

# Pupil aggressiveness, teacher authority, and disruptive classroom behaviour

by

Grete Sørensen Vaaland

Thesis submitted in fulfilment of  
the requirements for degree of  
PHILOSOPHIAE DOCTOR  
(PhD)



Norwegian Centre for Learning Environment and Behavioural Research in  
Education

Faculty of Arts and Education

2016

University of Stavanger  
N-4036 Stavanger  
NORWAY

[www.uis.no](http://www.uis.no)

©2016 Grete Sørensen Vaaland

ISBN: 978-82-7644-676-0

ISSN: 1890-1387

PhD Thesis UiS, No. 315

## Acknowledgements

The writing of this thesis has been one of the most significant academic challenges I have ever faced. I would never have been able to complete my thesis without guidance, patience and support.

Thanks to the Centre for Behavioural Research/Norwegian Centre for Learning Environment and Behavioural Research in Education for the opportunity to complete this thesis. Thanks to my leaders and my colleagues. The supportive climate that characterizes this workplace is unique and valuable.

To my supervisors, Professor Erling Roland and Professor Thormod Idsoe: Thank you! You both deserve a gold medal for your patience. I thank Erling especially for sharing creative ideas and hours of exciting reflections. Thormod: Thank you for being so generous with time, sharing your solid competence, guiding me and answering all my questions concerning methodological issues.

Thanks to my husband, Torbjørn for academic and practical support and for being there and never letting me give up. Hours of intellectually stimulating conversations are captured in this thesis. To Katarina, Rebekka and Elisabeth Aurora, my beloved daughters: you are awesome! I am grateful for your generosity, readiness to help, inspiration, laughing and keeping me on track, including in ways that have nothing to do with my thesis.

My father, Johannes Sørensen, has been an everlasting source of support and inspiration. I appreciate the ways he has influenced my life. His major pedagogical talent highly impacted my career choice. His extraordinary will and dedication, interest and curiosity, capacity and strength have been inspiring to me.

I am also very thankful for support from my sisters, Kristin and Sidsel, and from my friends who have been there, cheered me up when necessary and participated in discussions on my more or less interesting ideas with enthusiasm.

Stavanger, May 2016

Grete Sørensen Vaaland

## Summary

*Background:* Pupil behaviour is important for academic and social learning in school. Disruptive behaviour conflicts with learning and may cause teachers to experience stress and even burnout. Although some knowledge is available about factors that influence problem behaviour, we need to know more about what induces and maintains such behaviour in classrooms. Limited research focuses on factors affecting disobedience to teacher. Moreover, pupil behaviour is a complex product of factors related to each individual pupil and the classroom context, such as teacher authority. In addition to considering each factor, prevention and intervention targeting behavioural problems in school must take into account the interplay between all the factors impacting pupils' classroom behaviour. Given this complexity, this thesis attempts to shed light on some relevant elements and connections.

*Aims* The general aim of this study was to increase the knowledge and understanding of pupil aggressiveness, discipline problems, some aspects of their relationships and their relationship with teacher authority.

The first aim was to conceptualize pupil disobedience to teachers within the field of antisocial behaviour, to develop a scale measuring this concept and to reveal whether reactive and proactive aggressiveness can predict such behaviour. As this disruptive behaviour interferes with the role of the formal leader and the teacher-pupil relationship, it was labelled as disobedience.

Next, we studied possible relationships between pupil aggressiveness and perceptual orientation towards weakness in a teacher who is new to them. The aim was to explore whether reactive and/or proactive aggressiveness were related to pupils' perceptual tendency that could make teachers especially vulnerable in the start-up period of new classes.

Finally, the third paper aimed to investigate approaches that experienced practitioners presented as effective to turn around highly disruptive school classes that were out of the teachers' control. Because this field is rarely described, we built on practical experience to try to reveal concepts and frameworks that could be useful to describe, analyse and discuss approaches to addressing highly disruptive school classes. In these classes, the teacher(s) had lost control and needed external help to re-establish authority. Based on the

cases, we explored the similarities and differences in approaches to turning around hard classes.

*Methods:* Quantitative and qualitative approaches were followed. Papers 1 and 2 built on data from questionnaires that were part of the nationwide regular *School environment studies* conducted by the Centre for Behavioural Research<sup>1</sup> (CBR). These data were cross-sectional and collected by use of pupil-reported questionnaires. Data were analysed using structural equation modelling with confirmatory factor analyses and structural models. Multi-group analyses were used to test whether gender moderated the structural relationships. Paper 3 presents a qualitative study based on seven cases comprising models for approaches addressing highly disruptive classes. Data came from presentations and discussions during workshops arranged partly for this purpose. The instrumental multi-case study included within-case and cross-case analyses. Informants were experienced practitioners who had worked with turnarounds in highly disruptive classes, and the cases contained the practitioners' accumulated experience in the role as external experts assisting schools.

*Results:* We identified a statistically and theoretically robust concept, i.e., pupil disobedience. It refers to behaviour that the pupil knows interferes with instructions or standards set by the teacher. As hypothesized, the structural models confirmed relationships between all three independent variables, reactive aggressiveness, proactive power-related aggressiveness and proactive affiliation-related aggressiveness, and the dependent variable, disobedience, in both boys and girls. Gender moderated the relationships between aggressiveness and disobedience. In sum, the aggressiveness variables predicted nearly equal amounts of disobedience in boys and girls. However, differences were found when types and subtypes of aggressiveness were considered.

Perceptual orientation towards weakness in a new teacher was measured by statements regarding what pupils look for when they are scheduled to meet a new teacher. Both reactive and proactive aggressiveness were related to a perceptual orientation towards weakness. For reactive aggressiveness, the beta values were small, although significant for girls. The more alarming finding

---

<sup>1</sup> New name 2013: Norwegian Centre for Learning Environment and Behavioural Research in Education.

was the substantial and significant relationship between proactive aggressiveness and a perceptual orientation towards weakness in a new teacher. Gender did not moderate the relationships between the aggressiveness variables and perceptual orientation.

Chronic disruptions, poor learning and teachers who have lost control characterize some school classes. This implies continued ignorance of teachers' instructions and standards. Cases reflecting seven experienced practitioners' approaches to such classes revealed broad homogeneity regarding the issues emphasized. Although this led to a set of common concepts for describing turnarounds, cross-case analyses revealed different ways to handle the common issues. The results showed two main strategies in approaches to highly disruptive classes: One was a cognitive strategy with learning as a powerful tool. The other was a systems strategy with a power take-over on the part of the teacher. These strategies draw a tentative conceptual framework for approaches to highly disruptive school classes.

*Conclusion:* Both proactive and reactive aggressiveness are connected to the likelihood of disruptive pupil behaviour in terms of behaviour that the pupil is aware of conflicts with the standards or instructions given by the teacher. Such behaviour interferes with teacher-pupil relationships and may threaten teacher authority. Another threat to teacher authority may stem from the fact that some pupils are prone to signs of weaknesses when they expect to meet a new teacher. Pupils who score highly on proactive aggressiveness report a perceptual orientation towards signs of weakness in new teachers. Reactive aggressiveness is weakly connected to the same perceptual orientation in girls. Turnarounds in highly disruptive classes imply that the teacher re-establishes authority. A framework of two strategies to approaching such classes include a cognitive strategy focusing on learning and training new behaviour, and a systems strategy focusing on redistributing social power in the classroom.

## List of papers

This PhD thesis includes the following papers:

### Paper 1

Vaaland, G. S., Idsoe, T., & Roland, E. (2011). Aggressiveness and disobedience. *Scandinavian Journal of Educational Research*, 55(1), 1-22.

### Paper 2

Vaaland, G. S., & Roland, E. (2013). Pupil Aggressiveness and perceptual orientation towards weakness in a teacher who is new to the class. *Teaching and Teacher Education*, 29, 177-187.

### Paper 3

Vaaland, G. S. (2017). Back on track; Approaches to managing highly disruptive school classes. *Cogent Education*, 2017(4). DOI: <https://doi.org/10.1080/2331186X.2017.1396656>





## Contents

1	Introduction.....	1
2	Theoretical frame .....	3
2.1	Teacher authority .....	3
2.1.1	Conceptual meaning of authority .....	3
2.1.2	Authority is anti-authoritarian.....	5
2.1.3	A historical view of teacher authority .....	7
2.1.4	Preliminary criticism of authority .....	10
2.1.5	Teacher authority and classroom management .....	11
2.2	Aggression .....	14
2.2.1	Conceptual meaning of aggression and aggressiveness .....	14
2.2.2	Forms of aggression .....	16
2.2.3	Functions of aggression .....	18
2.3	Disruption .....	26
2.3.1	Relevance .....	26
2.3.2	Relevant concepts .....	26
2.3.3	Prevalence and challenges.....	27
2.4	Research questions.....	27
3	Method.....	31
3.1	Quantitative studies.....	31
3.1.1	Procedure and samples.....	31
3.1.2	Measurements .....	33
3.1.3	Analyses, Paper 1 and Paper 2 .....	37
3.1.4	Controlling for clustering in the data .....	37
3.2	The qualitative case study .....	38
3.2.1	Design and sample .....	38
3.2.2	Data collection .....	39

3.2.3	Data analyses .....	40
3.3	Validity .....	40
3.4	Ethical considerations .....	43
4	Results.....	45
4.1	Summary of Paper 1.....	45
4.2	Summary of Paper 2.....	46
4.3	Summary of Paper 3.....	48
5	Discussion.....	49
5.1	Methodological considerations .....	49
5.1.1	Considerations regarding the quantitative studies .....	49
5.1.2	Considerations regarding the qualitative study .....	51
5.1.3	Validity .....	59
5.2	Research questions discussed.....	71
5.2.1	Paper 1 .....	71
5.2.2	Paper 2 .....	81
5.2.3	Providing teachers with authority .....	86
5.2.4	Paper 3 .....	92
5.3	Overall discussion.....	96
5.4	Implications for practice .....	103
5.5	Future directions .....	105
6	References.....	109

# 1 Introduction

*A mother, who was also a 1st grade teacher, was engaged ensuring small children's traffic safety on their way to school. During a discussion, all parties agreed that a six-year-old child can be taught and trained how to cross the road safely. The mother then asked some further questions: given that it is safe for one 1st grader to cross the road, is it also safe if two children are together? Three? Four? Five? Six? The point is that there may be some differences between six single pupils crossing the road independently and a group of six children crossing together. If the risk for accidents increases due to group behaviour, can this problem be solved through further individual training?*

The core of the questions listed above is not new and is not typically related to traffic. In short, the issue that these questions raise regards whether and how individual and contextual factors influence human behaviour. In the 1930s, the psychologist Kurt Lewin proposed an answer: human behaviour (B) is a function of the person (P) in the environment (E) such that  $B = f(P, E)$  (Hall & Lindzey, 1978; Lewin, 1951). Lewin proposed that a dynamic interaction between nature and nurture, person and environment, shapes behaviour. Since then, the issue has been repeatedly debated. Disagreements do not primarily concern Lewin's basic statement; rather, they concern the emphasis placed on each of the two factors. Additional questions concern the identification of details about the person and environment that impact behaviour and the relative influence of each aspect (See e.g. Bandura, 1986; Bouchard, 1994; Bronfenbrenner, 1986; Costa & McCrae, 1992; McCrae & Costa, 2004; Mischel, 1973; Tremblay, 2010; Vitaro & Brendgen, 2012).

This thesis addresses discipline problems, pupil aggressiveness and some aspects of the relationship between the two within a classroom context. Although teacher authority, which is an aspect of the classroom context, is not empirically measured in the three studies of this thesis, it constitutes a theoretical concept of interest in each of these studies. Due to the study results, it seems reasonable to discuss teacher authority as a context that may both influence and be influenced by the activation of pupil aggressiveness.

## *Introduction*

---

The thesis does not approach the research questions with a person x environment interaction design. However, a theoretical perspective inspired by an interaction model is applied to the discussion of the results. In that light, this thesis focus on one type of behaviour, one aspect of the person and one environmental aspect: Disobedient/disruptive behaviour is investigated related to pupil aggressiveness and the context that is constituted by teacher authority. Hence, the empirical results are discussed in relation to teacher authority. Because the three papers outline teacher authority to only a limited extent, the phenomenon is submitted to a broader theoretical investigation in chapter 2. An overview of the research questions is presented in section 2.4.

## **2 Theoretical frame**

This section highlights the three topics that constitute the theoretical foundation of the thesis: teacher authority, pupil aggression, and pupil disruption.

To ensure the inclusion of relevant research, I performed literature searches for publications within the field of aggression and disruption/disobedience/indiscipline from 2011 to 2015. Searches regarding disruption etc. were performed in Oria, ERIC and Google Scholar and limited to publications whose abstracts combined the words disruption, disobedience, indiscipline with the word school. Searches regarding aggression were done in ERIC and PsycInfo with the following terms “proactive aggression and reactive aggression”. Relevant publications are incorporated in the text that follows.

### **2.1 Teacher authority**

I outline the conceptual meaning of authority and its application within school, namely, teacher authority. Attempting to better understand challenges that authority figures in today’s school face, I present a developmental view covering a few decades. Generally, a basic positive attitude towards classroom authority characterizes the presentation, and the text reveals arguments supporting this view.

#### **2.1.1 Conceptual meaning of authority**

The sociologist Max Weber developed an important theoretical foundation for the phenomenon of authority with legitimacy as a basic element. According to Weber (1925/1964), authority is power that both those who possess the power and the powerless acknowledge as legitimate. In other words, authority reflects the probability that a person gains others’ voluntary obedience (Pace & Hemmings, 2006; Weber, 1925/1964). This implies that not all kinds of power or influence satisfy the criteria for authority. Authority is legitimate power, which is power that one or more other persons voluntarily give to a person. When given authority, one can accomplish goals across the immediate interest

of others but not across their will. When an individual volunteers to give a person authority, he or she accepts that person's right to make decisions even when he or she does not agree to the decision. Weber (1925/1964) defined three different types of authority, and the important distinguishing criterion was the element of legitimacy. *Traditional authority* is legitimated by well-established traditions and structures. Typically, this person is a superior whose commands serve tradition, and subordinates are expected to respond with loyalty. Applied to the role of a teacher, he is an expert who should be obeyed due to the role as a teacher (Pace & Hemmings, 2006). *Charismatic authority* is legitimated by a person's exceptional personal quality and ability to inspire loyalty and obedience from others (Weber, 1925/1964). A charismatic teacher induces pupils to form emotional attachments to him. The influence is not due to official rules, such teachers' legitimacy holds as long as pupils are inspired to maintain their commitment (Pace & Hemmings, 2006). Third, *legal-rational authority*, also called bureaucratic authority, is legitimated by belief in the content of the law or natural law and implies that individuals obey a set of uniform principles rather than a specific leader, regardless of whether the leader is traditional or charismatic (Weber, 1925/1964). An individual possesses this type of authority representing an office or establishment that legitimates giving commands and taking actions to support the established order. Within this perspective, the teacher is a superior and the pupils are subordinates, and the teacher possesses the right to punish and reward. Legal-rational authority is typically accepted as legitimate: nevertheless, the threat of being punished with poor grades, negative remarks, detention etc. may indicate that pupils' approval is based on compliance rather than consent (Pace & Hemmings, 2006).

Expanding beyond Weber's categories, sociologists have introduced the concept of *professional authority*. This source to legitimacy covers the individual's expertise. In the case of teachers, expertise refers to subject matter knowledge and pedagogical skills (Pace & Hemmings, 2006).

According to Weber, the forms of authority do not occur in pure forms completely distinguished from each other; rather, authorities often appeal to mixed legitimation (Weber, 1925/1964). Teachers can build on all the mentioned sources of legitimacy to obtain authority (Emmer & Evertson, 2013).

The ancient philosopher Aristoteles addressed questions regarding authority when he discussed rhetoric and identified ethos, pathos and logos as criteria for convincing others (Aristoteles, trans. 2006). Ethos refers to the speaker's own credibility and is characterized by being trustworthy regarding the issue at hand, being a person of good character, and carrying a good reputation. Ethos can be strengthened by logos, which represents the ability to be convincing through arguments, facts and knowledge, and by pathos, which is the ability to emotionally touch the recipient (Aristoteles, trans. 2006). Aristoteles' considerations concerned how to speak convincingly rather than to achieve general personal authority. Yet, we may apply some of his perspectives to teacher authority. Teachers' strong rhetoric should then build on their personal expertise in subjects and communication skills and general credibility both personally and due to the role. The teacher's general authority in the class may to some extent reflect his rhetorical qualities. Parallel to all managers or leaders, teachers must be able to speak to their pupils in ways that build and sustain credibility, trustworthiness etc. Consequently, a teacher carries authority or non-authority, to some extent, as a personal strength or weakness within a class and potentially within a school or to the degree that his reputation allows.

### ***2.1.2 Authority is anti-authoritarian***

An authority is followed freely. It is not similar to a demand or a decree made by the police. Instead, it is as an acknowledgement of the truth (Brynildsen, 1987). This corresponds with legitimacy as outlined by Weber (1925/1964). Considering this notion, it follows that authority is anti-authoritarian.

Accepting an authority figure implies an element of submission, and it is reasonable to ask whether authority is compatible with human freedom and autonomy. Brynildsen (1987) discussed this based on the premise that the human desire for freedom and autonomy, whether in regards to religion, ethics, intellectual issues, or social life, is the strongest and most important positive feature in recent history. However, he stated, that each individual must be part of a higher harmonic fellowship than the biological one. Unless a humanity that is *one* in *everybody* exists, individual autonomy will lead to chaos, fights and discord. According to Brynildsen (1987), the only true authority that does not conflict with the demand for freedom is the authority necessary in learning

processes: Each individual can freely acknowledge this authority because it leads to a point at which people can recognize the truth. This authority does not claim a believer's submission but, rather, an independent critical attitude, which continuously breeds the will to understand. The above utterance by Brynildsen is likely more related to the learning content represented by the teacher than to the teacher as person. The application of Weber's authority categories to Brynildsen's description will likely imply that the teacher's authority should be traditional. According to Aristoteles (trans. 2006), a teacher could achieve authority by speaking with ethos because he is considered trustworthy and credible in the relevant subject and with logos when the content is logically and convincingly presented. Dale (1986) made an important statement regarding authority in school and knowledge, namely, that authority is a temporary substitute for pupils' own valid arguments. The rationale is that critical thinking can be achieved only through knowledge and arguments, which take time to achieve, and that during this process, teachers can possess authority with the purpose of being redundant.

Modern schools appreciate the values of democracy, autonomy, freedom of choices, etc. (Dale, 1986). Nevertheless, regardless of how highly we rank these values, schools are dependent on a set of rules, standards, and structures that constitute frames for interactions between pupils, teachers and others that share the physical area and work to fulfil plans, curricula, aims and so on (Dale, 1986; Emmer & Evertson, 2013). Schools are not different from other organizations and societies in this regard. Therefore, although authority differs from authoritarianism, it is not compatible with unconditional individual freedom. For school interactions to work effectively, pupils must accept a legitimate authority; otherwise, poor teaching, learning and pupil safety conditions will present (Dale, 1986; Emmer & Evertson, 2013). These understandings may be elaborated by the idea of classroom authority as a social construction. According to Pace and Hemmings (2006), classroom authority is constituted by complex social relations that form a social construction. It is dynamically negotiated through series of interactions between the teacher and the pupils, and conflicts – both overt and subtle – are not uncommon. Pace and Hemmings stated that “Classroom authority in its truest form depends on teachers' legitimacy, students' consent, and a moral order consisting of shared purposes, values, and norms” (Pace & Hemmings, 2006, p. 2). Despite possible conflicts,



authority can have positive effects on social relations in a class or a school when it is a culture-integrative value (Njegovan, Vucadinović, & Nešić, 2011). Current talks on teacher authority often relate to the combination of the role and the person. This may correspond to the concept of authority as a tripartite relationship constituted by the bearer of authority, the subject, and the relevant field (Bochenski 1974, referred in Tirri & Puolimatka, 2000).

### ***2.1.3 A historical view of teacher authority***

The general rate of change in modern society, including the degree to which knowledge is reliable across time, has developed tremendously during the last generations (Toffler, 1970). Teacher authority based on knowing “*what is true?*” or “*what works?*” may therefore meet challenges in today’s schools. Consequently, teacher authority must be legitimized by sources other than knowledge, implying that legitimation based on tradition or legal-rational arguments will likely be insufficient. This corresponds with the view of Bjerg (2011), who showed that teacher authority has developed in line with changes in Western culture during the last decades. In the 1950s, pupils assessed whether teachers were fair or unfair in accordance with a standardized pupil role. By contrast, today pupils expect teachers to build personal relationships with them and take care of their individual needs. Nevertheless, Bjerg (2011) claimed that pupils have always challenged the power of their teachers and that the key to achieving authority has consistently been handling such challenges.

Helle Bjerg investigated changes in the teacher role and in the relationship between teacher and pupils by listening to the experiences of people who were pupils during the 1950s, 1970s and 1990s. Bjerg described a developmental line that shed light on challenges to teacher authority in today’s school. The following presentation builds on Bjerg’s doctoral thesis completed at the University of Aarhus (2011). How teachers perceive their pupils will colour how the pupils perceive themselves. Bjerg referred to the teacher gaze as a tool that pupils use to understand or identify themselves as subjects, e.g. by asking questions such as what am I able to achieve, and who am I able to become? Thus, the teacher’s gaze also frames what the pupil should be happy about and aspire to. Consequently, pupils’ self-perception includes an identification with the meaning that teachers attach to them.

In the in the 1950s, teachers had a quite standardized picture of pupils, and aspects that were common to all pupils formed the description of the pupil role. The teachers' expectations of their pupils were primarily academic, and pupils were expected to behave in accordance with the rules, raise their hands and complete their homework. Teacher authority was mainly related to the formal position of the teacher, and the difference between the teacher's and the pupils' roles gave legitimacy to teacher authority. This corresponds with legal rational authority, as described by Weber (1925/1964), and authority based on tradition. This supported Moos' (2008) description of the relationship between school and society in the same period. Specifically, although reform-pedagogical ideas were growing, schools still aimed to discipline pupils into the established society.

In the 1970s, teachers still regarded the pupil's academic attitude and results as the basic information for their perception of the pupil. The same applied to the pupil's self-perception. The main question that a pupil asked when assessing himself according to the teacher's gaze was whether the homework was properly done, etc. However, the teachers' did not have the same standardized perspective of their pupils as did their colleagues some decades earlier. A more differentiated perception of pupils arose, and teachers viewed pupils as varied in regard to academic, personal and social issues. Pupils who struggled academically or who had special challenges at home could receive extra attention and support from the teacher. The teacher gaze in the 1970s allowed pupils to become visible as individuals with special needs and to expect to have their needs acknowledged and satisfied (Bjerg, 2011).

During this period, the teacher descended from his elevated position in the classroom, both physically and symbolically. Despite this, the conditions were still conducive to formal teacher authority. However, a change was introduced due to the fact that the teachers' differentiating gazes at pupils were supplemented with attention to the social dynamics between the pupils. According to Bjerg, pupils' self-perspectives met a competing power: Should they identify with the teacher or with the peers? As a result, a pupil had to choose whether to be corrected by the teacher or to not listen to the teacher because listening implied losing face and popularity among classmates. School versus peer culture represented two symbolic systems. When these systems challenged each other, the pupil had to choose which to identify with. This

constituted a conflict between teacher authority and another legitimate power: pupil fellowship. Bjerg's analyses (2011) correspond well with Moos' (2008) description of school's role in society in this period. Given the fact that schools were expected to develop solidary citizens in the 1970s, pupil cooperation, interactions and social-pedagogical tasks became important. Because the formal role of the teacher remained strong, I propose that the two of Weber's (1925/1964) categories of authority just mentioned continued to provide many teachers with authority. However, the need for personal credibility introduced the personal charismatic authority, which supplemented teachers' power.

Considering the 1990s, Bjerg (2011) pointed to the fact that teacher also gazed at the class as a social fellowship. Pupils commonly discussed questions regarding the social climate and their desired classroom conditions. Moreover, the teacher was actively involved in relationships and conflicts among the pupils. Teachers regarded pupils as individuals with social responsibility in the group. The teacher's gaze at the individual pupil and at his relationship to the pupil was closer and more personal than in the past. The teacher not only descended to the pupils' level but also walked among the pupils. According to the pupils, the teacher now considered them more as equals. This actually represented the key reason why pupils considered the teacher's leadership to be legitimate. On this background, Bjerg asked whether that kind of teacher gaze can serve as a guide for pupils' self-identification. An equalized teacher gaze may be inadequate for the pupil's development of his or her role, - the pupil's symbolic identification. Due to these circumstances, the pupils watched each other, and their views were not restricted because the firm teacher gaze was absent (Bjerg, 2011). According to Moos (2008), schools' assignment in the 1990s included supporting and providing mentorship for each pupil's individual development and promoting each pupil's responsibility for their own learning. Slogans such as "*Responsibility for one's own learning*" and "*Pupil-centered teaching*" received considerable support in Norwegian schools (Telhaug, 2006). One can reasonably suggest that authority legitimated in tradition or the teacher's formal role (Weber, 1925/1964) lost influence to the benefit of charismatic authority.

Parallels exist between the development of teacher authority described by Bjerg (2011) and the development within school history. Briefly, school has transformed its role from reproducing and disciplining via democratic

education to more strongly highlighting the individuals' development (Telhaug, 2006). The pupil role has developed from a uniform and homogeneous part of a class to a subject with an individual personality and increased self-focus. In parallel, the teacher role has changed from authority based on academic skills, discipline and sanctions to authority based on knowing each pupil and supporting the pupil's self-management. Bjerg claimed that during the decades examined in her study, the distance between the symbolic teacher position and the symbolic pupil position decreased. Despite changes in teacher and pupil roles, pupils have always challenged and tested their teachers. Teachers who have handled the challenges have gained authority. The others have struggled. Interestingly, although pupils challenge their teachers, they also request and demand teachers who have authority (Bjerg, 2011). In short, it seems as though authority has not lost its relevance in classrooms and in teacher-pupil relationships. Nonetheless, the possible relevance of different sources that give legitimacy to authority have considerably become more personally and relationally based.

#### *2.1.4 Preliminary criticism of authority*

Authority is power and implies the ability to influence people. Given the fact that authority is legitimate power, the influence can be strong, subtle, and, in some cases, extend the limitations of its legitimacy. Just as charismatic persons – because of their charisma – can achieve popularity and gain authority, teachers can obtain influence beyond what is considered sound in an educational relationship. As discussed above, today, teacher authority seems more related to the teacher as a person and less to the formal role. In addition, building strong relationships with pupils is an important means by which to achieve such authority (Emmer & Evertson, 2013; Walker, 2009; Wentzel, 2002). By virtue of strong relationships, the teacher might be popular in the class. As classmates' appreciation for the teacher's demands or propositions increases, a single pupil will need to exert greater effort to stand up for himself against unwanted directives or influences (Geetzels & Thelen, 1971). We can sum up this warning as a hypothetical pressure that may come from persons with high social status in a group. Pupils might adjust to social expectations even if they do not agree with or want to adjust them. Similar to pupils, teachers might achieve such a position in a class. In this case, the authority that originally

characterized the relationship may be replaced by power that is not considered legitimate by the pupil or by the class. However, the asymmetric relationship between pupils and teachers (Pianta, 2006) might contribute to sustained submission even if the legitimacy of the teacher's power is eliminated, especially if the majority of pupils in the class still provide the teacher with authority. I revisit critical comments regarding authority in the discussion section.

### ***2.1.5 Teacher authority and classroom management***

Applied to classroom management, "Teacher authority refers to the teacher's right to set standards for student behavior and performance and the likelihood that students will follow the teacher's lead in their decisions and behavior" (Emmer & Evertson, 2013, p.66). Pupils who follow teachers' expectations support the teachers' authority, while pupils who intentionally behave contrary to a teacher's instructions or standards challenge the teacher's authority (Bjerg, 2011; Emmer & Evertson, 2013). The likelihood that pupils voluntarily give the teacher authority depends on- among other things - the relationship that the teacher develops with each pupil (Bjerg, 2011; Roland, 2014; Walker, 2009; Wentzel, 2002). This supports the analyses performed by Bjerg, referred above, which showed that teacher authority due to the formal role has lost its position and is no longer effective in today's classrooms.

Teacher authority and classroom discipline are closely connected. Discipline is to follow rules (Dale, 1986). As already mentioned, rules must be in place for groups to be effective, and authority covers the pupils' acceptance of the common set of rules etc. One purpose of rules is to secure the content in school by ensuring that time and resources are utilized for learning and positive development. By accepting teacher authority, pupils choose to take part in a fellowship working towards certain goals through certain means. In some cases, a pupil's impulsive interest may conflict with the authority. However, when the pupil has accepted the authority, he has accepted to be disciplined according to the collective interest. Teachers possessing authority are able to regulate pupil behaviour because the pupil's have given them legitimacy to do so. A teacher who does not possess authority may attempt to regulate pupil behaviour, even

by using the same approaches as his colleague; however, if he does not have legitimacy, his words will be of little value.

Teachers can obtain practical advice for gaining authority as classroom managers by considering the perspective of authoritative teaching (Ertesvåg, 2011). The theoretical platform is Baumrind's (1991) model of parenting styles. Parenting style constitutes an emotional climate in which children develop; it is superior to episodic practice and thereby constitutes a context for episodes (Walker, 2009). Baumrind (1991) described two axes, nurturance and control each of which can range from overly low to excessive levels. High scores on the control axis indicate clear expectations, maturity demands, consistent enforcement of fair standards for behaviour, and control in following up on these standards (Walker, 2009). Democratic communication, arguments and explanations related to rules, encouragement of opinions should be encouraged. High scores on the nurturance dimension signify consistent concern for the child's emotional and physical well-being and support for the child's individuality and agency (Walker, 2009). This implies sensitivity and responsiveness to the child's needs and the provision of the support needed to meet established demands. Variations in the scores on the two axes, often presented in a system of coordinates, lead to four parenting styles: authoritative (high on both control and nurturance), authoritarian (high on control, low on nurturance), permissive (low on control and moderate nurturing), and neglectful (low on control and nurturance) (Baumrind, 1991; Wentzel, 2002).

The perspective on authoritative parenting has been applied to teachers' classroom work. Parallel to the socialization context created by parenting style, the context established by the teacher's management style influences pupils' motivation, learning and behaviour (Walker, 2009; Wentzel, 2002). Wentzel (2002) investigated whether teachers varied in the elements of control and nurturance. With reference to Baumrind's model, Wentzel studied maturity demands, control, democratic communication and nurturance. Additionally, she studied teachers as role models of motivation. The results confirmed that similar to parents, teachers have different control and nurturance profiles. Furthermore, she documented relationships between teacher styles and pupil outcome: pupils' adjustment to school in terms of their social and academic goals and interest in class, classroom behaviour and academic results (Wentzel, 2002). The obviously favourable teacher style was the authoritative style

characterized by high scores on both control and nurturance. An authoritative teacher style is now widely acknowledged as the most effective and preferable (Ertesvåg, 2011; Roland, 2014; Walker, 2009; Wenzel, 2002).

Authoritative teaching is a means by which to achieve and maintain authority in the class. This gives teachers legitimacy to establish and manage a set of standards, rules, procedures, and activities, which are all part of building a high-quality learning environment. Because authoritative teachers build a warm and supportive relationship with each pupil, the position that the teacher achieves will have some level of sustainability. The authority can become personalized and is not due only to episodes, teachers' knowledge in a limited sequence, and so on. Rather, the teachers are recognized as the actors who manage the classroom fellowship, are trustworthy and supportive and, thereby, achieve a significant position to each pupil and to the class.

Although teacher authority achieved through authoritative teaching is often quite stable, it does not come with a guarantee of sustainability or durable-until stamp. Consistent experiences over time will, of course, stabilize both the perception and expectations of a person. However, an authority figure that treats his or her followers disrespectfully, offends or otherwise does not behave in accordance with the foundation for the authority given will lose legitimacy. A teacher who fails to practice control when rules are broken implicitly fails to protect the pupils and established class standards. If this occurs once to a teacher who has authority, the teacher's position might not change. However, if inconsistency or permissiveness becomes common, the teacher style changes and authority can hardly be sustained (Walker, 2009). In short, pupils give authority to teachers who deserve it and take authority away if teachers no longer deserve it.

Although teacher authority has a certain level of stability, one should keep in mind the ongoing dynamics on which authority depends (Pace & Hemmings, 2006). Krejsler and Moos (2008) stated that teachers often have to fight for pupils' and parents' acceptance of their legitimate authority and they relate this to the commonly stated appeal for pupils' self-leadership.

Teachers who fail to build positive relationships with pupils, fail to establish a good learning environment, or fail to manage behavioural problems or other

challenges towards leadership may not be able to achieve authority (Emmer & Evertson, 2013; Roland, 2014; Vaaland, 2011). This corresponds with the perspective on teacher-pupil interactions and teacher authority evident in the 1990s, as described by Bjerg (2011).

Good classroom management depends on teachers' possession of authority. Pupils tend to give authority to teachers who 1) succeed in meeting the challenges arising from pupil behaviour, 2) build high-quality relationships with each pupil and provide substantial academic and social support, 3) value and respond to pupils as individuals, and 4) set demands related to pupils' maturity and follow up rules and standards by practicing control (Bjerg, 2011; Emmer & Evertson, 2013; Pianta, 2006; Roland, 2014; Walker, 2009; Wentzel, 2002). Teacher authority imprints the classroom context by constituting a climate (Walker, 2009; Wentzel, 2002) parallel to the socialization climate made by parenting style (Baumrind, 1991).

Interestingly, and encouragingly, authoritative classroom management can be learned. Evidence-based training programs that help teachers learn and implement such practice are available and show that teacher practice can improve (Allen, Pianta, Gregory, Mikami, & Lun, 2011; Ertesvåg & Vaaland, 2007).

## **2.2 Aggression**

This section starts by outlining the conceptual meaning of aggression and aggressiveness, including some frameworks that categorize types of aggression. Next, I present different forms or expressions of aggression. Finally, two different motivational systems for aggression are described, reactive and proactive aggression, and some recent research on these functions of aggression is presented.

### **2.2.1 Conceptual meaning of aggression and aggressiveness**

Aggressiveness is an individual's characteristic tendency to show aggression (Leary, 2010; Roland & Idsoe, 2001). Aggression is defined as behaviour intended to harm or cause pain, physically or psychologically (Anderson &



Bushman, 2002; Aronsen, 2008; Berkowich, 1993; Dodge, Coie & Lynham, 2006; Eisner & Malti, 2015) Bushman and Huesmann (2010), elaborated that aggression is not an emotion or a thought; rather it is external behaviour that can be observed. Furthermore, they stated that aggression is social in that it involves at least two persons and intends to hurt, implying that it is not accidental, and the victim will attempt to avoid harm. The incorporation of the intention to harm in the definition makes the identification of aggression challenging because it is not always easy to determine whether harm was intended. However, Dodge and colleagues (2006) argued that this is a measurement issue rather than a definitional issue. The studies included in this thesis used measurements that captured motives and, thereby, intentions (Papers 1 and 2).

Eisner and Malti (2015) remarked that some items in common instruments assessing aggression measure behaviour not covered by the definition. An example is the Achenbach Child Behavior Checklist, which contains items like “easily jealous”, “talks too much”, “showing off or clowning” (Eisner & Malti, 2015). This implicates that research on aggression sometimes uses measurements covering an empirical domain that is not consistent with the theoretical domain it aims to assess. In regard to the studies included in this thesis, the method sections of Paper 1 and Paper 2 explain procedures for scale development and scale evaluation that include the inspection of each item related to the theoretical concept. We applied this procedure to avoid inconsistency between empirical and theoretical domains.

Recent research presents physical and social/relational aggression as useful categories representing forms of aggression and reactive and proactive as categories corresponding to functions of aggression (Dodge, Coie, & Lynham, 2006; Eisner & Malti, 2015; Vitaro & Brendgen, 2012). A study conducted by Little and colleagues (Little, Brauner, Jones, Nock, & Hawley, 2003; Little, Jones, Henrich & Hawley, 2003) serves as a basis for the categorization applied in this thesis. A confirmatory factor analysis of the self-reports of aggressive children in grades 5-10 revealed a 4-factor structure. Two factors regarded forms - physical and social - of aggression. The other two factors regarded functions, reactive and proactive aggression. In the following, I elaborate these concepts with particular attention to the functions because they are most relevant to the research in this thesis. In accordance with previous research

(Roland & Idsoe, 2001), we used the construct of aggressiveness in the studies in this thesis. Consequently, we distinguished between proactive and reactive aggression, as manifest behaviour, and proactive and reactive aggressiveness, as latent dispositions to act and react aggressively.

### **2.2.2 Forms of aggression**

Aggression can be expressed differently and take forms such as physical, verbal, direct, indirect, active, passive, social, relational, overt, or covert aggression (Bushman & Huesmann, 2010; Dodge, Coie, & Lynham, 2006; Eisner & Malti, 2015; Vitaro & Brendgen, 2012). These are not mutually exclusive forms but are typical categorizations of aggressive acts. Assault, hitting, pushing, and biting are examples of physical aggression. Verbal aggression covers words spoken with intention to hurt, scandalize, frighten, threaten etc. Relational aggression refers to intentionally causing harm to a person's social relationships, feelings of acceptance or inclusion within a group (Crick & Grotpeter, 1995). Social aggression can be used in parallel to relational aggression (Vitaro & Brendgen, 2012). Displaced aggression means that the aggression is directed at a substitute target that is innocent of any wrongdoing but is available (Bushman & Huesmann, 2010; Marcus-Newhall, Pedersen, Carlson, & Miller, 2000). Overt aggression includes physical aggression and opposition-defiance, while theft-vandalism and rule breaking exemplify covert aggression (Tremblay, 2012). Direct aggression covers verbal or physical attacks, while indirect aggression hits by taking away something that is important to the victim such as reputation, social relations or property.

