

# The Role of Teaching Styles in the Development of School Alienation and Behavioral Consequences: A Mixed Methods Study of Luxembourgish Primary Schools

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Alyssa L. Grecu<sup>1</sup> , Andreas Hadjar<sup>1</sup>, and Kevin Simoes Loureiro<sup>1</sup>

## Abstract

This mixed-method research study aims at an analysis of the role of teaching styles in the development of school alienation and behavioral consequences. Applying an in-depth design, this study combines a quantitative panel study, a student survey (grades 5–6), and qualitative focus groups with Luxembourgish primary school students (grade 6). Methodologically, we aim to demonstrate potentials and limits of integrating quantitative and qualitative research. Quantitative results show that teaching styles affect students' alienation from teachers and from learning, and eventually from classroom participation and social behavior. Qualitative content analysis reveals that students characterize a fair teaching style as the equal treatment of all students regarding classroom rules and teachers' empathy for students' intentions.

## Keywords

school alienation, teaching styles, participation, mixed-methods study, learning

Socio-emotional aspects play a crucial role in learning, achievement, and educational attainment. Feelings of attachment to school and the learning environment, and well-being, but particularly the lack of such positive resources may lead to negative consequences in school and beyond such as students' school phobia, low participation, low achievement and educational success, disruptive behavior, dropout, or delinquency (e.g., Geddes, 2006; Henry et al., 2012; Huebner et al., 2014; Morinaj & Hascher, 2019). How students position themselves socio-emotionally toward the school changes over time, as many students become more distant to school and education during their educational trajectory (Çağlar, 2013; Hascher & Hagenauer, 2010).

This study centers on the school alienation approach, a concept that attempts to take explicit account of this process of distancing and detachment. School alienation (SAL) is conceptualized—following an approach of Hascher & Hadjar (2018) that is based on previous classical alienation concepts (e.g., Seeman, 1959) and more recent applications to learning environments (e.g., Mann, 2005)—as a set of negative attitudes toward academic and social aspects of schooling. SAL constitutes a complex phenomenon, as it covers three domains which are located at the interfaces between school, family, and peer group (Morinaj et al., 2021).

International research from various disciplines such as educational studies, sociology, and psychology universally perceives school alienation as a serious problem (e.g., Brown et al., 2003; Hascher & Hadjar, 2018; Hascher & Hagenauer, 2010), as alienated students are hardly interested in schooling and often show deviant behavior or reduced engagement, leading to low educational success, school dropout, and educational poverty (e.g., Archambault et al., 2009; Avcı & Çelikkaleli, 2016; Studsrød & Bru, 2012). In this light, it is important to gain further specific knowledge about the processes that lead to school alienation. Furthermore, research on school alienation has until now usually focused on the individual from a cross-sectional perspective (Calabrese & Seldin, 1986; Tarquin & Cook-Cottone, 2008). Previous research emphasized the impact of the school setting on students' attitudes toward school. This also demonstrated that negative student–teacher relationships enhance the development of school

<sup>1</sup>University of Luxembourg, Esch-sur-Alzette, Luxembourg

## Corresponding Author:

Alyssa L. Grecu, Institut für Schulentwicklungsforschung (IFS), TU Dortmund, Vogelpothsweg 78, D-44227 Dortmund, Deutschland.  
 Email: [alyssa.grecu@tu-dortmund.de](mailto:alyssa.grecu@tu-dortmund.de)



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alienation (Çağlar, 2013; Hascher & Hagenauer, 2010; Legault et al., 2006). Therefore, school-related aspects such as the teacher–student relationship and teaching styles need to be taken into account to understand causes and mediating factors of school alienation in a more holistic way. Addressing this research gap, this study focuses on teaching styles as one possible school-related driver of school alienation. The starting point of our investigation is the assumption that a positive classroom environment, including positive interactions and relationships between teachers and students, may have positive effects on students' attitudes toward school and learning. The ways in which students emotionally and cognitively experience teaching styles in the classroom affect their attitudes toward school. While a positive perception fosters bonding with and engagement at school, negative experiences result in students' feelings of distance from school and learning (Çağlar, 2013; Hascher & Hagenauer, 2010; Legault et al., 2006; Murdock, 1999). As central agents, teachers have an impact on students' well-being in school and the extent to which they bond with school (Bombèr & Hughes, 2013; Hattie, 2009), reaching beyond an academic support function (Hascher & Hadjar, 2018; Hagenauer & Volet, 2014; Pianta & Hamre, 2009). Teachers' practices in relationship building are considered as particularly important for students who struggle in adapting to school or have school phobia (Bombèr & Hughes, 2013; Geddes, 2006). While fulfilling an affective and support function, teachers' interactions with students have the potential to enhance or hamper developmental changes in relation to students' engagement in the classroom (Pianta & Hamre, 2009) as well as students' academic performance (Bombèr & Hughes, 2013). Certain teaching styles have also been shown to have a preventive function on students' disengagement and alienation in school (Patall et al., 2018). Accordingly, teachers' role and more specifically their teaching style is crucial to students' attitudes toward school and learning and is thus linked to school alienation.

Taking these conceptual discourses, previous findings, and research desiderata into account, the main objective of this study is to contribute to the examination of school alienation by *analyzing students' perceptions of their teachers' teaching styles as an important determinant of school alienation as well as the behavioral consequences of school alienation.*

The analysis of teaching styles and school behavior of primary school students builds on a longitudinal panel study. The empirical analysis is based on data from Luxembourgish primary students (years 5 and 6), gathered within the research project School Alienation in Switzerland and Luxembourg (SASAL). We decided to focus on primary school because previous research has shown that school alienation is already developing in the early school years (Finn, 1989; Hascher & Hagenauer, 2010). Although the Luxembourgish primary schooling system is comprehensive, it is oriented toward an externally segregated and stratified secondary education system. As the allocation into distinct secondary school tracks is based on prior

educational achievement, the final school years in primary school (grades 5 and 6) are crucial and characterized by extensive academic pressure (see Krolak-Schwerdt et al., 2015). The case of Luxembourg is comparable with other stratified educational systems and countries that are characterized by residential segregation and, thus, prone to educational inequalities in terms of systematic variations in educational attainment along certain axes of inequality such as social origin, gender, or immigrant background (Hascher & Hadjar, 2018). A main expression of such inequalities that constitute a social problem in Luxembourg are strong disadvantages in educational achievement and educational trajectories for working-class students, boys, and students with certain immigrant origins (e.g., Portuguese origin).

Our research design constitutes a mixed-methods sequential design in which the quantitative and qualitative parts dealt with distinct complementary research questions. The quantitative part was based on a survey that focused on the causes and consequences of school alienation and on the research question of *how (an authoritative teaching style versus unfair) teaching styles at the classroom level affect students' attitudes toward teachers and learning as well as their behavior (deviant behavior in school and classroom participation) at the individual level.* In order to provide more detailed insights, the qualitative part was based on focus groups focusing on students' experiences and addressed the questions of *which teacher practices students perceive as unfair and how these affect students' attitudes toward school.*

In the next section, we introduce the concepts of school alienation and teaching styles, specifying the relation between these issues as well as the link to students' behavioral consequences. The method section introduces the applied mixed-methods design, which aimed to convey the complexity of the phenomenon of school alienation. While we present the quantitative and qualitative results separately, the main results of both substudies are integrated in a successive section. In the final section, we summarize the main findings; reflect on theory, methodology, and the current state of research; and discuss the study's strengths, limitations, and implications for future research.

## Theoretical Framework

This section introduces the concept of school alienation and the theoretical assumptions that support, first, the link between teaching styles and school alienation, and second, the link between school alienation and behavioral consequences.

### How Teaching Styles Affect School Alienation

*The concept of school alienation.* Even though research on school alienation began about 40 years ago (Dyran, 1980; Mau, 1989), it has recently attracted new attention from the international educational research community (Archambault et al., 2009; Demanet & van Houtte, 2012a). School alienation

describes the students' belief of not fitting into and feeling mostly uncomfortable in school (Leduc & Bouffard, 2017). In accordance with a recent conceptualization and empirical validation (Hascher & Hadjar, 2018; Morinaj et al., 2017), school alienation is defined as a multidimensional construct that comprises a set of negative attitudes toward school that are related to certain domains of schooling, namely, learning, teachers, and classmates. Alienation does not necessarily occur in all those domains, and alienation in regard to different domains may also have specific consequences. Thus, considering the different domains is meaningful. What also needs to be taken into account is that school alienation relates to a dynamic process rather than a static trait: School alienation changes over the course of students' educational pathways—like students' attitudes toward school and learning in general (Hascher & Hagenauer, 2010)—and particularly increases toward and during secondary schooling (Hadjar et al., 2021; Hascher & Hadjar, 2018).

