emotions and enhancing their academic performance [23], the uniqueness of this study's findings is that it allows statements to be made about differential impacts between individuals in the position of disruptive and engaged students and by these, focus the individual context more closely.

Our study specifically investigated how preservice teachers' management of disruptions impacts the emotions of individuals in the roles of engaged or disruptive students. Using an experimental simulation of a challenging classroom scenario, we structured a learning environment where preservice teachers interacted with their peers, acting as students and employing diverse strategies that elicited varied emotional responses. The findings demonstrated that engaged students reported higher levels of positive emotions when they perceived the disruption management as effective, while they experienced more negative emotions when they considered it ineffective. In contrast, disruptive students tended to experience heightened positive emotions when the preservice teachers' disruption management was perceived as ineffective and, to a lesser extent, increased negative emotions when it was seen as effective. Overall, our hypotheses were largely supported by these results.

In line with previous theoretical and empirical findings [14–16], our results showed that in this learning arrangement, the perceived classroom emotions are significantly related to disruption management. In addition, the present study underlines the control value theory from Pekrun [8] in terms of the learning or teaching context being associated with the student's evaluation of the importance and usefulness of the subject matter and their controllability.

For instance, it is conceivable that during classroom disruptions that were not adequately addressed or minimised by their teachers, engaged students may perceive their learning progress as beyond their control. Consequently, they might experience negative emotions, echoing sentiments described by Michelle Obama in her diary [1]. In contrast, under these circumstances, disruptive students might feel a sense of mastery over their teachers—finding gratification and a sense of achievement when their behaviour achieves its intended outcome—leading to positive emotions. However, it is important to note that disruptive students may only experience negative emotions to a limited extent. If their disruptive behaviour is effectively managed by the teacher during the lesson, the act of disruption itself may have already been satisfying for the students.

Nevertheless, the result that "positive emotions are evoked in disruptive students" is difficult. Generally, teachers aim to engage all students with positive emotions or interests within the learning environment. In their research on classroom management, Landrum and Kauffman [66] point out that student behaviour is influenced by positive and negative reinforcement. Thus, teachers must avoid reinforcing disruptive behaviour through a stimulus that leads to positive emotions. At the same time, comparative studies between experts and novices indicated that novices tend to focus their entire attention on disruptive students, thus reinforcing negative behaviour [67,68].

In this context, abc training plays a pivotal role in helping preservice teachers recognise the importance of promptly and effectively addressing disruptive behaviour to foster a conducive learning environment. This approach can lead to increased learning opportunities for students and reduce the likelihood of teachers themselves becoming sources of disturbance.

We advocate for a constructive approach that integrates assertiveness, empathy, and management within a framework grounded in fundamental communication principles. These principles include respect and appreciation, using "I-messages", asking open-ended questions, and clearly outlining consequences while allowing disruptive students the autonomy to choose their behaviour. Such an approach is particularly effective when coupled with the widely emphasised significance of positive teacher-student relationships [66]. Within an emotionally supportive relationship, it is possible to promote and enhance learning activities, even for high-needs students.

### 4.1. Limitations and Directions for Future Research

This study identifies several limitations that may serve as potential research avenues for future research. These limitations primarily arise from the study's design.

Firstly, a key limitation is that preservice teachers in this study were assigned roles as either disruptive students, engaged students, or teachers within a simulated setting. In real-world scenarios, participants may choose their own roles, potentially leading to different motivations for their behaviour [69,70]. These varying motives were not taken into consideration in this study. Moreover, participants' emotional responses to the teacher's disruption management may have been influenced by their awareness of the abc training and the awareness of their assigned role, possibly leading to a tendency to present themselves in a socially desirable manner. This bias could be considered a trade-off for the opportunity for students to experiment with different roles and practice perspective-taking.

Secondly, while students reported genuine emotions in these simulated situations, which are crucial for validating the manipulation examined in the pre-study, it is possible that some participants faced challenges in fully embodying their assigned roles. This could have influenced the intensity and nature of the emotions they experienced. Additionally, the emotional responses could have been influenced by participants' emotional states prior to the training. Future research should control for these factors to better determine and interpret the effects of teachers' disruption management on participants' emotions.