When engaging in active aggression, the aggressor actively acts to harm the victim, and this harm might be physical, verbal, direct or indirect. Passive aggression can include refraining from doing what is normally expected, such as answering or saying hello, or it can include refraining from responding in a helpful manner or protecting a person or his/her property. Bushman and Huesmann (2010) stated that active forms of aggression can be risky and that most people therefore prefer to use indirect and passive forms of aggression. Vitaro and Brendgen (2012) described the social/relational form as more subtle than physical aggression. Actions are often indirect and might include ridicule, rumour spreading, or social exclusion. Such aggression, especially when

conducted by persons possessing social status or power, will injure the victim's social position and potentially his or her access to friendships and affiliation with the perpetrators and bystanders.

Recent research examines developmental trajectories of different forms of aggression (e.g. Eisner & Malti, 2015; Tremblay, 2010, 2012; Vitaro & Brendgen, 2012). The distinctiveness of physical and social aggression is established early in life and continues over the course of middle childhood. Physical aggression peaks in early childhood and then diminishes during childhood (Tremblay, 2010; Vitaro & Brendgen, 2012). Social aggression generally increases in prevalence from the end of early childhood to middle childhood and early adolescence (Tremblay, 2012). The distinction between overt and covert aggressive behaviours is similar to the pathways described above, namely that overt aggression occurs before covert, and overt problem behaviour decreases with age and maturation, while covert behavior increases as the individual masters the abilities necessary to act in a covert manner (Tremblay, 2012). Thus, brain maturation that increases the ability to inhibit impulses plays an important role in these different developmental tendencies. According to Tremblay (2010), girls seem to learn the covert aggression strategy earlier than boys, and among girls, the frequency of this strategy increases up to late adolescence. Vitaro and Brendgen (2012) concluded that a typical developmental path is characterized by the transformation of physically aggressive individuals into socially aggressive individuals. This transformation is achieved by early adolescence.

Research regarding the aetiology of forms of aggression suggests that the correlation between physical and social aggression in children may be attributable to overlapping genes. However, the two forms of aggression seem to be influenced by different environmental factors (Brendgen, Dionne, Girard, Boivin, Vitaro & Pérusse, 2005; Vitaro & Brendgen, 2012).

I anticipate that social aggression will be more relevant than physical aggression for the topic of this thesis, and I point to additional research that highlights this type of aggression. Björkquist, Lagerspetz and Kaukiainen (1992) described the complex manipulative skills that social aggression depends on to imply that the aggressor has quite advanced levels of linguistic and socio-cognitive skills. Social intelligence correlates positively with social

aggression (Kaukiainen, et al., 1999) and with language development (Hawley, 2003). Research on social aggression mainly focuses on relationships between peers, same age groups, friendship networks or other horizontal relationships. A network or expectations of affiliation with a network are important preconditions for social aggression. Highly socially aggressive children achieve central positions and status within their peer networks (Vitaro & Brendgen, 2012). It appears as though they socially profit from aggression in terms of increased affiliation with co-perpetrators, popularity, visibility and attention in the peer group. As a result, affiliation and social power exemplify possible benefits of social aggression. Adults seldom intervene in situations of social aggression compared with physical aggression, and perpetrators of social aggression can largely avoid being punished (Björkquist, Lagerspetz, & Kaukiainen, 1992; Vitaro & Brendgen, 2012). Attempting to explain why aggression occurs or why some individuals choose to behave aggressively, I turn to the issue of the functions of aggression.

### *2.2.3 Functions of aggression*

For approximately three decades, two different functions of aggression have been distinguished. These functions correspond with motives and are described as reactive and proactive aggression (Bushman & Huesmann, 2010; Dodge & Coie, 1987; Little, Jones, Henrich & Hawley, 2003; Vitaro & Brendgen, 2012).

Reactive aggression is “hot-blooded”, affective, impulsive, defensive and retaliatory (Vitaro & Brendgen, 2012). Typically, reactive aggression is triggered by frustrations, provocations or threats that leads to anger, often accompanied by fear and high physiological arousal (Eisner & Malti, 2015).

The classical Yale-hypothesis (Dollard, Doob, Miller, Mowrer, & Sears, 1939) and the revision by Miller (1941) provide the theoretical background for understanding frustration-related aggression. An important aspect in Miller’s revision is the fact that a frustrating event (A) will not always induce anger (B) and anger will not always lead to aggressive behaviour (C). Reactive aggression involves all three elements. The theory has been further developed (Anderson & Bushmann, 2002; Berkowitz, 1993; Dodge, 1991). It now describes reactive aggression as an angry and hostile response to perceived goal blocking or provocation (Dodge, Coie & Lynham, 2006; Vitaro & Brendgen, 2012).

Proactive aggression is typically “cold-blooded” and associated with low level of physiological arousal and callous-unemotional traits. It is calculated and offensive and involves a goal-directed and purposeful attack or threat of attack against an individual. It does not require anger or provocation; rather, it is planned with a goal in mind, implying that the behaviour is instrumental (Dodge, 1991; Dodge & Coie, 1987; Eisner & Malti, 2015; Vitaro & Brendgen, 2005; Vitaro & Brendgen, 2012). Theoretically, proactive aggression has been explained in light of social learning theory (Bandura, 1973); aggression serves the purpose of obtaining a desired goal. Goals can be social such as affiliation with peers or social power (Roland & Idsoe, 2001), as reflected in the instrument used to measure proactive aggressiveness in Paper 1.

As outlined above, the two types of aggression are distinguishable at the theoretical level. Empirically, the overlap has been reported to be quite large, as shown by correlations. Vitaro & Brendgen (2005) reported an average correlation of  $r = .70$  (+/- .15) between reactive and proactive aggression in variable-centred studies, and considerable co-occurrence in person-centred studies. The overlap has caused many researchers concern, and some have suggested dropping the idea of reactive and proactive aggression as distinct phenomena (Anderson & Bushmann, 2002). However, repeated research supports the theoretical distinction through clear and distinct factorial solutions (Dodge & Coie, 1987; Vitaro & Brendgen, 2005, 2012). Little, Jones and colleagues’ (2003) study showed that the strong correlation between reactive and proactive aggression is mainly due to their joint relationships with physical aggression as a common underlying form. Comprehensive research on social and psychological correlates of reactive and proactive aggression also confirms their distinctiveness (Vitaro & Brendgen, 2005, 2012). Papers 1 and 2 in this thesis contribute to this research.

I now describe research on the developmental trajectories of the two functions of aggression before I turn to studies on the aetiology of and factors related to reactive and proactive aggression.

### ***Developmental trajectories***

Some recognition of the relevance of developmental trajectories of types of aggression inspired interest in this topic (Vitaro & Brendgen, 2012). One line

of evidence indicated that reactive aggression seemed to precede proactive aggression. A study conducted by Lansford, Dodge, Pettit, & Bates (2002) showed that within a period of several years, the level of reactive aggression in one year predicted the level of proactive aggression in the next year. Proactive aggression did not predict reactive aggression. The other line of research concerned similarities in the distinction between aggression types, on the one hand, and the diagnosis of Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) according to DSM-IV diagnostic criteria, on the other hand. ODD includes some items parallel to reactive aggression: “loses temper” and “irritable”. CD includes items with parallels to proactive aggression: “bullies, threatens or intimidate other” (Vitaro & Brendgen, 2012). Coincidentally, ODD is often diagnosed at an earlier age than CD (Loeber, Lahey, & Thomas, 1991), and reactive aggression is diagnosed earlier than proactive aggression (Dodge, Lochman, Harnish, Bates, & Pettit, 1997).

Barker and colleagues’ study among 13-17 year old boys revealed three quite similar trajectories of reactive and proactive aggression. One started at a low level of aggression and was stable low. The medium aggressive showed a moderate desisting trajectory. The high aggressive trajectory had a peak on about 15 year before it started to desist (Barker, Tremblay, Nagin, Vitaro, & Lacourse, 2006). Vitaro and Brendgen (2012) reviewed studies on possible distinctions in the developmental trajectories of reactive and proactive aggression, and found that both types increased until a peak occurred between the ages of twelve and fifteen and then decreased. Furthermore, the authors concluded that the general decline in physical aggression from childhood to adolescence seemed to apply to reactive and proactive aggression, which can be explained by the correlation between physical aggression and both reactive and proactive aggression. Finally, they concluded that the review did not support the notion that each function of aggression has a distinct developmental trajectory.

### ***Aetiology***

Attempts to describe the aetiology of reactive and proactive aggression have highlighted the interesting issue of understanding the correlation between these types of aggression. A study performed by Tuvblad, Raine, Zheng and Baker (2009) that followed 9-14-year-old twins revealed that 80 % of reactive

aggression and 63 % of proactive aggression was explained by common genetic factors. Environmental factors explained the remaining variability. The greater genetic influence on reactive aggression corresponds with the view that such aggression is temperamentally driven behaviour, in contrast to proactive aggression, which is typically explained by social learning (Dodge, 1991). However, given the fact that the correlation between proactive and reactive aggression essentially vanished after physical aggression was controlled (Little, Jones, et al., 2003), the suggested commonality in genetics required further investigation.

Brendgen and her research team (Brendgen, Vitaro, Boivin, Dionne, & Pérusse, 2006) followed up this issue in a study with 6-year-old twins. Their investigation of the relative contribution of genetic and environmental factors found that genetics accounted for 52 % and 35 % of the variance in reactive and proactive aggression, respectively. Furthermore, 37 % of the genetic influences and 18 % of the environmental influences were common to both reactive and proactive aggression. By controlling for physical aggression, the authors found that the genetic factors that were shared were due to the common underlying form. The final results showed that 16 % of the variance in reactive aggression and 22 % of the variance in proactive aggression is related to specific genetic effects unique to each type. Environmental factors that did not explain the form accounted for 37 % of the variance in reactive aggression and 57 % of the variance in proactive aggression. Only 10 % of the environmental effects were shared after underlying forms of aggression were controlled (Brendgen, et al., 2006). Vitaro and Brendgen (2012, p. 27) concluded that “..once the form of aggression is controlled, both the genetic and the environmental influences on the functions of aggression seem to largely differ.”

Reactive aggression relates to some biological indicators that may be due to genetics. A highly volatile reactive temperament is one such factor, and specific physiological markers reflect this temperament. When stressed, reactively aggressive persons show elevated levels of skin conductance (Hubbard, et al., 2002). They also display higher levels of stress-related hormonal reactions (Lopez-Duran, Olson, Hajal, Felt & Vazquez, 2009). Furthermore, reactive aggression is connected to impulsivity (Raine et al., 2006), suspiciousness (Bjørnebekk, 2007) and a “temperamental disposition towards anxiety, angry reactivity, emotional dysregulation, and inattention” (Vitaro & Brendgen, 2012,

p. 28). Moreover, reactive aggression is linked to deficits in social problem solving (Eisner & Malti, 2015), and to problems in cognitive functioning, such as hostile attribution bias and biased attention to rejection, ridicule and failure cues (Crick & Dodge, 1996; Dodge & Coie, 1987; Orobio de Castro, Veerman, Koops, Bosch, & Monshouwer, 2002). Reduced ability to identify others' and their own emotional signals, low verbal intelligence, and deficits in executive cognitive functioning are also evidenced in individuals exhibiting reactive aggression (Dodge, et al., 1997).

The social information processing (SIP) model described by Crick and Dodge (1994, 1996; Kupersmidt, Stelter & Dodge, 2011) provides an overview of five cognitive mechanisms associated with decisions making about interpersonal behaviour: 1) encoding of internal and external cues, 2) interpretation of cues, 3) goal selection, 4) response access or construction, and 5) response decision. Each step in this process interacts with the individual's *database* containing memories from prior experiences, scripts and social schemas in a bidirectional manner (Crick & Dodge, 1994). The SIP framework implicitly states that children are active agents in their context (Crick & Dodge, 1994; Ostrov & Godleski, 2010). Several of the indicators related to reactive aggression described above, correspond with the SIP model. Dodge and Coie (1987) described hostile attribution bias as a tendency related to reactive aggression. Pupils who score high on reactive aggression tend to interpret ambiguous situations as hostile, provocative and threatening. Based on their interpretation of others' hostile intentions, that they find it reasonable to defend themselves (Dodge & Coie, 1987). Another association that goes from reactive aggressiveness to encoding of cues entails a tendency to pay selective attention to specific social cues (Dodge, et al., 1997). The SIP model was described in Paper 2 because we developed an instrument to measure perceptual orientation with reference to this perspective. Interestingly, new research has found support that individuals develop a characteristic pattern of information processing that functions as an acquired personal characteristic. The pattern has reasonable stability from kindergarten to adolescence and predicts aggressive behaviour. A causal connection from information processing to aggression has been suggested (Dodge, 2011). Yet, the process is also iterative and reciprocal (Fontaine & Dodge, 2006). Specifically, "...aggressive behavior at age 14 predicted processing patterns the next year, which in turn predicted growth in



aggression the following year, even controlling for prior aggression. Likewise, processing patterns in one year predicted aggression in the following year, which altered processing patterns in the subsequent year. Across adolescence, this reciprocal effect continues” (Dodge, 2011, p. 169). Interventions that attempt to reduce hostile attribution bias have been successful and have led to reduced aggressive behaviour (Graham & Hudley, 1993; Guerra & Slaby, 1990)

Another psychological issue that has quite recently been investigated in relation to the two types of aggression is the concept of theory of mind, which refers to the ability to attribute mental states to oneself and others and to understand that others have different beliefs, desires, perspectives etc. than oneself. Renouf Brendgen, Séguin and colleagues (2010) found that the theory of mind capacity was negatively associated with reactive aggression, implying a lowered capacity to understand oneself from an outside perspective and others from an inside perspective.

In regard to social experiences, reactive aggression develops in harsh, threatening and unpredictable environments and due to a parenting style characterized as controlling and punitive (Dodge, 1991; Vitaro, Brendgen, & Barker, 2006). Compared to proactive and non-aggressive children, reactive aggressive children more frequently experience physical abuse (Dodge, et al., 1997). Among peers, reactively aggressive children are more rejected and victimized and have fewer friends compared with other children (Brendgen, Vitaro, Tremblay, & Lavoie, 2001; Roland & Idsoe, 2001; Salmivalli & Heiteenvuori, 2007).

The examination of factors related to the aetiology of proactive aggression leads us to temperamental and possible biological bases for callous-unemotional traits. Research on these traits stems from research on youth’s psychopathic characteristics (Vitaro & Brendgen, 2012). Callous-unemotional traits (CU) comprise affective and interpersonal styles associated with proactive aggression in both children and adults (Cornell, Warren, Hawk, Stafford, Oram, & Pine, 1996; Fite, Stoppelbein, & Greening, 2009; Frick, Cornell, Barry, Bodin, & Dane, 2003; Marsee & Frick, 2007). Affective style relates to, e.g., the absence of guilt and constricted display of emotions. The interpersonal style associated with CU and proactive aggression is low levels

of empathy and a tendency to use others for one's own gain. According to Barry and colleagues (Barry, Thompson, Barry, Lochman, Adler & Hill, 2007), CU characteristics encompass a disregard for others which can lead to aggression towards other for personal gains, and this link is specific to proactive aggression.

Aggressive children with CU tend to face situations that are emotionally distressing or threatening with less reactivity than do other children (Blair, 1999; Loney, Frick, Clements, Ellis, & Kerlin, 2003). Children with this temperamental trait also tend to be less sensitive to cues of punishment after they have decided to achieve a desired goal (Frick et al., 2003). Physiological under-reactivity in the sympathetic nervous system characterizes this temperamental style. This is the part of the autonomous nervous system that is activated when an individual faces danger. This system may, e.g., increase an individual's blood pressure.

Some social-cognitive traits related to social information processing are typical among proactive aggressive children: preference for instrumental rather than relational goals, value of aggression as a means to achieve desired goals, focus on positive outcomes of aggression and lack of attention to potentially negative outcomes of aggressive behaviour (Crick & Dodge, 1996; Dodge, et al., 1997; Marsee & Frick, 2007). Based on the SIP model (Crick & Dodge, 1994, 1996), one can anticipate that aggressiveness may correspond with perceptual orientation, as outlined and investigated in Paper 2. Social motives as well as previous experiences and social schemas may also contribute.

In two studies, Renouf and colleagues found that theory of mind capacity was positively related to proactive aggression (Renouf, Brengden, Séguin et al., 2010) and to relational aggression (Renouf, Brengden, Parent et al., 2010). This implies competence in understanding how they are perceived by others and how others perceive themselves. This capacity supports the ability to make plans that preconceive others' responses, strategies etc. Such skills are valuable to successfully employing instrumental aggression and highly relevant to conducting social aggression.

Proactive aggression is associated with social environments containing aggressive role models and persons who value the use of aggression for

personal interests and conflict resolution. A parenting style with fewer rules and less control than average is related to children's proactive aggression (Dodge, et al., 1997). Proactively aggressive children seem to be well liked by peers. They tend to affiliate with like-minded proactively aggressive peers, who become role models and provide rewards for proactive aggression.

Dodge and colleagues (2006) reviewed research on the impact of dispositional factors on aggression and antisocial behaviour and reported extensive research confirming relationships between psychopathic traits, juvenile psychopathy and aggressive or antisocial behaviour. However, they did not draw distinctions between reactive and proactive aggression. Yet, because of the abovementioned connection between proactive aggression and the CU psychopathic trait, one can reasonably expect that proactive aggression may be relevant in this matter. Other research has linked CU traits to proactive aggression and other psychopathic traits such as poor planning, acting without thinking and engaging in risky activities, to reactive aggression (Barry et al., 2007). Stickle, Marini and Thomas (2012) studied a group of reactive and proactive adjudicated youths and found that CU traits are a strong predictor of physical and relational aggression in girls and physical aggression in boys.

In addition to CU traits, narcissism is discussed as a possible element in psychopathy and as a predictor of aggression (Barry, et al., 2007; Bushman & Huesmann, 2010). The trait of narcissism "includes thinking oneself superior, feeling entitled to preferential treatment, being willing to exploit others, having low empathy for "lesser" human beings, and entertaining grandiose fantasies or other ideas about oneself as a great person" (Bushman & Huesmann, 2010, p. 845). Research finds a relationship between narcissism and aggression (Bushman & Baumeister, 1998), contradicting a previously prevailing view connecting low self-esteem to aggression (Barry et al., 2007; Bushman & Huesmann, 2010). Barry and colleagues' (2007) study confirmed that narcissism and self-esteem are distinct and unrelated constructs. Furthermore, narcissism, but not self-esteem, substantially predicts reactive and proactive aggression.

Research regarding reactive and proactive aggression draws frames for understanding how the traits develop and how behaviour is formed. However, the characteristics associated with both reactively and proactively aggressive

pupils are based on significant differences from other groups. When focusing on intergroup distinctiveness, we should not forget that intragroup variations also exist. Especially in educational contexts, it is important to avoid placing negative and dysfunctional prejudices on pupils.

## **2.3 Disruption**

I now shortly address issues regarding the concept and relevance of disruption in school and the prevalence of disruption in the Norwegian context.

### **2.3.1 Relevance**

The practical relevance of the topic of disruption in school classrooms is indisputable. Disruptive pupil behaviour is a source of stress, burnout and professional escape for teachers (Dicke, Elling, Schmeck, & Leutner, 2015; Evertson & Weinstein, 2006). Some of the disruptive behaviour is directed at the teacher as obvious disrespect, which may be the toughest for teachers to handle (Sun & Shek, 2012b). Interestingly, pupils also regard such behaviour as the most unacceptable behaviour in classrooms (Sun & Shek, 2012a). Moreover, disruption causes poor learning environments, limits time for instruction, decreases learning, and contributes to negative peer interactions (Emmer & Evertson, 2013; Pas, Cash, O'Brennan, Debnam, & Brandshaw, 2015). Consequently, the disadvantages of disruption is obvious, implying that further development of disruption research, policy and practice is needed.

### **2.3.2 Relevant concepts**

Pupil behaviour that interferes with teaching and learning has many labels, many measurements, and many explanations. Furthermore, many approaches have been developed to prevent and stop it (Slee, 2014, 2015). As outlined in Paper 1, comparisons of the prevalence of disruptive behaviour, social and psychological correlates of such behaviour and discussions concerning reasons for disruptive classroom behaviour are challenged by variation in the concepts and measurements. Moreover, the behaviour in question varies from frequent to occasional and from mild to severe. In addition, variation in the theoretical

basis complicates communication in the field of discipline problems and disruptive or disobedient behaviour (Slee, 2014).

### **2.3.3 Prevalence and challenges**

According to the PISA reports, the learning environments of Norwegian schools have improved during the last decade. Pupils report a significant increase in peace to work during school lessons. They also assess that school lessons are more effective because less time is wasted due to disruptions at the beginning of each lesson (Kjærnsli & Jensen, 2013). In 2012, compared with 2000 and 2009, Norwegian principals reported a decrease in disruptive pupil behaviour. However, according to the principals, 50 % of Norwegian pupils are largely or to some extent hindered in their learning due to disruption (Roe & Kjærnsli, 2013).

Regarding gender, descriptive data from the Norwegian “*Pupil Survey*” 2012 shows that boys are more disruptive than girls (Wendelborg, 2012,). This result corresponds with usual findings (Castelao & Kröner-Herwig, 2014; Hamre & Pianta, 2001).

As mentioned, PISA 2012 indicated a positive trend in Norwegian schools regarding learning climate and disruption. Still, PISA’s comparative perspective clearly shows that this trend must continue for Norway to reach the standards set by the mean level of the OECD countries regarding these questions. The Norwegian PISA report 2012 underpinned that a sound learning environment, including peace to work, correlates with pupil performance (Kjærnsli & Jensen, 2013). The “*Pupil Survey*” for the same period confirmed the positive trend (Wendelborg, 2012, 2016). However, effort is needed to bring Norwegian pupils’ learning environment to a satisfactory level.

## **2.4 Research questions**

For schooling to be effective, pupils must regard the school and its content as legitimate. However, even when pupils accept and adopt the formal authority of school, they may refuse to give a particular teacher legitimacy to act on behalf of the general formal authority. Teacher authority in each class and in relationship to each pupil seems to be more personal- and relationship-based

than it was several decades ago. This may imply that actual teacher authority varies across classes within a school. Furthermore, a pupil may equip some teachers with authority but give other teachers less or no authority.

Disobedient behaviour towards a teacher may be direct or indirect. Indirect threats to teacher authority might include pupils' engagement in actions that the teacher does not approve or refusal to follow instructions given by the teacher (Brophy & McCaslin, 1992; Toby, 1993/94). Direct and indirect negative behaviour towards a teacher share one common element, namely, the pupils' awareness of breaking a standard set by the teacher. It is difficult to find a suitable measure of this concept of disobedience towards a teacher among established scales in the field. Scales developed to measure different aspects of disruptive pupil behaviour are diverse and are not consistent with our conceptual understanding of disobedience (e.g. Olweus, 1989; Storvoll, Wichstrøm, Kolstad & Pape, 2002). To develop a new measure, we conceptualized disobedience as a sub-dimension of antisocial behaviour. On this background, the following research question is posed:

RQ1: Can disobedience be revealed as a distinct factor through confirmatory factor analysis?

Studies on disobedience to teacher and aggressiveness are scarce. To the best of my knowledge, no previous studies on this topic examine adolescent pupils. Regarding younger children, a few studies based on teacher reports find that reactive aggression, but not proactive aggression, is significantly correlated with disruptive classroom behaviour (Brown, Atkins, Osborne, & Milnamow, 1996; Waschbush, Willoughby, & Pelham, 1998). Conceptual and methodological differences limit comparison between these studies and our study. Given a distinct construct of disobedience, the following research questions are formulated:

RQ2: What is the relationship between reactive aggressiveness and disobedience?

RQ3: What is the relationship between two dimensions of proactive aggressiveness and disobedience?

This thesis investigates whether disobedience can be conceptualized in the same manner for both genders by investigating its measurement invariance. Furthermore, the following research question is addressed to determine whether gender interacts with aggressiveness to affect disobedience.

RQ4: Does gender moderate the relationship between aggressiveness and disobedience?

The literature describes a teacher's authority as critical for a positive learning climate, positive academic outcomes and prosocial pupil behaviour (Eresvåg & Vaaland, 2007; Pace & Hemmings, 2006; Roland & Galloway, 2002). Teachers' weakness, then, must be conceptualized within this context. In general, such weakness are aspects of the teacher that pupils interpret as opposite to signs of authority. By devaluing the teacher's authority, some pupils may experience social profits. In struggles for social power, information about others' weaknesses might be important. Because no construct describing perceptual orientation towards weakness in a new teacher has been developed, the following research question is addressed:

RQ5: Can perceptual orientation towards weakness in a new teacher be revealed as a distinct factor through confirmatory factor analysis?

Discipline problems, in terms of pupil disobedience to teacher authority, are related to pupils' reactive and proactive aggressiveness (Paper 1). The literature, does not clearly indicate whether reactive aggressiveness pre-disposes a pupil to be interested in signs of weakness in a teacher whom they meet for the first time. Regarding proactive aggressiveness, discipline problems can be used as tools for gaining social power or status, e.g., at the cost of the teacher. Behaviour is a result of social information processing, and the SIP model described by Crick and Dodge (1994; 1996) provides a useful frame for understanding behaviour related to reactive and proactive aggressiveness. Even if the enactment of different behaviours has similar results, the mental processing from the detection of social cues to decisions about behaviour and evaluation of behavioural outcomes differ in proactive and reactive aggressiveness. Therefore, it is reasonable to ask whether reactive and proactive aggressiveness are associated with perceptual orientation towards weakness in

### *Theoretical frame*

---

a new teacher. On this background and given a distinct construct of perceptual orientation, the following research questions are addressed:

RQ6: What is the relationship between reactive aggressiveness and perceptual orientation towards weakness in a teacher who is new to the class?

RQ7: What is the relationship between proactive aggressiveness and perceptual orientation towards weakness in a teacher who is new to the class?

Research typically finds that the boys exhibit higher levels of aggression than girls (Côté & Archer, 2005). On this basis, it seems relevant to explore gender as a possible moderator in this investigation. Therefore, the following research question will be posed:

RQ8: Does gender moderate the relationship between aggressiveness and perceptual orientation towards weakness in a new teacher?

Some disruptions are common in most classrooms. Still, a class may erupt into disruptive chaos in which teachers' instructions are chronically disregarded. Knowledge regarding practical approaches that aim to re-establish a healthy learning environment in highly disruptive classes in which the teachers have lost control must be increased. An instrumental multi-case design was developed in an attempt to reveal concepts and a conceptual framework to discuss, analyse, and compare interventions in highly disruptive school classes. Based on seven experienced practitioners' descriptions of their approaches to achieving turnarounds in highly disruptive school classes, we aimed to answer the following research questions:

RQ9: What are the main issues in such interventions?

RQ10: Are there systematic variations across the cases in how they approach the core issues?

RQ11: Can we reveal systematic connections between elements within and across the cases that can allow us to develop a conceptual framework?



## **3 Method**

To address the research aims, three studies are included in this thesis, two quantitative studies and one qualitative case study. Due to the nature of the research questions posed in Paper 1 and Paper 2, a large-scale method was an evident choice, while a qualitative approach with limited data sources was useful for answering the research questions in Paper 3. I present the methods applied in the quantitative studies before presenting the methodological approach employed in the qualitative study.

### **3.1 Quantitative studies**

#### **3.1.1 Procedure and samples**

The School Environment Study was a tri-annual survey that the CBR conducted from 1995 to 2008. The study included pupil, teacher and principal questionnaires. Pupils answered a rather extensive questionnaire. Paper 1 and Paper 2 use data from parts of two datasets collected from pupils.

Consent was obtained from The Data Inspectorate, the district offices in the selected municipalities, and the principals at each school. Information about the survey was sent to each home to allow parents to refuse participation on behalf of their child. The pupils themselves could refuse to participate or withdraw from participation at any time. There were some differences in the procedures followed in the surveys relevant to Paper 1 and Paper 2. Thus, I further present the procedures, samples and other methodological questions of the two papers separately.

#### ***Data collection procedures, Paper I***

The participating schools received a package including instructions, information and signature sheets for parents' consent, envelopes, seals and questionnaires. Data were collected using a questionnaire distributed to the pupils and completed during a school lesson. The lead teacher administered the

investigation in class according to the written instructions. The teacher read each question aloud and waited for the pupils to answer. This procedure was implemented to support slow readers or pupils with other kinds of difficulties in understanding the questions and completing the questionnaire. To avoid the situation in which pupils influence each other, we had all classes within a school – to the extent possible - complete the questionnaire at the same time. This procedure employed to ensure reliability (Gall, Gall & Borg, 2007).

For the sake of confidentiality, no names were written on the questionnaires. Additionally, students' responses were gathered and placed into an envelope. Then the teachers sealed the envelope in the presence of the pupil council representative of each class. This seal was broken only at the CBR.

### ***Sample Paper 1***

The study was conducted in Norwegian secondary schools with pupils in grade 8, who were approximately 14 years old. The sample comprised 2083 pupils: 1010 boys and 1073 girls from 44 secondary schools in 38 municipalities. The sample was representative according to The Norwegian Central Bureau of Statistics' Standards (Statistics Norway, 1994). The response rate of pupils in the participating classes was 85 %.

### ***Data collection procedures, Paper 2***

The pupils completed a questionnaire administered by a teacher during a school lesson. The respondents completed the forms electronically. No names were recorded. To the extent possible, all pupils at each school completed the questionnaire at the same time to avoid the situation in which pupils influence each other's responses.

### ***Sample Paper 2***

The study was conducted among 10<sup>th</sup> graders in eight Norwegian secondary schools. The sample comprised 401 boys and 354 girls. The School Environment Studies are built on representative samples according to The Norwegian Central Bureau of Statistics' Standards (Statistics Norway, 1994). However, this particular year the sample had to be supplemented because some of the original schools were not able or did not want to participate. Additional

schools, which were invited via direct contact, were located across the country but were not chosen with reference to community classification index. The schools could choose whether to carry out the survey in the spring or in the autumn, approximately two months after the new school year had started. The convenience sample (Highhouse & Gillespie, 2008) that Paper 2 builds on is from the eight schools that conducted the survey in October 2008. The response rate of the participating classes was 90.5 %.

### 3.1.2 Measurements

#### *Survey 1*

*Disobedience* was measured by a scale developed for the study presented in Paper 1, and the items are described in that paper. The scale included seven statements designed to assess behaviour that the pupil knows is in conflict with the teacher's instructions or standards. The subjects responded to the statements with four ordinal categories. Alternatives were "YES," "yes," "no" and "NO," implying "Agree completely," "Agree," "Disagree," and "Totally disagree." Responses were scored 0, 1, 2, and 3, respectively. Internal consistency proved satisfactory, Cronbach's alpha was .91 and .88 for boys and girls, respectively.

To establish and test the validity of the scores of the new instrument, we applied confirmatory factor analysis (CFA). First, we tested the simplest measurement model with the observed indicators of the latent construct of disobedience. Next, we tested a more extensive measurement model with disobedience and measures of overt and covert antisocial behaviour. This external reference study aimed to test preconceived relationships among latent variables (Hagtvet, 1995), and the items were expected to form three factors that positively correlated with each other. The results are presented in Paper 1.

*Bullying* represented overt antisocial behaviour and was measured using a four-item scale that was validated in previous studies (Roland, 1999; Roland & Idsoe, 2001). A written standard explanation of bullying was introduced to the pupils before they answered these questions. The four questions regarded bullying in general, physical assault, teasing/verbal humiliation and active exclusion, and the time period was the present school year. Answers were "never," "now and then," "weekly," and "daily," representing ordinal

## *Method*

---

categories and coded 0, 1, 2, and 3, respectively. Cronbach's alpha for the scale was .81 and .67 for boys and girls, respectively.

*Covert antisocial behaviour* was measured using five items from the scale measuring antisocial behaviour in the "Young in Norway study" (Storvoll et al., 2002) which builds on Olweus' scale of antisocial behaviour (Olweus, 1989) and the National Longitudinal Youth Survey in the USA (Windle, 1990). The pupils reported involvement in specific behaviours during the last 12 months, and behaviour assessed in the covert scale was not limited to specific arenas such as home or school. The items are listed in Paper 1. Response alternatives were identical to those of the bullying items. Cronbach's alpha for the scale was .84 and .78 for boys and girls, respectively.

*Aggressiveness.* Reactive aggression and proactive aggression were estimated using scales developed by Roland and Idsoe (2001). The initial scale estimating reactive aggression comprised six items, as presented in Paper 1. Our study used a slightly modified scale with five items. We excluded one item from the original scale: "If a teacher has promised that we are going to do something fun but changes his/her mind, I protest strongly." Because this item concerns direct frustration with the teacher, we considered it to be too similar to disobedience. Cronbach's alpha was .71 and .69 for boys and girls, respectively.

Two scales estimated proactive aggressiveness. A four-item scale measured power-related proactive aggressiveness. The items are presented in Paper 1. Cronbach's alpha was .82 and .79 for boys and girls, respectively. The scale estimating affiliation-related proactive aggressiveness included four items, which are presented in the paper. Cronbach's alpha was .87 and .84 for boys and girls, respectively. The items concerning aggressiveness were statements. Response alternatives and coding were similar to those for disobedience.

CFA were applied to test the validity of the scores of the measures from all the scales used in the study. No problems occurred. The procedures and results are thoroughly described in Paper 1.

### *Survey 2*

One instrument measured the dependent variable, i.e., pupil's perceptual orientation towards weakness in a teacher that is new to him or her, and two instruments measured the independent variables, i.e., proactive and reactive aggressiveness. The perceptual orientation towards positive teacher qualities, original reactive and proactive aggressiveness, bullying others and being bullied scales are described in Paper 2 and utilized to validate the measures from the core instruments.

*Perceptual orientation towards weakness in a teacher new to the class* was estimated using a scale developed for this study. The scale is based on the theoretical framework of the social information processing model described by Crick and Dodge (1994, 1996), as described in Paper 2. Pupils were asked to respond to ten statements introduced by the following question: What would be your focus of interest if/when you get a new teacher? Five of the statements concerned signs of weakness in the teacher while five statements were about positive teacher qualities. All the statements are presented in Paper 2. Responses were divided into four ordinal categories, "YES," "yes," "no" and "NO", implying "Agree completely," "Agree," "Disagree" and "Totally disagree". The items were expected to form two factors that were negatively correlated with each other. One factor was supposed to measure perceptual orientation towards weakness. The other factor, related to signs of positive teacher qualities, was included in the analysis to test the factor structure by discriminating between the two. CFA was applied to investigate construct validity. Cronbach's alpha for the scales measuring perceptual orientation towards teachers' quality were .89 and .85 for boys and girls respectively. For perceptual orientation towards weakness in a new teacher, it was .95 for boys and .94 for girls.

*Aggressiveness.* Reactive and proactive aggressiveness were measured using modified versions of scales developed by Roland and Idsoe (2001). The scales were modified to standardize the structure and wording of the items. The procedure used to ensure essential consistency between the original and modified scales included five steps: 1) Inspection of the items in the original and modified scales to ensure that they are affirmative and consistent with the

theoretical concepts measured, 2) A CFA to test factor structure, 3) Test of the internal consistency of the modified scales using Cronbach's alpha and 4) inter-scale correlation, and 5) Comparison of the relationships between aggressiveness and external references that they are expected to relate to. We chose the external reference variables of being bullied and bullying others (Roland & Idsoe, 2001) because relationships between aggressiveness and bullying are well documented in the research literature and the concepts regarding bullying are not part of the study's research question.

The modification implied that the three components of reactive aggressiveness were worded in the same order. Each of the seven statements in the modified scale assessing reactive aggressiveness contains (A) a situation that one is exposed to (passive); (B) an emotion, anger, triggered by the exposure; and (C) an aggressive reaction. The respondent indicates how likely they are to have the combination of emotion and reaction when the referenced event occurs. The original scale (Roland & Idsoe, 2001) did not systematically include the A-B-C components in each item but most of them explicitly formulated the A and B components. The five items measuring proactive aggressiveness in the modified scale are formulated with (A) an action (i.e. a situation in which the respondent is actively involved) and (B) an emotion, power, achieved by the action. The answers indicate the probability that the respondent experiences that emotion as a result of the action in question. The original items did not systematically capture the A-B components. (Roland & Idsoe, 2001). The response alternatives were identical to those used in the original scales: "NO", "no", "yes" and "YES", implying "Totally disagree", "Disagree", "Agree" and "Agree completely". Cronbach's alphas for the modified scales were as follows: reactive aggressiveness, .92 for boys and .90 for girls, and proactive aggressiveness, .95 for boys and girls.

CFA were conducted for all scales involved to test validity in the present sample. No problems occurred. The procedures and results are described in Paper 2.