As this conceptualization of school alienation is similar to other concepts like (dis)engagement (Fredericks et al., 2004), (a)motivation (Ryan & Deci, 2008), well-being (Hascher, 2012), or participation (Loftin et al., 2010) that describe the students' situation in school, their relationship needs clarification. While some of those concepts refer to attitudes as well as to behavior, the main advantage of school alienation is that it strictly differentiates between those aspects. In doing so, school alienation is understood as an attitudinal phenomenon (Hascher & Hadjar, 2018), whereas behavior like participation or engagement is a consequence of alienation. From a sociological or social-psychological point of view, this differentiation is meaningful because—according to the theory of planned behavior (Fishbein & Ajzen, 1975) and situational action theory (Wikström, 2014)—attitudes structure behavior but do not entirely determine it.

*The role of teachers in developing school alienation.* While school alienation can also develop before students enter the schooling system, namely via parental and family influences, its development is mainly affected by structural stressors and experiences in school and particular agents within the school setting. This general thesis resembles Geddes' (2006) perspective that children's socio-emotional development before they come to the school is crucial, but the teachers' function includes providing these students with the necessary support to be able to attach to school and particularly to the school environment. Teachers' support is especially of interest for those students who—due to their socio-emotional development—show difficulties in adapting to school and its demands, and may likely develop a school phobia as an extreme behavioral outcome (Geddes, 2006). Thus, we focus on teachers as the primary agents in this environment. As indicated above, teachers function—apart from their role as instructors—as an attachment base, that is, they have to foster positive relationships and support students' attachment to school vis-à-vis previous and

ongoing attachment processes of the children regarding their families, peers, and the wider social world (cf. Bombèr & Hughes, 2013; Geddes, 2006; or the intervention study of Nash & Schlösser, 2015). From a more sociological perspective, this function can be understood as enhancing students' "social capital" (Coleman, 1988), as the teachers' functions include caring for, motivating, and supporting their students. Thus, in terms of a social resource, teachers are crucial for students' subjective well-being in school (Gambone et al., 2002; Pianta et al., 2003). As positive teacher–student relationships also enhance students' academic performance (Bombèr & Hughes, 2013), they constitute an important factor for both student well-being and academic outcomes. The important role of teachers in students' social and academic development (Hamre & Pianta, 2007; Rutter & Maughan, 2002) has also been supported by means of attachment theory (Baker, 2006; Bowlby, 1982) and social setting theory (Luckner & Pianta, 2011; Tseng & Seidman, 2007). Both claim that children's behavior is shaped by social interactions with ongoing relational representations, whereas the latter concept specifies this construct by framing these relationships within settings.

*Teaching styles and their impact on school-alienation-related characteristics.* As previously indicated, teaching styles are crucial for students' academic and social development, especially for those who struggle to meet school expectations (Eisenhower et al., 2007; Geddes, 2006; Sabol & Pianta, 2012) and those with learning disabilities or behavioral issues (Baker, 2006; Eisenhower et al., 2007). Research has revealed that teaching practices are potential drivers of attitudes such as alienation. This has particularly been shown for pedagogical traditions of instruction with regard to students' attitudes toward mathematics (Solomon & Croft, 2016).

Commonly three different teaching styles are distinguished: the authoritarian, the authoritative, and the permissive teaching style (Dever & Karabenick, 2011; Hallinan, 2008; Luckner & Pianta, 2011). Research on classroom teaching differentiates teaching styles with respect to the extent to which they display empathy and academic pressure. The authoritarian teaching style is characterized by a high degree of academic pressure and less solicitude, whereas the permissive teaching style reflects a high degree of solicitude and low or absent academic pressure. The authoritative teaching style balances academic pressure and solicitude while also considering fairness and rule enforcement (Dever & Karabenick, 2011).

According to research (e.g., Aldhafri & Alhrajji, 2014; Walker, 2008), students with authoritarian teachers show the lowest levels of motivation, whereas educational success is lowest in classrooms led by laissez-faire teachers who employ a permissive teaching style. However, a culture-specific perspective is needed, as it has been shown for the US that specific ethnic groups preferred authoritarian teaching styles, which appeared to lead to better results (Dever & Karabenick, 2011). A majority of studies (Baker et al., 2009;

Birch & Ladd, 1998; Myers & Pianta, 2008) have demonstrated that students benefit from an authoritative teaching style: They achieve better educational results, are better integrated into school, and show a reduced risk of school failure. Hallinan (2008) also found in her study on school attachment that students who perceive their teachers as caring and respectful think more positively about school. Similar results were revealed in a Swiss study of secondary school students by Hadjar et al., 2015: An authoritative teaching style was found to go along with lower school alienation and higher educational success. Baker et al. (2009) also came to the conclusion that a student-oriented teaching style is beneficial for students' educational performance and development.

Focusing on teacher–student relationships, several studies (Baker et al., 2008; Çağlar, 2013; Hascher & Hagenauer, 2010; Legault et al., 2006) have highlighted a lack of fairness and respect as well as low teacher engagement as key elements of a negative teaching style. This highlights the importance of fairness in teaching. Thus, in addition to the authoritative teaching style we include the unfair teaching style that is related to the three-dimensional concept mentioned above (e.g., Dever & Karabenick, 2011). Teachers' (un)fairness and (in)justice are mirrored in students' social behavior (Schäfer & Dalbert, 2013) in the classroom. On the one hand, fair teaching is expressed by interactional fairness with regard to interpersonal (e.g., polite and respectful) and informational (e.g., school-related matters) interactions with students. But on the other hand, fair teaching is expressed by procedural fairness in terms of equal treatment of the student body while considering individual educational needs and interests. Relying on fairness in the classroom fosters students' development with regard to positive interrelational experiences and learning outcomes (Kahileh et al., 2013). On the basis of this empirical state of research, we propose that the unfair teaching style has a detrimental effect on students' development. However, up to now little has been known about how students experience and assess unfair teaching styles. The predominantly quantitative studies show the correlation between teaching style and student behavior or well-being, but information about students' concrete experiences in the classroom is still scarce.

### *Behavioral Consequences of School Alienation*

School alienation is expected to play a decisive role in shaping behavior in class, such as students' social and performance behavior (Ricard & Pelletier, 2016), and it can lead to severe consequences in the long run (Hadjar et al., 2015). This correlation between school alienation and classroom participation as well as deviant behavior will be examined in this article as two major drivers that support or hinder academic achievement.

Ajzen's (1985, 2002) theory of planned behavior provides a useful approach to understand the mechanisms and determinants of those behavioral consequences. In this light, intentions and objective limitations such as individual or

institutional boundaries and capacities affect behavioral consequences. According to Ajzen (2002), attitudes are based on beliefs regarding expected and desired outcomes as well as other utilities and are strongly related to behavior. In this vein, school alienation is based on students' perceptions of their learning environment regarding certain utilities, with well-being as the highest goal (Hadjar et al., 2015; Ormel et al., 1999). Thus, perceptions and attitudes appear to be crucial in explaining and understanding students' behavior (von Saldern, 1992).

After having clarified how certain attitudes determine students' behavior, the following paragraphs describe the state of research regarding classroom participation and deviant behavior.

*Classroom participation.* Because classroom participation is related to the extent to which students are actively engaged in class, classroom participation plays a crucial role in students' learning development (Loftin et al., 2010; Tatar, 2005). According to Finn's (1989) participation-identification concept, both behavioral (participation at school) and cognitive (identification with school) components enhance the probability of school alienation. In addition, besides variables such as class size, age, gender, time spent in class, and class preparation, all of which may have only a minor effect on classroom participation, fear of peer disapproval has been shown to be a major determinant of students' classroom participation. Teachers can foster classroom participation by creating a safe environment through an active and positive reinforcement that fosters students' confidence and willingness to speak up in class, as well as by asking and answering questions (Loftin et al., 2010). In this regard, teachers can be supportive and caring so that expressions of peer disapproval are avoided (Mustapha et al., 2010). All in all, classroom participation is assumed to be students' response to the perceived learning environment that is mediated by students' attitudes (school alienation).

*Deviant behavior in school.* As an institution, school aims to shape students' behavior so that educational success is fostered. Students are in permanent tension between confrontation, adaptation, and resilience to school conditions (Kramer, 2014). Deviant behavior in school is characterized by a violation of school norms and values—such as school absenteeism, cheating, failing to follow the teacher's instructions, and violent behavior against people or school property (Hadjar, Grünwald-Huber, & Gysin, 2012). According to the concept of “underlife” by Goffman (1961), students might use deviant behavioral patterns as coping mechanisms that allow them to express negative attitudes toward schooling. Along these lines, the model of situational action theory (Wikström & Sampson, 2003) provides the basis for the following argument: School alienation functions like a frame. Accordingly, actions emerge from particular situations as a person's processual perspective on social factors such as teacher–student interactions within the classroom



(Wikström & Sampson, 2003). Alienated students use this frame to select behaviors, demonstrating certain actions that go against the schools' expectations of a "good student," namely, nonconforming deviant behavior that disrupts learning processes (Hadjar, Grünwald-Huber, & Gysin, 2012). Moreover, with regard to the role of teachers, existing research has demonstrated that teachers' low expectations and lack of support are associated with higher school misconduct (Demanet & van Houtte, 2012b).