Thirdly, this role play was conducted by preservice teachers undergoing teacher training. It is noteworthy that preservice teachers may experience this situation differently than, for example, adolescents in secondary school. For this reason, it would be beneficial to investigate the ways in which adolescents and children experience such role plays and whether there are any differences compared to the current study.

Finally, the independent variable was limited to four types of teachers' disruption management, which, in turn, constrains the generalisability of this study's findings. Future research may aim to develop a more nuanced understanding of teachers' disruption management, for instance, by investigating avoiding, problem-solving, or punitive teacher reactions as three distinct reactions to classroom disruptions (postulated by Mahvar et al. [57]). As a consequence, the complexity of the classroom environment could be better represented.

### 4.2. Practical Implications of the Findings

This study outlines several implications, including the following: (a) the significance of emotional factors in relation to cognitive factors in the classroom, (b) interindividual emotion regulation and the potential for successful implementation by teachers, and (c) the value of simulated teaching and learning opportunities.

The present study focuses on the importance of individual support in teaching. However, it is possible to address both emotional factors and cognitive student-related factors individually. As a case in point, Conner [71] demonstrated the differential effects of classroom management on students' cognitive skills, particularly related to their behavioural self-regulation.

Building on the study's findings, it becomes evident that not all students derive equal benefits from highly organised and structured teaching approaches. Behaviourally challenging students with weaker initial executive functions notably benefit from effective classroom management, which assists them in better controlling their impulses. Conversely, students proficient in executive functions and lacking behavioural risk factors may not

heavily rely on teacher-directed classroom management. However, the current study shifts the focus to emotional factors and suggests that even students assuming the role of engaged learners without behavioural risk factors indeed benefit from effective classroom management. Moving forward, it is recommended that future research integrate both emotional and cognitive factors concurrently to gain a more comprehensive understanding of their differential and intricate impacts.

In addition, with respect to interindividual emotion regulation, the present study underscores the importance of teachers learning when it comes to identifying emotionally triggering hotspots in students' classroom contexts. It emphasises the need for teachers to possess methods in order to alleviate these hotspots and re-engage the affected students, thereby enabling them to participate in cognitive learning activities [72]. In this context, individual If-Then plans could be advantageous, empowering each student to take responsibility for their behaviour and potentially fostering positive emotions, even among disruptive students. The primary inquiry revolves around identifying strategies teachers can utilise to re-engage disruptive students and cultivate a positive classroom atmosphere. Additionally, it is crucial to compare teaching scenarios with and without the involvement of special needs educators to illustrate the resulting effects.

Furthermore, this research underscores the importance of simulations as an educational tool for training teachers in classroom management within teacher education programmes. This approach allows preservice teachers to gain deeper insights into and empathise with students who exhibit disruptive behaviour, as well as those who demonstrate high engagement and enthusiasm for learning. These insights can lay the groundwork for further advancements in teacher education. It is essential to provide opportunities for preservice teachers to participate in practical teaching exercises within a supportive environment. While theoretically sound strategies for managing classroom disruptions and related factors can be learned, this knowledge alone may not suffice for effectively handling challenging situations. Previous research has indicated that the limbic system is activated under pressure, prompting individuals to revert quickly to established behavioural patterns [73,74]. Thus, it can be inferred that preservice teachers can learn to manage disruptions in high-pressure situations to prevent negative impacts on students. In this regard, simulation training can be an effective approach [75].

## 5. Conclusions

The current study underscores the critical role of effective disruption management by teachers during significant classroom disturbances in structuring, integrating, and regulating the emotional experiences of all participants in the classroom. Simultaneously, it presents a considerable challenge in re-engaging "high-needs students" towards a positive learning mindset, thereby promoting their interest in the subject matter, engagement with the content, and fostering positive learning emotions. These findings suggest that gaining deeper insights into the emotional and cognitive dynamics during disruptive classroom situations can aid preservice teachers in cultivating a more objective perspective. At the same time, such nuanced understanding can pave the way for implementing more appropriate and tailored responses in educational settings.