### ***3.1.3 Analyses, Paper 1 and Paper 2***

Data analyses were conducted by use of different statistical packages. SPSS (Norusis, 2007) was used for descriptive analyses and analyses of internal consistency (Papers 1 and 2). Structural equation models with latent variables were chosen to examine relationships between observed indicators as reflections of relationships among latent variables. By using these procedures, we evaluated the validity of the latent variables in the measurement models. Structures of relations between latent variables were analysed in structural models using Lisrel 8.80 (Jöreskog & Sörbom, 2006) in Paper 1 and Mplus (Muthén & Muthén, 1998-2010) in Paper 2. Missing data were handled in line with common procedures in Lisrel and Mplus. I revisit the issue of missing data in the discussion section.

### ***3.1.4 Controlling for clustering in the data***

The two quantitative papers (Papers 1 and 2), which included analyses at the individual level, did not include analyses controlling for data clustering. In this case, clustering refers to the possibility that variation due to classroom level factors influences the assessment of individual variation and causes miscalculations (Muthén & Satorra, 1995). More specifically, the standard errors to parameters at the individual level could have been influenced by classroom variance because of clustering. In accordance with the procedure described below, we compared analyses with and without controls for data clustering to reveal whether our reported results are biased.

Research often recognizes that low values of intraclass correlations (ICCs), e.g. below 0.05, do not cause problems for individual-level analyses. With increasing ICCs, values above 0.05, individual-level variance may be disturbed by class-level variance. In addition to inspecting ICC for the observed variables, we investigated the design effect, as prescribed by Muthén (1997; Muthén & Satorra, 1995). The design effect is a function of the intraclass correlation and the average cluster size. When the design effect exceeds 2, analyses should take into consideration the fact that data are clustered (Muthén, 1997; Muthén & Satorra, 1995).

Intraclass correlations exceeded 0.05 for some of the items in both studies. For the study reported in Paper 1, two ICC measures exceeded 0.05 (0.064 and 0.087), and the largest design effect was 2.78. Consequently, we compared analyses with and without controls for clustering. No differences in the parameters' significance values were found.

For the study reported in Paper 2, ICC measures varied from 0.02 to 0.06. Most items had an ICC of 0.05 or lower; however, seven of the ICC measures were above 0.05. The greatest design effect was 2.42. We repeated the analyses and controlled for clustering. For the group of boys, analyses controlling for clustering revealed that one of the parameters in the structural model was no longer significant, namely, the effect of reactive aggressiveness on perceptual orientation towards weakness. This originally reported regression coefficient was small (.14), implying that the change in significance level is not of substantial importance.

### ***3.2 The qualitative case study***

The study presented in Paper 3 investigated approaches to managing highly disruptive school classes and aimed to identify relevant concepts and connections between concepts suitable to describe, analyse and compare such interventions. We chose a qualitative approach in an attempt to gather knowledge from seven experienced practitioners' presentations of their approaches to problem solving in real life.

#### ***3.2.1 Design and sample***

An instrumental multi-case design suited our intentions. The term instrumental case study reflects the fact that each case is of secondary interest; in other words, each case serves as an instrument to obtain knowledge about the questions in focus (Stake, 2005). Our approach to these cases was interpretative rather than descriptive (Postholm, 2010). Therefore, numerous cases were investigated to determine whether models intending to transform highly disruptive classes into good learning environments seem to follow more or less the same path. An intrinsic single-case study would not provide us with that knowledge (Stake, 2005; Postholm, 2010).



The study comprised seven cases of seven experienced practitioners who had worked as external experts to help schools carry out turnarounds in highly disruptive classes. The unit of analysis is the approach that each informant described as his/her working model in interventions targeting school classes in which teachers had lost control. We mainly use the term *model* in the paper (Paper 3). However, the informants also used terms such as intervention, turnaround, procedures, process or guidelines. These units should be relevant for case study research (Woodside & Wilson, 2003; Yin, 2009).

The criterion used to select the cases in our study was as follows: a professional had developed and practiced an approach to guide schools that requested help to manage highly disruptive classes. Additionally, we had reasons to believe that the professionals had succeeded. In other words, unable to cope with classroom challenges, a school had applied for external assistance because pupils' behaviours were beyond the limits of what a teacher could handle and teacher-pupil interactions were ineffective for teaching and learning. Consequently, instead of using an exact or objective criterion, we used the teacher's or the school's subjective experience to label the class as "highly disruptive" and to identify the need for external assistance. Each case was an approach described as a model for assisting schools in achieving such turnarounds.

### **3.2.2 Data collection**

The information was gathered during a 2-day workshop at the Norwegian Centre for Learning Environment and Behavioural Research (NCLBR). Based on a pre-established schedule, three cases were presented and discussed each day. Additionally, overall discussions across cases were scheduled. The author and two researchers from the centre participated and led the arrangement. Paper 3 includes a description of the workshop and the data collection.

Shortly after the workshop, a thorough report was completed and sent to all participants for feedback. This report did not contain analyses or discussions regarding the presentations. Nevertheless, the lecturer's meaning becomes condensed to some extent when it is reproduced in a summarized form (Kvale & Brinkmann, 2009). This transformation of information was performed by an individual who was not the informant. Therefore, the report was sent to each

informant as a check and to obtain feedback. The data as documented in the report was analysed in the research project.

### **3.2.3 Data analyses**

We performed our analyses in accordance with the guidelines recommended by Eisenhardt (1989). First, within-case analyses aimed to identify the main issues in the practitioners' interventions in highly disruptive classes. The cross-case analyses included the following: A) Investigation of randomly paired cases to identify similarities and differences. The pairwise comparisons helped us learn more from the cases by using different lenses to observe each case. By comparing the cases with each another, we identified similarities and differences. B) Summarizing and investigating the concepts emerging from within-case and paired-case analyses to reveal whether clusters of concepts or approaches formed patterns reflecting a particular framework. C) Comparison of the emerging framework(s) with each individual case. This procedure attempted to sharpen our understanding of the concepts and to verify the relationships between concepts and the evidence from each case. Finally, we compared the emerging conceptual framework with external literature.

### **3.3 Validity**

According to Cook and Campbell (1979), validity (and invalidity) refers to the best available approximation to the truth (or falsity) of inferences or propositions. When different types of validity are assessed, the question becomes one of the degree of validity, from low to high. Researchers do not determine validity in a completely objective manner. Thus, Cook and Campbell suggested that validity should always be considered with the modifiers "approximately" or "tentatively" in mind. Validity may be subjectively assessed based on vague standards in the relevant domain of research (Lund, 2005). However, several concepts, principles and guidelines help researchers discuss the validity of studies.

The validity system based on Cook and Campbell (1979) and Shadish, Cook and Campbell (2002) is commonly used in quantitative research. This system is to some extent also utilized within qualitative research (Kleven, 2008; Lund, 2005). In Yin's (2009) discussion of validity related to case study research, he

applies three of the four types of validity presented in the Cook and Campbell system. Nevertheless, some qualitative researchers recommend other approaches to validity (Kvale & Brinkmann, 2009; Lincoln, Lynham & Guba, 2011). The Cook and Campbell validity system is rooted in a critical realism perspective (Cook & Campbell, 1979), which applies to both quantitative and qualitative research (Kleven, 2008; Lund, 2005). As mentioned above, the purpose of a validity assessment system is to guide researchers in identifying and discussing possible threats to the inferences drawn from research results. Basic perspectives on metaphysical questions such as “*what is?*” and epistemological questions as “*what can we know?*” imply information on possible threats to knowledge (Morris & Pai, 1976). Critical realism responds by considering research knowledge as a construction in the mind of the scientist but not completely a construction because it corresponds with real entities, that exist in the real world independently from observers and researchers (Hjardemaal, 2011; Lund, 2005). The knowledge construction is vulnerable to bias; thus, one must have a critical attitude towards observations and inferences. This applies equally to inferences based on qualitative and quantitative research. Critical realism is highly relevant as a reference in today’s social sciences (Lund & Haugen, 2006). Common acceptance of a perspective of how research knowledge relates to reality makes it reasonable to acknowledge a framework for questioning the value of knowledge gained from research.

In line with this, an important argument for applying the Shadish, Cook and Campbell perspective on validity in the current thesis, is that the combination of quantitative and qualitative papers makes it reasonable to look for an approach that allows the assessment of validity in all the three papers in a way that can be mutually acknowledged (Lund, 2005). If the criteria for validity are contradictory and conflicting when evaluating the quantitative Papers 1 and 2 versus the qualitative Paper 3, the thesis suffers from inconsistency. However, because inferences from research within critical realism can be made based on different methodologies, questions regarding validity may be differentiated without being contradictive.

I apply the validity system developed by Cook and Campbell (1979) and Shadish, Cook and Campbell (2002) as a lens through which to discuss validity in this thesis (See the discussion section). Thus, a short presentation of the system is provided. When considering the system, it is worth underlining that

validity is not a quality of the method or the data but, rather, a property of inferences. Although the data, methods and empirical results cannot have validity in themselves, they serve as a fundament for determining the level of validity (Lund, 2005). This refers to matters of validation (Kleven, 2008). The system comprises four aspects of validity: statistical conclusion, internal, construct, and external validity. These four types validity refer to four types of inferences, namely, statistical, causal, construct and generalizations (Cook & Campbell, 1979; Kleven, 2008; Lund, 2005). Yin (2009) applied the terms construct, internal and external validity to case study research. Kleven (2008, p.223) presented the following summary of the Cook and Campbell validity system:

**“Construct validity:** *validity of inferences from indicators to constructs (from what we have seen to what we call what we have seen)*

**Statistical validity:** *validity of inferences about covariation between variables (trivial or worthy of a substantial interpretation?)*

**Internal validity:** *validity of inferences from an observed covariation to a causal interpretation (to the interpretation that something is influenced by another thing)*

**External validity:** *validity of inferences from the context of the study to a wider context or to other contexts”.*

The relevance of each kind of validity depends on what kinds of inferences are drawn: statistical, causal, construct and/or generalizations (Cook & Campbell, 1979; Kleven, 2008; Lund, 2005).

In the discussion section on methodological considerations, I assess each of the three studies (Paper 1, Paper 2, Paper 3) through the lens of this validity system. Additionally, when assessing the validity of the qualitative part of the thesis (Paper 3), I consider credibility, transferability, dependability and confirmability, which are criteria that Lincoln and Guba (1985) developed to assess trustworthiness. The goal is to determine whether a validity system developed for qualitative research sheds light on further threats to validity.

### **3.4 Ethical considerations**

Ethical considerations should cover all parts of the research process; planning, carrying out and reporting. The research was conducted in accordance with the general rules and standards prescribed by the Norwegian Data Protection Authority and The Norwegian National Committees for Research Ethics (NESH, 2006). Two central principles are participation based on informed voluntary consent and confidentiality (Kleven, 2011; NESH, 2006). The publications included in this thesis adheres to the ethical guidelines for scientific publications set by American Psychological Association (2010).

The survey data used in Papers 1 and 2, the quantitative studies, were part of comprehensive research designs conducted by the CBR. The Norwegian Social Science Data Services approved the content of the questionnaires and the specific procedures for providing information and receiving consent from school authorities, school boards, parents and pupils. All participation was voluntary and based on informed consent. The respondents knew that they could withdraw at any moment. All relevant parties received information about confidentiality. Information gathering was conducted in accordance with relevant standards, and actions were taken to ensure confidentiality during the whole process. Details are presented in the Papers 1 and 2.

The case study also ensured voluntary participation. The workshop where we collected the data was arranged for dual purposes. The informants were invited to participate in presentations and discussions on a defined topic, and they all gave a presentation. They all kept the right to publish their own stories and models, whereas the research centre retained the right to conduct research based on the cases in sum. The participants gave their consent to this agreement. Both the researchers and the participants benefited from taking part in the workshop because experts in a field of common interest attended the meeting. An ethical issue was the anonymity of the informants and of the third parties included in examples that the participants referred to in their presentations. Paper 3 did not communicate information that could lead to the identification of schools, teachers, or pupils. The informants were not mentioned by name, place of residence or place of work. Nevertheless, a well-informed reader might be able to guess the identity of some of the participants. The substantial information presented in the paper does not give clues that would allow one to make

connections between a possible informant and specific information. Furthermore, I endeavoured to present every point of view respectfully and to avoid favoring any approaches or strategies. None of the participant should risk damage to their professional reputation by giving us access to information.

Generally, descriptive research within the field of education are sometimes transformed into normative statements. Knowing “*what is*” does not mean knowing “*what should have been*”. Undoubtedly, practical advice deduced from connections revealed in descriptive research can lead to improved practice. However, the logic from descriptive to normative statements is not in itself a scientific step (Hjardemaal, 2011). Rather it builds on pragmatic use of research to achieve aims and values over and beyond researchable issues. Especially in practical fields as complex as education, presenting such steps as seemingly logical, may blur the values, policy or political issues that are incorporated in the prescription of practice. This precautionary message applies to researchers, policymakers, and practitioners.

With this comment in mind, I mention a result in this thesis that calls for concern regarding how it is presented, discussed and applied. According to Paper 2, teachers should know that every time they meet a new class, some pupils might be prone to detecting their weaknesses and perhaps in gaining social power in the class at the cost of others’ powerlessness. Hence, these pupils may be a threat to the teacher’s ability to achieve authority and leadership in the class. Knowing this may motivate teachers to carefully plan a good start and optimize the establishment of leadership. However, the knowledge could, instead, make some teachers behave offensively towards possible enemies among the pupils or inappropriately focused on defending themselves against pupils, which could lead to inappropriate teacher-pupil relationships. Ethical responsibility implies presenting research results in ways that do not draw a picture of pupils as the teachers’ enemies.

## 4 Results

In this section, I present the main findings of the three studies included in the thesis.

### 4.1 Summary of Paper 1

Vaaland, G. S., Idsoe, T., & Roland, E. (2011). Aggressiveness and disobedience. *Scandinavian Journal of Educational Research*, 55(1), 1-22.

The aim of this study was to conceptualize disobedient behaviour within a more general framework of antisocial behaviour and to reveal relationships between two forms of aggressiveness and disobedience. Disobedience, in the context of this article, refers to disruptive pupil behaviour or discipline problems when the pupil is aware of breaking a standard set by the teacher. To answer RQ 1, we tested a concept of disobedience that was consistent across gender and did a CFA in which all parameters were constrained to be equal across gender. The chi square test was significant, as expected due to the sample size. Model fit was fair but improved by allowing the residuals of two items to correlate. These items regarded offensive provocation of the teacher, and it seemed reasonable that they had something in common that the other indicators of the construct did not share. Factor loadings were all above .72, and all the estimated parameters were significant at the 1 % level. The CFA model demonstrated good fit to the data. No particular problems were found in the factorial validity of disobedience.

The next step was to analyse whether disobedience would stand out as a construct discriminant from other constructs of antisocial behaviour. We performed a CFA with disobedience, bullying others and covert antisocial behaviour. All parameters were constrained to be equal across gender. The three latent variables were allowed to correlate, and variation was not constrained to be equal for boys and girls. All estimated parameters were significant, and the model fitted the data well. As expected based on theory, the three latent constructs correlated with each other. A one-factor solution was tested but then rejected because that model did not fit the data well and a chi-square difference test proved a significant reduction in goodness of fit.

Based on these analyses, we concluded that the concept of disobedience was distinct from but correlated with other constructs of antisocial behaviour.

A CFA with all indicators of the aggressiveness variables and disobedience revealed no problems of validity, and the model fitted the data well. RQs 2, 3 and 4 were answered by estimating the parameters of the measurement model and the structural model simultaneously. Fit indices showed close fit to the data both for the model in which the structural parameters were constrained to be equal across gender and for an unconstrained model. A chi-square difference test showed significant improvement in the goodness of fit of the unconstrained model, implying that gender moderates the effects of aggressiveness on disobedience. Reactive aggressiveness, proactive power-related and proactive affiliation-related aggressiveness predicted disobedience in both boys and girls. In total, the aggressiveness variables predicted nearly equal amounts of disobedience in boys and girls. Explained variance of aggressiveness on disobedience was 41 % in boys and 40 % in girls. However, differences between genders were evident when subtypes of aggressiveness were considered.

## **4.2 Summary of Paper 2**

Vaaland, G. S., & Roland, E. (2013). Pupil Aggressiveness and perceptual orientation towards weakness in a teacher who is new to the class. *Teaching and Teacher Education*, 29, 177-187.

The aim of this study was to investigate possible relationships between reactive and proactive aggressiveness in pupils and the extent to which pupils seek information about the weaknesses of a teacher who is new to them. To answer RQ 5, we first developed a construct and its measurement, namely, perceptual orientation towards weakness in a new teacher. The theoretical framework of social information processing developed by Crick and Dodge (1994, 1996) served as a reference for the construct. In the measurement development, a CFA with ten statements about signs to look for in new teachers was investigated. The items covered signs of weaknesses and signs of other characteristics of a teacher in an attempt to test discrimination between factors. Multiple-group CFA was applied with boys and girls as the two groups. The modification index showed that model fit could be improved by allowing the residuals of two items



to correlate. The items concerned teacher competence in teaching, and after inspecting all the items, we found it reasonable that these two statements could have something in common that was not shared by the other indicators of the construct. Correlations between the two residuals were freed up, and the modified model showed fair fit to the data. Standardized factor loadings were all above .64, and all estimated parameters were significant at the 1 % level. Model fit supported a two-factor solution with five items reflecting positive teacher qualities and five items reflecting weaknesses. Internal consistency proved good, and the two factors correlated as expected ( $r = -.26$  ( $p = .000$ ) for boys and  $-.31$  ( $p = .000$ ) for girls).

Scales modified from those developed by Roland and Idsoe (2001) measured reactive and proactive aggressiveness. The modification attempted to achieve more systematic wording of the items. As thoroughly described in Paper 2, all the steps applied to evaluate the modified scales confirmed the modification.

To answer RQs 6, 7 and 8, we estimated the structural model by applying the multiple-group framework (Jöreskog, 1993). Factor loadings were constrained to be equal across groups. By modelling girls and boys as distinct groups when estimating structural relationships between aggressiveness and PO-weak, we were able to compare model fit in a constrained versus an unconstrained model. A model with structural parameters constrained to be equal across gender yielded fair fit to the data. An alternative model with no restrictions in regard to variance in structural parameters across groups also demonstrated fair fit to the data. The model with free parameters did not improve the goodness of fit; thus, the answer to RQ 8 was that gender did not moderate the effects.

Paper 2 reported that reactive aggressiveness was weakly but significantly related to both boys and girls' tendency to look for signs of weakness in a new teacher. Beta values .14 (boys) and .18 (girls) were small. As reported in the method section, 2.1.4, the association between reactive aggressiveness and perceptual orientation in boys was not significant after the clustering of the data were controlled. This answers RQ 6. The relationship between proactive aggressiveness and perceptual orientation of weakness in new teachers was substantial and significant for boys and girls, which answers RQ 7.

### **4.3 Summary of Paper 3**

Vaaland, G. S. (Submitted). Back on track; Approaches to managing highly disruptive school classes.

The main purpose of this study was to develop concepts and conceptual frameworks that could be suitable for describing, analysing and discussing interventions in highly disruptive school classes. In this study, a highly disruptive class is defined as a class in which the frequency and intensity of disruptive behaviour by a number of its pupils significantly affect the teacher's well-being and productive teaching and learning and the condition persist for a long period.

Within-case analyses were conducted to reveal core issues in each case. The results showed common core issues across cases and thus answered RQ 9. Still, the cases did not recommend common solutions to the challenges. Cross-case analyses indicated that some of the core issues were approached within axes regarding working location, tempo for inducing changes, targets for change and perspective followed in choosing approaches. This result provided an answer to RQ10. The final cross-case investigations were conducted to confront each case with these axes. These investigations answered RQ11. A conceptual framework indicating two main strategies for approaching highly disruptive classes was developed. The strategies came from the patterns illustrated by how each case placed itself on each axis. One was a cognitive strategy that appealed to pupils' rationality and responsibility and included teaching and training rules and skills combined with raising pupils' consciousness regarding their roles and responsibility in the class. The other was a social systems strategy based on the perspective of the class as a group in which social power had been transferred from teachers to some pupils. Changing the system implied a power take-over on behalf of the teacher.

## **5 Discussion**

The results of the studies included in this thesis are addressed separately and summarized in section 4 and in each of the three papers enclosed. The introduction outlined a theoretical platform for discussing pupil aggressiveness, disobedience/disruptive pupil behaviour, and teacher authority. I start the discussion by considering methodological issues relevant to the outcome of the studies. Next, I elaborate on the findings related to the research questions presented in each paper and theory. Then, an overall discussion follows. Finally, I comment on implications and future directions.

### ***5.1 Methodological considerations***

In this section, I first comment on methodological issues regarding the two quantitative studies (Papers 1 and 2) before discussing questions related to the qualitative case study (Paper 3). Finally, I discuss validity.

#### ***5.1.1 Considerations regarding the quantitative studies***

##### ***Data based on self-reports***

Papers 1 and 2 build on survey data from pupils' self-reports. Variation in individuals' traits such as negative affectivity and acquiescence may lead to reporting biases (Spector, 2006). Another topic regarding critics of self-reports of behaviour that is of special interest to our studies, is possible biases related to social desirable and socially non-accepted attitudes and behaviour, and the tendency to over-report the first and under-report the second (Spector, 2006; Thornberry & Krohn, 2000). The surveys providing the data examined in this thesis imply risks for both tendencies: yet the main risk is the underestimation of antisocial behaviour and aggression.

Thornberry and Krohn (2000) studied the use of self-reports in the field of criminality; these instruments requested that individuals provided information about their own undetected criminality. Despite such challenges, the authors concluded that self-reports seem "to be successful and capable of producing valid and reliable data" (Thornberry and Krohn, 2000, p. 71). The detection of

the behaviour investigated in our studies results in less serious consequences. According to Loeber and colleagues (Loeber, Green, Lahey, & Stouthamer-Loeber, 1991), high correlations are generally found between youth and teacher reports of conduct problems. Yet, less agreement is found regarding oppositional behaviour, with pupils reporting a lower prevalence than teachers (Loeber, Green et al., 1991). In the case of this thesis, we measured disobedience by use of behavioural indicators. Behavioural indicators connected to motives measured aggressiveness, and statements about perceived tendency in selecting information measured perceptual orientation. Self-reports of antisocial behaviour are discussed yet widely accepted (Goodman, Meltzer, & Bailey, 2003; Moskowitz, 1986; Schwartz, 1999; Stockdale, Hangaduambo, Duys, Larson, & Sarvala, 2002). The use of self-reports should be even more relevant when aggressiveness and perceptual orientation are concerned. Self-reports are relevant because aggressiveness includes a motive that is not directly observable (Raine et al., 2006) and perceptual orientation is not observable but, rather, aims to measure the person's own perceived tendency. Generally, investigations of prevalence would be vulnerable to reporting biases. Because our main aim was to investigate the associations between aggressiveness and disobedience (Paper 1) and perceptual orientation (Paper 2) rather than to assess prevalence, we believe that the inferences regarding the relationships are valid to the extent that they provide important information.

### ***Cross-sectional design***

The results presented in Papers 1 and 2 build on quantitative cross-sectional designs utilizing self-reports. In such designs, common method variance (CMV) may be a concern. CMV is “variance that is attributable to the measurement method rather than to the constructs the measures represent” (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003, p.879), and it might cause systematic measurement errors that either inflate or deflate the observed relationships between constructs. We used surveys in which the same person rated the dependent and the independent variables in the same measurement context. According to Podsakoff and colleagues (2003), this may result in systematic measurement error. Cote and Buckley (1987) conducted a study that examined the amount of common method variance present in measures across studies in different fields, including education and psychology, and showed that

approximately 26.3 % of the variance in a typical research measure might be a result of systematic measurement error such as common method biases. Hawker and Boulton (2000) investigated mean effect sizes in studies with shared method variance and found an average effect of .11 (ranging from .04 - .18), which was higher than the effect sizes without shared method variance. By contrast, researchers such as Spector (2006) and Lindell and Whitney (2001) noted that the problems caused by CMV tend to be overstated. Spector stated it that the notion that everything measured with the same method shares CMV is an “urban legend”. He did not set aside the challenges of CMV but, rather, recommended replacing the term and idea with “a more complex conception of the connection between constructs and their assessment” (Spector, 2006, p. 228). We cannot rule out any possible influence of CMV-related biases in our data. However, we did not intend to investigate causality, which is vulnerable to biases when the same rater uses the same measurement at one time to measures prediction and outcome variables. Additionally, we did not primarily measure prevalence, which is also sensitive to this kind of bias. The main aim of our cross-sectional surveys was to investigate relationships between parallel phenomena. If the associations reported in our studies are deflated due to CMV, the conclusions still hold, and if connections are inflated, most of them are sufficiently strong to support our substantive conclusions. One exception might be the association between proactive power-related aggressiveness and disobedience in boys (Paper 1). Still, the strength of all the relationships should be interpreted with the contributions of the methodological research on CMV in mind (Cote & Buckely, 1987; Hawker & Boulton, 2000; Lindell and Whitney, 2001; Podsakoff et al., 2003; Spector, 2006).

### *5.1.2 Considerations regarding the qualitative study*

I chose a qualitative instrumental multi-case design in an attempt to induce concepts and conceptual frameworks that could be used to describe, discuss, and compare approaches to managing highly disruptive school classes. As results showed, this approach succeeded in that it resulted in a conceptual framework. Yet, we should ask whether other designs and methods would have been more appropriate and, if so, whether they would have led to other conclusions.

***Unit of analysis, information, information gathering***

A case study is not a method; rather, it is a research strategy that includes different designs and often combines qualitative and quantitative methods (Eisenhardt, 1989; Stake, 2005; Yin, 2009). In the case study presented in Paper 3, the data source was planned presentations and discussions during a workshop. This may represent a weakness in that our only source of information was spoken presentations and the only informants were the chosen experts. An alternative source, such as interviews with experts, could have been used. Additionally, we could have interviewed school principals and teachers that the experts had worked with, conducted field studies in schools during a turnaround project and likely engaged in other things as well. If time and resources for data gathering and analyses were unlimited, we could consider supplementing the study with other kinds of data and other informants.

More importantly, however, such data would not necessarily provide better answers to our research questions. Data collected from different informants within a school could be used to answer questions such as “what did the experts do?”, “what obstacles did they meet?”, “who did they cooperate with?”, “how did it work?”, “what results were achieved?”, and so forth. These are interesting questions but were not investigated in our study. Consequently, we determined that the usual recommendation of using multiple data sources and studying cases in their natural context (Yin, 2009) did not serve the purpose of our study. Some scholars have stated that case studies should not be limited to contemporary phenomena or real-life contexts (Woodside & Wilson, 2003).

Yet, some reflections are needed regarding our choice to use presentations rather than interviews to gather information. Compared with lecturing, interviews have the advantage of being a well-established method for collecting data (Eisenhardt, 1989; Yin, 2009). Furthermore, semi-structured interviews allow for follow-up questions, which can give access to useful information and enable the interviewer to clear up misunderstandings and thoroughly delve into issues of special interest or relevance (Kvale & Brinkmann, 2009). Thus, interviews (instead of the lectures used) could have led to differences in the data, which could have led to conclusions other than those we achieved. An interview setting often includes only the interviewer and the informant, potentially resulting in less stress for the informant. Our informants performed

in front of an audience, but all of them were experienced lecturers and participated due to their own interest in meeting with others addressing similar challenges. The workshop was primarily planned as a means for participants to learn from experience by presenting different approaches and discussing them together. This was the experts' workshop. The researchers had a double aim, which was known to all; however, the research purpose did not imprint the arrangement. By filming the presentations and discussions, we could have retained all information from the workshop throughout the whole research project. Thus, filming would have enabled us to re-listen or review, check information several times etc. Filming was considered in advance, but we dismissed the idea because we thought that filming could cause the participants to experience stress and thereby influence the data negatively. Moreover, the workshop's usefulness for the experts would have decreased as well.

In interviews, and in our workshop, informants may tend to give the information that he or she believes is in line with the researcher's expectations (Kvale & Brinkmann, 2009; Lincoln & Guba, 1985). After thoroughly considering whether our chosen workshop approach could have increased the risk for adjusted responses, we cannot see any evidence to support this possibility. Based on the research team's observations during the workshop, all the presentations seemed well prepared in advance, indicating that they could hardly have been heavily adjusted while the experts listened to others. Additionally, the presentations varied regarding both style and substance. We cannot confidently state whether and the extent to which the informants prepared their lectures to satisfy expectations they attributed to the NCLBR researchers. One reason to suggest they did not do this is the variance that occurred and the engagement and curiosity that characterized all the participants. In addition, the research centre did not have an established practice for class turnarounds in highly disruptive classes, implying that the researchers' views were not commonly known. However, we cannot guarantee that the professional perspectives of the researchers did not influence the informants before or during the workshop, although we did not detect any indications of such bias.

One advantage of using prepared presentations was that the information was organized in advance and, thereby, less susceptible to other information shared during information gathering. Moreover, the lecturing format gave each

informant the opportunity to thoroughly consider what he wanted to highlight, question, recommend, and so forth. The most important aspects of the turnaround models were likely better expressed in a planned presentation than in a dialogue led by an individual who did not know the logic of the approach. Important information could get lost because the interviewer would have to make decisions about when to follow up and when to leave an issue. Most importantly, we regard the planned presentation as the best way to collect data on mental models in the extremely complex field that was the topic of the study.

The unit of analysis was aggregated experience presented as models or guidelines for approaching highly disruptive classes. According to Woodside and Wilson (2003), the focus of a case study can be to describe, understand, predict or control a unit. They also broadened the focus by underpinning that deep understanding, which is the principal object of case studies (Yin, 2009), should include knowledge of sense-making processes, systems thinking, policy mapping and systems dynamics modelling. They also introduced meta-sense-making as an interesting strategy for reaching deep understanding. Given the fact that deep understanding is an aim, informants' mental models are interesting. Mental models can describe what typically occurs in a process, describe what actually occurred in a given process, or give a normative description of what a person thinks should have occurred in a process, and, finally, detail a person's perception of how other persons generally understand details in a process being investigated (Wooside & Wilson, 2003). We regard the concept of mental models as useful and related to the focus of our research, in which the informants presented modelled processes in which they were active participants and were asked to make their mental models explicit and present a kind of a normative meta-model.

### *Selecting cases*

We did not choose the cases randomly. We followed the guidelines of Eisenhardt (1989), who discriminated between random and theoretical sampling and highlighted the importance of defining the population before identifying cases. Defining an appropriate population increases the researchers' possibility to control extraneous variation and define the limits for generalizing the results of the study. Our population was all externally led or supervised approaches conducted in Norwegian schools to bring highly disruptive classes



back on track. Our selection of cases was similar to theoretical sampling, which aims to “choose cases which are likely to replicate or extend the emergent theory” (Eisenhardt, 1989, p. 537). We also looked to the strategy of information-oriented selection described by Flyvbjerg (2011). The purpose of this strategy is to maximize the utility of information from small samples and single cases. This implies the selection of cases based on expectations about their information content. Flyvbjerg (2011) described the information-oriented strategy with four sub-categories for selection: a) extreme/deviant cases, b) maximum variation cases, c) critical cases and d) paradigmatic cases. The strategies are not mutually exclusive (Flyvbjerg, 2011), and our selection touched criteria from more than one of these sub-categories. Selection based on paradigmatic cases serves the purpose of developing a metaphor or establishing a school for the domain that the case concerns (Flyvbjerg, 2006). This corresponds with our interest in identifying cases from which we could induce concepts and frameworks. Of course, a problem may arise in identifying a case as paradigmatic or giving it prototypical value when no paradigm is defined (Flyvbjerg, 2006). Because the case study aims to allow the paradigmatic case(s) to set the standard, no standards exists for the selection of those cases. We can suggest that our cases were paradigmatic because they led to success in schools struggling with classes that were out of control. As our cases seemed to solve problems, it was worth investigating them as relevant for developing a standard. In our study, the standard is described as a tentative framework including two strategies. Consequently, we attempted to avoid diversity regarding positive results from the turnarounds. In other respects, we were interested in cases with maximum variance. One aspect of variance in our study was that different persons had developed the approaches towards highly disruptive classes. These persons had different bases for the approaches they developed due to their education and professional experience. We added one case to our original sample because we had reasons to believe that it represented a deviant case in some ways. It was unusual in at least two ways: it was a modelled turnaround that had been practiced for a long time and it was quite standardized even though it had been implemented under different circumstances. Another reason why we studied these cases is the plain practical or pragmatic argument: we knew them and they were related to experienced practitioners that we knew had a good reputation regarding this kind of work.

Consequently, we selected based on convenience because few other cases were available.

### ***Analyses***

I chose to structure the analyses according to the guidelines for inducing theory from case study research developed by Eisenhardt (1989). One reason for this decision was Eisenhardt's experience in and contribution to the field of organizational research (See e.g. Bourgeois & Eisenhardt, 1987; Eisenhardt 1989; Eisenhardt, 1990; Eisenhardt & Bourgeois, 1988; Eisenhardt & Sull, 2001; Eisenhardt & Zbaracki, 1992). Thus, I considered school classes a relevant topic within this research approach. Moreover, organizations, groups, and processes are relevant units of investigation in case studies (Woodside & Wilson, 2003). A school class is a group that can also be considered an organization. We focused on changes within the class, ergo processes in a group or an organization. Second, the guidelines she described and recommended (Eisenhardt, 1989) seemed meaningfully applicable to our data. We especially appreciated the thorough description of cross-case analysing techniques that she developed with Bourgeois (Eisenhardt, 1989; Eisenhardt & Bourgeois, 1988). A substantial amount of the literature on case studies discusses designs and reports more thoroughly than analyses (Eisenhardt, 1989). We structured our data analyses according to Eisenhardt's roadmap for systematic and replicable analyses.

The literature on case studies recommends using multiple methods to collect data. An advantage of this procedure is that it provide a better substantiation of constructs and hypotheses because several data collection methods are used (Eisenhardt, 1989). This issue is discussed above. In addition to recommending method triangulation, Eisenhardt recommended researcher triangulation for at least two reasons. First, it enhances the creative potential of the study because members of the research team often have complementary insights and different perspectives. This increases the likelihood that novel insights that can be gained from the data will be revealed and utilized. Second, the confidence in the findings enhances when multiple researchers' observations converge. Furthermore, conflicting views within the research team may lead to new iterations and analyses that add value to the study (Eisenhardt, 1989). Our study involved three researchers who performed different roles. All participated in

the workshop where the data were collected. Two wrote the report that captured the essence of the information presented by the informants. One researcher did not take part in the analyses but read thoroughly through the draft of Paper 3 to assess whether the analyses and conclusions seemed to be consistent with the data collected, in other words, whether the data contains evidence of the results. One researcher (the author) first structured the data and carried out analyses with reference to the chosen roadmap. All analyses, results and reports were continually discussed with the third researcher on the team. Both convergence and conflicting perspectives arose during this process. New iterations were part of the process. Given that experience of our group, it is easy to adopt the recommendation about researcher triangulation. In our research project, we could have made such triangulation more predictable by differentiating the researchers' roles more precisely in advance.

A natural starting point for analyses is within-case analysis. According to Eisenhard (1989), it is useful to make detailed and pure descriptive write-ups for each site. During this process, the researcher becomes close to the information and intimately familiar with each unique case. Substance and patterns that exist within a case become visible before the cross-case analyses begin. In our study, the report that we wrote after the workshop was similar to the write-ups that Eisenhardt described. Becoming familiar with each case as preparation for cross-case analyses is also of great value.

A key to good cross-case analyses is examining the data in divergent ways and from different points of view. This aids in avoiding information processing biases (Eisenhardt, 1989). Such analyses strategies push the researcher to go beyond his or her initial impressions and obtain more information from the cases by viewing them through different lenses. As Eisenhardt underlined, "These tactics improve the likelihood of accurate and reliable theory, that is a theory with a close fit to the data" (Eisenhardt, 1989, p. 541). The steps that we followed in our cross-case analysis were taken from Eisenhardt's roadmap; these steps were useful and helped us systematically and constantly compare our hypotheses, concepts and framework with the data.

An important element of theory building from case studies is comparing the emergent concepts and frameworks with established theory, and Eisenhardt (1989) recommended a broad range of theories. We delimited the literature that

we compared with the framework that emerged from our analyses. This limitation was necessary because the volume of relevant and interesting literature was far too comprehensive to manage within a reasonable time. I chose to consider two perspectives of classroom management that are of current interest to schools in Norway. We could have broadened the discussion to include theories of aggression, consultation, leadership, school improvement, organizational development, and more. Due to the need to impose limit we prioritized maximum relevance.

### ***Evaluation***

According to Eisenhardt (1989), there are no generally accepted procedures for assessing case studies conducted for theory building purposes. Yet, she posted three criteria that we used to assess our study.

First, when the goal is to develop or start to develop a theory, assessment should consider whether the study contributes to this aim. Theory should emerge at the end rather than at the beginning of the study, and good theory is parsimonious, testable and logically coherent (Eisenhardt, 1989). Given the aims of our study, namely, to reveal core concepts and possible frameworks for describing turnarounds in highly disruptive classes, we did not expect the study to result in a complete theory. However, the results arising from the data seemed meaningful in terms of being reasonably accurate in describing central issues in turnaround operations. They are not meant to describe how to actually perform an intervention; rather, they should provide concepts that can be used to discuss, compare and analyse some important aspects of such approaches. Regarding coherence, the suggested framework leading to the description of two main strategies for turnarounds, shows relationships between concepts, and a tentative coherent picture emerges. It is revealed as a result of the analyses run in the study and, consequently, appears at the end of the study. These results are testable, although they are not final in terms of a stringent and logically coherent theory. More work is required, and new data must be collected to test, revise and further develop the framework that we suggest is a useful starting point to gaining knowledge about how we can describe, understand and compare turnarounds in highly disruptive classes. Consequently, the study contributes to the development of a theory by providing concepts and frameworks for new studies.