Overall, for the quantitative longitudinal study the following four hypotheses were developed from the state of research mentioned above. For the qualitative in-depth study the theoretical framework functions as a sensitizing concept.

*Hypothesis 1: The more students perceive that their teacher is exhibiting an authoritative teaching style (classroom level), the less students are alienated from learning and their teacher (individual level).*

*Hypothesis 2: The more students perceive that their teacher is exhibiting an unfair teaching style (classroom level), the more students are alienated from learning and from their teacher (individual level).*

*Hypothesis 3: The more students are alienated from learning and their teachers, the lower their participation in the classroom.*

*Hypothesis 4: The more alienated students are from learning and their teachers, the higher their deviant behavior in school.*

## Research Design of the Mixed-Methods Study

First, we introduce the mixed-methods approach we employed. Afterwards we outline the specific features of the quantitative and qualitative analyses separately. This strategy meets our intention to consider both studies as independent and fully adequate elements of the mixed-methods design that complement each other.

### Conceptualization of the Mixed-Methods Study

Exploring the characteristics and impact of an authoritative teaching style and a(n) (un)fair teaching style from students' perspective, this study employed a mixed-methods design that enabled us to capture students' attitudes toward school as well as their everyday experiences in the classroom in depth. The main objective was to gain a deeper understanding of the relation between teaching styles, school alienation, and its behavioral consequences.

Following Moran-Ellis et al. (2006), the mixed-methods research design determined the entire research process, from formulating the research questions until the results and discussion. Even though the quantitative and qualitative studies were conceptualized as independent studies following separate research questions, substantial integration was targeted by

connecting the results of both studies. Because sequential mixed-methods designs are often criticized for insufficient integration of research strands (Bryman, 2014; Creswell & Plano Clark, 2007; Halcomb, 2019), this study presents the triangulated findings—which display how both strands benefit from each other and contribute to deeper insights in relation to the research objectives—in a triangulation section following two separate results sections. Whereas mixed-methods research quality criteria constitute the overarching framework for linking both studies, specific quantitative and qualitative quality criteria were applied to the respective research strands (Halcomb, 2019).

The overarching aim of the methodological triangulation was not to validate existing findings (post-positivistic approach), but rather to establish a deeper understanding of school alienation by following a complementary approach (Bryman, 2006; Hammersley, 2008). This means that quantitative and qualitative research strands focus on different aspects of the research question, providing a more comprehensive understanding (Woolley, 2009). Hence, this complementary research strategy enables us to consider macro and micro levels of social analysis. In doing so, our study benefits from combining the strengths of quantitative and qualitative approaches. Whereas the quantitative research strand focuses on relationships between variables, explaining structures and processes, the qualitative study enables us to examine the reasons behind such relationships (Bryman, 1988, 1992). In this light, the mixed methods provide the flexibility to examine the research questions with the procedures that appear to be most promising and adequate (Teddlie & Tashakkori, 2009).

More precisely, we employed a sequential in-depth design, which means that a quantitative study preceded a qualitative study (Creswell & Plano Clark, 2007; Mayring, 2001). Starting with the quantitative study, we examined the effect of teaching styles on school alienation and behavioral consequences. Because the items applied for the unfair teaching style are lacking detail, the qualitative study aimed to study this aspect in depth. In doing so, the qualitative approach provided direct insights into how students define and experience unfair teaching. Overall, this research strategy allowed us to complement the standardized questions from the quantitative questionnaire survey with interpretations from the individual students' perspective.

To ensure correspondence between the quantitative and qualitative substudies, this paper was based on data gathered from primary school students in Luxembourg in two consecutive waves in school year 5 (wave 2; age 11) and year 6 (wave 3; age 12). The quantitative analysis of this paper was based on a questionnaire survey that focused on how teaching styles affect students' attitudes and behavior. The qualitative analysis was based on focus groups, analyzing classroom dynamics that focused on how students experience their teachers' practices and learning in everyday school life, as well as what conflicts predominate in the classroom and how the students deal with them.

**Table 1.** Operationalizations.

Scale/item (origin)	Construction	Number of items/ Cronbach's alpha	Example item	Distribution
Authoritative teaching style, wave 2 (BiKS study; Weinert et al., 2013) (classroom level)	4 items, students' indication: (1—disagree and 4—agree), mean index, Min: 1, Max: 4	4/ $\alpha$ = .59	"My teachers support me when I need some help."	$x = 3.35$ , $SD = 0.55$
Unfair teaching style, wave 2 (Dalbert & Stoeber, 2002) (classroom level)	3 items, students' indication: (1—disagree and 4—agree), mean index, Min: 1, Max: 4	3/ $\alpha$ = .76	"My teachers treat me unfairly."	$x = 1.58$ , $SD = 0.73$
School alienation from teachers, wave 2 and 3 (self-construction Morinaj et al., 2017)	8 items, students' indication: (1—disagree and 4—agree), mean index, Min: 1, Max: 4	8/ $\alpha$ = .87	"My teachers don't take me seriously."	$x = 1.90$ , $SD = 0.65$
School alienation from learning, wave 2 and 3 (self-construction, Morinaj et al., 2017)	8 items, students' indication: (1—disagree and 4—agree), mean index, Min: 1, Max: 4	8/ $\alpha$ = .87	"I don't feel like learning anything in school."	$x = 2.10$ , $SD = 0.62$
Deviant behavior in school, wave 3 (Melzer & Schubarth, 2006)	19 items, occurrence of deviant behavior, Students' indication: ("never" to "almost daily"), dichotomized ("never" versus "already done"), sum index, Min: 0, Max: 19	19/ $\alpha$ = .92	"Annoying others, throwing things at others in class."	$x = 4.74$ , $SD = 5.20$
Classroom participation, wave 3 (Eder, 1995 in Hagenauer, 2011)	5 items, students' indication: (1—disagree and 4—agree), mean index, Min: 1, Max: 4	5/ $\alpha$ = .79	"I always pay attention in class."	$x = 3.48$ , $SD = 0.46$

Source. Own depiction.

### Methodology of the quantitative study

**Sampling.** The sample is based on a selection of Luxembourgish primary schools. The nonrandom cluster sample comprises 17 primary schools in Luxembourg with a total of 39 classrooms ( $N=460$ ). The sampling strategy aimed to capture geographical and social heterogeneity. Another sampling objective was to gather a student sample that comprises a sufficient number of alienated students, leading to an overrepresentation of male students, students from low social origin, and immigrant students, as comparisons between sample and population reveal. The net initial sample used for the quantitative analyses refers to two consecutive waves. Students were surveyed in school years 5 and 6. In year 5, primary school students are regularly 11 years old in the Luxembourgish education system. The nested data structure allows for a multilevel design: While students' perceptions of teaching styles relate to the classroom level, students' school alienation and behavioral outcomes are individual-level variables.

**Method of data gathering and operationalizations.** The quantitative student data were gathered with a standardized questionnaire designed in German and French. The students completed the questionnaires in the classrooms, with researchers being present to respond to any queries. The measurement instruments were partly derived from tested and applied item sets, and partly derived from self-constructions that have undergone extensive tests regarding the quality criteria of quantitative research within the scope of a pre-test and validations. Scaling criteria have been measurement

invariance over time and between different settings. All measures used are based on student reports. This also includes teaching styles. Following the Thomas theorem (Thomas & Thomas, 1928), students' perceptions of the teaching styles have a stronger impact on their attitudes and behavior than actual teaching styles. Table 1 provides an overview of the operationalizations of the most important parameters to evaluate distribution, validity and reliability of measures, and references that also link to more detailed accounts on the methodological quality of the used scales. All scales appear to meet the internal consistency threshold (considering the number of items) and are thus of sufficient reliability.

**Methodology of the qualitative study.** The starting point for the qualitative study was the fact that the unfair teaching style has not yet been investigated in detail. Furthermore, the items employed in the quantitative study that capture the unfair teaching style suppose a certain understanding of justice, injustice, and fairness, for example, "My teachers treat me unfairly" or "I experience injustice in school." To obtain detailed insights, we conducted an in-depth qualitative study to complement the research gap from the quantitative results by analyzing students' perceptions of a(n) (un)fair teaching style and the ways in which it affects them.

**Sampling.** The qualitative data stemmed from focus groups with a total of 38 students from year 6 (age 11–13; 23 female and 15 male students) in two Luxembourgish primary schools. In order to match the quantitative substudy and its sampling objective to achieve heterogeneity (including

high- and low-achieving classrooms), we selected certain schools from the quantitative sample for this study. However, due to methodological considerations—particularly to prevent halo effects related to a bias in which an impression created during the first step influences responses in the second step—students from the qualitative study did not participate in the quantitative survey study. While the school *École Garonnet* (pseudonym) is characterized by low-achieving students from an urban neighborhood that is located in the south of Luxembourg, the school *École Bacchus* (pseudonym) is characterized by high-achieving students from an affluent quarter in the center of Luxembourg.