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## Appendix A

Scale for "Classroom Management under the condition of Classroom Disruption" by four different appraisals of teachers' disruption management:

Disruption stopped

- The teacher's intervention was successful.
- The teacher resolved the problem promptly.
- The teacher was able to put an end to the disruptive behaviour.

Disruption minimised

- The teacher has minimised the disruptive behaviour.
- In some cases, the teacher succeeded in minimising the disruption.
- The teacher's intervention was only partially successful. (excluded from the analysis due to a negative average covariance)

Disruption unaffected

- The disruptive students did not react to the teacher.
- The teacher did not influence the disruptive behaviour.
- The teacher was unable to stop the disruptive behaviour.

Disruption increased

- After the teacher's reaction, the students were even more disruptive.
- The teacher has reinforced the disruptive behaviour.
- The disruptive students reacted to the teacher's interventions with reactance.

## References

1. Obama, M. *Becoming*; Crown: New York, NY, USA, 2021.
2. Frenzel, A.C.; Pekrun, R.; Goetz, T. Perceived Learning Environment and Students' Emotional Experiences: A Multilevel Analysis of Mathematics Classrooms. *Learn. Instr.* **2007**, *17*, 478–493. [CrossRef]
3. Cheema, J.R.; Kitsantas, A. Influences of Disciplinary Classroom Climate on High School Student Self-Efficacy and Mathematics Achievement: A Look at Gender and Racial-Ethnic Differences. *Int. J. Sci. Math. Educ.* **2014**, *12*, 1261–1279. [CrossRef]
4. Kounin, J.S.; Gump, P.V. The Ripple Effect in Discipline. *Elem. Sch. J.* **1958**, *59*, 158–162. [CrossRef]
5. Pekrun, R.; Muis, K.R.; Frenzel, A.C.; Götz, T. *Emotions at School*; Routledge: New York, NY, USA, 2017.
6. Goetz, T.; Keller, M.M.; Lüdtke, O.; Nett, U.E.; Lipnevich, A.A. The Dynamics of Real-Time Classroom Emotions: Appraisals Mediate the Relation between Students' Perceptions of Teaching and Their Emotions. *J. Educ. Psychol.* **2020**, *112*, 1243. [CrossRef]
7. Marzano, R.J.; Marzano, J.S.; Pickering, D.J. *Classroom Management That Works: Research-Based Strategies for Every Teacher*; ASCD: Alexandria, VA, USA, 2003.
8. Pekrun, R. The Control-Value Theory of Achievement Emotions: Assumptions, Corollaries, and Implications for Educational Research and Practice. *Educ. Psychol. Rev.* **2006**, *18*, 315–341. [CrossRef]
9. Pekrun, R.; Linnenbrink-Garcia, L. *International Handbook of Emotions in Education*; Routledge: New York, NY, USA, 2014.
10. Murray, C.; Pianta, R.C. The Importance of Teacher-Student Relationships for Adolescents with High Incidence Disabilities. *Theory Pract.* **2007**, *46*, 105–112. [CrossRef]
11. Hagenauer, G.; Hascher, T.; Volet, S.E. Teacher Emotions in the Classroom: Associations with Students' Engagement, Classroom Discipline and the Interpersonal Teacher-Student Relationship. *Eur. J. Psychol. Educ.* **2015**, *30*, 385–403. [CrossRef]
12. Pekrun, R.; Elliot, A.J.; Maier, M.A. Achievement Goals and Discrete Achievement Emotions: A Theoretical Model and Prospective Test. *J. Educ. Psychol.* **2006**, *98*, 583. [CrossRef]
13. Nett, U.E.; Bieg, M.; Keller, M.M. How Much Trait Variance is Captured by Measures of Academic State Emotions?: A Latent State-Trait Analysis. *Eur. J. Psychol. Assess.* **2017**, *33*, 239–255. [CrossRef]
14. Frenzel, A.C.; Stephens, E.J. 1.1. Students in Focus. In *Emotion, Motivation, and Self-Regulation: A Handbook for Teachers*, 1st ed.; Emerald Group Publishing Limited: Bradford, UK, 2013.