Second, we assessed the quality of the methodological work, which is presented in the discussion about validity.

Third, theory building research should result in new insight, and we claim that our study provide such insight. The framework that emerged is new and is likely useful as a tentative theoretical perspective to observe, analyse, discuss and compare approaches to managing highly disruptive classrooms.

### ***5.1.3 Validity***

In the method section, I introduced the validity system developed by Cook and Campbell (1979; Shadish et al., 2002) as the system employed to discuss validity. In the following, I discuss validity in the three papers through the lens of the four elements of the validity system. I discuss the two quantitative studies (Paper 1 and Paper 2) together because of their many parallels before I discuss validity related to the qualitative study (Paper 3).

#### ***Statistical validity***

Statistical validity regards the validity of inferences about covariation between variables and whether they are trivial or worthy of substantial interpretation (Kleven, 2008).

In Paper 1, the results showed a substantial and significant relationship between reactive aggressiveness, proactive power-related aggressiveness and proactive affiliation-related aggressiveness, as independent variables and disobedience to teacher, as the dependent variable. The structural relationships were estimated for boys and girls, respectively; thus, six beta values were estimated. Except for one of the beta-values, variation ranged from .20 to .40, all significant at the 1 % level; we consider these values to be worthy of substantial interpretation. The exception, beta .14, which was significant at the 5 % level, represented the association from proactive power-related aggressiveness to disobedience in boys. The relationship was significant but weak, influencing statistical validity negatively. Additionally, the significance level of this beta value was lower than that of the others. This is not to say that the inference about proactive power-related aggressiveness' relationship with disobedience is not valid but, rather, that its statistical validity is weakened when boys are considered. The

possibility of a type I error should be taken into consideration until replication studies are performed.

Of course, the statistical validity of the conclusive inferences depends on the statistical calculations performed prior to the estimates of the structural model (Kleven, 2008). Unreliable measures imply a threat to construct validity and affect statistical validity by causing errors in measured relationships between two or more variables (Shadish et al., 2002). In Paper 1, we considered the reliability of all measures to be satisfactory. Generally, latent variable modelling of several observed measures can be used to parcel out true scores from error variance (Shadish et al., 2002). Previous calculations included CFA and correlational analyses. Overall, the results showed significant and substantial values, and no threats to statistical validity were detected.

In Paper 2, we made inferences about associations between aggressiveness and perceptual orientation towards weakness in a teacher that is new to the class. The paper reported that both reactive and proactive aggressiveness showed significant relationships with perceptual orientation. Although the results were significant at the 1 % level, the strength of the associations was weak for reactive aggressiveness, .14 for boys and .18 for girls. Gender difference was not significant. Consequently, statistical validity is challenged when possible associations between reactive aggressiveness and perceptual orientation are concerned. A serious threat to validity was revealed through analyses that controlled for clustering in the data, ref. section 3.1.4. The substantially weak parameter in the group of boys lost significance and, thereby, statistical validity. Consequently, the reported estimate represented a type I error (Gall, Gall & Borg, 2007). The relationship held for girls; yet, statistical validity was threatened due to low estimates, and demand careful interpretation. Replication studies of associations between reactive aggressiveness and perceptual orientation towards weakness are needed before the probability of type I error or type II errors (Gall, Gall & Borg, 2007) is satisfactorily ruled out. The substantive discussion of this issue is, therefore, preliminary and tentative.

When the relationship between proactive aggressiveness and perceptual orientation was considered the statistical validity was good due to the beta values of approximately .40, significant at the 1 % level.

All the parameters assessed prior to the structural model in Paper 2 had significant and substantial values. Reliability was good and did not threaten the statistical validity of the conclusive inferences.

***Internal validity***

Internal validity concerns inferences from an observed covariation to a causal interpretation, implying that a factor is influenced by another factor (Kleven, 2008). The cross-sectional design of the studies (Papers 1 and 2) does not facilitate the investigation of causality. However, some reflections are useful. Kleven (2002) discussed internal validity in non-experimental designs and suggested that researchers carefully discuss possible causality even though no evidence for inferences regarding causality can be stated.

In Paper 1, good model fit was found for relationships between different types of aggressiveness and disobedience. However, other models that we did not estimate may display an equally good or better fit to the data (Diamantopoulos & Siguaw, 2000). Alternatives to a causal relationship include a common third factor that influence both variables or the two variables may influence each other. The cross-sectional design does not investigate possible causality, and we can draw no valid inferences about the direction of influence between aggressiveness and disobedience.

In Paper 2, a model in which aggressiveness was connected with a perceptual orientation towards weakness in a new teacher fit the data well. Again, we must have in mind the fact that other models with equal or even better fit to the data may exist (Diamantopoulos & Siguaw, 2000). We did not employ a longitudinal design or have data showing how each of the variables develops, the stability of their relationship over time, etc. In short, data were not collected to provide answers regarding causal relationships. The relationship seems clear, yet neither the existence nor possible direction of causality is given. The relationship might exist due to a third factor from which they are parallel outcomes. An alternative interpretation is that pupils with unpleasant, unfair or traumatic experiences with teachers exhibit increased aggressiveness and get into a fight-modus to prepare themselves for a potential risk when meeting new teachers.

Some relationships between variables have high probability regarding causality based on theory. A significant relationship between aggressiveness as a trait and aggressive behaviour is an example. The probability is high that a personal trait is present prior to behaviour. This expectation could apply to the relationship from aggressiveness to disobedience. Still, correlation does not confirm causality. In Paper 2, we found that aggressiveness was connected to a phenomenon that we considered to be an aspect of the trait or a social or psychological correlate of the trait. In this perspective, causality is not a main issue. With reference to theory, it is reasonable to suggest that the more general trait of aggression implies the more particular trait of perceptual orientation towards weakness in a teacher. It is more a question of superior level (aggressiveness) and subordinate level (perceptual orientation towards weakness). One may consider this relationship in light of causality; yet, there is no difference in time between reason and effect. We found no theoretical reason to anticipate that one of the variables preceded the other, which would be necessary to infer causality (Shadish et al., 2002). Perceptual orientation is considered a way the trait of aggressiveness manifests in particular situations. However, these assumptions were not confirmed by the data analyses or from the design; instead, they are based on theory and their validity depends on the theoretical assumptions. Consequently, we should differentiate between the relationships that regard reactive versus proactive aggressiveness. As presented in Paper 2, we did not have a clear and convincing theoretical rationale for the relationship between reactive aggressiveness and perceptual orientation towards weakness in a new teacher. This relationship was further weakened when clustering in the data were controlled. Therefore, we suggest no interpretations of causality from reactive aggressiveness in this matter. When proactive aggressiveness was considered, the paper presented a much clearer rationale for expecting and explaining the relationship, and a careful and tentative suggestion can be drawn.

### ***Construct validity***

Construct validity concerns inference from indicators to constructs, e.g. from what we have observed to what we label what we have observed (Kleven, 2008; Shadish et al., 2002). This encompasses both independent and dependent variable, and procedures for collecting data, often also described as questions of reliability. Messick (1995) developed a unified framework for validity to



discuss measurement issues. Within this framework, “Validity is an overall evaluative judgement of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of interpretations and actions on the basis of test scores or other modes of assessment” (Messick, 1995, p.741). This implies that validity depends also on the degree to which test scores actually reflect the theoretical construct of interest. The constructs of greatest interest in this thesis are disobedience and perceptual orientation towards weakness in a new teacher because these are new constructs. Issues regarding construct validity were thoroughly addressed in Paper 1 for disobedience and in Paper 2 for perceptual orientation. Each paper also discussed issues of the validity of the independent variables. The validity of the independent variables was found to be good in other studies (Roland & Idsoe, 2001), and theoretical reflections and measurement models confirmed the validity of these measures in our samples.

As outlined in the method and results sections, the scales measuring aggressiveness were modified for use in the second study. The new measures were employed to more precisely operationalize the theoretical concepts. As described in Paper 2, both factor analyses and correlations with other constructs gave the expected results.

As previously mentioned, problems with reliability may cause problems with construct validity (Shadish et al., 2002). The measures in the studies reported in Papers 1 and 2 did not display unreliability. We assessed the internal consistency of each variable using Cronbach’s alpha. Values ranged from 0.67 to 0.95. Cronbach’s alphas of 0.7 and above are typically considered sufficient for reliable measures (Nunnally & Bernstein, 1994). In Paper 2, two alpha values were below 0.7, namely, those for bullying and reactive aggressiveness in girls. Bullying was used to test the validity of the dependent variable, disobedience. Reactive aggressiveness was an independent variable in the structural model. The measures of bullying and reactive aggressiveness were based on instruments that had been validated several times in other samples. We consider the measures to hold acceptable reliability.

In sum, the construct validity was good in both quantitative studies. However, the empirical and theoretical novelty of the construct of perceptual orientation

should be interpreted with caution, implying a certain reservation regarding the level of construct validity.

***External validity***

External validity concerns the inferences from the context of the study to a wider context or to other contexts (Kleven, 2008; Shadish et al., 2002). In our studies, the question regards the stability of the estimated relationships across units and settings. In our case, units are pupils and settings are classes and schools. I assess external validity in the two studies separately because of differences in sample sizes and sampling methods.

The study presented in Paper 1 builds on a sample that is representative according to the Norwegian Central Bureau of Statistics' standards (Statistics Norway, 1994). The sample is large (N=2083) and the response rate is good, 85 %. However, generalizability should take into consideration that 15 % did not participate, especially when measures of prevalence are concerned. Estimates of associations between variables are supposed to be less vulnerable in this matter. Missing data were handled by the listwise deletion procedure in Lisrel, which demands missing completely at random (Peugh & Enders, 2004). This procedure is criticized for several reasons: It may cause considerable loss of statistical power due to reduction of sample size when cases are deleted from an analysis (Peugh & Enders, 2004; Schlomer, Bauman & Card, 2010). Furthermore, the procedure may lead to biased results when the missing completely at random condition is not satisfied (Peugh & Enders, 2004; Schlomer et al., 2010), which may apply to our study. However, Graham states that "if the loss of cases due to missing data is small (e.g., less than about 5 %), biases and loss of power are both likely to be inconsequential" (Graham, 2009, p. 554). In our study, the missing rates were less than 2 %. Consequently, due to a large sample and low levels of missing we do not regard missing data to be an essential threat to external validity of the inferences in Paper 1.

Norwegian public schools include the absolute majority of adolescents, implying that our population comprises all Norwegian adolescents who are approximately 14 years olds. Keeping in mind the non-participating 15 % , I suggest that external validity is acceptable in this regard. Nevertheless, the relevance of the findings should be considered with reference to a larger

population, e.g., all secondary school pupils in Norway, or an even broader age group or pupils in schools outside of Norway. We do not have statistical proof for generalizing across individuals outside of the original population. Yet, according to Shadish, Cook and Campbell (2002), a lack of statistical significance should not eliminate an assessment based on theoretical and practical significance. According to Vitaro and Brendgen (2005), research is needed to investigate whether and how the reactive and proactive types of aggression differ across ethnicity. Thus, we should be careful in generalizing the result across ethnic groups. Empirical evidence may support a broadening across age due to the fact that social and psychological correlates of aggression seem to be reasonably general for the group of adolescents (Vitaro & Brendgen, 2005). Additionally, the relative stability of aggression (Huesmann, Eron, Lefkowitz & Walder, 1984; Loeber & Farrington, 2001; Olweus, 1979) also speaks to the stability of its relationship with associated behaviours within the group of secondary school pupils. This is anticipated to hold even though reactive and proactive aggression has its peak in about this age (Barker, et al., 2006; Vitaro & Brendgen, 2012). However, given the fact that the prevalence of discipline problems varies with age (Ertesvåg & Vaaland, 2007), we should be careful in generalizing the findings across a broader age span. Based on these considerations, I suggest that the external validity of a tentative value should hold across the age group of secondary schools and across countries with cultures relatively similar to the Norwegian culture. Given that the role and authority that teachers have in a society influence the relationship between aggressiveness and disobedience, we should avoid generalization across societies that differ in this matter. I leave this an issue for future research.

In our case, questions about generalizability across settings may regard whether associations between aggressiveness and disobedience to teacher apply to classrooms in general, teachers in general, or schools in general or if it holds only for the settings the respondent answers within. Although an individual pupil's amount of disobedient behaviour may vary across teachers, classrooms etc., the results revealed from 2083 pupils may catch general tendencies. Consequently, I hold that the external validity is acceptable within school settings. Another consideration is whether inferences about associations between aggressiveness and disobedience towards an authority can be generalized to be valid outside of a school setting. Pupils are individuals who

hold different roles in addition to their roles as pupils, and they relate to other formal authorities or leaders at home, in leisure activities, and in other formal settings such as part-time jobs, etc. Again, we have no statistically significant evidence to support generalization across settings outside of schools. Therefore, only reflections regarding practical and theoretical significance can be drawn (Shadish et al., 2002). As stated above, due to the relative individual stability of aggression, one can reasonably suggest that a tendency to act disobediently to authorities can be at least tentatively generalized across settings. Loeber's description of developmental pathways of antisocial behaviour, which includes a pathway described as authority conflicts (Loeber & Farrington, 2001), supports this suggestion.

In Paper 2, an association was found between pupil aggressiveness and perceptual orientation towards weakness in a new teacher. The sample is quite large and comprises 755 pupils (10<sup>th</sup> graders) from eight secondary schools in Norway. The response rate was good, 90,5 %, and no specific differences were known between those who participated and those who did not. Missing data were handled by the full information maximum likelihood procedure in Mplus, which is recommended because it utilizes all available information to compensate for the missing values (Graham, 2009; Peugh & Enders, 2004; Schlomer et al., 2010). The procedure demands that missing are missing at random (Peugh & Enders, 2004), a condition that was anticipated although not statistically controlled in our study.

However, comments about the sample must be noted. The study was conducted with a convenience sample, which cannot be considered representative. The statistics used, such as confidence intervals and tests of significance require random samples, which corresponds with some of the critics of convenience samples. However, the sampling type is defended and recommended for some reasons. Perla and Provost (2012, p. 171) argued that some research issues should be approached by use of convenience samples when "getting "just enough" data can guide our learning and subsequent testing". According to the authors, this is not only the most convenient and economical approach but, rather, conceptually and technically the most appropriate one. Issues covered by this argument concern learning about or improving specific processes or systems, which may apply to classrooms. Recognizing the limitations of

convenience samples, Highhouse and Gillespie (2008) argued that this type of sampling is likely the most common type because it is cost-effective but also because of its simplicity, informality and adequacy. Although convenience samples can be defended, interpretations should notice the limitations caused by such an approach. Despite the fact that the Norwegian society is considered egalitarian, with generally small differences between schools (Veland, Midthassel & Idsoe, 2009), our convenience sample results in limitations in external validity. Although no problems was detected, the possibility exists that the schools that accepted the invitation to participate are special in some way. This condition would threaten validity more if the prevalence or effect sizes of interventions were in question. However, due to the type of research question examined in our study, we consider the external validity to be reasonable as long as associations between variables are the issue.

Pupils taking part in the study attended their last year of secondary schools. Due to the reasonable stability of aggression at individual level (Huesmann et al., 1984; Loeber & Farrington, 2001; Olweus, 1979), it is not reasonable to assume that the associations detected in the study should be specific to only one year in adulthood, and I suggest that the results should be generalizable to at least pupils in secondary schools. The stability in individual social information processing patterns (Dodge, 2011) supports this. However, I recommend restricting further generalizations until replications of the study are performed, preferably in large and representative samples with a broader age group. This also applies to generalizations across settings, even though the theoretical arguments are strong for connections between proactive aggressiveness and perceptual orientation towards signs of vulnerabilities in others.

#### ***Validity in the qualitative study***

In the case study presented in Paper 3, the construction of knowledge occurred at two levels. First, the experts made modelled descriptions of the approaches they used to turn highly disruptive classes around. These models were abstractions of an accumulated practice that they organized to fit a presentation. Next, through within-case and cross-case analyses, a new construction appeared as a result of the research process. We do not question the validity of the first-level construction because this is the object of our investigation. The

knowledge constructed through our research is the centre of attention regarding validity.

In qualitative research, the question of validity has been discussed and solved differently by different researchers (Eisenhardt, 1989; Kvale & Brinkmann, 2009; Lund, 2005; Lincoln & Guba, 1985; Yin, 2009). As previously outlined, in this thesis, I apply the validity system developed by Cook and Campbell (1979) and Shadish, Cook and Campbell (2002) to the qualitative study. This corresponds with Yin's (2009) recommendations for assessing validity in case studies. I consider the advice by Lund (2005), who stated that not all inferences are necessarily relevant in all research. Additionally, I apply concepts to assess trustworthiness that substitute the concept of validity, as prescribed especially in qualitative research: credibility, transferability, dependability and confirmability (Lincoln & Guba, 1985; Lincoln et al., 2011).

Internal validity (Cook & Campbell, 1979; Shadish et al., 2002) is irrelevant because the research questions do not comprise causality. As common in qualitative studies, our case study did not include statistics or statistical inferences. However, some reflections are needed regarding credibility (Lincoln & Guba, 1985), and some of these reflections correspond to issues discussed as statistical validity in the quantitative study. It is reasonable to hold that our results are non-trivial, are substantial, and do not come from random errors but, rather, have evidence in the data. Activities that Lincoln and Guba (1985) recommended performing to ensure credibility are largely captured in the guidelines for theory building in case study research developed by Eisenhardt (1989). In paper 3, I described our application of these guidelines. We discussed how the units of analysis were identified, how cases were chosen, how the information gathering procedure was performed, and what was done to prepare the information for analysis. A threat to this aspect of securing the later upcoming inferences was the process from 1) listening and observing the lectures to 2) taking notes and 3) creating the workshop report that contained the data used for analysis. If this transformation from oral information into a data report had been biased, the quality of the analyses could not make the resulting inferences valid. Two main procedures were used: researcher triangulation and member check. Three researchers participated in the workshop, two wrote the report and the third read the report thoroughly before it was sent to each informant for a check. The member check ensured that the

data used for analysis were approved by all informants. Possible biases should have been minimized, and we regard the first condensing of content to satisfy an acceptable standard for credibility.

According to Lund (2005), external validity is more relevant to applied research than to basic research. Applied research is often used to guide actions in some way, in other words, to give normative advice. Basic research comprises for example theory building. It may sound too ambitious to characterize our case study as basic research, although it seems as though the conceptual framework is an inference that is not typical for applied research and generalizations are not of current interest. Generalizations and external validity would be highly relevant if we aimed to develop evidence-based advice regarding how to turn around highly disruptive classes based on the two strategies in the framework that we developed. Trustworthiness assessed by transferability (Lincoln & Guba, 1985) to some extent corresponds to the generalizability of the validity system (Cook & Campbell, 1979; Shadish et al., 2002). Transferability refers to providing “the thick description necessary to enable someone interested to making a transfer to reach conclusion about whether transfer can be contemplated as a possibility” (Lincoln & Guba, 1985, p. 316). One probable transfer from our case study is comparing new cases to the developed framework and strategies (See Paper 3). I consider the description given in the paper as satisfactory for making transferability judgements possible.

The above discussion implies that the threats to construct validity are the kind that make our study vulnerable, and we must discuss this topic carefully. Construct validity regards inferences from indicators to constructs or vice versa (Cook and Campbell, 1979; Lund, 2005), which is the main aim of our study.

Eisenhardt (1989) focused on the importance of ensuring the validity of the constructs that constitute the framework or theory that is the inference of the case study research. She argued that method triangulation involves multiple data sources that give stronger substantiation of the constructs and hypotheses. We did not enhance the substantiation of our inferences by gathering data from multiple sources, which may be considered a threat to construct validity. Investigator triangulation is another way to strengthen the research approach. The convergence of observations across researchers enhances confidence in the findings, while divergent observations or meanings lead to new iterations

between data and analyses. “Thus, the use of more investigators builds confidence in the findings and increases the likelihood of surprising findings” (Eisenhardt, 1989, p. 538). The increase in surprising findings is because the complementarity of competence and insight among a team of investigators enhances the creative power of the team. Three researchers were involved in our study but they had different roles and different degrees of involvement. The single author of Paper 3 was mainly responsible for administering the study and analysing the data. One of the other researchers played a role in the data gathering, and when the paper was nearly finished, he assessed it with regard to consistency with the data input, i.e. whether the inferences had evidence in the data. This check concluded positively. The other researcher played a central role in leading the workshop, and he was a co-researcher during analysis, which enriched creativity and contributed to enhanced confidence in the findings because of converging perceptions.

The key feature of our study is the resulting conceptual framework. The value of this framework depends on how well the concepts and the relationships between them find evidence in the data. Construct validity depends on a precise definition of concepts that capture some essence from the data and, at the same time, distinguish a phenomenon from other constructs capturing something else from the data (Eisenhardt, 1989). Indicators of a construct may vary from case to case and often emerge from the analysis process rather than being defined a priori. When core issues in our cases were identified and constructs that could represent these issues were specified, we tested these constructs in each case. Likewise, when connections between constructs emerged, they were examined for each case (not for the aggregate cases, which is typically done to test hypotheses in quantitative research). This replication logic, as described by Yin (2009), is a technique that can enhance confidence in the validity of concepts and conceptual frameworks. Based on the circumstances described above, I consider the construct validity to be good.

Dependability, as outlined by Lincoln and Guba (1985), has parallels to reliability. The nature of our case study makes total replication irrelevant, partly because learning and reflections were issues for the participants of the workshop. A new workshop would obviously have a different starting point. Replication with new participants would imply a starting point with different knowledge, experiences etc., and it is impossible to say whether such



replication would lead to new results. However, the study is described to ensure transparency and with sufficient details to allow replications of the procedures and analyses.

If the participants were influenced by situated motives such as trying to please the researchers or other participants rather than presenting their perspective, this could represent a threat to reliability and to credibility. We cannot completely rule out that this might have happened, but as described in the method section, we did not find reasons to suspect any actual threat to reliability from this.

According to Lincoln and Guba (1985), confirmability refers to whether the data can be confirmed. It is not a question of the objectivity of the researcher; rather, it regards the data. Undoubtedly, filming or taping the workshop would have strengthened this aspect of trustworthiness. Saving all would allow us to check and, thereby, confirm it. However, we considered the gains against the losses that stress related to filming or taping could have caused. Both choices had potential to influence several aspects of trustworthiness. As presented, we preferred to make the setting relaxed and comfortable, implying some loss of confirmability. Still, the informants approved the data report prepared for analyses, and this report confirms the data.

## **5.2 Research questions discussed**

### **5.2.1 Paper 1**

#### ***Disobedience***

In line with RQ1, Paper 1 concerns disobedient pupil behaviour, defined as behaviour that the pupil is aware of is in conflict with standards or instructions given by the teacher. As outlined in the paper, disobedient behaviour is typically included in the somewhat broader terms of disruptive pupil behaviour and discipline problems. Yet, not all behaviour covered by these broader concepts are necessarily disobedient. Different studies and scholars define and measure the terms differently, making comparisons and discussions within the field difficult (Bear, 1998; Cohen & Fish, 1993; Freiberg & Lapointe, 2006; Frude, 1992; Levin & Nolan, 2006; Robinson & Ricord Griesemer, 2006;

Topping, 1987). The answer to RQ1 was a successful identification of a theoretically and empirically distinct construct of disobedient pupil behaviour and its measurement. The construct limits disobedience to behaviour that the pupil knows breaks rules or standards. Despite considering disobedience to teachers a problem, I show some attention to possible critiques of this concept within the field of education.

Normativity complicates the issue of disobedience. Norms for classroom behaviour cannot be induced solely from descriptive research; thus, the normative aspect has at least two challenges: identifying the standard that separates prescribed behaviour from problem behaviour and who should possess the right to establish those standards. The introduction deals with the first question by giving support to standards that positively affect learning output. The second connects, among other things, to authority in classrooms, schools and societies, and I return to that later.

The term disobedience used in Paper 1 is perhaps more normatively troublesome than other terms representing disruptive behaviour because it relates clearly to a relationship between two parties. Some scholars may interpret this term as if every pupil must obey every teacher in every matter, which is not the message of Paper 1. Within the field of education, many scholars associate this term with Milgram's studies (Milgram, 1963, 1965, 1978) on obedience. Milgram investigated how far people would go to obey an authority when obedience implied causing an individual pain. In this matter, obedience was expected to conflict with the persons' values. The results have been used to warn against blind or, as Milgram named it, destructive obedience to authorities (Milgram, 1963). Despite a very different starting point, our study on disobedience in schools also regards a relationship between a person and an authority. I have explained the reason why we chose the term disobedience instead of disruption, indiscipline, etc. Nevertheless, I point to two important reasons to exercise caution when requesting obedience in school.

The terms obedience and disobedience are easy to understand and can easily be communicated to pupils. Yet, it takes some more competence, maturity and reflection to understand and evaluate when obedience is legitimate. Hence, authorities might misuse their position and demand obedience in ways that they should not. This might also happen in the case of teachers, even if they are

professionals and their mandate is restricted by rules and curricula. This implies that pupils should typically obey their teachers, but situations in which disobedience would be the morally or juridical right response exist. Both obedience and disobedience can be admirable properties and vice versa. The value(s) at stake should determine whether it is reasonable to request pupils' obedience. Obedience itself (and disobedience) can be a value. The challenge is to achieve consciousness regarding the hierarchy of values that one endorses. Fangen (1965) identified basic values and lent values in his description of how each person should make a hierarchical structure of his values. Basic values are absolute, while lent values are secondary to the basic values. Occasionally, lent values must be set aside because they conflict with values that are more superior. It is risky to state that obedience is a basic value. As a lent value, obedience must give way for basic values, e.g. non-violence or human dignity. Total obedience should be given to values or issues rather than persons to avoid authoritarian relationships.

Another reason for some reservation against demanding obedience in school is the high valuation of critical thinking that is quite common in education (Brynildsen, 1987; Dale, 1986; Kunnskapsløftet, 2006). It appears as a logical mismatch to expect critical attitudes in a climate of obedience. Similar to authority, freedom is defined by its limitations (May, 1981). There are times, themes, methods etc. for applying critical thinking in the class. At the same time, there are standards, instructions, demands etc. to which the classroom leader should expect obedience. Just as an authoritative teacher continuously has to balance warmth and control (Walker, 2009; Wentzel, 2002), all teachers have to balance other pedagogical principles such as critical thinking and firm demands.

Yet, a concern regarding normativity and disobedience may lead to bright sides of disobedient behaviour. Professional teachers care for every pupil's healthy development in environments promoting human rights (Kunnskapsløftet, 2006; Opplæringsloven). Still, some teachers use their power selfishly or at the cost of one or more pupils; for example, teachers may humiliate, bully, abuse or in other ways commit professional misconduct (Monsvold, Bendixen, Hagen, & Helvik, 2011; Twemlow, Fonagy, Sacco & Brethour, 2006; Wendelborg, 2012). In such situations, we would like pupils to stand up for justice and disobey. The desire to disobey then applies both to those suffering directly from

the acts and attitudes of the teacher and to all witnessing these acts. This exemplifies a situation in which the leader acts beyond his or her legitimate sphere of authority. Pupil disobedience would then communicate support to the legitimate values. In other words, only high-quality teachers deserve authority and obedience. Expectations about obedience meet limitations due to legitimate authority. This applies at least to the issue of how teachers treat pupils, the interpersonal values and practice that pupils experience in relationship to the teacher and so on. Another potential situation involve a teacher who loses legitimacy due to poor teaching skills. In that case, the dilemma is whether to accept pupils' withdrawal of legitimacy from the teacher's management.

Disobedience can become a tool for development in an organization or society. Both obedience and disobedience are relevant democratic values and play a role in stability and development in a democracy (Morselli & Passini, 2012). Obedience ensures social and political stability, and disobedience sometimes ensures democratic values, e.g. on behalf of minorities. In this matter, disobedience may be part of progressive interests that come to the surface and, in the long run, might be necessary for the sustainability of democracies. Applied to the classroom society, learning content or traditions may favour one group over others, and the renewal of the practice may start with disobedience. Relationships to authorities are complex, and individuals may obey and disobey at the same time because different levels of legitimacy exist: the authority, the system and the demands (Morselli & Passini, 2012). "For instance, facing morally illegitimate demands, people may disobey the specific demand without necessarily questioning the authority itself nor the system in which it is ascribed. In this sense, disobeying a specific authority's demands does not deny the importance of obeying to authority in general" (Morselli & Passini, 2012, p. 683).

RQ1 was explicitly answered in Paper 1, and the construct of disobedience was used in the paper. Paper 2 only indirectly addressed disobedience, and the label was not used in the paper. In Paper 3, discipline problems and disruptive behaviour were used synonymously, but disobedience was not applied in that study because we did not have information that satisfied the use of the term.

***Explanations of disobedient behaviour***

Literature explaining disobedient or disruptive behaviour has many facets (Loeber & Farrington, 2001, Tremblay, 2010, 2012). According to Slee (2014), one-sided explanations based on either psychology or sociology contribute to a biased understanding of disruptive behaviour and cause problems in preventing and handling such behaviour effectively.

Slee (2014) conducted a comprehensive analysis of undesirable consequences following from the fact that pupil disruption and disengagement has been explained by psychology to an unreasonable degree. Overreliance on psychological and pathological understandings has led to approaches that fail because they do not take into account, e.g., sociological factors that are important for understanding why pupils become disruptive and disengaged in school. He asked for “a broader analysis of student disengagement and disaffection to ensure that more extensive calibrations of mental health disorders does not become a proxy for problems of education structures, processes and cultures” (Slee, 2014, p. 460). Furthermore, he called for multidimensional analyses to give educational reforms a relevant foundation upon which to succeed. This recommendation corresponds with Farrington and Ttofi’s (2012) research presenting an advanced understanding of the interactions between protective and promotive factors in the development of antisocial behaviour and offending. Behaviour is obviously a complex outcome. Simplifications will suffer from weaknesses; either the sociologists fail to recognize the complexity of the individual or the psychologists are unwilling to recognize the dimension of sociological factors (Slee, 2015).

Psychological research relevant to disruptive pupil behaviour often comprises diagnostic levels of behaviour and, consequently, focuses on the individual level (Peticlere & Tremblay, 2009; Tremblay, 2010). Disruptions in schools are not limited to pupils carrying diagnoses that may explain their behaviour. The classroom management literature describes how the organization of the classroom, routines, relationships, emotional climate, etc. influence pupil behaviour; thus, these issues are all relevant when the prevention of problem behaviour is an agenda item (Emmer & Evertson, 2013; Marzano, 2003; Roland & Galloway, 2002; Slee, 2015). The link between classroom management, pupil behaviour and academic achievement obtain

further evidence from intervention studies on classroom management training programs (Allen et al., 2011; Ertesvåg & Vaaland, 2007). A recent study based on observations in 1262 high school classrooms investigated the association between pupils' classroom behaviour profiles and teachers' classroom management. The results showed three classroom behaviour profiles: pupils consistently met expectations, pupils inconsistently met expectations, and pupils were noncompliant. These profiles related significantly to teachers' use of positive and negative classroom management strategies (Pas et al., 2015). Contextual aspects of relevance include, e.g., social climate, social norms, structures, management, teacher-pupil relationships, peer relations, instructional climate, and authoritative teaching (Allan et al., 2013; Pianta, 2006; Roland, 1999, 2014; Walker, 2009; Wentzel, 2002). Theoretical distinctions between individual and contextual contributors to behaviour are meaningful and necessary to reach new knowledge. The combination of aggressiveness and teacher authority perspectives in this thesis, is equally meaningful.

RQs 2, 3, and 4 concern the associations between aggressiveness as a personal trait and disobedient behaviour, and I now discuss this issue.

### ***Reactive aggressiveness and disobedience***

Paper 1 hypothesized associations between reactive aggressiveness and disobedience to teacher in both boys and girls, as reflected in RQ2. A model based on the hypothesized assumptions fitted the data well and supported the hypothesis. One argument for the assumed relationship posted in the paper is that classroom life implies situations that may trigger pupils high on reactive aggression, e.g. teachers correcting behaviour, giving unclear instructions or advice, or even acting harshly. Additionally, frustrations due to unsuccessful coping with academic tasks may be associated with the teacher. Teachers causing pupils to experience frustration may be targets of aggressive responses and disobedient behaviour. There are reasons to expect a higher likelihood of such responses from pupils high on reactive aggression compared with other pupils due to the former pupils' low threshold for frustrations, highly volatile reactive temperament and problems related to cognitive functioning (Dodge, 2011; Eisner & Malti, 2015; Vitaro & Brendgen, 2012). Investigations with physiological markers indicated a high intensity of stress responses in reactive

aggressive individuals (Hubbard et al., 2002; Lopez-Duran et al., 2009). The temperamental trait also causes individuals to be predisposed for anxiety, anger, inattention, and dysfunctional regulation of emotions (Dodge & Coie, 1987; Dodge et al., 1997). According to research performed by Dodge (2011), individuals develop a personal characteristic pattern of social information processing, and reactive aggression is associated with a tendency to attribute negative intent to other persons when situations are ambiguous (Dodge & Coie, 1987). Based on hostile, provocative and threatening interpretations, defence becomes reasonable and probable. The lowered capacity of theory of mind related to reactive aggression (Renouf, Brendgen, Séguin et al., 2010) may explain behaviour that harms others arising from a convinced interpretation of the need for defence. The combination of the tendency to experience intense and dysregulated emotions with a lowered threshold for negative interpretation of situations increases the probability of negative classroom experiences and behaviour. As mentioned, Dodge (2011) found that an individual's pattern of social information processing predicted aggression. Based on this recent research, he suggested a causal relationship from information processing pattern to aggression, implying that hostile attribution bias caused aggression.

Anger caused by social frustration in the classroom or school could also lead to disobedient classroom behaviour. Reactively aggressive pupils have fewer friends, have lower quality friendships, and are more frequently bullied or rejected than their peers (Brendgen et al., 2001; Roland & Idsoe, 2001; Salmivalli & Heiteenvuori, 2007). Hence, rule-breaking behaviour directed at peers may occur. Aggression is sometimes displaced; in other words, it is directed at a substitute target instead of the person who caused the anger (Bushman & Huesmann, 2010; Marcus-Newhall, et al., 2000). Thus, anger induced from peer relations can lead to displaced aggression that targets the teacher in the form of disobedience instead of being directed at the classmates. In general, peer relations represent a challenge related to reactive aggression, and teachers are expected to manage social relations in the class so that every pupil feels included and accepted (Kunnskapsløftet, 2006). When a classroom life actually results in repeated loneliness, the inability to make friends, a lack of social support from peers etc., pupils may interpret their disappointment as teacher failure. Consequently, frustrations arising from social disappointments in class may be directed at the teacher, leading to disobedience as an exponent

of reactive aggressiveness. These reflections are based on theoretical assumptions and cannot be tested with our data. Therefore, to reach a deeper understanding of disobedience to teachers associated with reactive aggressiveness, new research is needed.

Recent research link traits of narcissism to reactive aggression (Barry et al., 2007) because narcissism might lead one to believe that one has the right to disturb others or act defiantly when one's desires are hindered. Disobedience to teacher could be a consequence. Impulsivity (Raine et al., 2006) and low social competence, which are associated with reactive aggression (Eisner & Malti, 2015) might underlie disruptive classroom behaviour. Those mechanisms could cause disruption that is covered by the concept of disobedience to teacher. However, behaviours caused by impulsivity or low social competence are probably not planned to attack teachers.

In sum, I find reasons to suggest that the association from reactive aggressiveness to disobedience to teacher mainly depends on the reactive pupil's frustration, need for defence or revenge and is not an intended attack on the teacher's authority. The possible causal link from information processing pattern to reactive aggression (Dodge, 2011) may explain why reactive aggressiveness may lead to disobedient classroom behaviour.

A promising result stems from research on interventions attempting to reduce hostile attribution bias. At least two studies evaluated successful development in this matter and revealed that a reduction in attribution bias implied a reduction in aggressive behaviour (Graham & Hudley, 1993; Guerra & Slaby, 1990). Corresponding studies including measures of disobedient classroom behaviour are of great interest.

### ***Proactive aggressiveness and disobedience***

Paper 1 defined and measured proactive aggressiveness as a two-dimensional concept: power-related and affiliation-related aggressiveness. Each dimension captures a separate motive for proactive aggressive behaviour as described by Roland and Idsoe (2001). Power-related proactive aggression reflects a commonly described motive in this instrumental aggression. It refers to a vertical axis where power is contrasted with powerlessness, in other words



dominance versus submission. Affiliation-related proactive aggressiveness reflects a horizontal axis with affiliation in contrast to isolation/rejection (Roland & Idsoe, 2001).