**Method of data gathering and analytical procedure.** Semistructured focus groups were used to obtain the students' experiences and feelings in relation to school and learning. The focus groups used an interview guideline centering on the students' interrelationships and relationships with their teachers as well as preferences and dislikes of aspects of schooling and school alienation. The interview guideline was based on open-ended questions that were supplemented by follow-up questions, which is why the chosen semistructured approach provided both a structure that ensured a focus on the research interest as well as a flexible frame for the students to be able to introduce topics and aspects that are important for them in reaching beyond the predetermined structure. Taking a reserved role (Kamberelis & Dimitriadis, 2020), the interviewer functioned as a moderator, helping to focus the group discussion on the themes of interest, facilitating interchanges and integrating all students into the conversation, with the aim of including a number of perspectives on those topics.

In line with the qualitative paradigm, this approach enabled the researchers to understand the students' assessments and interactions while being aware of internal conflicts in narratives and between students (Brinkmann, 2020). Moreover, using an interview guideline strengthened the comparability between the group discussions (Brenner, 2006).

A further rationale for choosing a semistructured approach was the assumption that the primary school students were used to being guided through the classroom setting by an adult, which is why a degree of structure and leadership was perceived as an advantage in creating an environment as familiar as possible. The semistructured guideline-based focus groups lasted approximately 45 minutes and were conducted in German, whereby, due to the multilingual context of Luxembourg, the students answered the questions in German, French, or Luxembourgish. Each focus group was audio- and videorecorded to understand as well as possible what was going on during the inquiry.

After transcription and anonymization, the focus group content was analyzed by applying Mayring's (2001) qualitative content analysis. In doing so, categories were created in inductive as well as in deductive ways. Successively, parts of the material were assigned to those categories. The coding process corresponds to a reduction of the material, as it

focused on selected aspects of meaning relating to the overall research questions (Schreier, 2014). The focus of interpretation encompassed explicit emotional and cognitive content within the transcripts. To ensure reflexivity, codes and interpretations were discussed in the team as well as in the context of research workshops.

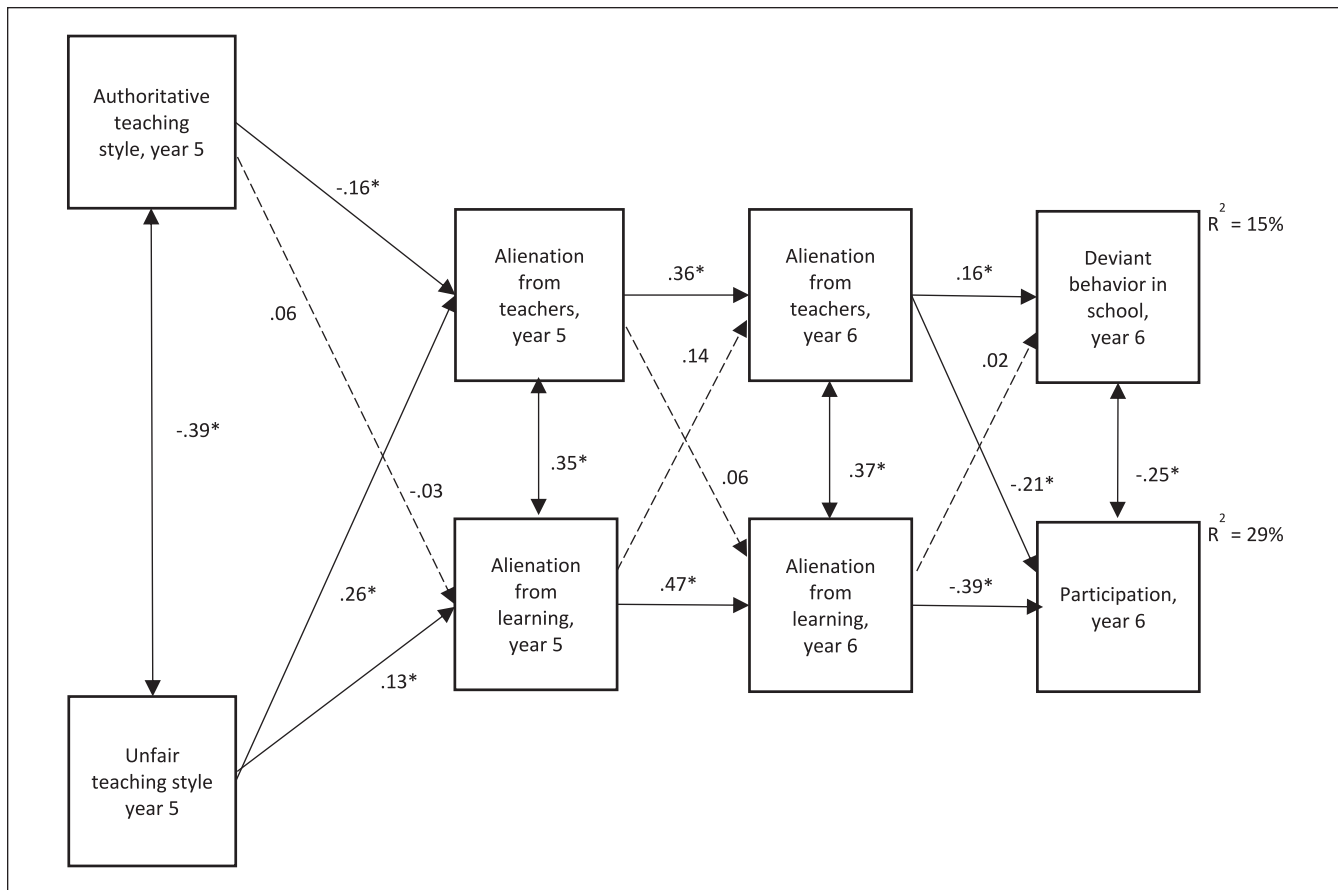
## Results

In accordance with the mixed-methods approach outlined above, the quantitative and qualitative results are presented separately in the next section before they are substantially integrated.

### Quantitative Results: Structural Equation Model

In order to demonstrate the complex (direct and indirect) links between teaching styles, at the classroom level, and school alienation and behavioral outcomes (deviant behavior in school and classroom participation), at the individual student level, the analyses were conducted by following a (multilevel) structural equation approach (Muthén & Muthén, 1998–2012). Random intercept models (intercept as outcome) were estimated (level 1/within: students; level 2/between: classrooms) while controlling for social origin, gender, and immigrant background. Thus, links between demographic variables and other independent and dependent (i.e., exogenous and endogenous) variables were estimated. For clarity of presentation, control variables are not displayed in the visual representation of the results (Figure 1). According to the goodness-of-fit indices, the quality of the structural equation model was high. The hypothetical model corresponded excellently with the empirical model according to these indices and in particular according to the chi-square test, which indicates that the structures in the data do not differ significantly from the structure of the theoretical model (Hu & Bentler, 1999).

The results of the structural equation model (Figure 1) indicate that an unfair teaching style in year 5 is associated with a higher degree of alienation from teachers and from learning in year 5, whereas an authoritative teaching style (year 5) is associated only with a lower degree of alienation from teachers (year 5). Both teaching styles are associated with each other: The greater the unfairness of the perceived teaching style, the less teaching styles are perceived as authoritative in terms of student-oriented and supportive on the classroom level. While teaching styles (year 5) did not directly affect alienation from learning and alienation from teachers (year 6)—indicating that school alienation is situation specific—there is some linkage mediated by the school alienation scores in year 5 given the moderate association—that is to say, a medium level of stability—regarding both alienation dimensions between years 5 and 6. On students' behavioral level, alienation from teachers (year 6) is linked to both higher levels of deviant behavior in school and lower classroom participation (year 6), while alienation from



**Figure 1.** Multilevel structural equation model: teaching styles, school alienation, deviant behavior, and classroom participation.

Notes. Standardized estimates; \* paths significant (5% level), controlled for social and migration background, gender; W2 Grade 5/Cycle 4.1; W3 Year 6/Cycle 4.2. Database: Luxembourgish primary school sample (students:  $N=460$ ; classrooms:  $N=39$ ).

Model fit: chi-square test,  $\chi^2=7.797$ ,  $df=4$ ,  $p=.100$ ; RMSEA=0.054; SRMR=0.022 (within), 0.025 (between); CFI=0.994; TLI=0.940.

Source. Own depiction.

learning—measured at the same time point—is associated only with lower classroom participation (year 6). Finally, the two behavioral consequences are associated with each other: Students who reported a higher level of deviant behavior in school also showed lower classroom participation.