15. Scherer, K.R. Appraisal Theory. In *Handbook of Cognition and Emotion*; Dalgleish, T., Power, M.J., Eds.; John Wiley & Sons: Chichester, UK, 1999.
16. Weiner, B. An Attributional Theory of Achievement Motivation and Emotion. *Psychol. Rev.* **1985**, *92*, 548. [CrossRef]
17. Diener, E. *Subjective Well-Being*; University of Illinois: Chicago, IL, USA, 2000.
18. Frenzel, A.C.; Goetz, T.; Lüdtke, O.; Pekrun, R.; Sutton, R.E. Emotional Transmission in the Classroom: Exploring the Relationship between Teacher and Student Enjoyment. *J. Educ. Psychol.* **2009**, *101*, 705. [CrossRef]
19. Gläser-Zikuda, M.; Fuß, S. Wohlbefinden von Schülerinnen Und Schülern Im Unterricht [Well-being of Students in the Classroom]. In *Schule positiv erleben. Ergebnisse und Erkenntnisse zum Wohlbefinden von Schülerinnen und Schülern [Results and Insights]*; Haupt: Bern, Switzerland, 2004; pp. 27–48.
20. Jones, V. How Do Teachers Learn to Be Effective Classroom Managers? In *Handbook of Classroom Management*; Everton, C.M., Weinstein, C.S., Eds.; Routledge/Lawrence Erlbaum: Mahwah, NJ, USA, 2013; pp. 897–918.
21. Van de Grift, W.; Van der Wal, M.; Torenbeek, M. Ontwikkeling in de Pedagogische Didactische Vaardigheid van Leraren in Het Basisonderwijs [Development of Pedagogical and Didactic Skills of Teachers in Primary Education]. *Pedagog. Stud.* **2011**, *88*, 416–432.
22. Kunter, M.; Kleickmann, T.; Klusmann, U.; Richter, D. The Development of Teachers' Professional Competence. In *Cognitive Activation in the Mathematics Classroom and Professional Competence of Teachers*; Kunter, M., Baumert, J., Blum, W., Klusmann, U., Krauss, S., Neubrand, M., Eds.; Springer: Boston, MA, USA, 2013; pp. 63–77.
23. Mitchell, B.S.; Hirn, R.G.; Lewis, T.J. Enhancing Effective Classroom Management in Schools: Structures for Changing Teacher Behavior. *Teach. Educ. Spec. Educ. J. Teach. Educ. Div. Counc. Except. Child.* **2017**, *40*, 140–153. [CrossRef]
24. Gläser-Zikuda, M. *Lehrerexpertise-Analyse Und Bedeutung Unterrichtlichen Handelns [Teacher Expertise: Analysis and Importance of Instructional Actions]*; Waxmann Verlag: Münster, Germany, 2008.
25. Chen, X.; Lu, L. How Classroom Management and Instructional Clarity Relate to Students' Academic Emotions in Hong Kong and England: A Multi-Group Analysis Based on the Control-Value Theory. *Learn. Individ. Differ.* **2022**, *98*, 102183. [CrossRef]
26. Doyle, W. Ecological Approaches to Classroom Management. In *Handbook of Classroom Management*; Evertson, C.M., Weinstein, C.S., Eds.; Routledge/Lawrence Erlbaum: Mahwah, NJ, USA, 2013; pp. 107–136.
27. Sutherland, K.S.; Lewis-Palmer, T.; Stichter, J.; Morgan, P.L. Examining the Influence of Teacher Behavior and Classroom Context on the Behavioral and Academic Outcomes for Students with Emotional or Behavioral Disorders. *J. Spec. Educ.* **2008**, *41*, 223–233. [CrossRef]
28. Blank, C.; Shavit, Y. The Association between Student Reports of Classmates' Disruptive Behavior and Student Achievement. *AERA Open* **2016**, *2*, 2332858416653921. [CrossRef]