In Paper 1, we hypothesized a relationship between affiliation-related proactive aggressiveness and disobedience to teacher. The results supported the hypothesis for both genders and answered a part of RQ3. We based the hypothesis on the assumption that affiliation with attractive peers may serve as a social reward, achievable by establishing common negative attitudes or actions towards a target. Disobedience to teacher may therefore serve as an instrument to gain relations with peers. Acting as co-aggressors towards a person by negatively stigmatizing the victim makes the affiliation achieved among the aggressors apparent. The rejected person, disqualified for affiliation because of negative stigma, contrasts the reward. When the teacher serves as a common negative reference, extra reward may be obtained because the formal role and visibility of the leader draw extra attention to the fellowship among the co-aggressors (Roland, 1999). Proactive aggressive pupils are often associated with status among class-mates (Eisner & Malti, 2015), implying that some pupil might affiliate with them as a strategy to increase their own status. Consequently, expressing negative attitudes and behaviour towards the teacher may serve as a qualification for participation in the group (Størksen, Idsoe, & Roland, 2011).

As hypothesized, proactive power-related aggressiveness was significantly and substantially related to disobedience in boys and girls. This result contributes to answering RQ3. Proactive power-related aggression is not a reaction to an unpleasant event; rather, it is an initiative to achieve, e.g., social power through aggressive means (Eisner & Malti, 2015). The aggressor–target relationship is an important reference for the behaviour or even determines it, e.g., when the target’s powerlessness confirms the power of the aggressor. The aggressor experiences social power as a benefit achieved by causing the target to suffer. Proactive aggression is related to a tendency to use others for one’s own purposes (Barry, et al., 2007). Power can be gained by eliminating the teacher’s power by ruling out the teacher’s ability to lead (Vaaland & Ertersvåg, 2013). The loss of impact on a single pupil’s behaviour will likely not completely undermine the teacher’s leadership position. However, the fact that the proactive aggressive pupil achieves power at the cost of the teacher may cause

other pupils to seek affiliation with those possessing power in class. Proactive aggressive behaviour could also be directed towards peers by forcing some of them into submission, e.g. by demanding them to hold negative attitudes and participate in negative behaviour towards the teacher. Moreover, proactive aggression corresponds with a decreased sensitivity to cues of punishment (Crick & Dodge, 1994, 1996), implying that possible corrective initiatives employed by teachers are not considered problematic. When evaluating behavioural alternatives, the possible profit gained by aggressive means seems to more strongly influence behavioural decisions than possible negative outcomes of aggression (Dodge, 2011; Fontaine & Dodge, 2006).

***Aggressiveness, disobedience, and gender***

The moderating effect of gender on the relationship between aggressiveness and disobedience is considered in RQ4. According to Paper 1, both reactive and proactive aggression are associated with disobedience in both genders. However, reactive aggression seems to play a stronger role in boys' aggression compared with girls' aggression, and the oppositely result is found for proactive aggressiveness. As long as these results are neither confirmed by new studies nor support a well-justified theoretical expectation, we should interpret them with care. Some preliminary thoughts may be presented. Considering disobedience to teacher as an attack on teacher authority, it can be associated with the terms social and relational aggression, which intends hurt or harm a person's relationships, reputation, self-esteem or social status (Crick & Grotpeter, 1995; Underwood, 2003). According to developmental pathways, girls start using relational and social aggression at an earlier age than boys (Tremblay, 2010). Moreover, the frequency of this type of aggression is higher among girls (Crick & Grotpeter, 1995). Although genetic factors are well documented in physical aggression (Brendgen et al., 2005), corresponding research on relational aggression is still needed. Research indicates a certain inherited factor but a substantially greater effect of environmental influences (Brendgen, et al., 2005). Suggestions can be made that girls inherit this type of aggressive behaviour although we do not yet know if this is the case. An alternative explanation is connected to gender-related schemas for encoding cues, interpretations, goal selection, response construction and other steps in social information processing. Ostrov and Godleski (2010) suggested, e.g. that previously reinforced gender schemas impact the coding of cues and that

gender schemas influenced by culture and subcultural norms guide goal orientation. If peers have previously reinforced disobedient behaviour towards teachers, the likelihood that pupils will choose that kind of behaviour again increases. Correspondingly, gender schemas that support reactive aggression might be evident in boys. However, these assumptions are premature and only ideas that information processing may be an arena in which to investigate gender differences in reactive and proactive aggression related to disobedience.

### **5.2.2 Paper 2**

#### ***Perceptual orientation towards weakness in a new teacher***

In an attempt to reveal whether aggressiveness was associated with a certain preference for information that could be used to dethrone a teacher, we needed a construct to describe and measure it. RQ5 addresses this issue. If a specific trait -aggressiveness- could make pupils prone to signs of weakness in others, the pupils' perceptual orientation towards teachers would be of interest when considering teacher authority, especially in the start-up period when authority is most at stake (Vaaland, 2011). Questions were restricted to teachers who the pupils were scheduled to meet for the first time because the first meeting is important for making a first impression and initiates the social dynamics that lead to establishing roles, norms, status, etc. (Vaaland, 2011). Teachers need to know if pupils come to such first meetings with a negative predisposition.

Crick and Dodge (1994, 1996) explained mental processing of social information in the SIP model. Such processing starts with the encoding of cues, and similar to all the other steps, it implies interaction between the individual and the context (Crick & Dodge, 1996). Equivalent situations will cause different pupils to engage in different mental processing because each person brings their own data-base of memories, acquired rules, social schemas, social knowledge etc. (Crick & Dodge, 1996). Social perception is selective; thus, not all cues are equally given attention (Crick & Dodge, 1994; Dodge, 2011). Attention and focus vary across pupils; therefore, their first impression of teachers will vary, at least until they start discussing the teacher's characteristics. Research remains about details of how the database interacts with each step of the information processing (Ostrov & Godleski, 2010). However, it is reasonable to suggest that aspects stored in the database will

influence pupils' attention when they meet a new teacher: previous experiences with teachers, ambitions in learning and schoolwork, social motives and previous experiences with social roles in class. Emotions and emotional regulation processes may also interact with information processing (Lemerise & Arsenio, 2000), which may lead to differences between proactive and reactive aggressive pupils due to differences in temperament (Vitaro & Brendgen, 2012). Gender schemas based on gender-relevant experiences may also be stored in the database and influence interaction between the situation and individual in information processing (Ostrov & Godleski, 2010). Behaviour that has previously been rewarded by peers or the teacher might be different for boys and girls; thus, gender-related schemas might influence the kind of information that boys and girls may be sensitive to. Among several contributors to individual influence on information processing, one influence is the motive structure in reactive and proactive aggressiveness (Fontaine & Dodge, 2006). The concept of perceptual orientation implicitly proposes that motives, together with memories, experiences etc., will contribute to selective perception through the purposeful selection of social cues.

The pupils taking part in the study presented in Paper 2 were 10<sup>th</sup> graders; hence, they were well experienced in meeting new teachers and likely had experiences stored in meaningful schemas in the data-base. Thus, pupils could recall their tendency based on a combination of experiences and motives.

Based on theory and CFA, RQ5 was answered through the successful development of the construct of perceptual orientation towards weakness in a teacher who is new to the class.

According to Dodge, "individuals develop characteristic styles of processing social information within specific social situations. These styles act as acquired personality characteristics. They correlate significantly with and predict individual differences in aggressive behavior in particular situations" (Dodge, 2011, p.165-166). Our data cannot provide evidence for perceptual orientation as a general personal characteristic in line with Dodge's anticipations; yet, the concept seems worth following up.

An interesting consideration that has not yet been investigated is whether a perceptual orientation towards weakness in teachers corresponds with an equal tendency towards weakness in persons in other social roles.

***Reactive aggressiveness and perceptual orientation towards weakness in a teacher who is new to the class***

RQ6 concerns possible associations between reactive aggressiveness and perceptual orientation towards weakness in a teacher that is new to the class. The emotional arousal that reactive aggression involves (Vitaro & Brendgen, 2005) could affect perception in some direction (Lang, 1995). However, arousal will occur situationally and will likely not influence questions of anticipated perceptual preferences. The tendencies towards hostile attribution and suspiciousness that characterize reactive aggressive pupils (Bjørnebekk, 2007; Dodge & Coie, 1987) might influence the aspects of social situations that they attend to. This tendency, combined with previous experiences of social rejection, conflicts or coping problems in classrooms, could also direct their attention when meeting new teachers. However, as outlined in Paper 2, the literature gives no clear basis for hypothesizing an association. The answer to RQ6 was that no significant relationship between reactive aggressiveness and the perceptual orientation was found in boys, when data clustering was controlled. A weak but significant relationship was found in girls. The substantial value of this relationship is meagre and calls for careful interpretation.

When discussing the relationship between reactive aggressiveness and disobedience, I suggested that reactively aggressive pupils' disobedience did not represent a conscious attack on teacher authority. The results of the study on reactive aggressiveness and perceptual orientation may indicate the same. Given that damaging teacher authority was an issue for reactive aggressive pupils, we would expect these pupils to have an interest in detecting the teacher's vulnerability.

***Proactive aggressiveness and perceptual orientation towards weakness in a teacher who is new to the class***

To supplement the previous research question, we asked RQ7, which concerns the relationship between proactive aggressiveness and perceptual orientation towards weakness in a teacher who is new to the class. In other words, it examines whether being proactively aggressive would imply having specific assumptions about what information one would prefer to pay attention to in an anticipated situation. Typical characteristics of the personal trait and of the situation gave reasons to expect an association between the two variables. Instrumental behaviour to achieve power is typical for proactive aggression (Dodge & Coie, 1987). Dominance over and humiliation of the other person are effective tools to gain the desired reward (Roland & Idsoe, 2001). Teachers are the target persons in our study, and the anticipated situation is when pupils and teachers meet for the first time. Teachers are formal leaders in the class and should be expected to have authority; however, experienced pupils know that teachers differ in this matter. The first meeting is an opportunity to make an impression regarding the likelihood that the teacher will gain and maintain legitimate power. The options for succeeding with the motive for gaining power at the cost of others will depend on the strengths and weaknesses of other persons. Hence, information about possible weaknesses in a new teacher could be information of strategic value to a pupils high on proactive aggressiveness.

The measure applied in the study assessed power-related proactive aggressiveness. Affiliation-related proactive aggressiveness was not measured. The answer to RQ7 was a substantial and significant association between proactive aggressiveness in boys and girls and perceptual orientation towards weakness in a teacher that is new to the class for both boys and girls.

Proactive aggression is associated with a well-functioning capacity for theory of mind (Renouf, Brendgen, Séguin et al., 2010). This supports the cognitive ability to anticipate what others may be able to think, do, initiate and respond to, which should be useful in manipulating social dynamics. Moreover, proactive aggression correlates with callous-unemotional traits, implying low feelings of guilt, low empathy and high instrumental use of others for one's own purposes (Barry, et al., 2007). The social information processing

characteristics of proactive aggressiveness further enhance the probability that the individual is both able and willing to use the teacher as an instrument for his or her own sake. Proactive aggression connects to a tendency to positively evaluate aggression as a tool for desired outcomes. It seems as though the evaluation of the outcome of aggression is more important than the moral valuing of the behaviour used to achieve the outcome (Fontaine & Dodge, 2006). Given that proactive aggressive pupils highly value social power, it is reasonable to assume that information that can be used to achieve that gain will be of interest to these pupils.

Social power in a group needs a reference to be visible, and powerlessness or submission can serve as a contrast. The teacher is expected to be a prominent person in class, and the rewards of relieving the teacher of power and credibility will likely be even higher than those associated with gaining power from peers. The fact that pupils high on proactive aggressiveness are prone to signs of weakness in new teachers is important to all teachers and to others engaging in teacher authority.

***Aggressiveness, perceptual orientation towards weakness in a new teacher and gender***

Analogue to the research question on gender in Paper1, RQ8 asked if gender moderated the relationship between aggressiveness and perceptual orientation towards weakness in a new teacher. According to descriptive statistics, boys had higher mean scores than girls on reactive aggressiveness, proactive aggressiveness and perceptual orientation towards weakness in a new teacher (Paper 2, Table 2). The gender difference in aggression is quite commonly found (Côté & Archer, 2005; Hawley, 2007; Vaillancourt, 2005). However, the relationship between aggressiveness and perceptual orientation applied equally to boys and girls. No theoretically based expectation was proposed, and the answer to RQ8 was that perceptual orientation towards weakness in a new teacher relates to aggressiveness regardless of gender. The theoretical framework given by the SIP model (Crick & Dodge, 1994; 1996) was applied in our investigation of perceptual orientation. Ostrov and Godleski (2010) developed an integrated gender-linked model within the SIP perspective. They argued that gender-related processing schemas are incorporated into the SIP

model via the database. Even if differences between the genders are evident in some steps of information processing, the results of our study did not indicate that the perceptual tendency towards weakness in teachers interacted differently with aggressiveness for boys and girls.

### ***5.2.3 Providing teachers with authority***

Contributions from Paper 1 showed that proactive and reactive aggressiveness were associated with disobedience, which undermined teacher authority. Paper 2 added to the literature by connecting aggressiveness to an interest in detecting vulnerabilities in new teachers. Some pupils likely to be disobedient also search for strategic information that can be utilized to harm the teacher. Consciously breaking standards or instructions given by the teacher is perhaps an effective way to undermine the teacher's ability to lead the class. In other words, a tendency to harm teacher authority through disobedient behaviour is combined with an ability to do so by gathering information about how to hit effectively. Paper 3 contributed to the topic by showing the seriousness and complexity of the situation in which a teacher is dethroned and no longer able to manage the class. A framework for changing such situations was revealed. Before turning to the research questions addressed in Paper 3, I discuss some aspects of teacher authority that become topics of interest based on Papers 1 and 2.

Interestingly, although Norwegian schools suffer from disruptive pupil behaviour, they generally use little punishment. Good learning environments (Duesund, 2014; Ertesvåg, 2014; Nordahl, 2008; Ogden, 2001; Utdanningsdirektoratet) and motivating teaching and learning (Bru, 2006; Bru, Stephens & Torsheim, 2002; Skaalvik & Skaalvik, 2005; Thuen & Bru, 2000), have been highlighted to prevent disruption rather than to enforce punitive issues such as referrals to the headmaster or expulsion from school. In the light of Arum and Ford's (2012) investigations, this may reflect the legal and social context of Norwegian schools. One element in this context is how the society provides teachers with moral authority.

The suggestion is supported by the comprehensive study that Arum and Velez (2012) conducted about the relationship between school discipline and student achievement in the 49 countries taking part in the 2003 Trends in International Mathematics and Science Survey (TIMSS). The international data evidenced



that discipline problems corresponded strongly with lower achievement at the individual, school and society levels. The authors found that pupils in nations with high average discipline problems, such as the United States, score lower on the performance tests than expected given their level of economic development (Arum & Ford, 2012). They stated that “The degree of authority that a society grants its teachers is a key factor in how that country’s schools maintain good learning climates” (Arum & Ford, 2012, p.57-58). Thus, in countries where teachers have strong authority, discipline is performed informally and by social control. Countries with weaker teacher authority more commonly lean on legal regulations and formal means of maintaining control such as formal policing in school.

A thorough effort to obtain control through discipline in American schools was introduced in the 1990s as “zero tolerance”. According to Skiba (2014), the intuitively appealing message of zero tolerance has led to a punitive practice that has failed. The policy has dramatically increased the number of pupils who are kicked out of school for disciplinary purposes and have run-ins with the law enforcement (Arum & Ford, 2012; Skiba, 2014; Slee, 2014). Skiba concluded that “suspension, expulsion and the increased use of law enforcement in school settings are themselves risk factors for a range of negative academic and life outcomes.” (Skiba, 2014, p. 28). Recidivism, lower achievement and school dropouts are results of punitive approaches used in schools (Skiba & Rausch, 2006). Consequently, Skiba and Rausch called for new and differentiated strategies. Among other strategies, they recommended putting more weight on preventive strategies and improving school climate. These recommendations correspond to conclusions drawn by Arum and Ford, who stated that discipline problems in American schools will not be eliminated by greater formal sanctions and stricter enforcement. “For discipline to be effective, students and others need to perceive it not just as strict, but also as fair” (Arum & Ford, 2012, p.60). They also stated that pupils will better internalize the rules of the school and society if the society itself supports the moral authority of the educators. Interestingly, they explained that the tendency for schools to lean heavily on courts, legislators, statutes etc. might undermine the authority of teachers by restricting their ability to practice based on their own expert opinion. Punishment should not necessarily be the only effort in place to ensure zero tolerance. One aspect of this issue is what is tolerated, and another aspect is

how schools respond when rules are broken. The control dimension of authoritative teaching underlines that standards must be followed up (Wentzel, 2002), although heavy use of coercive punishment may undermine authority and replace it with an authoritarian teacher role.

According to the reflections of the researchers presented above, in some ways, Norway seems to be ahead of the United States concerning prevention and intervention targeting disruption. In Norway, high expectations regarding classroom and school climate, learning environment, and classroom management are commonly accepted as means to prevent and regulate disruptive classroom behaviour (Duesund, 2014; Ertesvåg, 2014; Nordahl, 2008; Roland, 1998; Vaaland, 2011). However, discussions among scholars question whether Norwegian policy has developed too far leaving teachers' with insufficient tools for controlling pupil behaviour.

Given that authority is a dynamic phenomenon negotiated through interactions between teachers and pupils (Pace & Hemmings, 2006), it is impossible to guarantee that teachers never fail in their use of power. Power can be used for wrong purposes and with wrong means. Given that pupils are the most vulnerable parties in the classroom, empowering teachers might imply a risk for suppression (Freire, 1978; Gilliam, 2008). Nevertheless, arguing for decreased teacher authority does not necessarily clean the room of the use or disuse of power (Vaaland, 2011) by other interested parties.

Bullying can serve as an example. Some teachers bully (Twemlow, Fonagy, & Sacco 2010), which is obviously rule-breaking behaviour. The formal role combined with legitimate authority increases the vulnerability of the victim. When leaders bully, other persons, e.g. pupils, in the organization can recognize the behaviour as a norm, and negative attitudes and even bullying may be legitimated and spread. The stronger the authority, the more damage to the bullied pupil. Thus, one may wonder whether we should argue for diminishing general teacher authority. However, bullying among peers is a major problem in schools, and poor teacher authority is connected to an increased risk of being bullied by peers (Ertesvåg & Roland, 2015). Consequently, teacher authority implies power to influence, and it should be given by pupils and parents, and supported by school leadership when authority is legitimated by shared values, aims etc.

Similar to discipline and indiscipline, obedience and disobedience are normatively loaded. The same can be said about authority. The reflections below show that disciplining in school may be based on a system that demands pupils to adapt to situations against their own will and conviction. Some pupils refuse to join in or associate with the school's project because the schools' values, content, culture and so on conflicts with their own or those of their peers. Giving school credibility would imply losing dignity or suppress something in themselves (Gilliam, 2008). An alternative option for those pupils is to establish their own project, e.g. as a group of immigrant boys, as Gilliam (2008) described it. In this alternative, teacher leadership has no legitimacy, and the teacher will not succeed in forming close relationships with the pupils involved. The refusal of teacher authority results in the refusal of the pedagogical relationships on which the teacher depends to achieve a leadership position. According to Gilliam (2008), when the teacher's power to manage the classroom is shaken, his or her professional self-confidence is wounded. She concluded that dismissed teacher authority leads to discipline problems.

A curriculum is a normative document. Among others, the Norwegian curriculum emphasizes pupil participation and pupil responsibility for learning (Bjerg & Knudsen, 2008; Kunnskapsløftet, 2006). Contributing to research on classroom management, Bjerg and Knudsen (2008) analysed how the curriculum affects teacher authority when teachers have to delegate responsibility for learning to the pupil. Some pupils accept the responsibility delegated by the teacher, and others do not. Discipline problems may occur when pupils refuse to take responsibility for their own progress. The teacher will be left with narrow space to act as a leader because the pupil's actions define the possible re-actions of the teacher.

In line with the findings presented in Paper 1, other approaches confirm that disruptive classroom behaviour is negatively associated with teacher authority (Bjerg & Knudsen, 2008; Emmer & Evertson, 2013; Gilliam, 2008 Pace & Hemmings, 2006). Interestingly, another type of problem behaviour, bullying, also corresponds with teacher authority. Ertesvåg and Roland (2015) found that schools with low levels of pupils bullying others and being bullied were characterized by teachers who perceived high authority in classrooms and vice versa. The relationship between teacher authority and bullying behaviour has interesting parallels to disruptive behaviour and an anticipated relationship with

teacher authority. First, both types of pupil behaviour break the standards set by the teacher(s). A second parallel is that both behaviours are often conducted in groups and with bystanders (Roland, 2014). Additionally both behaviours are, to a certain extent, explained by proactive aggressiveness, which is sensitive to contextual variations (Ertesvåg & Roland, 2015; Paper 1; Vitaro & Brendgen, 2012).

As already described, teacher authority contributes to the classroom context in a manner that is relevant to pupil behaviour. Interestingly, Ertesvåg and Roland (2015) found that teacher authority in classrooms is itself partly constituted by school contextual factors. Their study of rates of bullying and professional cultures in schools revealed that these factors were connected. Moreover, they found indirect effects from teacher affiliation and teachers' collaborative activities through teacher authority to bullying among peers. The study indicated associations between the two professional culture variables and teachers' perceived authority. Although more research is needed, there are reasons to suggest that parallel to an authority context in classrooms, a culture of teacher authority may exist at the school level. Support for such a connection comes from what was learned from a whole school approach aimed to reduce problem behaviour by improving authoritative teaching. Discipline problems/disobedience was one of the behavioural categories included in the evaluation of the program. Collective teacher training in authoritative teaching markedly reduced discipline problems (Ertesvåg & Vaaland, 2007). However, even if some school culture indicators may support teacher authority, we have no reasons to rule out each teacher's individual practice to realize the context of teacher authority in his or her classroom.

Even if connections are made between teacher authority and negative pupil behaviour, questions remain regarding a broader picture of what contributes to poor versus good standing for teacher authority in classrooms. In a study of primary and secondary school teachers in Norway, approximately 5 % of the teachers perceived that they had little or no authority in the class. Moreover, 25 % of the respondents reported some lack of authority. The measure of perceived authority was based on responses to four statements regarding aspects of authority: respect from the class, development of social climate, learning environment and perceived control (Vaaland & Ertesvåg, 2013). The study did not reveal gender differences in perceived authority. Teachers with less than 5

years of teaching experience reported significant lower levels of perceived control than all groups of more experienced teachers. Secondary school teachers perceived their authority to be lower than did their colleagues in primary schools. More research is needed to reveal a robust picture of teachers' individual characteristics, school characteristics and teacher practices that may affect teacher authority.

We do not have data to explore how discipline problems based on reactive or proactive aggression are addressed by teachers practicing different teaching styles. Yet, some reflections and suggestions may be drawn. Even if authoritative teaching generally prevents problems and serves as a sound basis for intervening when necessary, occasions may arise when the teacher becomes too permissive and goes too far in understanding and supporting pupils, especially when facing instrumentally aggressive pupils who negotiate with the teacher in a manipulative way. In other situations, the teacher may be too controlling and move towards an authoritarian practice, e.g. when the teacher is fed up with impulsive aggressive pupils. Permissive teachers, who practice much warmth but poor control, will perhaps withdraw from problems and remain friendly as long as possible. If the pupils recognize that problems increase and that the teacher is unable to cope, they may withdraw from close relationships with that teacher because the teacher loses attraction. An authoritarian teacher will likely trigger the reactive aggressive pupils because of these pupils' tendency to interpret social stimuli as hostile. Proactively aggressive pupils will perhaps be careful when meeting authoritarian teachers who use power in a way that may frighten or humiliate pupils. However, pupils may make use of identified vulnerabilities or occasions to fight back. A main issue with the four parenting and teacher styles is that dominating practice creates a climate in which episodes occur. This does not mean or suggest that a teacher constantly and in every situation acts as an authoritative ideal (Wentzel, 2002). Variations in the control and warmth axes may occasionally lead to teacher actions that are permissive or authoritarian. When episodes of divergent practice become frequent, this may be a sign of changes in the teacher's style.

It is reasonable to suggest that teacher authority prevents disruptive or disobedient pupil behaviour. Moreover, it seems as though non-disruptive classrooms may increase the teacher's credibility and legitimate power. By contrast, when teacher authority is weak, the probability that pupils engage in

disruptive behaviour rises, and authority is further weakened. This indicates that the association between authority and disobedience is bidirectional. The classroom context influences pupil behaviour, and the context is developed through its interactions with both the teacher and the pupils. Although disobedient behaviour is relative to contexts, the connection also depends on the pupils' individual characteristics in the pupils.

### **5.2.4 Paper 3**

#### ***Frameworks revealed to change the authority context in classrooms***

Considering highly disruptive school classes, we found that teacher authority was replaced with chaos. Paper 3 presents a case study that answered three research questions about approaches to bringing such classes back on track. RQ9 questioned the main issues in such interventions. The results showed common core issues across cases. Among other things, the issues covered training and supervising in classroom management, and a special focus on the empowerment of teachers enabled teachers to conduct management, re-establish authority, and re-build self-efficacy. However, several of the common issues referred to procedures and possible problems in running the intervention, e.g. who to co-operate with, information gathering, decision making etc. The great complexity of such approaches was thoroughly highlighted.

RQ10 concerned possible commonality versus variation in how the main issues were approached across the cases. The answer to RQ10 revealed some systematic variations because cases did not recommend common solutions to the challenges. The pattern of variations contributed to answering RQ11: Can we reveal systematic connections between elements within and across the cases that can allow us to develop a conceptual framework? From the approaches described in the cases, we identified two main strategies for turning highly disruptive classes around. One was called a cognitive strategy and prioritized step-by-step training and implementation of good classroom organization and management. The other, a systems approach, introduced several changes at a time with the intention to rearrange the distribution of social power in the classroom.

Both strategies aimed at establishing a classroom context with an authoritative teacher. I claim teacher authority benefits teachers, pupils, and learning, and the discussions above recognize teacher authority as a buffer against disruption, aggression and other undesirable pupil behaviours in classrooms. Once established as a quality in the teacher-pupil or teacher-class relationship, authority will have some stability. However, relationships are dynamic, and vulnerable to disappointments, competing authorities, sources of status or power etc. (Geetzels & Thelen, 1971). Authority as a classroom leader is not achieved once and for all; rather, the maintenance of authority is an everlasting process. According to Metz (2006, p.ix), “Students do not respond with on-and-off switches of compliance or disobedience, but instead respond with subtle nuanced, often ambivalent, inventiveness. Authority along with other forms of classroom control is highly interactive.” Furthermore, authority is not lost once and for all. Yet, when it is seriously damaged, or never established, in a relationship, effort is needed to change the social pattern established in the relationship (Vaaland, 2011).

Every pupil has a picture of how he is perceived by his teachers. This picture influences how the pupil perceives himself (Bjerg, 2011). When pupils perceive that they are valued, respected, attributed academic and social possibilities etc., their confidence in the teacher will be positively affected, contributing to teacher authority. Consequently, relationships are one means by which to achieve authority. Authoritative teaching, as outlined in the introduction, implies teachers’ continual and consistent effort to establish high-quality and close relationships with each pupil. These relationships must be characterized by the qualities of warmth and nurturance, on the one hand, and clear demands and support to cope with these demands, on the other hand (Baumrind, 1991; Walker, 2009; Wentzel, 2002). Many researchers have investigated teacher-pupil relationships, how these relationships develop and how they affect goal achievement in school (Hamre & Pianta, 2001; Marzano, 2003; Pianta, 2006). Some examples from a Norwegian context are Drugli, (2012) and Roland (1998).

The teacher-pupil relationship is one aspect in the more complex field of emotional climate in a classroom, which also includes relationships among pupils (Allen, et al., 2011). Affiliation to other pupils in the class is crucial to pupils’ feeling of inclusion and well-being. A teacher who is liked, is respected

and has authority may easily influence peer-relations in addition to developing teacher-pupil relationships. Troubles occur in classes in which the teacher does not have authority. Pupils will typically not view close relationships with the teacher as attractive. Actually, they risk losing status and attractiveness among peers if they affiliate with the teacher. (Geetzels & Thelen, 1971; Vaaland, 2011). Thus, the teacher who has not gained authority lacks access to the most powerful strategy for building authority. Consequently, building close relationships with each pupil should be an important strategy used to re-establish teacher authority; however, unfortunately, this strategy seems to be closed to teachers who have lost authority.

Good organization, clear rules and procedures, effective management of time, and effective behaviour management are typical in well-functioning classrooms where teachers conduct good leadership (Allan, et al., 2013; Allen, et al., 2011; Emmer & Evertson, 2013; Roland & Galloway, 2002). This type of leadership corresponds with authoritative teaching, and the classroom management literature holds rich descriptions of and recommendations regarding these issues. It follows from this that poorly organized classrooms relieve the teacher his authority. Moreover, parallel to the question of relationships, teachers who have little or no authority in the class will hardly succeed in implementing or practicing routines, behaviour management, etc. Therefore, this tool that teachers can utilize to gain position is weakened or out of reach when authority is lost.

Paper 3 revealed two strategies to turn around highly disruptive classes; these strategies can be viewed as two approaches to re-establishing teacher authority. The cognitive strategy largely addressed the above issues: implementing rules and procedures and organizing the classroom and the lessons. Before implementation, the class could participate in discussions about their desires regarding the classroom life and climate. The implementation to a certain extent should rest on a common understanding of the future classroom life. With reference to the above reflections, teachers who lost authority would likely struggle with such an approach. Success may depend on classes that have become chaotic in spite of the fact that the pupils want an orderly and effective classroom. Pupils highly motivated to experience good classroom management could cooperate with the teacher to facilitate the change. The external expert



who supports or replaces the teacher for a period could increase the possibility that pupils exert effort to change the highly disruptive classroom context.

The messages addressed in the previous sections may argue for scepticism. If teacher authority is lacking because it is lost in a competition for power won by some pupils, there is no reason to believe cognitive strategies will return this authority to the teacher. Alternatively, it may be lost for the reasons mentioned above, poor classroom management, unclear expectations etc., but in the vacuum of leadership some pupils may have captured the social power and become informal leaders. Proactively aggressive pupils are prone to seek power at the cost of another individual (Roland & Idsoe, 2001). Capturing the power that formally should belong to the teacher will be a strong and visible scalp and, thus, attractive. A formal leader's helplessness is likely a nice profit. If this is the case in a school class, cognitive strategies, such as learning to behave, building relationships, implementing rules and procedures, etc., will hardly succeed. Proactively aggressive pupils who rule the class will likely prefer to continue to hold onto power.

In cases in which teacher authority is lost due to a power take-over from proactively aggressive pupils, re-establishing teacher authority should take into account the power of social status. The teacher's legal right to lead the class must be coupled with a legitimate right to lead. Legitimacy comes when the class accepts the teacher's right to set standards, give instructions etc., implying that those who have lent or stolen this legitimacy for a period must lose it or voluntarily give it away. To achieve legitimacy to lead, the teacher could use his legal right to lead. This could include eliminating some of the foundation for the power that some pupils have captured. For example, the social system in a classroom that has been ruled by pupils will continue to support their ruling. The social system can be shaken for a moment by suddenly introducing a set of new conditions in a coordinated and planned manner. In the moment of unexpected destabilization, a classroom management strategy can be introduced to the class by the teacher together with a team of teachers. When the leadership role is achieved and power re-established, an intensive effort to establish relations and routines in the class can begin. In this phase, the cognitive strategy described above can be helpful. This approach corresponds with the social system strategy revealed in Paper 3.

Reactive aggression contributes to disruptive behaviour in classrooms. To reach the level of highly disruptive behaviour, I assume that corrections to reactive aggression must be very poor or that disruptive behaviour caused by other motives supplement the indiscipline in the class. We can anticipate that the threshold for activation of reactive aggression is low in a disruptive and poorly led classroom. When structures, organization and instructions are unclear, predictability will be weak and social stimuli may be numerous and chaotic. This creates a classroom context with many triggers for disruptiveness in impulsive pupils, pupils with low social competence and pupils with hostile attribution bias, causing them to feel a frequent need for defence. The cognitive strategy for turnarounds could be helpful to those pupils who have extra needs for clarity, firm demands and a large amount of support. In highly disruptive classes, reactive aggressive peers may be under pressure or led by proactive aggressive pupils possessing informal leadership. Highly visible and socially incompetent reactive aggression can create a shelter that may help proactive aggressive pupils remain undetected.

The case study reported in Paper 3 did not measure any type of aggressiveness or pupil behaviour. However, the social systems strategy, which was one of the strategies revealed to turn around highly disruptive classes, corresponds very well with an understanding of proactive aggressiveness as a relevant motive to dethrone the teacher. Making the teacher's loss of leadership highly visible may serve as a reward to those seeking power through another person's powerlessness and for those seeking affiliation at the cost of another person's exclusion. Consequently, the above discussion about the association between proactive aggressiveness and disobedience (RQ3) may explain why some classes develop into highly disruptive learning environments and why teachers' power take-over can help to get the class back on track.

### **5.3 Overall discussion**

An aim of this thesis was to elaborate on the interplay between disobedient/disruptive pupil behaviour, pupil aggressiveness and teacher authority.

Although goals and values are established for classroom life, some classes become an arena for contradicting interests. A teacher, on behalf of the school and educational system, needs pupils to consider him a legitimate

representative of a legitimate system (Bjerg, 2011; Dale, 1986; Hansen, 2006; Pace & Hemmings, 2006). If pupils reject either the system's or the teacher's right to set directions, give instructions, set demands and give rewards, it opens the door for conflicting interests, and the teacher's ability to conduct good classroom management will be deflated. Due to changes in schools, as well as in societies today, teacher authority depends largely on the teacher as a person and his or her abilities to establish positive relationships with each pupil (Bjerg, 2011; Pianta, 2006). Hence, the teacher achieves the credibility needed to conduct good classroom management if pupils think that he deserves it. When personal ability is so highly emphasized, it may be both painful and embarrassing to recognize that one does not succeed because one's professional identity is at stake (Dicke et al., 2015; Sun & Shek, 2012b). It is well known that many teachers leave the profession due to struggles with classroom management, negative pupil behaviour, disobedience, etc. (Evertson & Weinstein, 2006). However, research suggests that classroom management and the skills needed to gain authority can be successfully trained (Allen et al., 2011; Ertesvåg & Vaaland, 2007). The problems teachers face when they lose authority should not be viewed as a personal issue but, rather, as a professional issue communicated in professional terms.

A main road to teacher authority is authoritative teaching, which involves the integration of firm demands and warm relationships (Walker, 2009; Wentzel, 2002). In addition to releasing legitimate power in the individual axes from pupils to teacher, promoting a shared understanding of and commitment to the teachers' right to possess authority benefits the classroom climate (Pace & Hemmings, 2006). However, even if the mechanisms from engaging in authoritative teaching to gaining credibility as a classroom manager are evident, obstacles exist.

Discipline problems may occur for several reasons. Such behaviour will challenge the authority of the teacher (Emmer & Evertson, 2013; Vaaland, 2011). When a teacher is unable to regulate behaviour in accordance with standards in the classroom, a group of pupils or an individual other than the teacher make the decision. Hence, authority is threatened regardless of whether the teacher's position was intentionally targeted. However, sometimes indiscipline does not simply occur but, rather, reflects consciously rule-breaking behaviour and disobedience to teacher (Paper 1). Aggressiveness is a

person-related factor that enhances the probability that a pupil behaves disobediently in class. This applies to reactive aggressiveness as well as power-related and affiliation-related proactive aggressiveness (Paper 1). Hence, from a teacher's perspective, the risk that his or her authority will be defied depends to some extent on the pupils in his or her class.

Every teacher should prioritize establishing a leadership position, or in other words, achieving legitimate power to lead, in the start-up period of each new class. This is the time when the social dynamics in the class are most workable; social roles and status should be distributed and social norms and relationships should be established (Roland, 1998; Vaaland, 2011). As the social structure develops in the class, the power to influence the group is addressed (Geetzels & Thelen, 1971). Pupils' first impression of the teacher and each other and first common experiences in the class contribute to establishing social structures, and social expectations play an important role in this (Roland, 1998; Vaaland, 2011). During this period of great social dynamics, teachers must recognize that teacher authority is at stake (Paper 2). Hence, establishing themselves as classroom managers should be teachers' main focus when starting up with a new class (Emmer & Evertson, 2013; Roland, 1998).

Given, that the start-up period is strategically of great value for establishing authority, on the one hand, and that pupil aggressiveness implies a special threat to teacher authority, on the other hand, how can this information be supplemented to prescribe purposeful practice? Mental processing of first impression information affects future perception and behaviour (Hamilton, Katz & Leirer, 1980; Kelley, 1950). A useful theoretical supplement to that knowledge regards how aggressiveness interacts with social information processing as described in the SIP model (Crick & Dodge, 1994, 1996). Hence, a question of great interest in this thesis was whether pupils' proactive or reactive aggressiveness was associated with special tendencies regarding the type of information that they would search for in a first meeting with a new teacher. The results indicated that pupils who scored highly on proactive aggressiveness were prone to perceive signs of weakness in a new teacher (Paper 2).

In sum, proactive aggressiveness implied an increased risk for disobedient classroom behaviour (Paper 1), and high scores on proactive aggressiveness

was associated with a perceptual orientation towards signs of weakness in teachers (Paper 2). Each of these facts put teacher authority at stake. However, the two associations with proactive aggressiveness revealed in this thesis may also work together. Pupils with high probability to challenge their teachers through disobedient behaviour also have a special interest in teachers' vulnerabilities. Not only are those pupils prone to detecting weaknesses, they also seem to time their search for such information to the period when the teacher has not yet established legitimacy.