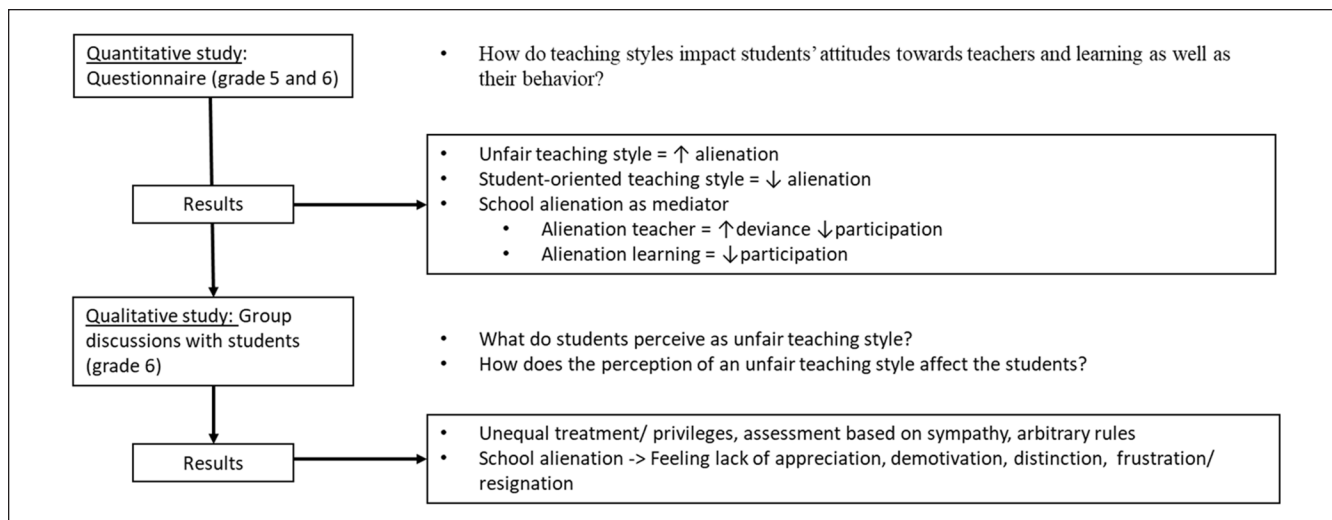
Summarizing the quantitative results in the light of the theory-driven hypotheses, two out of four hypotheses were supported: The presented results indicate that an authoritative teaching style prevents students from experiencing alienation from teachers, but not from learning. Thus, *Hypothesis 1*—which proposed that the more students perceive a teaching style as authoritative (classroom level), the less they are alienated from their teachers and learning (individual level)—is confirmed. In support of *Hypothesis 2*—which proposed that the greater the unfairness of the perceived teaching style by the students (classroom level), the more they are alienated from learning and their teachers (individual level). Thus an unfair teaching style enhances students' risk to suffer from alienation from learning and teaching. Hypotheses 3 and 4 focused on the link between school alienation and deviant behavior in school and

classroom participation as behavioral consequences: *Hypothesis 3*—which proposed that the more students are alienated from learning and teachers, the lower their participation in the classroom—was supported by the data. However, *Hypothesis 4* received support only with regard to the link between students' alienation toward teachers and deviant behavior in school, with no effect between alienation toward teachers and classroom participation. Thus, as hypothesized, the more alienated students are from teachers, the higher their deviant behavior in school.

### Qualitative Results: Qualitative Content Analysis

Qualitative analyses aimed to identify which teacher practices are perceived as unfair and how these affect students' attitudes toward school. The main codes in the coding system relied on the theoretical concept of Luckner and Pianta (2011) regarding the three main functions of teachers as central agents (emotional support, instructional support, and classroom organization) who affect students' attitudes toward schooling. When considering the students' perspectives, these main codes were





**Figure 2.** Joint table of the results from the mixed-method study. Source. Own depiction.

fleshed out with their statements. The *emotional support* code comprises subcodes related to teachers’ strictness and their unequal treatment of, interest in, empathy for, and support of students, as well as teachers’ emotions during class. *Instructional support* is associated with the way teachers explain the learning content in relation to students’ abilities to understand. Its subcodes reflect the relevance of the teaching material and language use in class and of the teachers’ practices that directly determine how students learn in the classroom. The latter includes the way teachers structure learning in the sense of setting time frames and in the way they assess students’ academic work. The third main code, *classroom organization*, focuses on teachers’ support concerning students’ educational allocation to secondary school, practices of unequal punishment, and teachers’ conflict management skills. Furthermore, the practices teachers apply to create variety in the classroom are part of the classroom organization. While the perceptions of unfair treatment were based on students’ individual values and/or comparisons among classmates or between classes, the qualitative results showed a medium level of satisfaction with teachers and learning.

Analyses revealed that students characterized a fair teaching style as equal treatment with regard to classroom rules (*procedural justice*) and equal amounts of teachers’ empathy for students’ intentions (*interactional justice*). By contrast, an unfair teaching style is described as an unequal level of sympathy that is expressed through a teacher’s lack of awareness regarding pedagogical intentions:

Dillan: What I also recognized: In each class, there is a child who the teacher respects more than the other students.

//Cecile: a Chouchou// [. . .]

Dillan: Yes, in Luxembourg, we call it a Chouchou. And I do not understand why it exists at all. Other children are shouted at, but

this one child is (caresses another student’s head), and this is blatant. (Classroom École Bacchus)

Accordingly, perceptions and experiences of injustice reduce students’ well-being in school, affecting their attitudes toward teachers, learning, and classmates, which are in line with the conceptual domains of school alienation. This also affects behavior, lowering classroom participation, motivation, and engagement. Students experience classroom conflicts with the teachers as inappropriate or erratic, which includes passivity regarding conflict management, surveillance, and unequal treatment. Moreover, students perceive teachers’ practices as unfair when they assess situations inadequately. Consequently, students feel misunderstood and hastily judged:

Jolien: For example, when we read a book in class and we don’t understand the book, then she believes straight away that we have not read it. [. . .] Yes, and then you feel really bad. [. . .]

Because then you are afraid to ask anything or to admit that you did not understand something. If you are called on, then the teacher might say you did not read the book. Because you did not understand. (Classroom École Garonnet)

Furthermore, experiences of deprivation and related powerlessness can also lead to alienation processes. By contrast, an authoritative, student-centered, and democratic teaching style prevents such experiences.

### Integrated Results From the Mixed-Methods Study

The overall results from the study are outlined in this section. In doing so, we demonstrate in which ways the findings from the quantitative and qualitative components complement each other (Figure 2).

The quantitative study revealed the beneficial effect of an authoritative teaching style, whereas the unfair teaching style negatively affects students' educational performance and development, as well as their alienation from teachers and learning. Given the importance of an unfair teaching style for the development of school alienation, knowledge about what students perceive as an unfair teaching style constitutes a starting point for prevention by enhancing fair teaching.

Because the items measuring an unfair teaching style in the quantitative study appeared considerably vague, it remained unclear what unfair teaching in the classroom substantially means. Using the term "unfair" (e.g., "My teachers treat me unfairly"), those items dealt with a highly subjective construct that might be interpreted by students in different ways. Against this background, the qualitative study generated knowledge about the nature of unfair and fair teaching styles from the students' perspective. In doing so, crucial aspects of teaching styles could be identified that determine the students' experiences in the classroom and shape their attitudes toward school and learning. According to our findings, students perceive an unfair teaching style as unequal and incomprehensible treatment, sympathy-driven assessment, and arbitrary rules. Students experiencing rejection from the teacher behave in ways that are demotivated, frustrated, and resigned. In this sense, the qualitative and quantitative findings equally indicate that the development of school alienation is related to an unfair teaching style. Furthermore, the feeling of demotivation is presumably a strong indicator of the lack of classroom participation.

## Discussion and Conclusions

### *Contribution to the Field of School Alienation Research*

Results revealed that an unfair teaching style as well as an authoritative teaching style were linked to the development of school alienation, but in different ways. Whereas an authoritative teaching style had a positive effect on students' attitudes toward teachers, an unfair teaching style showed a negative effect by fostering the development of alienation from learning and teachers. Accordingly, in comparison with students who experience an authoritative teaching style, students who are confronted with an unfair teaching style are more likely to be alienated from school. Overall, characterized by a combination of severity, care, and support, the authoritative teaching style seems to be beneficial for students' educational performance and development, as demonstrated in several studies (Baker et al., 2009; Birch & Ladd, 1998; Dever & Karabenick, 2011; Hamre & Pianta, 2001; Myers & Pianta, 2008; Pianta, 1999). In this light, the current results support and contribute to the state of research.

### *Change in Teaching Practice in the Course of Primary Schooling*

Furthermore, this research provided hints that teaching styles and pedagogical expectations change in the face of the allocation of students into secondary school. More specifically, this includes increasing pressure to perform academically in the final years of primary school. In this light, it is assumed that stronger academic pressure comes along with less student-oriented and more teacher-centered teaching styles, as meeting the curriculum's educational goals becomes the priority. Those findings are concordant with other studies proving that exams affect teaching styles and students' learning (Klein, 2016; Ryan & Weinstein, 2009). Moreover, students indicate that teachers' assessments, determining students' allocation to specific school tracks, are unfair (e.g., Glock et al., 2015). Specifically, teachers seem to offer unequal opportunities to students with respect to presenting their skills or revising their work.