29. Dicke, T.; Parker, P.D.; Marsh, H.W.; Kunter, M.; Schmeck, A.; Leutner, D. Self-Efficacy in Classroom Management, Classroom Disturbances, and Emotional Exhaustion: A Moderated Mediation Analysis of Teacher Candidates. *J. Educ. Psychol.* **2014**, *106*, 569. [CrossRef]
30. Voss, T.; Kunter, M.; Seiz, J.; Hoehne, V.; Baumert, J. Die Bedeutung des Pädagogisch-Psychologischen Wissens von angehenden Lehrkräften für die Unterrichtsqualität [The Importance of Pedagogical and Psychological Knowledge of Pre-Service Teachers for Teaching Quality]. *Z. Pädagog.* **2014**, *60*, 184–201.
31. Ophardt, D.; Thiel, F. *Klassenmanagement: Ein Handbuch Für Studium Und Praxis [Classroom Management: A Handbook for Study and Practice]*; Kohlhammer Verlag: Stuttgart, Germany, 2013.
32. Praetorius, A.-K.; Klieme, E.; Herbert, B.; Pinger, P. Generic Dimensions of Teaching Quality: The German Framework of Three Basic Dimensions. *ZDM—Math. Educ.* **2018**, *50*, 407–426. [CrossRef]
33. Jennings, P.A.; Greenberg, M.T. The Prosocial Classroom: Teacher Social and Emotional Competence in Relation to Student and Classroom Outcomes. *Rev. Educ. Res.* **2009**, *79*, 491–525. [CrossRef]
34. Wubbels, T. An International Perspective on Classroom Management: What Should Prospective Teachers Learn? *Teach. Educ.* **2011**, *22*, 113–131. [CrossRef]
35. Hoy, A.W.; Weinstein, C.S. Student and Teacher Perspectives on Classroom Management. In *Handbook of Classroom Management*; Evertson, C.M., Weinstein, C.S., Eds.; Routledge/Lawrence Erlbaum: Mahwah, NJ, USA, 2013; pp. 191–230.
36. Scherzinger, M.; Wettstein, A. Classroom Disruptions, the Teacher–Student Relationship and Classroom Management from the Perspective of Teachers, Students and External Observers: A Multimethod Approach. *Learn. Environ. Res.* **2019**, *22*, 101–116. [CrossRef]
37. Crawshaw, M. Secondary School Teachers' Perceptions of Student Misbehaviour: A Review of International Research, 1983 to 2013. *Aust. J. Educ.* **2015**, *59*, 293–311. [CrossRef]
38. Little, E. Secondary School Teachers' Perceptions of Students' Problem Behaviours. *Educ. Psychol.* **2005**, *25*, 369–377. [CrossRef]
39. Wettstein, A.; Ramseier, E.; Scherzinger, M.; Gasser, L. Unterrichtsstörungen Aus Lehrer-Und Schülersicht. [Class Disorders from the Teacher and Student Perspective]. *J. Dev. Educ. Psychol.* **2016**, *48*, 171–183.
40. McDonald, F.; Wilks, R. *A Survey of 45 Primary School Teachers Self-Perceived Discipline Styles: A Pilot Study*; Wilks, R., Ed.; RMIT University Department of Psychology and Disability: Bundoora, VIC, Australia; Cambridge University Press: Cambridge, UK, 1994.
41. Emmer, E.T.; Evertson, C.M.; Worsham, M.E. *Classroom Management for Middle and High School Teachers*; Pearson: Upper Saddle River, NJ, USA, 2009.
42. Evertson, C.M.; Emmer, E.T. *Classroom Management for Elementary Teachers*, 10th ed.; Pearson: Boston, MA, USA, 2017.
43. Alpert, B. Students' Resistance in the Classroom. *Anthropol. Educ. Q.* **1991**, *22*, 350–366. [CrossRef]