Previous research on proactive aggression adds knowledge that further increases the importance of our findings. Callous-unemotional traits (CU), which are connected with proactive aggression (Fite et al., 2009; Frick et al., 2003), represent the ability to hurt, offend and insult the teacher (or others) without feeling guilt. Furthermore, such traits imply a tendency to use others for one's own satisfaction. Cues of punishment are less important to proactive aggressive pupils compared with their peers (Frick et al., 2003). Actually, these cues seem to bring about low costs as long as the use of aggression pays off. The temperamental style with lowered reactivity in the sympathetic nervous system might make it physiologically "cheaper" to exhibit proactive aggression compared with reactive aggression. Moreover, the positive association between theory of mind capacity and proactive aggression (Renouf, Brendgen, Séguin, et al., 2010) equip those pupils with the ability to manipulate and act instrumentally based on cold-blooded calculations of how others will respond, how to make people feel scared or happy, satisfied or dissatisfied, agree or disagree, etc. It is obvious that theory of mind capacity can result in profit, especially in terms of relational aggression (Renouf, Brendgen, Parent et al., 2010). Additionally, proactive aggression is related to traits of narcissism (Barry et al., 2007; Bushman & Huesmann, 2010), which may lead to a feeling that it is reasonable for one to possess power, affiliation and profits at the cost of others. Even if there is some unique heritability for proactive aggression, unique environmental factors explain a larger amount of variation in such behaviour (Brendgen, et al., 2006). Interestingly, the environmental influence increases until adolescence (Tremblay, 2010), which may imply that the classroom climate plays a substantial impact in school. Yet, research has not yet identified details in the classroom environment that inhibit or enhance aggression.

Reactive aggressiveness implies an increased risk for disobedient classroom behaviour (Paper 1); yet, high scores on this type of aggressiveness are not strongly associated with a perceptual orientation towards signs of weakness in teachers (Paper 2). It seems as though reactive aggressive pupils do not put teacher authority at stake to the same extent as proactive aggressive pupils. However, even if this is not the intention, the teacher's position can be at risk due to persisting disruptive behaviour. Inattention and impulsivity coupled with low social competence in reactive aggressiveness (Raine et al., 2006; Vitaro & Brendgen, 2012) vouch for inappropriate classroom behaviour. Reactive aggressive behaviours are often caused by anger and the need for defence or revenge based on the hostile attribution of social stimuli (Dodge, 2011). The target can be the teacher or one or more classmates, and the behaviour will often be disturbing. Low theory of mind capacity can influence the pupil's ability to understand how his behaviour affects others and the learning conditions. Moreover, possible traits of narcissism (Barry et al., 2007) in reactive aggressive pupils may lead to a convinced view that the attention that they receive is deserved and fair. Some studies have shown that reactive aggression precedes and predicts proactive aggression (Lansford et al., 2002), implying that reactive aggressive pupils may become proactive aggressive. Assuming that environmental factors contribute to such development (Tremblay, 2010), it is reasonable to suggest that the likelihood would increase in a classroom climate with proactive aggressive role models. This is especially the case when pupils are exposed to peers that succeed in obtaining rewards by use of instrumental aggression for a long period of time and even more if the teachers seem to accept or oversee the aggression, which is often the case with social aggression (Björkquist et al., 1992; Vitaro & Brendgen, 2012).

To understand the role that aggressiveness may play in a school, one must consider how the different types of aggressiveness seem to influence peer relations. Reactive aggression is associated with rejection from peers, victimization, fewer friendships and friendships of lower quality than average (Eisner & Malti, 2015; Vitaro, Boivin, & Tremblay, 2007). It follows from this that statements, attitudes, behaviour, etc. exposed by reactive aggressive pupils typically are not admired or copied by other pupils. By contrast, proactive aggressive pupils are often well liked by peers; they are more often admired – potentially because of the power they capture – and they are followed (Eisner

& Malti, 2015; Vitaro et al., 2007). According to Bushman and Huesmann (2010), these studies seem to define popularity based on who has social power more than who is liked. Hence, there may exist a risk for an epidemic effect of proactive aggressive pupil's attitudes and behaviour. This may imply that proactive aggressiveness strongly threatens teacher authority. Moreover, it is hard to foresee possible consequences because the fellowship that the proactive aggressive leaders create among pupils might be powerful and offensive.

Pupil's aggressiveness and teachers' weak authority may both result in the development of highly disruptive classes. Other explanations might also exist, e.g. poor classroom management. Regardless of what causes classes to be disruptive beyond what the teacher can handle, getting the class back on track must imply bringing the teacher into position as the classroom manager. Re-establishing teacher authority will allow the teacher to implement and follow up standards that are compatible with good learning environments. A lack of authority may make such implementation difficult or even impossible (Geetzels & Thelen, 1971). All the seven approaches to highly disruptive classes investigated in Paper 3 indicated that the same issues must be addressed in turnarounds. However, the issues that commonly called for actions were not met by identical initiatives across the cases. Systematic variation regarding solutions revealed two main strategies for turnarounds. One of these strategies corresponds with a theoretical basis that recognizes proactive aggressiveness as important in analysing the dynamics in disruptive classes.

As mentioned, classes may become highly disruptive for different reasons, and reactive and proactive aggressiveness may contribute to this disruption. Furthermore, a highly disruptive classroom may elicit even more aggression. Reactive aggression resulting from weak management and chaos may cause ambiguous situations and frustrations, followed by anger and aggressive behaviour. Reactively aggressive pupils will easily suffer from unpredictability and insecurity in such environments, and the need for self-defence and angry retaliation may occur. This type of aggression is often described as hostile angry reactions meant to ensure self-defence or angry retaliation (Fontaine & Dodge, 2006). When episodes are interpreted in terms of hostile attribution, reactively aggressive pupils are more likely to choose aggressive responses. They tend to quickly and quite impulsively access and enact a mental schema for aggressive responses (Dodge, et al., 1997; Fontaine & Dodge, 2006). Changes in the

environment may reduce typical triggers, which should be expected to lead to decreased anger and aggression. Proactive aggressive pupils may view a highly disruptive classrooms as an Eldorado for use of aggression to achieve desired goals. The literature suggests that home contexts that poorly regulate behaviour may stimulate proactive aggression (Dodge, et al., 1997); this connection may also apply to school. A lack of effective means of correcting behaviour is a characteristic of highly disruptive classes. According to Fontaine and Dodge's (2006) elaboration of behaviour decisions and evaluation in the SIP model, contextual characteristics influence behavioural decision making. Responses must be situationally applicable, and some environmental conditions may lower the threshold for aggressive schemas. This step also includes the evaluation of response efficacy, which is the probability that the behaviour will be an effective instrument for gaining the anticipated rewards (Fontaine & Dodge, 2006). Proactive aggressive pupils who desire affiliation by use of aggressive means can likely succeed in achieving this desire in a chaotic class. The stigmatization of the teacher or a pupil can serve as a focus for common negative attitudes and, thereby, in-group affiliation, which is one central reward for proactive aggression (Roland & Idsoe, 2001). As long as such alliances are part of the classroom culture, some receive benefits and will likely attempt to keep these benefits. Thus, changes in class may not be welcomed. By use of disobedient behaviour, pupils can build alliances against the teacher. The marked visible role of the teacher could make affiliation that underlines distance from the teacher extra rewarding.

In highly disruptive classrooms, and in general when teachers are not in charge of the class, the possibility to gain power at the cost of others is available. The teacher can hardly protect pupils victimized by peers, and the teacher himself is vulnerable to victimization. Social power and status can be gained by use of fear, threats, humiliating someone etc. Proactive aggression makes use of such strategies to achieve rewards (Roland & Idsoe, 2001). According to social information processing (Crick & Dodge, 1994), proactive aggressive pupils more easily anticipate possible success from aggressive behaviour than others and thus evaluate such behaviour more positively than others (Fontaine & Dodge, 2006). One can reasonably expect that those benefitting from a disruptive classroom out of teachers' control will resist changes that might cost them a loss of power and affiliation. Instead of choosing to give up benefits,



some pupils will work against a classroom turnaround intended to re-establish teacher authority. Highly disruptive classes will likely be “protected” by such powerful pupils, implicating that under such circumstances, a cognitive strategy to turnarounds may fail because teaching the pupil right thoughts and skills will not lead to the desired behaviour. Proactively aggressive pupils may find opportunities to obtain short-time social rewards such as power and affiliation within a highly disruptive class. Moreover, by maintaining high levels of disruption, they may reach a long-time benefit from the chronic degradation of the teacher and an environment in which they themselves can possess leadership at the cost of the formal leader. Hence, the systems strategy that forces power redistribution will be more effective than negotiating with pupils about giving away the power that they have captured.

#### **5.4 Implications for practice**

We should not neglect the short-term problems or the long-term implications of classroom disruptions. Behavioural, academic, developmental and moral perspectives imply that ignoring the challenges may result in increasing problems. Teacher stress and burnout are of course, problems; moreover, they imply a risk for recruitment to the profession. Additionally, teachers who hold a formal leadership role but whose authority is undermined risk damage to their professional reputation and self-esteem. Under-achievement in pupil learning implies a loss to the affected pupils due to generally lowered outcome from school, which is also a cost to the society. Disruptive behaviour may also cause more generalized problems among pupils because behaviour becomes “usual” and might spread to other arenas. Disruptive classrooms increase aggressive behaviour, while orderly classrooms with on-task behaviour prevent aggressive behaviour. Disruptive and aggressive environments influence peer relationships and teacher-pupil relationships negatively. Finally, disruptive classroom and school climates may colour the society’s attitudes and beliefs about school and influence how society provides teachers with authority. General negative attributions to school may contribute to vicious cycles, making it more difficult for teachers to establish good learning environments. There may also be a developmental direction from teacher burnout or tiredness to more discipline problems, perception of weakness and deflated authoritative leadership with less warmth and more permissiveness.

In Norway, as in all societies studied, disruption is a challenge in schools. However, for reasons that are not obvious, teachers in Norwegian classrooms struggle more than their colleagues in many comparable countries.

There seem to be a long list of “diffusers” contributing to confusions concerning the issue of disruption. As mentioned, the normative aspect of behaviour – morality – is one perspective that may diffuse the problem. Teacher authority may be questioned by parents, colleagues or school leadership when issues concerning pupil autonomy versus rules are discussed. Lack of school-level consistency in expectations of pupils may lower teachers’ influence and mandate. Variation between adults within school may be supplemented by disagreements or unclear distribution of responsibility between school and homes. When responsibility is not clear, passivity can be a strategy to avoid engaging in activities that will cause other parties to complain.

Other types of diffusers relate to the variation in labels and concepts used to describe disruptive behaviour. This applies to the practical work in school and to the literature and research. The everyday noise and disruption that reduce the quality of the learning environment are labelled with words that are also used in diagnostic language (e.g. disruptive behaviour, noncompliance, oppositional behaviour, disobedience etc.), potentially confusing and complicating communication. Moreover, the severity of problems varies, and concepts used to describe levels of severity of noisy or disruptive classrooms are not commonly or generally established. The construct development in Paper 1 should be a useful contribution in this matter.

Aggressiveness plays a role in disruption. Knowledge of the distinctions between reactive and proactive aggression, how they develop, their aetiology, what triggers activation, and differences in their predictions call for enhanced attention to disruptive behaviour in classrooms. Knowledge of these topics should help prepare teachers to face, analyse and tackle different forms and functions of aggression. Preparedness based on competence makes differentiation possible. The broad terms *noise* and *disruption* should be analysed into more explicit issues to identify what is driven by aggressiveness, what represents unclear instructions, what relates to negative social norms, what is due to individual lack of capacity, what is part of social dynamics between pupils and/or between pupils and teachers, etc. There is reason to

believe that good classroom management, including authoritative teaching, implies powerful prevention of all kinds of disruption. However, a more explicit and detailed understanding of micro and macro mechanisms influencing pupil behaviour would be helpful for prevention and when problems occur. Aggression threatens the learning environment and teacher authority.

Teacher authority is a complex issue. Authority implies power, which is necessary to conduct leadership. Still, authority can be used for destructive purposes. In schools, authority possessed by a teacher who does not have clear goals and intentions but, instead, acts impulsively or inconsistently with pupils can lead to negative consequences. Several sources may contribute to a teacher's authority: formal role, school culture and consistency among staff, high-quality classroom management, personal characteristics, support from socially strong pupils in the class, support from parents, society's general positive attitudes towards teachers and schools. The classroom management element mentioned in the list contains many aspects: social and academic support to every pupil, close relationships, high-quality teaching, clear demands, consistent and proactive behaviour management, fairness, humour, respect etc. Classroom management is listed as one source of authority, although this is likely the only element on the list that cannot be compensated by any of the others. Classroom management appears to be the master key to enhance teacher authority and diminish disruptive pupil behaviour as well as aggression in school. Fortunately, classroom management can be learned.

### **5.5 Future directions**

In working on this thesis, I attempted to synthesise a behaviour aspect, disruption; a person-related disposition, aggressiveness; and a contextual element, teacher authority. The process has revealed that within each of the three components as well as their interactions, new knowledge could be useful and contribute to improved practice. Some examples are presented below.

-Proactive aggression is sensitive to environmental influence, and this effect increases until adolescence (Tremblay, 2010). Research should explore environmental aspects within the classroom that influence proactive aggression positively or negatively. Intervention studies could reveal information

regarding how environmental manipulation may affect proactive aggression in class.

-Disobedient pupil behaviour varies across gender and perhaps across age. The prevalence of disobedience in specific grades and its association with reactive and proactive aggressiveness is an interesting topic for future research. Such knowledge could lead to improved preventions and interventions.

Teacher authority seems to be a potential solution to serious challenges in schools. Studies of authority as a philosophical or sociological issue contribute to understanding teacher authority. Still, the classroom as a context, and pupils as those giving the teacher credibility, may be quite different from authority in general or in work-place organizations. Empirical studies of teacher authority exist, although many questions must be investigated. Some examples follow:

-For research on teacher authority to improve, high-quality measures must be employed to assess authority in classrooms. Vaaland and Ertesvåg (2013) and Ertesvåg and Roland, (2015) used an instrument that asked teachers to report their perceived authority in class. A parallel instrument based on pupil reports is needed. How parents perceive teacher authority may also be of interest. Moreover, reliable measurement based on observational data would largely contribute to teacher authority research.

-What elements constitute teacher authority? Are these elements hierarchically organized implying that some elements are more basic than others and, thereby, necessary for other elements to be effective? How can teachers achieve the elements of authority? What about sustainability across time, classes, subjects, working methods etc.? Further questions regard how school and society promote or hinder teacher authority.

-Given that teacher authority is an objective in classrooms, to what extent do pupils differ in what they consider signs of authority? Do reactive and proactive aggressive pupils assess teachers' authority differently because they perceive different aspects of authority? Moreover, the stability of teacher authority across classes should be considered to learn more about what factors that give and withdraw authority. A longitudinal design following teachers across time and classes could assess the stability and variability of authority.

## *Discussion*

---

-For practical and theoretical purposes, research is needed on approaches to re-establishing teacher authority in highly disruptive classes. Field studies following single-case turnarounds and quasi-experimental designs are relevant. Screenings of pupil aggressiveness and teacher authority before and after the intervention would be interesting. The measure of disobedience developed in this thesis could be used together with other measures of discipline problems to reveal whether some different patterns of behaviour are typical in highly disruptive classes and whether different strategies seem to be useful in different types of highly disruptive classes.

Given that this thesis is a pilot for investigating the possible interplay between pupil aggressiveness and teacher authority, an interaction design would contribute to a further understanding of this issue. Pupil aggressiveness could be assessed as a personal factor that the pupils bring to the classroom. Classroom management and teacher authority could be estimated as contextual factors. Behavioural measures such as disruption could be supplemented with, e.g. bullying, and measures of pro social behaviour.

In addition to revealing new topics for research, this thesis points to the need to supplement the cross-sectional design. Longitudinal designs, intervention designs, and mixed method designs could provide important contributions.



## 6 References

- Allan, J., Gregory, A., Mikami, A., Lun, J., Hamre, B., & Pianta, R. (2013). Observations of effective teacher-student interactions in secondary school classrooms: Predicting student achievement with the Classroom Assessment Scoring System- Secondary. *School Psychology review*, 42 (1), 76-98.
- Allen, J. P., Pianta, R. C., Gregory, A., Mikami, A. Y., & Lun, J. (2011). An interaction-based approach to enhancing secondary school instruction and student achievement, *Science (New York, N.y.)*, 333(6045), 1034–1037. <http://doi.org/10.1126/science.1207998>
- American Psychological Association (2010). *Publication Manual of the American Psychological Association*, 6<sup>th</sup> ed. Washington DC: APA.
- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology*, 53, 27-51.
- Aristoteles (trans. 2006). *Retorikk*. Oversatt av T. Eide. Oslo: Vidarforlaget AS.
- Aronsen, E. (2008). *The social animal* (10<sup>th</sup> ed.). New York, NY: Worth Publishers.
- Arum, R., & Ford, K. (2012). How other countries «Do Discipline». *Educational Leadership*, 70(2), 56-60.
- Arum, R., & Velez, M. (2012). *Improving Learning environments: School discipline and student achievement in comparative perspective*. Stanford, CA: Stanford University.
- Bandura, A. (1973). *Aggression: A social learning analysis*. Englewood Cliffs, NJ: Prentice-Hall Inc.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall Inc.
- Barker, E. D., Tremblay, R. E., Nagin, D. S., Vitaro, F., & Lacourse, E. (2006). Development of male proactive and reactive physical aggression during adolescence. *Journal of Child Psychology and psychiatry*, 47, 783-790.
- Barry, T. D., Thompson, A., Barry, C. T., Lochman, J. E., Adler, K., & Hill, K. (2007). The importance of narcissism in predicting proactive and reactive aggression in moderately to highly aggressive children. *Aggressive Behavior*, 33, 185-197.

## References

---

- Baumrind, D. (1991). Parenting styles and adolescent development. In J. Brooks-Gunn, R. Lerner & A. C. Peterson (Eds.), *The Encyclopedia of adolescence* (pp. 746-758). New York: Garland.
- Bear, G. G. (1998). School discipline in the United States: Prevention, correction, and long-term *social development*. *Educational and Child Psychology*, 15(1), 15–39.
- Berkowitz, L. (1993). *Aggression: Its causes, consequences and control*. New York, NY: McGraw-Hill.
- Bjerg, H. (2011). *Skoling af lyst. Fantasier og fornemmelser i tre elevgenerationers erindringer om livet i skolen 1950-2000*. Ph.D-avhandling fra Institut for Uddannelse og Pædagogik, Aarhus Universitet.
- Bjerg, H., & Knudsen, H. (2008). Når straff er til forhandling. I J. B. Krejsler & L. Moos (Eds.), *Klasseledelse –magtkampe i praksis, pædagogik og politik*, (pp. 61-76), Frederikshavn: Dafolo.
- Björkquist, K., Lagerspetz, K., & Kaukiainen, A. (1992). Do girls manipulate and boys fight? Developmental trends in regard to direct and indirect aggression. *Aggressive Behavior*, 18, 117-127.
- Bjørnebekk, G. (2007). Dispositions related to sensitivity in the neurological basis for activation of approach-avoidance motivation, antisocial attributes, and individual differences in aggressive behavior. *Social behavior and personality; an international journal*, 35(9), 1251-1264.
- Blair, R. J. R. (1999). Responsiveness to distress cues in the child with psychopathic tendencies. *Personality and Individual Differences*, 27, 135-145.
- Bouchard, T. J. (1994). Genes, environment, and personality. *Science*, 264(5166), 1700-1701.
- Bourgeois, L. J., & Eisenhardt, K. M. (1987). Strategic decision processes in high velocity environments: Four cases in the microcomputer industry. *Management Science*, 34, 816-835.
- Brendgen, M., Dionne, G., Girard, A., Boivin, M. Vitaro, F., & Pérusse, D. (2005). Examining genetic and environmental effects on social aggression: A study of 6-year-old twins. *Child Development*, 76, 930-946.



## References

---

- Brendgen, M., Vitaro, F., Boivin, M., Dionne, G., & Pérusse, D. (2006). Examining genetic and environmental effects on reactive versus proactive aggression. *Developmental Psychology, 42*, 1299-1312.
- Brendgen, M., Vitaro, F., Tremblay, R. E., & Lavoie, F. (2001). Reactive and proactive aggression: Predictions to physical violence in different contexts and moderating effects of parental monitoring and caregiving behavior. *Journal of Abnormal Child Psychology, 29*, 293-304.
- Bronfenbrenner, U. (1986). Ecology of the family as a context of on the human development: Research perspectives. *Developmental Psychology, 22*(6), 723-742.
- Brophy, J., & McCaslin, M. (1992). Teachers' reports of how they perceive and cope with problem students. *Elementary School Journal, 93*(1), 3-68.
- Brown, K., Atkins, M.S., Osborne, M.L., & Milnamow, M. (1996). A revised teacher rating scale for reactive and proactive aggression. *Journal of Abnormal Child Psychology, 24*(4), 473-480.
- Bru, E. (2006). Factors associated with disruptive behaviour in the classroom. *Scandinavian Journal of Educational Research, 50*(1), 23-43.
- Bru, E., Stephens, P., & Torsheim, T. (2002). Student's perceptions of class management and reports of their own misbehavior. *Journal of School Psychology, 40*(4), 287-307.
- Brynildsen, A. (1987). *Frihet og forpliktelse*. Oslo: Dreyer.
- Bushman, B. J., & Baumeister, R. F. (1998). Threatened egotism, narcissism, self-esteem, and direct and displaced aggression: Does self-love or self-hate lead to violence? *Journal of Personality and Social Psychology, 75*, 219-229.
- Bushman, B. J., & Huesmann, L. R. (2010). Aggression. In S. T. Fiske, D. G. Gilbert, & G. Lindzey (Eds.), *Handbook of Social Psychology, 5<sup>th</sup> edition*, Vol 2, pp.833-863. Hoboken, NJ: Wiley & Sons, Inc.
- Castelao, C. F., & Kröner-Herwig, B. (2015). Developmental trajectories and predictors of externalizing behavior: A comparison of girls and boys. *Journal of Youth Adolescence, 43*, 775-789.
- Cohen, J. J., & Fish, M.C. (1993). *Handbook of school-based interventions: Resolving student problems and promoting healthy educational environments*. San Francisco, CA: Jossey-Bass Social and Behavioral Science Series.

## References

---

- Cook, T. D., & Campbell, D. T. (1979). *Quasi Experimentation. Design & Analysis issues for field settings*. Boston, MA: Houghton Mifflin Company.
- Cornell, D. G., Warren, J., Hawk, G., Stafford, E., Oram, G. & Pine, D. (1996). Psychopathy in instrumental and reactive violent offenders. *Journal of Consulting and Clinical Psychology, 64*, 783-790.
- Costa, P. T., & McCrae, R. R. (1992). Normal personality assessment in clinical practice: The NEO-personality inventory. *Psychological Assessment, 4*(1), 5-13.
- Cote, J. A., & Buckley, R. (1987). Estimating trait, method, and error variance: Generalizing across 70 construct validation studies. *Journal of Marketing Research, 24*, 315-318.
- Côté, S., & Archer, J. (2005). Sex differences in aggressive behavior: a developmental and evolutionary perspective. In R. E. Tremblay, W. W. Hartup, & J. Archer (Eds.), *Developmental origins of aggression* (pp. 425-443). New York: The Guilford Press.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social-information-processing mechanisms in children's social adjustment. *Psychological Bulletin, 115*(1), 74-101.
- Crick, N. R., & Dodge, K. A. (1996). Social information-processing mechanisms in reactive and proactive aggression. *Child Development, 67*, 993-1002.
- Crick, N. R., & Grotpeter, J. K. (1995). Relational aggression, gender, and social-psychological adjustment. *Child Development, 66*, 710-722.
- Dale, E. L. (1986). *Oppdragelse fri fra "mor" og "far"*. *Pedagogikkens grunnlag i det moderne samfunn*. Oslo: Gyldendal.
- Diamantopoulos, A., & Siguaw, J. A. (2000). *Introducing LISREL*. Los Angeles, CA: Sage.
- Dicke, T., Elling, J., Schmeck, A., & Leuter, D. (2015). Reducing reality shock: the effects of classroom management skills training on beginning teachers. *Teaching and Teacher Education, 48*, 1-12.
- Dodge, K. A. (1991). The structure and function of reactive and proactive aggression. In D. J. Pepler & K. H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 201-218). Mahwah, NJ: Lawrence Erlbaum.

## References

---

- Dodge, K. A. (2011). Social information processing patterns as mediators of the interaction between genetic factors and life experiences in the development of aggressive behavior. In P. R. Shaver & M. Mikulincer (Eds.), *Human Aggression and Violence. Causes, manifestations, and Consequences* (pp. 165-185). Washington DC: American Psychological Association.
- Dodge, K. A., & Coie, J. D. (1987). Social information-processing factors in reactive and proactive aggression in children's playgroups. *Journal of Personality and Social Psychology*, 53, 1146-1158.
- Dodge, K. A., Coie, J. D., & Lynam, D. (2006). Aggression and antisocial behavior in youth. In N. Eisenberg (Volum editor), *Handbook of Child Psychology*, (6<sup>th</sup> ed.), Vol. 3 (pp. 719-788). Hoboken, NJ: Wiley & Sons, Inc.
- Dodge, K. A., Lochman, J. E., Harnish, J. D., Bates, J. E., & Pettit, G. S. (1997). Reactive and proactive aggression in school children and psychiatrically impaired chronically assaultive youth. *Journal of Abnormal Psychology*, 106, 37-51.
- Dollard, J., Doob, L. W., Miller, N. E., Mowrer, O. H., & Sears, R.R. (1939). *Frustration and aggression*. New Haven, CT: Yale University Press.
- Drugli, M. B. (2012). *Relasjonen lærer og elev - avgjørende for elevenes læring og trivsel*. Oslo: Cappelen Damm AS.
- Duesund, L. (2014). Uro i skolen. In: J. H. Stray, L. Wittek (Eds.), *Pedagogikk – En grunnbok* (pp.568-583). Oslo: Cappelen Damm Akademisk.
- Eisenhardt, K. M. (1989). Building theories from case study research. *Academy of Management Review*, 14(4), 532-550.
- Eisenhardt, K. M. (1990). Speed and strategic choice: How managers accelerate decision making. *California management Review*, 32(3), 39-54.
- Eisenhardt, K. M., & Bourgeois, L. J. (1988). Politics of strategic decision making in high-velocity environments: Toward a midrange theory. *Academy of Management Journal*, 31(4), 737-770.
- Eisenhardt, K. M., & Sull, D. N. (2001). Strategy as simple rules. *Harvard Business Review*, 79, 107-116.
- Eisenhardt, K. M., & Zbaracki, M. A. (1992). Strategic Decision making. *Strategic Management Journal*, 13, 17-37

## References

---

- Eisner, M. P., & Malti, T. (2015). Aggressive and violent behavior. In R. M. Lerner (Ed.), *Handbook of child psychology and developmental science* (7<sup>th</sup> ed.) Vol. 3 (pp. 1-48). Hoboken NJ: Wiley & Sons, Inc.
- Emmer, E. T., & Evertson, C. M. (2013). *Classroom management for middle and high school teachers* (8<sup>th</sup> ed.). Boston: Pearson.
- Ertesvåg, S. K. (2011). Measuring authoritative teaching. *Teaching and Teacher Education*, 27(1), 51-61.
- Ertesvåg, S. K. (2014). Klasseledelse – teoretiske perspektiv. In: J. H. Stray, L. Wittek (Eds.), *Pedagogikk – En grunnbok* (pp. 321-338). Oslo: Cappelen Damm Akademisk.
- Ertesvåg, S.K., & Roland, E. (2015). Professional cultures and rates of bullying. *School Effectiveness and School Improvement*, 26(2), 195-214.
- Ertesvåg, S. K., & Vaaland, G. S. (2007). Prevention and reduction of behavioural problems in school: An evaluation of the Respect program. *Educational Psychology*, 27(6), 713-736.
- Evertson, C. M., & Weinstein, C. S. (2006). Classroom management as a field of inquiry. In C. M. Evertson, and C. S. Weinstein, *Handbook of classroom management. Research, practice, and contemporary issues* (pp. 3-15). Mahwah, NJ: Lawrence Erlbaum Associates.
- Fangen, R. (1965). *Essays*. Oslo:
- Farrington, D. P., & Ttofi, M. M. (2012). Protective and promotive factors in the development of offending. In T. Bleisener, A. Beelmann, & M. Stemmer (Eds.), *Antisocial behavior & Crime. Contributions of Developmental and Evaluation Research to Prevention and Intervention*, (pp. 71-88). Cambridge, MA: Hogrefe Publishing.
- Fite, P. J., Stoppelbein, L., & Greening, L. (2009). Predicting readmission to a child psychiatric inpatient unit: The impact of parenting styles. *Journal of Child and Family Studies*, 18, 621-629.
- Flyvbjerg, B. (2006). Five misunderstandings with case-study research. *Qualitative Inquiry* 12(2), 219-245.
- Flyvbjerg, B. (2011). Case study. In N. K. Denzin & Y. S. Lincoln (Eds.), *Qualitative Research* (pp. 301-316). California: Sage.
- Fontaine, R. G., & Dodge, K. A. (2006). Real-time decision making and aggressive behavior in youth: A heuristic model of response evaluation and decision (RED). *Aggressive behavior*, 32, 604-624.

## References

---

- Freiberg, H.J., & Lapointe, J.M. (2006). Research-based programs for preventing and solving discipline problems. In C.M. Evertson & C.S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 735–786). Mahwah, NJ: Lawrence Erlbaum.
- Freire, P. (1978). *De undertryktes pædagogik*. København: Chr. Ejlertsen Forlag.
- Frick, P. J., Cornell, A. H., Barry, C. T., Bodin, S. D., & Dane, H. E. (2003). Callous-unemotional traits and conduct problems in the prediction of conduct problem severity, aggression, and self-report of delinquency. *Journal of Abnormal Child Psychology*, *31*, 457-470.
- Frude, N. (1992). Perspectives on disruptive behavior. In M. Scherer, I. Gersch, & L. Fry (Eds.), *Meeting disruptive behavior* (pp. 3–28). London: Routledge.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational Research: An Introduction* (8<sup>th</sup> ed.). Boston, Allyn & Bacon.
- Geetzels, J. W., & Thelen, H. A. (1971). The classroom group as a unique social system. In A. Yee (ed.), *Social interaction in educational settings* (pp. 6-24). Englewood Cliffs, NJ: Prentice-Hall.
- Gilliam, L. (2008). Bøvl og ballade – når børn obstruerer læreres projekt. I J. B. Krejsler & L. Moos (Eds.): *Klasseledelse – magtkampe i praksis, pædagogik og politik* (pp. 77-92), Frederikshavn: Dafolo.
- Goodman, R., Meltzer, H., & Bailey, V. (2003). The strengths and difficulties questionnaire: A pilot study on the validity of the self-report version. *International Review of Psychiatry*, *15*, 173–177.
- Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology*, *60*, 549-576.
- Graham, S., & Hudley, C. (1993). An attributional intervention to reduce peer-directed aggression among African-American boys. *Child Development*, *64*, 124-138.
- Guerra, N. G., & Slaby, R. G. (1990). Evaluative factors in social problem solving by aggressive boys. *Journal of Abnormal Child Psychology*, *17*, 277-289.
- Hagtvet, K. A. (1995). Using preconceptions in quantitative analysis of empirical data. In G. Imsen, E. Skaalvik, & A. Oftedal Telhaug (Eds.),

## References

---

- Frontlinjer i pedagogisk forskning* (pp. 27–56). Trondheim: Norwegian Centre for Child research/ Norwegian Research Council.
- Hall, C. S., & Lindzey, G. (1978). *Theories of personality* (Third ed.). New York: John Wiley & Sons.
- Hamilton, D. L., Katz, L. B., & Leirer, V. O. (1980). Cognitive representation of personality impressions: organized processes in first impression. *Journal of Personality and Social Psychology*, 39(6), 1050-1063.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectories of children's school outcomes through eight grade. *Child Development*, 72(2), 625-638.
- Hansen, D. T. (2006). Epilogue: the sources and expressions of classroom authority. In J. L. Pace, & A. Hemmings (Eds.), *Classroom authority: Theory, research, and practice* (pp. 175-185). Mahwah, NJ: Lawrence Erlbaum.
- Hawker, D. S. J., & Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: a meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 41(4), 441-445. doi:10.1111/1469-7610.00629.
- Hawley, P. H. (2003). Strategies of control, aggression, and morality in preschoolers: An evolutionary perspective. *Journal of Experimental Child Psychology*, 85, 213-235.
- Hawley, P. H. (2007). Social dominance in childhood and adolescence: why social competence and aggression may go hand in hand. In P. H. Hawley, T. D. Little, & P. C. Rodkin (Eds.), *Aggression and adaptation. The bright side to bad behavior* (pp. 1-29). Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Highhouse, S., & Gillespie, J. Z. (2008). Do samples really matter that much? In C. E. Lance & R. J. Vandenberg, (Eds.), *Statistical and methodological myths and urban legends: Doctrine, verity and fable in the organizational and social sciences* (pp. 249-267). Mahwah, NJ: Lawrence Erlbaum.
- Hjardemaal, F. (2011). Vitenskapsteori. I: T.A. Kleven (red.), *Innføring i pedagogisk forskningsmetode* (pp. 179-216). Oslo: Unipub.
- Hubbard, J.A., Smithmyer, C. M., Ramsden, S. M., Parker, E. H., Flanagan, K. D., Dearing, K. F. ... Simon, R. F. (2002). Observational, Physiological, and self-report measures of children's anger: Relations

## References

---

- to reactive versus proactive aggression. *Child Development*, 73, 1101-1118.
- Huesmann, L. R., Eron, L. D., Lefkowitz, M. M., & Walder, L. O. (1984). Stability of aggression over time and generations. *Developmental Psychology*, 20(6), 1120-1134.
- Jöreskog, K., & Sörbom, D. (2006). *LISREL 8.80*. Lincolnwood: Scientific Software International.
- Kaukiainen, A., Björkquist, K., Lagerspetz, K., Osterman, K., Salmivalli, C., Rothberg, S., ... Ahlbom, A. (1999). The relationships between social intelligence, empathy, and three types of aggression. *Aggressive Behavior*, 25, 81-89.
- Kelley, H. H. (1950). The warm-cold variable in first impressions of persons. *Journal of Personality*, 18, 431-439.
- Kjærnsli, M., & Jensen, F. (2013). Læringsmiljøet i skolen. I M. Kjærnsli, & R. V. Olsen (red.), *Fortsatt en vei å gå. Norske elevers kompetanse i matematikk, naturfag og lesing i PISA 2012 (pp. 261-)*. Oslo: Universitetsforlaget.
- Kleven, T.A. (2002). Ikke-eksperimentelle design. I: T. Lund (Red.), *Innføring I forskningsmetodologi*, (s. 265-286). Oslo: Unipub.
- Kleven, T. A. (2008). Validity and validation in qualitative and quantitative research. *Nordisk Pedagogik*, 28(3), 219–233.
- Kleven, T. A. (2011). Forskning og forskningsresultater. I T.A. Kleven (red.), *Innføring i pedagogisk forskningsmetode* (pp. 9-27). Oslo: Unipub.
- Krejsler, J. B., & Moos, L. (2008). Magtkampe i praksis, pedagogik og politik. En introduktion til klasseledelse. I J. B. Krejsler & L. Moos (Eds.): *Klasseledelse –magtkampe i praksis, pedagogik og politik* (pp. 7-22). Frederikshavn: Dafolo.
- Kunnskapsløftet (2006). Læreplan for grunnskolen og videregående opplæring. Downloaded 10. Mars 2016 from <http://www.udir.no/Lareplaner/Kunnskapsloftet/>
- Kupersmidt, J. B., Stelter, R., Dodge, K. A. (2011). Development and validation of the social information processing application: A web-based measure of social information processing patterns in elementary school-age boys. *Psychological Assessment*, 23,(4), 834-847.



## References

---

- Kvale, S., & Brinkmann, S. (2009). *Det kvalitative forskningsintervju* (2nd ed.) [The qualitative research interview, 2<sup>nd</sup> ed.]. Oslo: Gyldendal Akademisk.
- Lang, P. J. (1995). The emotion probe. Studies of motivation and attention. *American Psychologist*, 50(5), 372-385.
- Lansford, J. E., Dodge, K. A., Pettit, G. S., & Bates, J. E. (2002). *Developmental trajectories of reactive and proactive aggression: Similarities and differences over time*. Paper presented at the International Society for Research on Aggression, Montreal, QC.
- Leary, M. (2010). Affiliation, acceptance, and belonging. The pursuit of interpersonal connection. In S. T. Fiske, D. G. Gilbert, & G. Lindzey (Eds.), *Handbook of Social Psychology* (5<sup>th</sup> ed.), Vol 2 (pp. 864-897). Hoboken, NJ: Wiley & Sons, Inc.
- Lemerise, E. A., & Arsenio, V. F. (2000). An integrated model of emotional processes and cognition in social information processing. *Child Development*, 71(1)107-118.
- Levin, J., & Nolan, J.F. (2006). *Principles of classroom management: A professional decisionmaking model* (5<sup>th</sup> ed.). Boston: Allyn & Bacon.
- Lewin, K. (1951). Behavior and development as a function of the total situation. In D. Cartwright (Ed.), *Field Theory in Social Science. Selected theoretical papers by Kurt Lewin* (pp. 238-303). New York: Harper & Brothers Publishers.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: SAGE Publications.
- Lincoln, Y. S., Lynham, S. A., & Guba, E. G. (2011). Paradigmatic controversies, contradictions, and emerging confluences, revisited. In N. K. Denzin & Y. S. Lincoln (Eds.) *The SAGE handbook of qualitative research* (pp. 97-128). Thousand Oaks, CA: SAGE.
- Lindell, M. K., & Withney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114-121.
- Little, T. D., Brauner, J., Jones, S. M., Nock, M. K., & Hawley, P. H. (2003). Rethinking aggression: A typological examination of the functions of aggression. *Merrill-Palmer Quarterly*, 49, 343-369.