### *The Role of Teachers for Students' Development*

As a part of teacher–student interactions, teaching styles represent a core dimension of the classroom climate. As such, teaching styles crucially affect students' attitudes toward school (in this study: school alienation), achievement, and self-concept (Beeler et al., 2007).

In line with attachment theory (Bowlby, 1982) and social setting theory (Tseng & Seidman, 2007), our findings confirm that teachers play an important role in students' social and academic engagement. This emphasizes the idea that besides individual dispositions, the learning environment and classroom interactions are also important aspects explaining the development of school alienation. In line with Coleman's (1988) social capital theory, our qualitative findings emphasize teachers' role as motivators and supporters in students' social and educational development, as well as with regard to students' subjective well-being in school. In relation to the presented results, teaching styles in general can reach beyond the individual level and either positively or negatively affect the classroom climate. As our findings indicate that students are often unable to understand teachers' pedagogical practices and that teachers often unequally respond to individual needs, we strongly recommend that teachers explain their intentions in order to achieve procedural and interactional justice.

### *Extension of the Previous Conception of Teaching Styles*

Analyzing students' perspectives on an unfair teaching style contributes to the specification of the concept of teaching styles (Dever & Karabenick, 2011), as it appears to be an autonomous dimension in addition to the three-dimensional concept of authoritarian, authoritative, and permissive

teaching styles. Our construct of a(n) (un)fair teaching style combines Kahileh et al.'s (2013) view of an unfair teaching style with Luckner and Pianta's (2011) concept of teachers' main functions. Hence, we consider interactional (interpersonal and informational) and procedural (equal treatment) fairness in relation to emotional support, instructional support, and classroom organization provided by the teachers.

The necessity to differentiate between a(n) (un)fair and authoritative teaching style became obvious in the differential effects we found on school alienation and its behavioral consequences, as shown in the quantitative results. Equally, the qualitative results revealed that (un)fair teaching styles were clearly different from teaching styles described in Dever and Karabenick's (2011) concept. Against this background, students' overall perceptions of an unfair teaching style are mainly characterized by teachers' rigor and/or lack of (clear) instructions, thus resulting in a lack of understanding, unequal treatment across students, and unfair consequences with regard to conflict management in the classroom.

*Decreased participation and increased deviant behavior as consequences.* With respect to the behavioral consequences of the examined teaching styles, students reported that the characteristics linked to an unfair teaching style lowered classroom participation, overall motivation, and engagement in school. Regarding the behavioral consequences of school alienation, the quantitative results indicated that alienation from teachers and alienation from learning have domain-specific effects at the behavioral level. Students who feel alienated from their teachers are less likely to participate and more likely to show deviant behavior in class. However, students who are alienated from learning tend to lower classroom participation, whereas no significant increase in deviant behavior occurs. This clearly illustrates the need to differentiate between the domains of school alienation, as suggested by the multidomain concept of school alienation (Hascher & Hadjar, 2018). The fact that *Hypothesis 4*, which proposed that the more alienated students are from learning and teachers, the higher their deviant behavior in school, received only marginal support from the data supports the theory of planned behavior (Fishbein & Ajzen, 1975) and situational action theory (Wikström, 2014), which claim that attitudes can help organize behavior but do not entirely determine it.

### **Methodological Contribution to Mixed-Methods Research**

Besides the contribution to educational research, this study also set the aim of demonstrating, through this empirical study, in which way a mixed-methods design is beneficial in providing a more comprehensive picture compared to monomethod approaches. The integration of a quantitative and a qualitative study—each of which functioned as full-fledged methodical approaches and followed differential research questions—enabled us to investigate statistical relationships

between students' alienation, teaching styles, and behavior at the structural level as well as the substantial nature of an unfair teaching style (see Bryman, 1988, 1992). Striving for substantial integration (Moran-Ellis et al., 2006), both studies were linked through the mixed-methods framework along the entire research process. In concrete, the studies were united through a common theoretical framework but strived for complementarity (Woolley, 2009). Moreover, integration occurred through data acquisition because decisions on how to choose the qualitative sample were made under consideration of the experiences from the quantitative study. Additionally, the direction of the qualitative study benefitted from the insight that the quantitative items did not reveal in which ways teaching styles are regarded as unfair, which was made a subject of the qualitative focus groups. Integrating the results of both studies revealed a more comprehensive and deeper picture of the role and nature of teaching styles in the context of school alienation and its behavioral consequences. All in all, it appears to be crucial to conceptualize the research strands of the mixed-methods study, ensuring that the potential of each approach can be fulfilled, which in turn means that no strand is considered as an entirely auxiliary construction for the other strand (Sale et al., 2002).

To sum up, two main potentials of the applied mixed-methods design were identified: First, using a sequential in-depth design enabled us to fulfill the strengths of each research strand by complementing each other and thus contributing to deeper insights. Second, the flexibility of mixed methods was beneficial because its starting point was the research interest and which measures were needed and most adequate to examine the research questions (Teddlie & Tashakkori, 2009). In this way, this approach enabled us to bridge methodological and methodical paradigms in a regulated and reflective manner.

### **Limitations**

Considering the limitations of our analyses, a lack of correspondence between the quantitative and qualitative samples could be perceived as a problem because it differs from common integration practices in sequential research designs (Ivankova, 2014). Separating the samples from each other was meaningful because we were able to avoid having the different substudies interfere with each other. However, at the school level, a consistent procedure guaranteed comparability. Because the data used in this study only covered the last 2 years of primary school, the results specifically apply to this stage of students' educational journeys.

### **Implications for Further Research**

Years 5 and 6 are characterized by changing school demands as the transition to secondary school approaches. Thus, triangulating these results with results derived from earlier and later stages (from preschool to higher education and beyond)

may be a promising option for future research when data become available. For more detailed insights into teachers' practices in the classroom, applying ethnographic approaches and the inclusion of teachers' perspectives seems to be promising.

This study focused on only two dimensions of school alienation (Hascher & Hadjar, 2018)—negative attitudes toward learning and teachers—whereas the dimension of classmates was omitted. Therefore, research on the links between negative attitudes toward classmates, teaching styles, and student behavior offers another promising direction for future mixed-methods research.

Finally, the results of the qualitative study may provide data for an enhancement of quantitative items to measure an unfair teaching style in future surveys.

## Conclusion

To gain further insights into the complex phenomenon of school alienation and its causes and consequences, a differentiated methodological approach is needed. Taking into account teaching styles and their impact on students' attitudes as well as the link between these attitudes and behavior allowed us to identify the complex mechanisms between teacher inputs and student outcomes.

The empirical results are in favor of an authoritative teaching style, which prevents students from becoming alienated from teachers and fosters students' social and educational development with the right balance of authority, support, and care. Clearly unappreciated by students, an unfair teaching style puts students at risk of becoming alienated from school, particularly from their teachers and from learning in general. In this light, it is highly recommended that teachers reflect on their practices in class.

As demonstrated through the example of this study, complex phenomena in the school context such as school alienation need specific approaches that allow the research to address the multifarious characteristics and effects associated with a particular construct. In this light, applying a mixed-methods research approach turned out to be beneficial in bridging the methodical borders by using a comprehensive framework. To conclude, the experiences from this study call for more courage to apply mixed methods in the context of educational research.

## Data Availability Statement

Quantitative and qualitative data are related to the international project "SASAL—School alienation in Switzerland and Luxembourg" (University of Bern/University of Luxembourg) and are available upon request from the authors.

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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## Ethical Approval

This research was approved by the Ethics Review Panel of the University in Luxembourg. The students' participation was at any point voluntary and was based on informed consent which comprised the written agreement of the parents and oral assent of the students themselves.

## ORCID iD

Alyssa L. Grecu  <https://orcid.org/0000-0002-7984-5334>

## References

- Ajzen, I. (1985). From intentions to action: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action-control: From cognition to behavior* (pp. 11–39). Springer.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology, 32*(4), 665–683.
- Aldhafri, S., & Alrajhi, M. (2014). The predictive role of teaching styles on Omani students' mathematics motivation. *International Education Studies, 7*(6), 135–144.
- Archambault, I., Janosz, M., Morizot, J., & Pagani, L. (2009). Adolescent behavioral, affective, and cognitive engagement in school. *Journal of School Health, 79*(9), 408–415.
- Avci, R., & Çelikkaleli, Ö. (2016). Peer victimization, trait anger and alienation as predictors of violence tendency in adolescents. *Journal of Educational Sciences Research, 6*(2), 151–167.
- Baker, J. A. (2006). Contributions of teacher-child relationships to positive school adjustment during elementary school. *Journal of School Psychology, 44*(3), 211–229.
- Baker, J. A., Clark, T. P., Crowl, A., & Carlson, J. S. (2009). The influence of authoritative teaching on children's school adjustment: Are children with behavioural problems differentially affected? *School Psychology International, 30*(4), 374–382.
- Baker, J. A., Clark, T. P., Maier, K. S., & Viger, S. (2008). The differential influence of instructional context on the academic engagement of students with behavior problems. *Teaching and Teacher Education, 24*(7), 1876–1883.
- Beeler, S., Gentili, O., & Turkawka, G. (2007). *Drei Instrumente und ihre Wirkung auf das Klassenklima* (Studenten praS04). Regensburg.
- Birch, S. H., & Ladd, G. W. (1998). Children's interpersonal behaviors and the teacher-child relationship. *Developmental Psychology, 34*(5), 934–946.
- Bombèr, L. M., & Hughes, D. A. (2013). *Settling to learn, settling troubled pupils to learn: why relationships matter in school*. Worth Publishing.
- Bowlby, J. (1982). Attachment and loss: Retrospect and prospect. *American Journal of Orthopsychiatry, 52*(4), 664–678.