44. Kumschick, I.R.; Piwowar, V.; Thiel, F. Inducing Adaptive Emotion Regulation by Providing the Students' Perspective: An Experimental Video Study with Advanced Preservice Teachers. *Learn. Instr.* **2018**, *53*, 99–108. [CrossRef]
45. Kumschick, I.R.; Torchetti, L.; Gasser, L.; Tettenborn, A. How Controllable versus Uncontrollable Cognitions Affect Emotion Processing during Classroom Disruptions: A Video Study with Preservice Teachers. *Teach. Teach. 542 Educ.* **2023**, *135*, 104317. [CrossRef]
46. McFarland, D.A. Student Resistance: How the Formal and Informal Organization of Classrooms Facilitate Everyday Forms of Student Defiance. *Am. J. Sociol.* **2001**, *107*, 612–678. [CrossRef]
47. Thiel, F. *Interaktion Im Unterricht: Ordnungsmechanismen Und Störungsdynamiken [Interaction in the Classroom: Mechanisms of Order and Dynamics of Disruption]*; Verlag Barbara Budrich: Leverkusen, Germany, 2016.
48. Lewis, T.J.; Sugai, G. Effective Behavior Support: Systems Approach to Proactive Schoolwide Management. *Focus Except. Child.* **1999**, *31*, 1–24.
49. Kumschick, I.R.; Piwowar, V.; Ophardt, D.; Barth, V.; Krysmanski, K.; Thiel, F. Optimierung Einer Videobasierten Lerngelegenheit Im Problem Based Learning Format Durch Cognitive Tools. Eine Interventionsstudie Mit Lehramtsstudierenden [Optimization of a Video-Centered Learning Arrangement in a Problem-Based Learning Format Through Cognitive Tools: An Intervention Study with Pre-Service Teachers]. *Z. Für Erzieh.* **2017**, *20*, 93–113. [CrossRef]
50. Blömeke, S.; Gustafsson, J.-E.; Shavelson, R.J. *Approaches to Competence Measurement in Higher Education*; Hogrefe Publishing: Göttingen, Germany, 2015.
51. Kumschick, I.R. Dealing with Feeling. Emotionsregulation Als Ausbildungsbaustein [Emotion Regulation as a Component of Teacher Education]. *J. Für LehrerInnenbildung Jlb* **2022**, *22*, 60–75. [CrossRef]
52. Kumschick, I.R. Ärger—Die Unerwünschte Emotion Im Klassenzimmer [Anger—The Unwanted Emotion in the Classroom]. *Erzieh. Unterr.* **2023**, *173*, 134–144.
53. Leung, C.; Lam, S. The Effects of Regulatory Focus on Teachers' Classroom Management Strategies and Emotional Consequences. *Contemp. Educ. Psychol.* **2003**, *28*, 114–125. [CrossRef]
54. Kolbe, M.; Seelandt, J.; Nef, A.; Grande, B. Simulation Und Forschung [Simulation and Research]. In *Simulation in der Medizin [Simulation in Medicine]*; St.Pierre, M., Breuer, G., Eds.; Springer: Heidelberg, Germany, 2018; pp. 145–158.
55. Korpershoek, H.; Harms, T.; De Boer, H.; Van Kuijk, M.; Doolaard, S. A Meta-Analysis of the Effects of Classroom Management Strategies and Classroom Management Programs on Students' Academic, Behavioral, Emotional, and Motivational Outcomes. *Rev. Educ. Res.* **2016**, *86*, 643–680. [CrossRef]
56. Bienefeld, N.; Grote, G. Shared Leadership in Multiteam Systems: How Cockpit and Cabin Crews Lead Each Other to Safety. *Hum. Factors J. Hum. Factors Ergon. Soc.* **2014**, *56*, 270–286. [CrossRef]
57. Mahvar, T.; Farahani, M.A.; Aryankhesal, A. Conflict Management Strategies in Coping with Students' Disruptive Behaviors in the Classroom: Systematized Review. *J. Adv. Med. Educ. Prof.* **2018**, *6*, 102.
58. Gross, J.J.; John, O.P. Individual Differences in Two Emotion Regulation Processes: Implications for Affect, Relationships, and Well-Being. *J. Pers. Soc. Psychol.* **2003**, *85*, 348. [CrossRef]