## *References*

---

- Little, T. D., Jones, S. M., Henrich, C. C., & Hawley, P. H. (2003). Disentangling the “whys” from the “whats” of aggressive behavior. *International Journal of Behavioral Development, 27*, 122-133.
- Loeber, R., & Farrington, D. P. (2001). The significance of child delinquency. In R. Loeber and D. P. Farrington (Eds), *Child Delinquents. Development, Intervention and Service Needs* (pp. 1-22). Thousand Oaks, CA: SAGE Publications.
- Loeber, R., Green, S.M., Lahey, B.B., & Stouthamer-Loeber, M. (1991). Differences and similarities between children, mothers and teachers as informants on disruptive child behavior. *Journal of Abnormal Child Psychology, 19*, 75–95.
- Loeber, R., Lahey, B. B., & Thomas, C. (1991). Diagnostic conundrum of oppositional defiant disorder and conduct disorder. *Journal of Abnormal Psychology, 100*, 379-390.
- Loney, B. R., Frick, P. J., Clements, C. B., Ellis, M. L., & Kerlin, K. (2003). Collous-unemotional traits, impulsivity, and emotional processing in antisocial adolescents. *Journal of Clinical Child and Adolescent Psychology, 32*, 66-80.
- Lopez-Duran, N. L., Olson, S. L., Hajal, N. J., Felt, B. T., & Vazquez, D. M. (2009). Hypothalamic pituitary adrenal axis functioning in reactive and proactive aggression in children. *Journal of Abnormal Child Psychology, 37*, 169-182.
- Lund, T. (2005). The qualitative-quantitative distinction: Some comments. *Scandinavian Journal of Educational Research, 49*(2), 115-132.
- Lund, T., & Haugen, R. (2006). *Forskningsprosessen*. Oslo: Unipub.
- Marcus-Newhall, A., Pedersen, W. C., Carlson, M., & Miller, N. (2000). Displaced aggression is alive and well: A meta-analytic review. *Journal of Personality and Social Psychology, 78*(4), 670-689.
- Marsee, M. A., & Frick, P. J. (2007). Exploring the cognitive and emotional correlates to proactive and reactive aggression in a sample of detained girls. *Journal of Abnormal Child Psychology, 35*, 969-981.
- Marzano, R. J., (with Marzano, J. S., & Pickering, D. J.) (2003). *Classroom management that works. Research-based strategies for every teacher*. Alexandria, VA: Association for Supervision and Curriculum Development.
- May, R. (1981). *Freedom and destiny*. New York: W. W. Norton.

## References

---

- McCrae, R. R., & Costa, P. T. (2004). A contemplated revision of the NEO five-factor inventory *Personality and individual differences*, 36(3), 587-596.
- Messick, S. (1995). Validity of psychological assessment: Validation of inferences from persons' responses and performances as scientific inquiry into score meaning. *American Psychologist*, 50(9), 741-749.
- Metz, M. H. (2006). Foreword. In J. L. Pace & A. Hemmings (Eds.), *Classroom authority. Theory, research, and practice*, (pp. vii-xvi). Mahwah, NJ: Lawrence Erlbaum.
- Milgram, S. (1963). Behavioral study of obedience. *Journal of Abnormal and Social Psychology*, 67(4), 371-378.
- Milgram, S. (1965). Liberating effect of group pressure. *Journal of Personality and Social Psychology*, 1(2), 127-134.
- Milgram, S. (1978). *Obedience to authority*. New York, NY: Harper & Row.
- Miller, N. E. (1941). The frustration-aggression hypothesis. In R. Lawson (Ed.), *Frustration: The development of a scientific concept* (pp.72-76). New York: Macmillan.
- Mischel, W. (1973). Toward a cognitive social learning conceptualization of personality. *Psychological Review*, 80(4), 252-283.
- Monsvold, T., Bendixen, M., Hagen, R., & Helvik, A. S. (2011). Exposure to teacher bullying in schools: A study of patients with personality disorders. *Nordic Journal of Psychiatry*, 65(5), 323-299.
- Moos, L. (2008). Diskurser og styringslogikker i kampen om demokratisk dannelse. I J. B. Krejsler & L. Moos (Eds.), *Klasseledelse –magtkampe i praksis, pædagogik og politik* (pp. 195-211). Frederikshavn: Dafolo.
- Morris, V. C., & Pai, Y. (1976). *Philosophy and the American school* (2<sup>nd</sup> ed.) Boston: Houghton Mifflin Company.
- Morselli, D., & Passini, S. (2012). Rights, democracy and values: A comparison between the representations of obedience and disobedience in Italian and Finnish students. *International Journal of Intercultural Relations*, 36, 682-693.

## References

---

- Moskowitz, D.S. (1986). Comparison of self-reports, reports by knowledgeable informants, and behavioral observation data. *Journal of Personality*, 54(1), 294–317.
- Muthén, B. O. (1997). Latent variable modeling of longitudinal and multilevel data. In A. Raftery (Ed.), *Sociological methodology* (pp. 453-480). Boston: Blackwell Publishers.
- Muthén, L. K., & Muthén, B. O. (1998-2010). *Mplus user's guide* (6<sup>th</sup> ed.). Los Angeles, CA: Muthén & Muthén.
- Muthén, B. O., & Satorra, A. (1995). Complex sample data in structural equation modeling. *Sociological Methodology*, 25, 267-316
- Njegovan, B. R., Vucadinović, M., & Nešić, L. G. (2011). Characteristics and types of authority: the attitudes of young people. A case study. *Sociologia*, 43(6), 657-673.
- Nordahl, T. (2008). Klassen som læringsmiljø og lærerens ansvar. I J. B. Krejsler & L. Moos (Eds.), *Klasseledelse –magtkampe i praksis, pædagogik og politik* (pp.145-161). Frederikshavn: Dafolo.
- Norusis (2007). *SPSS 15.0 guide to data analysis*. Chicago, IL: Prentice Hall, Inc.
- Norwegian National Committees for Research Ethics (NESH) (2006). Forskningsetiske retningslinjer for samfunnsvitenskap, humaniora, juss og teologi. Forskningsetiske komiteer. <https://www.etikkom.no/globalassets/documents/publikasjoner-som-pdf/forskningsetiske-retningslinjer-for-samfunnsvitenskap-humaniora-juss-og-teologi-2006.pdf> Downloaded February 8, 2016.
- Nunnally, J.C., & Bernstein, I. H. (1994). *Psychometric theory* (3<sup>rd</sup> ed.). New York, NY: McGraw-Hill.
- Ogden, T. (2001). *Sosial Kompetanse og Problematferd i Skolen*. Oslo: Gyldendal
- Olweus, D. (1979). Stability of aggressive reaction patterns in males: A review. *Psychological Bulletin*, 86(4), 852-875.
- Olweus, D. (1989). Prevalence and incidence in the study of antisocial behavior: Definitions and measurements. In M.W. Klein (Ed.), *Cross-national research in self-reported crime and delinquency* (pp. 187–201). Norwell, MA: Kluwer Academic.

## References

---

- Opplæringsloven downloaded 2. April 2016 from <https://lovdata.no/dokument/NL/lov/1998-07-17-61>
- Orobio de Castro, B., Veerman, J. W., Koops, W., Bosch, J. D., & Monshouwer, H. J. (2002). Hostile attribution of intent and aggressive behavior: A meta-analysis. *Child Development, 73*, 916-934.
- Ostrov, J. M., & Godleski, S. A. (2010). Toward an integrated gender-linked model of aggression subtypes in early and middle childhood. *Psychological review, 117*(1), 233-242.
- Pace, J. L., & Hemmings, A. (2006). Understanding classroom authority as a social construction. In J. L. Pace & A. Hemmings (Eds.), *Classroom authority. Theory, research, and practice* (pp. 1-32). Mahwah, NJ: Lawrence Erlbaum.
- Pas, E.T., Cash, A.H., O'Brennan, L., Debnam, K.J., & Brandshaw, C.P. (2015). Profiles of classroom behavior in high schools: Association between teachers classroom management strategies and classroom composition. *Journal of School Psychology, 53*, 137-148
- Perla, R. J., & Provost, MS (2012). Judgment sampling: A health care improvement perspective. *Quality Management in Health Care, 21*(3), 169-175.
- Petclere, A., & Tremblay, R. E. (2009). Childhood disruptive behaviour disorders: Review of their origin, development, and prevention. *Canadian Journal of Psychiatry - Revue Canadienne de Psychiatrie, 54*(4), 222-231.
- Peugh, J. L., & Enders, C. K. (2004). Missing data in educational research: A review of reporting practices and suggestions for improvement. *Review of Educational Research, 74*(4), 525-556.
- Pianta, R. C. (2006). Classroom management and relationships between children and teachers: Implications for research and practice. In C. M. Evertson, and C. S. Weinstein, *Handbook of classroom management. Research, practice, and contemporary issues* (pp. 685-709). Mahwah, NJ: Lawrence Erlbaum Associates.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y., & Podsakoff, N.P. (2003). Common method biases in behavioral research: critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903.

## References

---

- Postholm, M. B. (2010). *Kvalitativ metode. En innføring med fokus på fenomenologi, etnografi og kasusstudier (2.utgave)* [Qualitative method. (2<sup>nd</sup> ed.)]. Oslo: Universitetsforlaget.
- Raine, A., Dodge, K., Loeber, R., Gatzke-Kopp, L., Lynam, D., Reynolds, C., Stouthamer-Loeber, M., & Liu, J. (2006) The reactive-proactive aggression questionnaire: differential correlates in reactive and proactive aggression in adolescent boys. *Aggressive Behavior, 32*(2), 159-171.
- Renouf, A., Brendgen, M., Parent, S., Vitaro, F., Zelazo, P. D., Boivin, M., Dionne, G., Tremblay, R. E., Pérusse, D., & Séguin, J. R., (2010). Relations between theory of mind and indirect and physical aggression in kindergarten: Evidence of the moderating role of prosocial behavior. *Social Development, 19*(3), 535-555.
- Renouf, A., Brendgen, M., Séguin, J. R., Vitaro, F., Boivin, M., Dionne, G., Tremblay, R. E., & Pérusse, D. (2010) A. Interactive links between theory of mind, peer victimization, and reactive and proactive aggression. *Journal of Abnormal Child Psychology, 38*, 1109-1123.
- Robinson, S. L., & Ricord Griesemer, S. M. (2006). Helping individual students with problem behavior. In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management: Research, practice and contemporary Issues* (pp. 787–802). Mahwah, NJ: Lawrence Erlbaum.
- Roe, A., & Kjærnsli, M. (2013). Resultatet fra skole spørreskjemaet. I M. Kjærnsli & R. V. Olsen (red.), *Fortsatt en vei å gå. Norske elevers kompetanse i matematikk, naturfag og lesing i PISA 2012*, pp. 237-260. Oslo: Universitetsforlaget.
- Roland, E. (1998). *Elevkollektivet* (2<sup>nd</sup> ed.). Stavanger: Rebell Forlag.
- Roland, E. (1999). *School influences on bullying*. Stavanger: Rebell forlag.
- Roland, E. (2014). *Mobbingens psykologi* (2nd ed.). Oslo: Universitetsforlaget.
- Roland, E., & Galloway, D. (2002). Classroom influences on bullying. *Educational Research, 44*, 299–312.
- Roland, E., & Idsoe, T. (2001). Aggression and bullying. *Aggressive Behavior, 27*, 446–462.
- Salmivalli, C., & Heiteenvuori, T. (2007). Reactive but not proactive aggression predicts victimization among boys. *Aggressive Behavior, 33*, 198-206.

## References

---

- Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology, 57*(1), 1-10.
- Schwartz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist, 54*(2), 93–105.
- Shadish, W.R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston, MA: Houghton Mifflin Company.
- Skaalvik, E. M., & Skaalvik, S. (2005). *Skolen som læringsarena. Selvoppfatning, motivasjon og læring*. Oslo: Universitetsforlaget.
- Skiba, R. J. (2014). The failure of Zero Tolerance. *Reclaiming children and youth, 22*(4), 27-33.
- Skiba, R. J., & Rausch, M. K. (2006). Zero Tolerance, suspension, and expulsion: Questions of Equity and effectiveness. In C. M. Evertson, & C. S. Weinstein (Eds.), *Handbook for classroom management: Research, Practice, and Contemporary Issues* (pp. 1063-1089). Mahwah, NJ: Lawrence Erlbaum Associates.
- Slee, R. (2014). Evolving theories of student disengagement: a new job for Durkheim's children? *Oxford Review of Education, 40*(4), 446-465. DOI: 10.1080/03054985.2014.939414.
- Slee, R. (2015). Beyond a psychology of student behaviour. *Emotional and Behavioural Difficulties, 20*(1), 3-19.
- Spector, P. (2006). Method variance in organizational research. Truth or urban legend? *Organizational Research Methods, 9*(2), 221-232.
- Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research* (3<sup>rd</sup> ed.) (pp. 443-466). Thousand Oaks: Sage.
- Statistics Norway (1994). *Standard Classification of Municipalities, 1994*. Oslo: Statistics Norway.
- Stickle, T. R., Marini, V. A., & Thomas, J. N. (2012). Gender differences in psychopathic traits, types and correlates of aggression among adjudicated youth. *Journal of Abnormal Child Psychology, 40*, 513-525.

## References

---

- Stockdale, M.S., Hangadumbo, S., Duys, D., Larson, K., & Sarvela, P.D. (2002). Rural elementary students', parents', and teachers' perceptions of bullying. *American Journal of Health Behavior*, 26(4), 266–277.
- Storvoll, E.E., Wichstrøm, L., Kolstad, A., & Pape, H. (2002). Structure of conduct problems in adolescence. *Scandinavian Journal of Psychology*, 43, 81–91.
- Størksen, S., Idsoe, T., & Roland, E. (2011). Schoolyard corner society: relating membership to reactive and proactive aggressiveness. *Emotional and Behavioural Difficulties*, 16(2), 145e158.
- Sun, R. C. F., & Shek, D. T. L. (2012a). Classroom misbehavior in the eyes of students: A qualitative study. *The Scientific World Journal*, 1-8. DOI: 10.1100/2012/398482.
- Sun, R. C. F., & Shek, D. T. L. (2012b). Student classroom misbehavior: An exploratory study based on teachers' perceptions. *The Scientific World Journal*, 1-8. DOI: 10.1100/2012/208907.
- Telhaug, A. O. (2006). Barne- og elevsentrert tenkning i historisk perspektiv. *Barn*, 2, 123-142. Norsk Senter for Barneforskning.
- Thornberry, T. P., & Krohn, M. D. (2000). The self-report method for measuring delinquency and crime. *Criminal Justice, Vol. 4: Measurement and Analyses of Crime and Justice*, 33-83.
- Thuen, E., & Bru, E. (2000). Learning environment, meaningfulness of schoolwork and on-task- orientation among Norwegian 9<sup>th</sup> grade students. *School Psychology International*, 21, 393-413.
- Tirri, K., & Puolimatka, T. (2000). Teacher authority in schools: A case study from Finland. *Journal of Education for Teaching*, 26:2, 157-165.
- Toby, J. (1993/1994). Everyday school violence: How disorder fuels it. *American Educator*, 17(4), 4–9 & 44–48.
- Toffler, A. (1970). *Future shock*. London: Pan.
- Topping, K. (1987). School sanction systems: Myth and reality. In N. Hastings & J. Schwieso (Eds.), *New directions in educational psychology* (pp. 137–166). London: The Falmer Press.
- Tremblay, R. E. (2010). Development origins of disruptive behaviour problems: the “original sin” hypothesis, epigenetics and their consequences for prevention. *Journal of Child Psychology and Psychiatry*, 51(4), 341-367.



## References

---

- Tremblay, R. E. (2012). Environmental, Genetic, and Epigenetic influences on the developmental origins of aggression and other disruptive behaviors. In T. Bliesner, A. Beelmann, & M. Stemmler (Eds.), *Antisocial behavior & Crime* (pp. 3-16). Cambridge, MA: Hogrefe Publishing.
- Tuvblad, C., Raine, A., Zheng, M., & Baker, L. A. (2009). Genetic and environmental stability differs in reactive and proactive aggression. *Aggressive Behavior*, 35, 437-452.
- Twemlow, S. W., Fonagy, P., & Sacco, F. C. (2010). The etiological cast to the role of the bystander in the social architecture of bullying and violence in schools and communities. In S. R. Jimerson, S. M. Swearer, & D. L. Espelage (Eds.), *Handbook of bullying in schools. An international perspective* (pp. 73-86). New York: Routledge.
- Twemlow, S. W., Fonagy, P., Sacco, F. C., & Brethour Jr., J. R. (2006). Teachers who bully students: A hidden trauma. *International Journal of Social Psychiatry*, 53(3), 187-198.
- Underwood, M. K. (2003). *Social aggression among girls*. New York, NY: Guilford Press.
- Utdanningsdirektoratet Klasseledelse. Downloaded 10. Mars 2016 from <http://www.udir.no/Laringsmiljo/Bedre-laringsmiljo/Klasseledelse/>
- Vaaland, G. S. (2011). God start – utvikling av klassen som sosialt system. I U. V. Midthassel, E. Bru, S. K. Ertesvåg, & E. Roland (Eds.), *Tidlig intervensjon og systemrettet arbeid for et godt læringsmiljø* (pp.18-33). Oslo: Universitetsforlaget.
- Vaaland, G. S., & Ertesvåg, S. K. (2013). Leading or losing? –Lost in the classroom. Retrieved from <http://laringsmiljosenteret.uis.no/getfile.php/SAF/Til%20nedlast/leading-losing-classroom.pdf>
- Vaillancourt, T. (2005). Indirect aggression among humans: social construct or evolutionary adaption? In R. E. Tremblay, W. W. Hartup, & J. Archer (Eds.), *Developmental origins of aggression* (pp. 158e177). New York: The Guilford Press.
- Veland, J., Midthassel, U. V., & Idsoe, T. (2009). Perceived socio-economic status and social inclusion in school: Interactions and disadvantages. *Scandinavian Journal of Educational Research* 53(6), 515-531.
- Vitaro, F., Boivin, M., & Tremblay, R. E. (2007). Peers and violence: A two-sided perspective. In D. J. Flannery, A. T. Vazsonyi, & I. D. Waldman



## References

---

- (Eds.), *The Cambridge handbook of Violent Behavior and Aggression*, (pp. 361-387). Cambridge, MA: Cambridge University Press.
- Vitaro, F., & Brendgen, M. (2005). Proactive and reactive aggression: A developmental perspective. In R. E. Tremblay, W. W. Hartup, & J. Archer (Eds.), *Developmental origins of aggression* (pp.178-201). New York: The Guilford Press.
- Vitaro, F., & Brendgen, M. (2012). Subtypes of aggressive behaviors. Etiologies, development, and consequences. In T. Bliesner, A. Beelmann, & M. Stemmler (Eds.), *Antisocial behavior & Crime* (pp. 17-38). Cambridge, MA: Hogrefe Publishing.
- Vitaro, F., Brendgen, M., & Barker, E. D. (2006). Subtypes of aggressive behaviors: A developmental perspective. *International Journal of Behavioral Development*, 30, 12-19.
- Walker, J. T. (2009). Authoritative classroom management: How control and nurturance work together. *Theory Into Practice*, 48, 122-129. DOI: 10.1080/00405840902776392
- Waschbush, D. A., Willoughby, M.T., & Pelham, W.E. Jr. (1998). Criterion validity and the utility of reactive and proactive aggression: Comparison to the attention deficit hyperactivity disorder, oppositional defiant disorder, conduct disorder, and other measures of functioning. *Journal of Clinical Child Psychology*, 27(4), 396–405.
- Weber, M. (1925/1964). *Social and Economic Organization*. New York: The Free Press.
- Wendelborg, C. (2012). *Mobbing, diskriminering og uro i klasserommet. Analyser av Elevundersøkelsen 2012*. Trondheim: NTNU Samfunnsforskning.
- Wendelborg, C. (2016). *Mobbing, krenkelser og arbeidsro I skolen. Analyse av Elevundersøkelsen skoleåret 2015/16*. Trondheim: NTNU Samfunnsforskning.
- Wentzel, K. R. (2002). Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child Development*, 73, 1, 287-301. 0009-3920/2002/7301-0019.
- Windle, M. (1990). A longitudinal study of antisocial behaviors in early adolescence as predictors of late adolescence substance use: Gender and ethnic group differences. *Journal of Abnormal Psychology*, 99, 86–91.

### *References*

---

- Woodside, A G., & Wilson, E. J. (2003). Case study research methods for theory building. *Journal of Buisness & Industrial Marketing*, 18(6/7), 493-508.
- Yin, (2009). *Case Study Research. Designs and methods* (4<sup>th</sup> ed.). Thousand Oaks, CA: SAGE.

## **Paper I**

This article was downloaded by: [Vaaland, Grete Sørensen]

On: 10 February 2011

Access details: Access Details: [subscription number 933353465]

Publisher Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



## Scandinavian Journal of Educational Research

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713445993>

### Aggressiveness and Disobedience

Grete Sørensen Vaaland<sup>a</sup>; Thormod Idsoe<sup>a</sup>; Erling Roland<sup>a</sup>

<sup>a</sup> University of Stavanger,

Online publication date: 10 February 2011

**To cite this Article** Vaaland, Grete Sørensen , Idsoe, Thormod and Roland, Erling(2011) 'Aggressiveness and Disobedience', Scandinavian Journal of Educational Research, 55: 1, 1 – 22

**To link to this Article:** DOI: 10.1080/00313831.2011.539850

**URL:** <http://dx.doi.org/10.1080/00313831.2011.539850>

## PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

**Not available in UiS Brage due to copyright**

## **Paper II**

**Not available in UiS Brage due to copyright**

## **Paper III**





## EDUCATIONAL PSYCHOLOGY & COUNSELLING | RESEARCH ARTICLE

# Back on track: Approaches to managing highly disruptive school classes

Grete S. Vaaland<sup>1\*</sup>

Received: 20 March 2017  
Accepted: 20 October 2017  
First Published: 25 October 2017

\*Corresponding author: Grete S. Vaaland, Norwegian Centre for Learning Environment and Behavioural Research in Education, University of Stavanger, N-4036 Stavanger, Norway  
E-mail: [grete.s.vaaland@uis.no](mailto:grete.s.vaaland@uis.no)

Reviewing editor:  
Sandro Serpa, University of the Azores, Portugal

Additional information is available at the end of the article

**Abstract:** Teaching and learning are at stake when classrooms become highly disruptive and pupils ignore the teacher's instructions and leadership. Re-establishing teacher authority in a highly disruptive school class is an understudied area.

This instrumental multiple case study aimed to reveal concepts and conceptual frameworks that are suitable for describing, analysing and discussing interventions in highly disruptive school classrooms. The tentative conceptual framework for turnarounds in highly disruptive classrooms revealed two main strategies: (1) a cognitive strategy appealing to pupils' rationality and responsibility, which involves creating an awareness among students about preferred learning environments and training them to obtain the skills needed to behave in accordance with the chosen standards; (2) a systems strategy addressing the class as a social system in which the teacher's loss of authority has become beneficial to some pupils. Re-establishing teacher authority implies a power takeover by teachers, and success depends on leadership by use of social dynamics. The data cover seven cases, each based on an experienced practitioner's model for helping highly disruptive classes get back on track. The seven informants had worked as external experts in schools that had given up on coping with classes in which teachers had lost control.



Grete S. Vaaland

### ABOUT THE AUTHOR

Grete S. Vaaland is an associate professor at the Norwegian Centre for Learning Environment and Behavioural Research in Education, University of Stavanger. Together with teams of researchers and scholars at the centre, she is engaged in issues concerning bullying, discipline problems and other types of behavioural problems in schools. She and her colleagues are also involved in classroom management, teacher authority, school leadership and school development. In addition to research activities, Vaaland and her colleagues are teaching and supervising master students in education. Furthermore, they give courses and supervise schools across the country in school development associated with the prevention and handling of behaviour problems and improvement of classroom management and school leadership. The present paper concerns an understudied area: collective discipline problems in classrooms where teachers have lost control.

### PUBLIC INTEREST STATEMENT

It is challenging to be a teacher when the class is highly disruptive and pupils ignore your standards and instructions. Moreover, pupils' learning and well-being are negatively influenced when teachers suffer from poor credibility and chaos rules the classroom. Knowledge and skills about approaching classrooms characterized by chaos and indiscipline are an understudied area within educational research. This article compares seven approaches for changing highly disruptive classes into well-functioning learning environments. The analyses revealed two different strategies: one, a cognitive strategy with a focus on increasing pupil awareness and teaching them how to behave; two, addressing the social dynamics in the classroom because the pupils know the rules and standards but do not follow them. When teachers have lost their authority, some pupils take control and rule the classroom. Consequently, social power must be re-distributed to establish teacher authority.

**Subjects: Social Psychology; Educational Psychology; Teachers & Teacher Education; Classroom Practice**

**Keywords: disruptive school classes; classroom management; teacher authority; multiple case study**

### 1. Introduction

Some disruptions are quite common in classrooms; however, a class can occasionally erupt into disruptive chaos, which makes learning nearly impossible (Rogers, 2000; Vaaland & Ertesvåg, 2013). This article concerns highly disruptive school classes and discusses approaches to managing such classes based on some experienced practitioners' models for helping these classes get back on track.

By "highly disruptive class", we mean a class in which teaching is hindered on a regular basis. According to Rogers (2000), a class is considered "hard" when the *frequency* and *intensity* of disruptive behaviour by a number of its pupils significantly affect the teacher's well-being and productive teaching and learning, and this condition lasts for some time. Disruptive classes are more difficult to manage than the average class. Rogers' specifications of "hard classes" are useful for *highly disruptive classes*, which is the term used in our study. Examples of disruptive behaviours are talking out of turn, walking around when expected to sit down, irritating peers, bullying, violence, refusing to follow the teacher's instructions, and ignoring the teacher.

A study conducted among primary and secondary school teachers in Norway indicated that approximately 5% of the teachers perceived that they had little or no authority in their classrooms. Another 25% reported some lack of authority (Vaaland & Ertesvåg, 2013). It is reasonable to assume that this lack of authority relates to pupil misbehaviour, ignorance or disrespect. The following theoretical rationale supports this assumption.

*Pupils.* Pupil aggressiveness constitutes a substantial amount of the variation in pupils' disruptive behaviours. A study by Vaaland and colleagues (2011) investigated relationships between proactive and reactive aggressiveness and disruptive behaviour in terms of disobedience, i.e. behaviour that the pupil knows conflicts with the standards and instructions set by the teacher. Proactive aggressiveness refers to the tendency to act aggressively as a means of achieving social rewards, such as affiliation with peers, status and social power (Berkowitz, 1993; Dodge, 1991; Dodge & Coie, 1987; Roland & Idsøe, 2001). Reactive aggressiveness refers to the tendency to behave aggressively based on frustration and anger (Berkowitz, 1993; Dodge, 1991; Roland & Idsøe, 2001). Both proactive and reactive aggressiveness predict disobedient pupil behaviours (Vaaland et al., 2011). Consequently, pupil aggressiveness potentially threatens teachers' authority. Proactive aggressiveness relates to a perceptual orientation towards weakness in new teachers, which means that some pupils search for signs of vulnerability when they meet teachers who are new to them (Vaaland & Roland, 2013). Consequently, some pupils who are highly motivated to gain social power at the cost of others' powerlessness are also interested in how they can humiliate or threaten the teacher and the teacher's authority. Pupils who score highly on proactive aggressiveness may often possess enough power to influence other pupils' behaviours and attitudes (Card & Little, 2007; Dodge, 1991; Vitaro & Brendgen, 2005), which suggests that negativity and problem behaviours might spread throughout the classroom, threatening the teacher's authority even more (Vaaland & Roland, 2013). Obviously, these connections may compromise the teacher's role as a classroom manager.

*Teachers.* Poor classroom leadership is another reason that a teacher's authority may decrease (Emmer & Evertson, 2013; Vaaland & Roland, 2013). An authoritative classroom management style is recommended when creating a healthy learning environment that promotes effective learning and prevents problem behaviours (Baker, Clark, Crowl, & Carlson, 2009; Ertesvåg & Vaaland, 2007; Hughes, 2002; Walker, 2009; Wentzel, 2002). Authoritative teaching reflects control and nurturance assessed on two different axes, and the recommended practice combines high expectations and consistent

demands that are adapted to the pupil's developmental level (control axis) with democratic communication and sensitivity to the pupil's emotional and physiological needs (nurturance axis) (Baumrind, 1991; Walker, 2009; Wentzel, 2002). Practicing high levels in both these dimensions constitutes an authoritative teaching style, which has a positive effect on academic achievement and pupil behaviour (Walker, 2009; Wentzel, 2002). Close teacher–pupil relationships build confidence, which helps establish and maintain the teacher's authority. Teachers with authority have the validity to influence pupils and to work successfully with motivation and support. They also have the legitimacy to make demands, regulate pupil behaviour and practice control (Emmer & Evertson, 2013). With this background, we now identify our research questions and our approach to answering them.

If learning is inhibited or restricted in a classroom, something has to change; for example, the school might replace the teacher(s). However, this approach does not necessarily change pupils' classroom behaviours. Re-establishing classroom management by assisting the teacher(s) might help get a highly disruptive class back on track, as the cases studied in this article attempt to do. This research project sought to increase the knowledge surrounding practical approaches that aim to re-establish a healthy learning environment in highly disruptive classes in which the teacher(s) have lost control.

The literature is rich on disruptive behaviour by a single pupil and how teachers should act to prevent as well as intervene in such challenges (Brophy, 2006; Emmer & Evertson, 2013; Freiberg & Lapointe, 2006; Gregory & Ripski, 2008; Roland, 1998; Vaaland et al., 2011). Yet, highly disruptive school classes in which classroom leadership becomes nearly impossible are an understudied area. Many teachers and schools find themselves alone in handling such challenges. Nevertheless, with the serious challenges faced by schools, some practitioners have attempted to help schools re-establish good learning environments in highly disruptive classes. Exploring these approaches provides a starting point for developing research-based strategies to confront highly disruptive school classes. We need to develop concepts to describe and strategies to turn around those classes. Accordingly, this study aims to explore the issue using practical experiences represented by seven cases to reveal concepts and investigate similarities and differences in how interventions in highly disruptive classes are carried out by some experts.

### **1.1. Research issues**

A qualitative research design was set up: based on seven experienced practitioners' descriptions of their approaches to achieving turnarounds in highly disruptive school classes, we aimed to answer three research questions (RQs). Each case represents an approach to help highly disruptive classes get back on track. Based on within-case analyses, the following research question was explored:

RQ1: What are the main issues in such interventions?

Cross-case analyses are recommended to investigate whether new cases replicate previous cases or represent something diverse (Yin, 2009). Based on that framework, it is possible to investigate whether the intervention approaches are mainly similar or vary with respect to their core elements. Therefore, the following research question was investigated:

RQ2: Do systematic variations exist between the cases regarding how they approach the core issues?

Supplementary cross-case analyses are suggested by Eisenhardt (1989) to outline possible conceptual frameworks from data. Thus, we wanted to continue the analyses across cases to determine if the approaches varied systematically and, if so, whether links between approaches or strategies appear. With this background, a final research question was formulated:

RQ3: Can we reveal systematic connections between elements within and across the cases that can make suggesting a conceptual framework possible?

Given these research questions, this study aims to derive concepts and frameworks from these cases in an attempt to develop a rationale for describing, discussing and analysing interventions in highly disruptive classes.

## 2. Method

### 2.1. Approaching the Research Questions

In new topic areas or when little research exists, inductive case studies are recommended (Eisenhardt, 1989; Eisenhardt & Bourgeois, 1988; Postholm, 2010). Because presentations and evaluations of approaches to managing highly disruptive classes are seemingly rare, we must discover potentially useful concepts and frameworks to describe and compare these complex interventions. Therefore, we begin by open-mindedly investigating real-life experiences and actions. The literature and theoretical knowledge complement our data in the discussion.

The purpose of the study makes an instrumental case study relevant because each case is of secondary interest; each case's role is to support and facilitate knowledge about the question of interest (Stake, 2005). Our approach to these cases is not descriptive; it is instead primarily interpretative (Postholm, 2010). Therefore, numerous cases were investigated to determine whether models that intend to transform highly disruptive classes into good learning environments tend to follow more or less the same path. An intrinsic study of a single case would not provide us with that knowledge (Postholm, 2010; Stake, 2005). Therefore, we chose an instrumental multiple case study (Stake, 2005). We collected cases without knowing in advance whether they would manifest common core characteristics. Our collection of cases was purposive, and the selection criterion was cases that seemed to offer a reasonable opportunity to learn. Flyvbjerg (2011) describes information-orientated selection as a strategy that maximizes the utility of information based on small samples by choosing cases based on the expected content of information. This multi-case design corresponds with replication logic, as described by Yin (2009), implying that each case serves to confirm or refute suggestions and conclusions from previous cases. Eisenhardt (1989) has developed a roadmap for inducing theory from case-study research. She states that the final products can be concepts, conceptual frameworks, propositions or middle-range theory. She also notes a downside; the results might show that no clear patterns emerge within the data.

A research team at the Norwegian Centre for Learning Environment and Behavioural Research in Education (NCLBR) in Norway conducted the study. The team members possessed expertise in research and practical approaches to classroom management and problem behaviours.

### 2.2. Case – units

Each case presents the modelled practice or procedures for turnaround operations in highly disruptive classes that an experienced practitioner has developed based on his or her accumulated experience with such interventions. Consequently, the units that we analyse here are models, which are relevant for case studies (Woodside & Wilson, 2003; Yin, 2009). We did not require models that included thorough theoretical arguments; instead, we required a more or less tentative guide or programme to show how each expert managed turnarounds in highly disruptive classes. We focused on what these practitioners chose to highlight when they presented their approaches.

One of the criteria used to identify the cases in our study was that a professional had developed and practised an approach to guide schools that requested help to manage highly disruptive classes. Other criteria were related to the experience and reputation of the informants as noted below. Unable to cope with classroom challenges, a school had applied for external assistance because pupils' behaviours were beyond the limits of what a teacher could handle and teacher-pupil interactions were ineffective for teaching and learning. Consequently, instead of using an exact or objective criterion, we used the teacher's or the school's subjective experience (Galloway, 1983, 1987; Vaaland et al., 2011) to label the class as "highly disruptive" and to identify the need for external assistance. Each case was an approach described as a model for assisting schools in achieving such turnarounds.

The approaches were developed within the context of Norwegian public schools, which educate approximately 95% of pupils in grades 1–10. The Norwegian society is considered egalitarian, with generally small differences between schools (Veland, Midthassel, & Idsoe, 2009). In Norway, school classes are organized as stable units across subjects and grades. Usually, pupils are in the same class for three to seven years. In the lowest grades, the teacher usually teaches all or almost all of the subjects in his or her class.

The Norwegian schools are supported by the Educational-Psychological Service. However, competence in approaches to managing highly disruptive classes is limited, implying that access to professionals for help in such cases is not always available.

### **2.3. Informants**

We invited six professional practitioners to a workshop. In line with the selection criteria, all informants had recently been supporting schools as external experts via projects that attempted to get highly disruptive classes back on track. We also knew that each expert had a good professional reputation in the regions in which they worked.

All invited informants, five men and one woman, accepted and participated in the workshop. They came from different parts of the country. All were in their forties, and had worked in the field for several years, which implied that they were considered experienced amongst their colleagues. Their educational backgrounds were in education, special needs education and psychology. They were employed in educational-psychological services, schools for special needs education, and special education resource centres and were charged with supporting schools with their expertise. All had experience from working with children in both primary and secondary schools.

Another practitioner (male) presented a case in a seminar that the research team arranged after the workshop, and this case has been included in our study. This informant had ample experience and a good reputation in relation to turnarounds in hard classes. According to the principle of replication logic (Yin, 2009), we had reason to believe that including this case would supplement the information that had already been gathered.

In summary, the sources of information were seven experienced professionals who shared their experiences through more or less generalized models that reflected their approaches as external experts in schools struggling with highly disruptive classes.

### **2.4. Workshop for collecting information**

A two-day workshop was organized for two purposes: to collect information for the study and to create an arena for collegial learning among the participants. Three researchers from our centre (including the author) participated in the workshop with the invited practitioners. Each day was divided into three parts, one for each of the cases. One after the other, the professionals presented their approaches, followed by a session in which all participants could ask questions, provide comments and discuss the case. In addition, some time was scheduled for cross-case discussions. The order of the presentations was randomly assigned in advance.