- Brenner, M. E. (2006). Interviewing in educational research. In J. L. Green, G. Camilli, & P. B. Elmore (Eds.), *Handbook of complementary methods in education research* (pp. 357–370). Routledge.
- Brinkmann, S. (2020). Unstructured and semistructured interviewing. In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (1st ed., pp. 424–456). Oxford University Press.
- Brown, M. R., Higgins, K., & Paulsen, K. (2003). Adolescent alienation: What is it and what can educators do about it? *Intervention in School and Clinic, 39*(1), 3–9.
- Bryman, A. (1988). *Quantity and quality in social research*. Routledge.
- Bryman, A. (1992). Quantitative and qualitative research: Further reflections on their integration. In J. Brannen (Ed.), *Mixing methods: Quantitative and qualitative research* (1st ed., pp. 57–80). Avebury.
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative Research, 6*(1), 97–113.
- Bryman, A. (2014). June 1989 and beyond: Julia Brannen's contribution to mixed methods research. *International Journal of Social Research Methodology, 17*(2), 121–131.
- Çağlar, C. (2013). The relationship between the perceptions of the fairness of the learning environment and the level of alienation. *Eurasian Journal of Educational Research, 13*(50), 185–206.
- Calabrese, R. L., & Seldin, C. A. (1986). Adolescent alienation: An analysis of the female response to the secondary school environment. *The High School Journal, 69*(2), 120–125.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*, 95–120.
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. SAGE.
- Dalbert, C., & Stoeber, J. (2002). Gerechtes Schulklima. In J. Stoeber (Ed.), *Skalendokumentation "Persönliche Ziele von SchülerInnen"*, Hallesche Berichte zur Pädagogischen Psychologie, Nr. 3 (pp. 32–34). Martin-Luther-Universität Halle-Wittenberg, Institut für Pädagogik.
- Demant, J., & van Houtte, M. (2012a). School belonging and school misconduct. The differing role of teacher and peer attachment. *Journal of Youth and Adolescence, 41*(4), 499–514.
- Demant, J., & van Houtte, M. (2012b). Teachers' attitudes and students' opposition. School misconduct as a reaction to teachers' diminished effort and affect. *Teaching and Teacher Education, 28*(6), 860–869.
- Dever, B. V., & Karabenick, S. A. (2011). Is authoritative teaching beneficial for all students? A multi-level model of the effects of teaching style on interest and achievement. *School Psychology Quarterly, 26*(2), 131–144.
- Dynan, M. P. (1980). *Do schools care?* Education Department of Western Australia.
- Eder, F. (1995). *Das Befinden von Kindern und Jugendlichen in der Schule*. Studienverlag.
- Eisenhower, A. S., Baker, B. L., & Blacher, J. (2007). Early student-teacher relationships of children with and without intellectual disability: Contributions of behavioral, social, and self-regulatory competence. *Journal of School Psychology, 45*(4), 363–383.
- Finn, J. D. (1989). Withdrawing from school. *Review of Educational Research, 59*(2), 117–142.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior*. Addison-Wesley.
- Fredericks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of evidence. *Review of Educational Research, 74*(1), 59–109.
- Gambone, M. A., Connell, J. P., Klem, A. M., Sipe, C. L., & Bridges, L. (2002). *Finding out what matters for youth: Testing key links in a community action framework for youth development*. Philadelphia Youth Development Strategies, Inc., and Institute for Research and Reform in Education.
- Geddes, H. (2006). *Attachment in the classroom: The links between children's early experience, emotional well-being and performance in school*. Worth Publishers.
- Glock, S., Krolak-Schwerdt, S., & Pit-ten Cate, I. M. (2015). Are school placement recommendations accurate? The effect of students' ethnicity on teachers' judgments and recognition memory. *European Journal of Psychology of Education, 30*(2), 169–188.
- Goffman, E. (1961). *Asylums: Essays on the social situation of mental patients and other inmates*. Aldine Publishing.
- Hadjar, A., Backes, S., & Gysin, S. (2015). School alienation, patriarchal gender-role orientations and the lower educational success of boys. *Masculinities and Social Change, 4*(1), 85–116.
- Hadjar, A., Greco, A., Scharf, J., de Moll, F., Morinaj, J., Hascher, T. (2021). Changes in school alienation profiles among secondary school students and the role of teaching style. Results from a longitudinal study in Luxembourg and Switzerland. *International Journal of Educational Research, 105*(2021), 1–14.
- Hadjar, A., Grünewald-Huber, E., & Gysin, S. (2012). Traditionelle Geschlechterrollen und der geringere Schulerfolg der Jungen. Quantitative und qualitative Befunde aus einer Schulstudie im Kanton Bern (Schweiz). *Swiss Journal of Sociology, 38*(3), 375–400.
- Hagenauer, G. (2011). *Lernfreude in der Schule*. Waxmann
- Hagenauer, G., & Volet, S. E. (2014). Teacher–student relationship at university: An important yet under-researched field. *Oxford Review of Education, 40*(3), 370–388.
- Halcomb, E. J. (2019). Appraising mixed methods research. In P. Liamputtong (Ed.), *Handbook of research methods in health social sciences* (pp. 1051–1067). Springer.
- Hallinan, M. T. (2008). Teacher influences on students' attachment to school. *Sociology of Education, 81*(3), 271–283.
- Hammersley, M. (2008). *Questioning qualitative inquiry: Critical essays* (1st ed.). SAGE.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development, 72*(2), 25–638.
- Hamre, B. K., & Pianta, R. C. (2007). Learning opportunities in preschool and early elementary classrooms. In R. C. Pianta, M. J. Cox, & K. L. Snow (Eds.), *School readiness and the transition to kindergarten in the era of accountability* (pp. 49–83). Paul H Brookes Publishing.
- Hascher, T. (2012). Well-being and learning in school. In N. M. Seel (Ed.), *Springer reference. Encyclopedia of the sciences of learning* (pp. 3453–3456). Springer.
- Hascher, T., & Hadjar, A. (2018). School alienation – Theoretical approaches and educational research. *Educational Research, 60*(2), 171–188.