59. Thompson, E.R. Development and Validation of an Internationally Reliable Short-Form of the Positive and Negative Affect Schedule (PANAS). *J. Cross-Cult. Psychol.* **2007**, *38*, 227–242. [CrossRef]
60. Nakagawa, S.; Schielzeth, H. A General and Simple Method for Obtaining $R^2$ from Generalized Linear Mixed-effects Models. *Methods Ecol. Evol.* **2013**, *4*, 133–142. [CrossRef]
61. Rost, J. Informationstheoretische Masse [Information-Theoretical Measures]. In *Lexikon der Psychologie [Encyclopedia of Psychology]*; Wirtz, M.A., Ed.; Hogrefe: Göttingen, Germany, 1996.
62. Sakamoto, Y.; Ishiguro, M.; Kitagawa, G. *Akaike Information Criterion Statistics*; Reidel Publ. Co.: Dordrecht, The Netherlands; Springer: Amsterdam, The Netherlands, 1986.
63. SKBF—Schweizerische Koordinationsstelle für Bildungsforschung. *Bildungsbericht Schweiz 2014*; SKBF: Aarau, Switzerland, 2014.
64. Dunn, J.; Layard, R. *A Good Childhood: Searching for Values in a Competitive Age*; Penguin: London, UK, 2009.
65. Houghton, S.; Wheldall, K.; Merrett, F. Classroom Behaviour Problems Which Secondary School Teachers Say They Find Most Troublesome. *Br. Educ. Res. J.* **1988**, *14*, 297–312. [CrossRef]
66. Landrum, T.J.; Kauffman, J.M. Behavioral Approaches to Classroom Management. In *Handbook of Classroom Management*; Everton, C.M., Weinstein, C.S., Eds.; Routledge/Lawrence Erlbaum: Mahwah, NJ, USA, 2013; pp. 57–82.
67. Wolff, C.E.; Jarodzka, H.; Boshuizen, H.P.A. Classroom Management Scripts: A Theoretical Model Contrasting Expert and Novice Teachers' Knowledge and Awareness of Classroom Events. *Educ. Psychol. Rev.* **2021**, *33*, 131–148. [CrossRef]
68. Glock, S.; Kleen, H. The Role of Preservice Teachers' Implicit Attitudes and Causal Attributions: A Deeper Look into Students' Ethnicity. *Curr. Psychol.* **2023**, *42*, 8125–8135. [CrossRef]
69. Hamre, B.K.; Pianta, R.C. Can Instructional and Emotional Support in the First-Grade Classroom Make a Difference for Children at Risk of School Failure? *Child Dev.* **2005**, *76*, 949–967. [CrossRef] [PubMed]
70. Granero-Gallegos, A.; Gómez-López, M.; Baena-Extremera, A.; Martínez-Molina, M. Interaction Effects of Disruptive Behaviour and Motivation Profiles with Teacher Competence and School Satisfaction in Secondary School Physical Education. *Int. J. Environ. Res. Public. Health* **2020**, *17*, 114. [CrossRef]
71. Connor, C.M.; Ponitz, C.C.; Phillips, B.M.; Travis, Q.M.; Glasney, S.; Morrison, F.J. First Graders' Literacy and Self-Regulation Gains: The Effect of Individualizing Student Instruction. *J. Sch. Psychol.* **2010**, *48*, 433–455. [CrossRef] [PubMed]

72. Mischel, W. *Der Marshmallow-Test: Willensstärke, Belohnungsaufschub und die Entwicklung der Persönlichkeit [The Marshmallow Test: Willpower, Delay of Gratification, and Personal Development]*; Siedler Verlag: München, Germany, 2015.
73. LeDoux, J. The Emotional Brain, Fear, and the Amygdala. *Cell. Mol. Neurobiol.* **2003**, *23*, 727–738. [CrossRef]
74. LeDoux, J.E. *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*; Simon and Schuster: New York, NY, USA, 1998.
75. Chernikova, O.; Heitzmann, N.; Stadler, M.; Holzberger, D.; Seidel, T.; Fischer, F. Simulation-Based Learning in Higher Education: A Meta-Analysis. *Rev. Educ. Res.* **2020**, *90*, 499–541. [CrossRef]

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