- Hascher, T., & Hagenauer, G. (2010). Alienation from school. *International Journal of Educational Research*, 49(6), 220–232.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses on achievement*. Routledge.
- Henry, K. L., Knight, K. E., & Thornberry, T. P. (2012). School disengagement as a predictor of dropout, delinquency, and problem substance use during adolescence and early adulthood. *Journal of Youth and Adolescence*, 41(2), 156–166.
- Hu, L.-T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55.
- Huebner, E. S., Hills, K. J., Jiang, X., Long, R. F., Kelly, R., & Lyons, M. D. (2014). Schooling and children's subjective well-being. In A. Ben-Arieh, F. Casas, I. Frønes, & J. E. Korbin (Eds.), *Handbook of child well-being. Theories, methods and policies in global perspective*. (pp. 797–819). Springer.
- Ivankova, N. V. (2014). Implementing quality criteria in designing and conducting a sequential QUAN → QUAL mixed methods study of student engagement with learning applied research methods online. *Journal of Mixed Methods Research*, 8(1), 25–51.
- Kahileh, R., Peter, F., & Dalbert, C. (2013). Gerechte-Welt-Glaube, Gerechtigkeitserleben und Schulerfolg. In C. Dalbert (Ed.), *Gerechtigkeit in der Schule* (pp. 55–71). Springer.
- Kamberelis, G., & Dimitriadis, G. (2020). Focus group research: Retrospect and prospect. In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (pp. 480–516). Oxford University Press.
- Klein, E. D. (2016). How do teachers prepare their students for state-wide exit exams? A comparison of Finland, Ireland, and the Netherlands. *Journal for Educational Research*, 8(2), 31–59.
- Kramer, R.-T. (2014). Kulturelle Passung und Schülerhabitus—Zur Bedeutung der Schule für Transformationsprozesse des Habitus. In W. Helsper, R.-T. Kramer, & S. Thiersch (Eds.), *Studien zur Schul- und Bildungsforschung: Vol. 50. Schülerhabitus: Theoretische und empirische Analysen zum Bourdieuschen Theorem der kulturellen Passung*. (pp. 183–202). VS Verlag.
- Krolak-Schwerdt, S., Pit-ten Caten, I., Glock, S., & Klapproth, F. (2015). Der Übergang vom Primar- zum Sekundarschulbereich: Übergangsentscheidungen von Lehrkräften. In MENJE, SCRIPT, & Universität Luxemburg (Eds.), *Bildungsbericht Luxemburg. Band 2: Analysen und Befunde* (pp. 57–62). University of Luxembourg.
- Leduc, C., & Bouffard, T. (2017). The impact of biased self-evaluations of school and social competence on academic and social functioning. *Learning and Individual Differences*, 55, 193–201.
- Legault, L., Pelletier, L., & Green-Demers, I. (2006). Why do high school students lack motivation in the classroom? Toward an understanding of academic amotivation and the role of social support. *Journal of Educational Psychology*, 98(3), 567–582.
- Loflin, C., Davis, L. A., & Hartin, V. (2010). Classroom participation: A student perspective. *Teaching and Learning in Nursing*, 5(3), 119–124.
- Luckner, A. E., & Pianta, R. C. (2011). Teacher-student interactions in fifth grade classrooms: Relations with children's peer behavior. *Journal of Applied Developmental Psychology*, 32(5), 257–266.
- Mann, S. J. (2005). Alienation in the learning environment. *Studies in Higher Education*, 30(1), 43–55.
- Mau, R. Y. (1989). Student alienation in a school context. *Research in Education*, 42(1), 17–28.
- Mayring, P. (2001). Kombination und integration qualitativer und quantitativer analyse. *Forum: Qualitative Sozialforschung*, 2(1), 6.
- Melzer, W., & Schubarth, W. (2006). *Gewalt als soziales problem an schulen. untersuchungsergebnisse und präventionsstrategien*. Barbara Budrich.
- Moran-Ellis, J., Alexander, V. D., Cronin, A., Dickinson, M., Fielding, J., Sloney, J., & Thomas, H. (2006). Triangulation and integration: Processes, claims and implications. *Qualitative Research*, 6(1), 45–59.
- Morinaj, J., de Moll, F., Hascher, T., Hadjar, A., Grecu, A. (2021). School alienation among adolescents in Switzerland and Luxembourg: The role of parent and peer supportive attitudes toward school and teacher autonomy support. *Youth and Society*, 1–26.
- Morinaj, J., & Hascher, T. (2019). School alienation and student well-being: A cross-lagged longitudinal analysis. *European Journal of Psychology of Education*, 34, 273–294.
- Morinaj, J., Scharf, J., Grecu, A., Hadjar, A., Hascher, T., & Marcin, K. (2017). School alienation: A construct validation study. *Frontline Learning Research*, 5(2), 36–59.
- Murdock, T. B. (1999). The social context of risk: Status and motivational predictors of alienation in middle school. *Journal of Educational Psychology*, 91(1), 62–75.
- Mustapha, S. M., Abd Rahman, N. S. N., & Yunus, M. (2010). Factors influencing classroom participation: A case study of Malaysian undergraduate students. *Procedia—Social and Behavioral Sciences*, 9, 1079–1084.
- Muthén, L. K., & Muthén, B. O. (1998–2012). *Mplus user's guide*. (7th ed.). Muthén & Muthén.
- Myers, S. S., & Pianta, R. C. (2008). Developmental commentary: Individual and contextual influences on student-teacher relationships and children's early problem behavior. *Journal of Clinical Child & Adolescent Psychology*, 37(3), 600–608.
- Nash, P., & Schlösser, A. (2015). Working with schools in identifying and overcoming emotional barriers to learning. *Educational Studies*, 41(1–2), 143–155.
- Ormel, J., Lindenberg, S., Steverink, N., & Verbrugge, L. (1999). Subjective well-being and social production functions. *Social Indicators Research*, 46(1), 61–90.
- Patall, E. A., Hooper, S., Vasquez, A. C., Pituch, K. A., & Steingut, R. R. (2018). Science class is too hard: Perceived difficulty, disengagement, and the role of teacher autonomy support from a daily diary perspective. *Learning and Instruction*, 58, 220–231.
- Pianta, R. C. (1999). *Enhancing relationships between children and teachers* (1st ed.). American Psychological Association.
- Pianta, R. C., & Hamre, B. K. (2009). Classroom processes and positive youth development: Conceptualizing, measuring, and improving the capacity of interactions between teachers and students. *New Directions for Youth Development*, 2009(121), 33–46.
- Pianta, R. C., Hamre, B. K., & Stuhlman, M. (2003). Relationships between teachers and children. In I. B. Weiner, W. M. Reynolds, & G. E. Miller (Eds.), *Handbook of psychology: Educational psychology* (pp. 199–234). John Wiley.

- Ricard, N. C., & Pelletier, L. G. (2016). Dropping out of high school: The role of parent and teacher self-determination support, reciprocal friendships and academic motivation. *Contemporary Educational Psychology, 44–45*, 32–40.
- Rutter, M., & Maughan, B. (2002). School effectiveness findings 1979–2002. *Journal of School Psychology, 40*(6), 451–475.
- Ryan, R. M., & Deci, E. L. (2008). A self-determination theory approach to psychotherapy: The motivational basis for effective change. *Canadian Psychology, 49*(3), 186–193.
- Ryan, R. M., & Weinstein, N. (2009). Undermining quality teaching and learning: A self-determination theory perspective on high-stakes testing. *Theory and Research in Education, 7*(2), 224–233.
- Sabol, T. J., & Pianta, R. C. (2012). Recent trends in research on teacher-child relationships. *Attachment & Human Development, 14*(3), 213–231.
- Sale, J. E. M., Lohfeld, L. H., & Brazil, K. (2002). Revisiting the quantitative-qualitative debate: Implications for mixed-methods research. *Quality & Quantity, 36*(1), 43–53.
- Schäfer, F., & Dalbert, C. (2013). Gerechte-Welt-Glaube und Antisemitismus—Welche Anforderungen ergeben sich aus der Gerechtigkeitsforschung für den Umgang mit dem Holocaust in der Schule. In C. Dalbert (Ed.), *Gerechtigkeit in der Schule* (pp. 93–107). Springer.
- Schreier, M. (2014). Qualitative content analysis. In U. Flick (Ed.), *The SAGE handbook of qualitative data analysis*. (pp. 170–183). SAGE.
- Seeman, M. (1959). On the meaning of alienation. *American Sociological Review, 24*(6), 783–791.
- Solomon, Y., & Croft, T. (2016). Understanding undergraduate disengagement from mathematics: Addressing alienation. *International Journal of Educational Research, 79*, 267–276.
- Studsød, I., & Bru, E. (2012). Upper secondary school students' perceptions of teacher socialization practices and reports of school adjustment. *School Psychology International, 33*(3), 308–324.
- Tarquin, K., & Cook-Cottone, C. (2008). Relationships among aspects of student alienation and self concept. *School Psychology Quarterly, 23*(1), 16–25.
- Tatar, S. (2005). Classroom participation by international students: The case of Turkish graduate students. *Journal of Studies in International Education, 9*(4), 337–355.
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioural sciences*. SAGE.
- Thomas, W. I., & Thomas, D. S. (1928). *The child in America*. Alfred A. Knopf.
- Tseng, V., & Seidman, E. (2007). A systems framework for understanding social settings. *American Journal of Community Psychology, 39*(3–4), 217–228.
- Von Saldern, M. (1992). *Social climate in the classroom: Theoretical and methodological aspects*. Waxmann Studies.
- Walker, J. (2008). Looking at teacher practices through the lens of parenting style. *The Journal of Experimental Education, 76*(2), 218–240.
- Weinert, S., Roßbach, H.-G., Faust, G., Blossfeld, H.-P., & Artelt, C. (2013). *Bildungsprozesse, Kompetenzentwicklung und Selektionsentscheidungen im Vorschul- und Schulalter (BiKS-3-10)* (Version 6) [Datensatz]. Institut zur Qualitätsentwicklung im Bildungswesen. [http://doi.org/10.5159/IQB\\_BIKS\\_3\\_10\\_v6](http://doi.org/10.5159/IQB_BIKS_3_10_v6)
- Wikström, P.-O. H. (2014). Why crime happens. A situational action theory. In G. Manzo (Ed.), *Analytical sociology: Actions and networks* (pp. 74–94). John Wiley.
- Wikström, P.-O. H., & Sampson, R. J. (2003). Social mechanisms of community influences on crime and pathways in criminality. In B. B. Lahey, T. E. Moffitt, & A. Caspi (Eds.), *Causes of conduct disorder and juvenile delinquency*. (pp. 118–148). The Guilford Press.
- Woolley, C. M. (2009). Meeting the mixed methods challenge of integration in a sociological study of structure and agency. *Journal of Mixed Methods Research, 3*(1), 7–25.