The article's author and a colleague initiated and organized the workshop. One took the lead in the workshop activities, while the other was responsible for writing the minutes. A third colleague from the centre participated because of his interest and expertise in the subject matter. He assisted in writing the minutes, and whenever necessary, provided support during the two-day workshop. The researchers from the centre focused on creating an atmosphere of interest, respect and inclusion. Ensuring the participants that every presentation was genuinely interesting and making them feel confident were important. We considered the climate and atmosphere during the workshop to be positive, respectful, inclusive and genuinely engaging. The participants readily welcomed meeting in this way, as it offered them the opportunity to share and discuss the complex issues that they had encountered in their work.



Information on the additional case was gathered at a seminar that the NCLBR researchers had arranged for a broader audience. The practitioner was responsible for a workshop session similar to the one previously arranged, and the same researchers were present for this additional presentation.

### **2.5. Collecting information**

To answer the research questions, information was gathered during the practitioners' presentations, and handouts and other aids were collected. All participants then had the opportunity to ask questions about and comment on the presentation. During these sessions, thorough notes were taken to enable us to write the minutes as accurately as possible. The text was completed shortly after the workshop and was sent to all participants for their review. Analyses or discussions were not included in the report. The informants' meaning can become somewhat condensed (Kvale & Brinkmann, 2009) if someone other than the informant reproduces it. Therefore, each informant checked and confirmed the content of the data report. We considered all of their responses and made corrections as needed. This procedure was conducted to ensure the validity of the information collected (Kvale & Brinkmann, 2009).

### **2.6. Analyses**

We performed our analyses in accordance with the guidelines recommended by Eisenhardt (1989) when using case studies to induce core concepts and conceptual frameworks. These guidelines provided a structure for the analyses and ensured that they were made systematic and replicable. The first step involved within-case analyses that aimed to identify the main issues in the practitioners' interventions in highly disruptive classes. The following steps involved cross-case analyses. (A) Randomly paired cases were investigated to identify similarities and differences. The pairwise comparisons helped the researchers learn more from the cases using different lenses to observe each case. (B) We summarized and investigated the concepts emerging from within-case and paired-case analyses to reveal whether clusters of concepts formed patterns that could reflect a particular framework. (C) We compared the emerging framework(s) with each individual case. This procedure attempted to sharpen our understanding of the concepts and to verify the relationships between concepts and the evidence from each case. Finally, we compared the emerging conceptual framework with the external literature.

### **2.7. Ethical considerations**

The study was based on voluntary participation. Data were collected during a workshop that was arranged for dual purposes. We invited the informants to participate in presentations and discussions on a defined topic, and they all gave a presentation. Each participant retained the right to publish his or her models and stories. The right to conduct research based on the sum of cases was reserved for the research centre. This arrangement was agreed upon by all participants.

Anonymity was ensured for all informants as well as third parties included in the examples referred to in the presentations. Accordingly, no descriptions are included that can identify any schools, experts or others.

The above procedures ensured informed consent, voluntary participation and confidentiality.

## **3. Results**

The purpose of the study was to increase knowledge underpinning practical strategies aimed at re-establishing productive learning environments in highly disruptive school classrooms. This section presents the results, starting with common issues revealed from within case analyses to answer RQ1. Next, RQ2 is addressed based on cross-case analyses that highlight diversities and similarities between the approaches. Finally, we present the results of further cross-case analyses related to RQ3, which leads to the framework of two main strategies for turnarounds.

### 3.1. Core issues in turnaround operations in highly disruptive classes

A central aim of this study was to identify the core issues emerging from these cases. Interestingly, the practitioners showed considerable consistency when identifying the key issues during turnaround operations in highly disruptive classes. Table 1 presents these issues, related sub-issues, and examples. Nevertheless, the agreement on these core issues did not result in full agreement regarding how such issues should be handled, a topic that we will return to. Our investigation of these seven cases drew our attention to nine core issues and a set of related sub-issues that answer RQ1. These are presented in Table 1 and further elaborated in the text.

#### 3.1.1. Individual vs. systems approach

All of the cases highlighted group dynamics as a premise for initiating changes in dysfunctional school classes. Those who recommended testing or mapping individuals still focused on the group as a basis for understanding individual and collective behaviour in the class. The informants claimed that social contexts influenced group members' attitudes and behaviours, they also underscored that individuals contributed to their contexts. Therefore, the interactions between each pupil and the group and between the teacher and the class were important in all cases. Some cases were

**Table 1. Core issues and sub-issues regarding the approaches to managing highly disruptive classes**

Core issues	Sub-issues	Examples or explanations
Individual vs. systems approach	Individual pupil behaviour influences the classroom context	Pupil possessing social status influences the common attitude towards the teacher/subject/school
	The classroom context impacts individual pupil behaviour	Easy not to do the homework because no one else does
Administrative/procedural elements of the intervention	Stakeholder generating request for external assistance	Principal requests external assistance when the school has failed to re-establish a productive learning environment in the class
	Anchoring	Meetings with school leadership to clarify expectations and conditions Establishing a project group
Information	Purpose	Getting to know the situation Evolving trust
	Informants	e.g. teachers, test materials, observations
	Gathering information	e.g. observations, performance tests, interviews, surveys
Roles: Actors/participants, co-operators, and those passively affected	School leadership, teachers	Always included
	Pupils, parents	Active vs. passive
	Experts	Highly visible vs. hardly visible
Complexity	Persons	In-group and between-group agreements and disagreements
	Dimensions of trouble	Several types of problems to be solved, e.g. related to individuals, systems, learning, behaviour, trust, cooperation, competence
	Focus of change	Pupil behaviour, classroom rules Teacher management style
Time focus	Past – present – future	Agree upon the future and no discussions about the past
Training	Courses	Course(s) for all staff Courses for teachers involved in the highly disruptive class
		Mentoring
Evaluation	Formal – informal	Surveys, observations, dialogues

especially interested in identifying those pupils who had the strongest impact on the classroom culture, while others mostly focused on how to release the pupils from the negative social expectations constituted by the social context in the class. Consequently, understanding the highly disruptive classes demanded an understanding of the ever-ongoing interactions between individuals and systems. Moreover, the approaches targeted individuals as well as relationships and other aspects of social dynamics, and they all discussed the challenge of balancing these perspectives.

### 3.1.2. *Concerning the administrative/procedural elements of the intervention*

3.1.2.1. *Stakeholder generating request for external assistance:* A common interest concerned *who* brought these challenging classes to the attention of external experts. Usually, principals took action when a teacher, unable to cope with the challenges in his or her classroom, asked for outside assistance. Moreover, parents were occasionally the ones who requested external help because teachers and principals did not want external parties involved.

3.1.2.2. *Anchoring the process:* Anchoring refers to establishing common agreements, clear expectations, mandates, etc. When engaged by schools to help solve complex problems, all practitioners underscored the necessity for clear agreements. More or less explicitly, the anchoring process resulted in a co-operation agreement that reflected the expectations and responsibilities of the school and external parties, respectively. Together they planned the intervention project (e.g. scheduled meetings) to ensure that the turnaround project would be properly prioritized. All informants underscored the necessity of school leadership involvement to achieve success in the type of projects described. One argued that a school class that is highly disordered and extremely difficult to lead will affect the entire school, and therefore the principal's general responsibility demanded participation. Some argued more pragmatically that leadership involvement was necessary because the process could reveal demands for some reorganization and re-prioritization of time, personnel and tasks. Such actions required a mandate, determination, insight and thus leadership involvement during the entire process to ensure its effectiveness. Several practitioners stated that they refused to start turnaround operations in a class if the leadership was not *involved, participated and took responsibility*, or if they believed that the school leadership lacked the capacity required to implement the necessary changes.

### 3.1.3. *Information*

3.1.3.1. *Purpose:* Gathering information was certainly a key cross-case issue. This activity covered several questions regarding what, how, who and occasionally why. In some cases, the information provided a platform for analysing the problem and suggesting particular actions. In other cases, the experts collected and presented information to the class to raise awareness. Finally, some also used information gathering as a means of achieving trusting relationships with all parties involved, carefully focusing on how the power balance or imbalance was affected when, for example, the expert asked some people for information while neglecting others.

3.1.3.2. *Informants:* When the experts decided to whom they listened, they implicitly communicated something about their perspective regarding the situation. The expert's opinion about the causes of highly disruptive classes may be implicitly apparent in the questions that he or she asked and did not ask. All cases presented included dialogues with involved teachers and the school leadership. Some only shared information with parents, whereas others asked for parents' perspectives and opinions. Finally, the pupils were important informants in some cases, whereas they were not questioned in other cases.

3.1.3.3. *Gathering information:* In summary, several types of information and approaches to gathering information were actualized, including performance tests (on selected topics), individual dialogues with each pupil, individual questionnaires, dialogues with the entire class, dialogues with the parents, dialogues with representatives of the pupils and/or parents, classroom observations,



schoolyard observations, and dialogues with the teacher(s). Several cases included individual tests in basic subjects, as highly disruptive classrooms easily make special needs invisible; to get pupils and classes back on track, schools should address the needs that demand special facilitation to help pupils learn. Classroom observations included the mapping of pupil behaviour and teacher behaviour. Some cases did not prioritize information on pupil behaviour; instead, they focused on pupils' opinions and experiences.

One case described semi-structured interviews with each pupil in an attempt to reveal individual norms and collective norms and illusions. Another case emphasized the close relationship between gathering information and gathering trust and ensured that all parties had the opportunity to present their experiences and opinions regarding the classroom situation. As a commonly trusted external party, this expert positioned him/herself as the bridge builder between conflicting parties.

The examples above show different approaches to selecting informants and information, and the cases do not necessarily fit into a single category. Instead, they use different approaches to serve more than one purpose. Finally, the cases had a unified message: although information about individual pupils was useful, the most vital information related to other factors, such as teacher-to-pupil interactions, pupil-to-pupil interactions, social codes and roles.

#### *3.1.4. Roles in the turnarounds: Actors, participants, co-operators and those passively affected*

The main roles in the classroom turnarounds were played by experts, teachers, school leadership, parents and pupils. Suggestions regarding who possesses the "key" to turn around a disruptive learning climate surfaced when the roles in the intervention were described.

*3.1.4.1. School leadership:* As already mentioned, all experts assumed that school leadership was involved, at the very least, in the anchoring of the project. The role of school leadership was twofold: it symbolized collective responsibility and acted as a leader of the teachers involved.

*3.1.4.2. Teachers:* Teachers in highly disruptive classes were responsible for managing their classes, but they experienced ignorance or even harassment when they attempted to set standards and provide instructions. All cases indicated that professional identity and pride were vulnerable when a teacher failed to manage the classroom and pupil behaviour. Thus, empowerment of teachers was important. All of the external experts worked directly with the teacher(s) who struggled. Improving teachers' behaviours was generally one way of changing pupils' behaviours. In some cases, teachers obtained instructions about how to organize their classrooms, teach and behave. Others were less instructive and instead guided reflections to help the teachers uncover their own ideas about how to promote change. Regardless of the strategy that the experts used to identify preferred teacher behaviours, the teacher gained support in implementing new management skills. Consequently, teachers were targeted for competence, supervision and support. However, in the most intense part of the turnaround, whether and to what extent the teachers stood out as active participants as opposed to bystanders in the process varied. Some cases gave the teachers a barely visible role with their pupils during this phase, while the experts took over by replacing the teacher for some lessons or for a period. Others cases made the teachers play the most active and visible role, while the experts were quite invisible to the pupils.

*3.1.4.3. Pupils:* The different approaches to teachers' roles in these cases showed the diverse ways in which they addressed pupils. Some experts built relationships with the pupils and, to some extent, took over the class for a short period. During their replacement of the ordinary teacher, they often had pleasant classroom dialogues, and invited the pupils to discuss the class' situation and future. In these cases, the pupils were active agents who made choices and took action to provide a better learning milieu for themselves. In other cases, the experts hardly met the pupils and never acted as teachers in the classroom. The purpose was to empower the teacher(s). With these approaches, the

pupils had a less active role and became more like passively affected parties. Some experts occupied a position somewhere between these two marginal strategies.

3.1.4.4. *Parents*: All experts described parents' importance to classroom life due to their interactions with their children, one another and the teacher(s). However, their roles varied – from being merely recipients of information to being very active participants in several stages of the process. Extensive involvement of parents was obvious in cases in which they had applied for assistance. Parents were then an important source for information, and they were included in discussing the direction of development in the class. Moreover, their voices were important for evaluating the intervention. In these cases, involvement of the parents was part of the expert's effort to rebuild trust between the parents and the school.

*Occasionally, psychological services, childcare, health care and other external systems were also already involved in the classroom. Thus, turnarounds in the classroom had to consider these cooperative relationships:*

### 3.1.5. Complexity

These cases were characterized by complexity, particularly regarding questions in the following areas: the persons involved, the dimensions of the trouble and the focus of the change.

3.1.5.1. *Complexity 1: Persons*: A special condition in turnaround projects was obviously the wide range of people involved as actors and participants. Each group often viewed the situation differently. Additionally, different views existed within each group due to varying experiences, attitudes, motivations, disillusionments, hopes, alliances, and the like. Consequently, between-group differences and within-group differences contributed to this complexity. In addition to persons and groups, the experts also described the *relationships* between groups and between individuals within and across groups as potentially even more complex. Into this complexity, the experts added their ambition to motivate and help everyone – or at least as many as possible of those connected to the class – move towards a better shared future and leave behind disillusionment, distrust, guilt, and the like.

3.1.5.2. *Complexity 2: Dimensions of the trouble*: The experts shared a common concern: one can never consider one hard class to be an exact copy of another hard class. Numerous elements constitute the complex situation, and no two projects are ever homogeneous. The experts described the following problems: poor learning outcomes, pupils with severe learning difficulties, behavioural problems (e.g. bullying, indiscipline, violence), negative social norms, poor communication, poor classroom management practices, inadequate competence in managing disruptive pupils, poor school leadership and support for teachers, poor collegial cooperation. Teachers suffered from stress, lacked authority and felt unable to cope. School leadership was under pressure from teachers, on the one hand, and parents (and pupils), on the other hand. Several types of conflicts were described, such as between parents, between parents and the school, and between teachers.

3.1.5.3. *Complexity 3: The focus of the change*: Obviously, pupil behaviour had to change in the highly disruptive school classes, and some cases emphasized implementing new behavioural standards. Nevertheless, occasionally the focus was on changing the teacher's management style and thereby affecting the pupils' behaviours. Furthermore, a focus was a redistribution of social power, which allowed teachers to secure the authority needed to stand out as leaders. Although the cases may have included more than one of the mentioned foci for change, how they were weighted varied.

### 3.1.6. Time focus

Explicitly or implicitly, the time focus was restricted to *the present* and *the future*. As shown in all cases, a future with a healthy learning environment and good classroom leadership did not seem to be a controversial concept when working with schools. More tension surrounded how to describe the present situation; different parties often presented conflicting or competing pictures of the situation. To achieve radical change, cooperation and consistency among these actors were important;

therefore, conflicting views received less attention because agreement and fellowship regarding the future were prioritized. In the cases studied, the real trouble occurred when the past was discussed because this focus drew attention to guilt and responsibility associated with the class’s destructive development. Across the cases, dwelling on the past seemed to be avoided, which suggests that, as long as the parties agreed about the future, problems could be solved without knowing exactly why they had occurred.

### 3.1.7. Training

Competence building for teachers was a common issue in these cases.

**3.1.7.1. Courses:** Several experts held courses for the entire school staff or for those involved in highly disruptive classes. Often the teachers who worked in the highly disruptive class participated in a number of courses, while a short version was offered to all school staff. Generally, high collective competence was regarded as important to facilitate collective responsibility and support among colleagues as well as to achieve sustainable change.

**3.1.7.2. Mentoring:** Individual mentoring was a strategy that all cases used to develop teachers’ professional competence. In this way, the expert combined specific challenges related to the class to train more general principles and skills in classroom and behavioural management.

### 3.1.8. Evaluation

A general topic across most of the cases was evaluation, including informal evaluations integrated into the working process and formalized steps for assessing the process and its effects. Evaluation during the intervention process enabled adjustments and actions to gather more information, conduct performance tests to serve special needs, reorganize the actors, etc. The cases showed that the evaluation served different purposes. One purpose was to define whether and to what extent the intervention had succeeded. Another was to pay attention to the opinions of different parties as a means of facilitating trusting relationships for the future. Furthermore, the experts wanted to learn whether the approaches they had developed worked or required adjustment.

## 3.2. Outline for a conceptual framework

The results above from the within-case analysis present common core issues and concepts across the cases. Cross-case analyses revealed that, to some degree, the experts took different positions or recommended different solutions to the questions arising from these common issues. Building on the common core issues, we will now present our answer to RQ2 concerning variance that surfaced when we compared randomly paired cases to explore the similarities and differences between the two. Some elements in the approaches seemed to spread along four axes that constitute the spans across which these cases can be drawn. The suggested axes and their spans are presented in Table 2 and are further described and elaborated below.

**Table 2. Axes and related spans representing core issues in turnarounds in highly disruptive classes**

Name on axis	Span
Working location	back stage ----- front stage
Tempo for introducing changes	slowly ----- quickly
Targets for change	pupils ----- teachers
Perspective	cognition and skills (learning) ----- social dynamics (distribution of power)

### 3.2.1. Working location

When using back stage–front stage phraseology, a pupil-filled classroom is the front stage, and all information gathering, analyses, planning and preparation performed without pupils present are the back-stage activities. Using the stage metaphor, what defines and constitutes success happens on the front stage. Often, the audience only comprises those watching a stage performance; however, in some cases, the audience and the performers interact. The classroom is definitely an interactive space. Regardless of the level of interaction, front-stage success depends on the quality of the back-stage work.

As presented in Table 1, several core issues in the cases concerned the questions that had to be asked and answered, the analyses that had to be performed, the actions that had to be taken, and other tasks that had to be completed before the turnaround operation started in the classroom. Consequently, back-stage and front-stage work were included in the turnaround operations.

### 3.2.2. Tempo for introducing changes

In this study, we refer to “turnarounds”, which the experts also called “developmental processes”, “innovations” and “interventions”; all of these terms described changes. However, how radical the changes were varied. One approach searched for the class’s competence, i.e. their strengths. While reinforcing these strengths, a new step, or competence, was introduced to enhance the learning climate; then, an additional competence was introduced, and so on. This step-by-step approach should make the class feel as though it is taking minor steps to improve the classroom climate. The tempo in this approach is serene to moderate. A contrasting approach involved introducing several coordinated changes simultaneously. At a high tempo, implementing changes that were more or less completely reconstructing the class, the moment to introduce these changes had to be very well prepared in advance. No dwelling, doubting or uncertainty could be shown when adult control was thus re-established.

### 3.2.3. Targets for change

The experts described models that implied communication and cooperation between themselves and several parties – school leadership, teacher(s), parents and pupils. Across the cases, all of these parties were addressed, except for the pupils. With respect to the pupils, considerable variety appeared regarding whether and how much time the experts spend with them – from not meeting with the pupils at all to spending a substantial amount of time with them.

Those who chose not to work directly with pupils emphasized the need to ensure the empowerment of the teacher(s) who would continue working with the class after the intervention period. A temporary expert-teacher – who was just playing an intermezzo in the class, listening to pupils’ frustrations, motivating them and giving them inspiring future perspectives – could have easily become a favourite at the cost of the ordinary teacher(s) who had been unsuccessful in managing the class. To avoid a situation that could undermine the ordinary teacher’s authority, the experts in some of the cases strongly emphasized that all changes should be performed by the teachers to help them regain authority. Additionally, the changes implemented by an external expert who was working temporarily in the class would hardly be sustainable when the teacher – whom pupils had dethroned – returned.

The experts who preferred to cooperate directly with the class were also concerned with the empowerment of the ordinary teachers. This approach was favoured because it raised pupils’ awareness about how their behaviours contributed to poor learning conditions and about how their choices could make the learning environment more like what they wanted it to be. During individual and/or group conversations, the experts helped the class establish common aims, expectations and standards, which were set to guide their behaviour. Thus, pupils chose the intervention and the direction of the changes. By arranging this choice, the experts made the pupils feel as though they were volunteering to be part of this new direction, although changes in classroom behaviour should not be solely dependent on pupils’ decisions to change. In the commonly established picture of new classroom life, the teacher’s role would certainly be an important one. By stressing this point, the experts addressed the ordinary teachers’ status. In addition to his/her work with the pupils, the expert was

also training the teacher(s) to improve their classroom management skills. The framework for teacher–pupil interactions changed because of the development of pupils’ awareness and desire, the teaching and training of pupils regarding purposeful learning behaviours, and the teaching and training teachers regarding classroom management. The new circumstances provided the teacher with a new opportunity to practice classroom management.

#### 3.2.4. *Perspective*

This axis is not an either/or question; instead, it should be considered a continuum from which all initiatives during the intervention could be marked off. Finally, the centred points reflected how strongly the case emphasized the development of cognition in terms of learning to behave well vs making changes via social dynamics to re-distribute social power.

Some approaches strongly focused on improving pupils’ skills and competence to behave in accordance with the expectations set for the classroom context. A class that had long-practised disruptive behaviour had to re-learn relevant expectations and appropriate behaviours. Therefore, the path to classroom change involved developing pupils’ mental knowledge and behavioural skills.

At the opposite end of the continuum, some cases highlighted the social context as having an important effect on pupil behaviour. Therefore, behavioural changes should be related to contextual changes. In models built on this basis, teaching pupils to think the right thoughts, develop the right viewpoints, and master appropriate behaviour was considered insufficient because their actual behaviour would be somewhat influenced by the social norms in class, the relationships that were associated with status, and those with whom they wanted to be affiliated, among other things. The experts considered these factors important in the distribution of status and social power in class. When teachers had lost control as classroom managers, some pupils had usurped the leadership role. To ensure their protection in such classrooms, the pupils would try to affiliate themselves with the mightiest among their peers. This affiliation often implied taking a stand against the teacher in an attempt to please the pupils in charge. The social climate, relationships, “likes” and “dislikes”, and social status and influence became important determinants of pupils’ behaviours. Therefore, instead of knowing intellectually the right course of action, pupils’ behaviours depended on that which provided access to social acceptance and rewards. Therefore, the turnaround intervention was successful in disturbing the power base of the informal leaders, taking back adult control and re-establishing teachers’ authority. On this foundation, the teacher should introduce rules and procedures and establish school-friendly social norms.

### 3.3. *Revealing the two main strategies*

The last element in the cross-case analyses involved investigating whether we could suggest a framework based on clusters of concepts or approaches and comparing each case with the emerging framework. This procedure answered RQ3 and revealed that these cases were not randomly placed on the axes described above. Instead, when a case was identified with a cross-mark on one of the axes, it tended to fit in a particular place on other axes. A pattern emerged that showed two main tendencies for how the cases were positioned on the different axes. Based on this pattern, we suggest a conceptual framework for the two main strategies for approaching highly disruptive classes.

One is the *cognitive strategy*, described as a project of learning. Cognitive strategies were used to raise pupils’ awareness about their goals, motives and behaviour to help them realize that their behaviour in class was counterproductive in light of what they really wanted to achieve and what they wanted their working conditions to be. Class discussions then led to a common understanding or agreement regarding what they wanted their working conditions to be. Finally, the pupils had to train to be able to adjust their behaviour in accordance with their established agreement. The expert often led the entire process, recognizing the actual norms in a class, identifying the desired norms, rules and procedures and initiating the implementation of the new behaviour. The experts led this process because when the pupils had more or less ignored teachers’ standards and instructions, these teachers would hardly be able to lead the class through such a process. Therefore, in such

cases, the expert often replaced the teacher or at least liberally assisted him or her during this phase of the turnaround process.

In addition to working with the pupils, the expert also helped prepare the teacher(s) to take over the renewed class. Additionally, parents were often involved in discussions, and they received information and were encouraged to support their child's participation in the new regime.

This strategy often implied that the part of the process spent in the classroom with the pupils took some time. Of course, these front-stage activities had to be thoroughly prepared in advance, but the back-stage phase was not very time-consuming. Most of the process happened on the front-stage. To change an extremely disruptive class into a healthy learning environment, it had to develop gradually through increased consciousness and learning; small changes were implemented one after another.

The second main strategy was a *systems approach*, which was a project that redistributed social power to re-establish the teacher's authority. As formal leaders in the classroom, the teachers should possess authority. However, in highly disruptive classes, the teachers' instructions and standards were systematically ignored. Usually, some pupils acquired social power at the cost of the teacher. Other pupils realized that the formal leader had been dethroned. Consequently, those who connected with the teacher risked losing their status in the class; the teacher was also unable to protect them, and they were actually better off joining the informal leaders. Unruly classes then became battlefields for social power, influence and status. As such, the redistribution of power would benefit the teacher and, in the long term, the class as well. However, someone had to lose their power and influence. Therefore, some pupils would attempt to maintain the status quo because it was beneficial to those who possessed the greatest social power. These conditions made rational, cognitive strategies inadequate for addressing these problems. Socially adept pupils would easily use raising awareness and negotiating norms in an effort to avoid giving up something that they did not want to share. If the formal leader had to discuss his or her right to lead and had to negotiate with informal leaders, the leader sent the wrong message. Therefore, according to this strategy, a teacher preferred to re-establish his or her leadership and authority based on his or her right and duty to do so; they did not ask for permission.

Taking back adult authority in the classroom demands clear communication of who is in charge. Structure, behaviour and words were the means of communicating this authority. Immediately after returning to power, teachers should consistently show their leadership role by doing the things that teachers are expected to do and demanding pupil behaviour in accordance with normal expectations. Numerous actions were taken within a short time.

To succeed in the power takeover, all actors involved had to be very well prepared. Unclear or ambiguous leadership behaviour from the teachers in this phase allowed pupils the opportunity to possess informal leadership and to consolidate their positions, a situation that underlined the need for good preparation. In other words, front-stage events were highly intensive; much was at stake in a very short time; and success depended on thoroughly executing back-stage work. In this strategy for classroom turnarounds, the most time-consuming period was dedicated to back-stage work.

During the cross-case analysis, the framework that emerged with these two strategies did not introduce two mutually exclusive categories such that each case fitted only one of them. In fact, the cases generally implemented elements from both strategies. Nevertheless, two main paths, both of which may lead to turnarounds in classes, seemingly arised from this analysis. Within one such strategy, using actions from the other strategy as a supplement seemed possible. In addition, core actions that were seemingly necessary in one strategy could be more peripheral in the other one. Cases related to each of the strategies underlined the importance of teachers' empowerment. However, some experts argued that when working with pupils in a disruptive class, they always focused intently on ensuring the empowerment of the ordinary teacher(s). Others argued that the



**Table 3. Framework for the two main strategies for approaching highly disruptive classes**

	<b>Tentative framework for a cognitive strategy: learning to behave; re-establishing rules and procedures</b>	<b>Tentative framework for a systems approach: redistributing social power; re-establishing teacher authority</b>	<b>Remarks</b>
Back stage vs front stage	Front stage primarily	Back stage primarily	Both arenas are important in both strategies, but they are emphasized differently
Pupils vs teachers	Both are central participants in preparing the interventions; both are recipients of competence training; and, to a certain extent, both are co-operators when the intervention begins in the class	Teachers are the main focus when preparing the interventions, and they are the main actors in the front-stage intervention	Teachers are always addressed; however, the content and amount of cooperation vary. The extent to which pupils are directly addressed varies more, from no contact to considerable contact
Tempo and intervention intensity	Calm; medium intensity	Fast; high intensity	Tempo and intensity reflect the number of actions taken per time unit when the intervention starts with pupils, i.e. the front-stage work

empowerment of teachers was the primary goal when working with turnarounds in highly disruptive classes. Therefore, the experts should avoid discussions or relationship building with pupils in the operative phase of the project because such contact would likely elevate the experts' status at the cost of teachers.

The tentative framework for the two strategies derived from the cross-case analyses are presented in Table 3.

The two middle columns in Table 3 do not exclusively apply to their respective cases among the seven cases included in the study. The tentative framework that we have outlined above accentuates the cross-case diversity and presents two diverse strategies that more or less seem to work as a reference or framework in the cases. Comparing each individual case with this framework showed that several cases were somewhat eclectic. Nevertheless, the distinction between these two strategies seems meaningful and apparent when investigating underlying arguments rather than concrete actions in the cases.

#### 4. Discussion and conclusion

We will start the discussion by comparing the emerging framework with the external literature covering two perspectives on classroom management, both within the paradigm of authoritative teaching.

Based on thorough observations in classroom settings, Pianta and his colleagues model classroom management as teacher–pupil interactions in three domains: emotional support, classroom organization and instructional support (Allan et al., 2013; Hamre & Pianta, 2010).

Emotional support covers the classroom climate, including relationships and social interactions. High quality implies a friendly, inclusive, supportive and safe atmosphere. The second domain, classroom organization, comprises clear expectations for behaviour. High quality means that teachers consistently and proactively monitor pupil behaviour, effectively redirect misbehaviour and manage instructional time effectively so that pupils always know what to do. The third domain, instructional support, covers how the teacher facilitates learning by communicating clear learning targets, using various modalities and material and promoting involvement and engagement (Hamre & Pianta, 2010). Teacher management practices involve a continually dynamic integration of interactions in all three domains. Although the model considers the importance of relationships between pupils, it focuses on teacher–pupil interactions and does not provide a model for classroom fellowship. An

evaluation of Pianta and colleagues' teacher training programme shows that teachers who, based on classroom observations, are supervised in developing their practices to include high-quality interactions have more effective classrooms and better learning outcomes (Allen, Pianta, Gregory, Mikami, & Lun, 2011).

Pianta and colleagues' work seeks to establish effective teachers in effective classrooms – the polar opposite of ineffective teachers who have lost control of their classrooms. Our study about approaches to managing highly disruptive classes revealed a cognitive strategy and an alternative strategy that addresses social mechanisms and the redistribution of social power within the group. Both strategies acknowledge the importance of establishing and implementing rules and procedures and make teaching and learning the basic activities in the classroom. Pianta and colleagues' interaction model for classroom management seems quite congruent with a strategy that highlights cognitive strategies, training, moderate intensity and front-stage work with pupils. The model does not provide sufficient support for a strategy that stresses resetting the power balance in the classroom to the teacher's advantage. Because the social systems in hard classes are ruled by informal leaders, the teachers will not possess the necessary credibility to improve their interactions with pupils.

An alternative model for classroom management proposed by Roland and Galloway (2002; Roland, 1998, 2014) conceptualizes the class as a social system. This model provides concepts and frameworks for analysing and managing the social system that develops in every class. It shows how group dynamics influence the role of the classroom manager, and vice versa. These powerful dynamics can be utilized for the purposeful development of the class. Classroom managers should consider teacher–pupil relationships, pupil–pupil relationships, collective skills and collective consciousness, parental cooperation and the effective correction of disruptive behaviour. High-quality classroom management demands that teachers possess the knowledge and skills to mould the group into a fellowship that promotes learning, pro-social behaviour and a good climate. For every pupil, teachers must build relationships that are characterized by warmth and compassion and clear standard-related demands, and they must exert their control when standards are broken. Teachers must also know how to promote good relationships among pupils. In this model, routines and procedures are examples of collective skills. Social norms, standards and classroom culture are examples of collective consciousness. Classroom management through the lens of a social system must also include cooperation with parents, who obviously influence the classroom climate for better or worse. Additionally, this classroom management perspective includes principles and practical advice for how to handle disruptive behaviour. The overall message in Roland and Galloway's concept of classroom management is the importance of the interplay between the different elements in the social system (Roland, 1998, 2014; Roland & Galloway, 2002). For example, relationships influence pupils' social norms; the distribution of social status and power influence behaviour; collective skills contribute to fellowship and loyalty; and relationships and collective identity in class affect the teacher's authority. The tools that regulate behaviour function differently for teachers who possess authority compared with teachers with little authority and poor relationships. High-quality classroom management comes from teachers who are trained to understand and lead each pupil and who comprehend the complex dynamics of the group and the social system that it represents (Roland, 1998; Roland & Galloway, 2002). This classroom management perspective strongly emphasizes the interaction between the classroom context and pupil behaviour, the effect that social expectations have on pupils' social behaviours, engagement in learning activities, and pupils' respect for teachers' instructions, among other things. When a class is new, its social system is highly malleable. It develops through episodes in the classroom, no matter what the teacher intends. Consequently, a social system develops in school classes either randomly or through purposeful leadership (Geetzels & Thelen, 1971; Vaaland, 2011). When established, this system is quite sustainable, although not completely resistant to change. It will make an invisible structure in the classroom that can have a powerful impact on pupil behaviour (Geetzels & Thelen, 1971; Roland & Galloway, 2002).



Based on this conceptualization of the class as a social system and the subsequent model for classroom management, Roland and colleagues have developed a programme for teacher and school development called Respect that is effective in preventing and controlling disruptive behaviour (Ertesvåg, Roland, Vaaland, Størksen, & Veland, 2010; Ertesvåg & Vaaland, 2007).

Observed through the lens of the social systems management model, the cognitive strategy for managing highly disruptive classes does not satisfactorily answer the question of how to re-establish teacher authority or how to address power imbalances and negative social norms. The other strategy, which involves the redistribution of power to take back adult control and to re-establish teacher authority, fits very well with the classroom management model described by Roland and colleagues. Pupils do not always follow the teacher's standards and instructions, although they know exactly what is expected of them. A dysfunctional social system in class may lead pupils to behave in ways they believe will provide social rewards through their affiliation with the pupils who possess the highest social status (Geetzels & Thelen, 1971). Therefore, teaching and training rules and routines will not be sufficient to re-establish good learning conditions. The social systems model for classroom management explicitly addresses the dynamics required to regain teacher authority.

Above, we have described two well-established perspectives of classroom management and have used them as references to discuss the two strategies for turnarounds in highly disruptive classes. Viewed as the management of a social system, classroom management does not necessarily contradict the management interaction model. The two perspectives may actually complement one another, each describing some sides of the theme and leaving other sides undescribed rather than labelling them unimportant. Two main strategies for approaching disruptive classes have emerged from the cases studied. However, they are not mutually exclusive; they are instead diverse main roads that can easily accommodate elements from other approaches. We must also underscore that cognitive learning-based actions that are taken to establish good learning conditions in classrooms are welcome, though not sufficient, from a perspective on classroom management that highlights dynamics in a social system, and vice versa. However, in line with our findings regarding the approaches to managing highly disruptive classes, the classroom management literature also seems to reflect different positions concerning this issue.

Interestingly, the classroom management literature also highlights issues that are relevant to the management of disruptive classes, such as teacher authority, rules, organizing, relationships, and social norms. However, hard classes seem to need extremely intense, precise and systematic classroom management to change their unhealthy conditions. However, these findings do not contradict the established knowledge in the classroom management field; they instead act as a supplement.

Although we argue that the classroom management literature is a relevant reference for turnarounds in highly disruptive classes, important distinctions exist between the two. Classroom management is an ongoing process. Turnarounds, regardless of which strategy is used, have time limits and involve an external expert. We can view the external expert as a consultant who interacts directly with pupils in class for a short period or who interacts indirectly with pupils through a teacher in line with the triadic model developed by Tharp and Wetzel (1969; Tharp, 2012). In both models, the consultant's position depends on his possession of knowledge. The triadic model introduces a mediator between the consultant and the target person. Consequently, to improve the pupils' classroom behaviours, the consultant supervises the teacher(s), explaining how he or she can influence behaviours through direct interaction with pupils. Our social systems strategy reflects a triadic consultation model. The external party does not work directly with pupils; instead, he or she teaches teachers how to implement changes and supervises the process. The process stresses the backstage work to prepare teachers for a major change within a short time period on the front stage. Conversely, in the cognitive strategy for turnarounds, the expert spends time with pupils in the classroom to improve their behaviour, with a direct consultation between the consultant and the target.

The cognitive strategy prioritizes front-stage work, which the external party manages. The two strategies seem to depend on two different but well-established approaches to consultation, which implies that the literature on consultation may provide useful references for a deeper understanding of the differences between the two strategies.

Our data revealed a framework with two different strategies for approaching hard classes: a cognitive strategy appealing to pupils' rationality and responsibility and a systems strategy implying a power takeover on the part of the teacher. We consider this framework to be our main finding. However, both approaches seem to be successful, based on our informants' reputations. We will try to explain the possible success across these approaches.

Considering proactive aggressiveness on the part of some pupils the main reason that classes become highly disruptive, the power takeover strategy seems the most logical approach because having power over the teacher, being affiliated with co-aggressors and improving one's status are considered rewards for proactive aggressiveness (Vaaland et al., 2011; Vaaland & Roland, 2013). According to previous research, reactive aggressiveness and disruption are also strongly related (Vaaland et al., 2011). However, proactively aggressive pupils likely influence pupils with high levels of reactive aggressiveness (Card & Little, 2007). Consequently, the power takeover method should be effective because it seizes the informal leaders' power. Moreover, in general, proactively aggressive and socially adept pupils can possibly generate a classroom culture that is quite resistant to leadership by demanding that most pupils take part in this disruptive behaviour. In such cases, regaining teacher power may inspire positive behaviour in mainstream pupils (Card & Little, 2007; Geetzels & Thelen, 1971; Stormshak et al., 1999; Vaaland & Roland, 2013).

The cognitive strategy addresses pupils' rationality, implying that pupils, who know what teachers expect, will comply if they possess the skills to follow the instructions. Pupils are assumed to relate to expected classroom behaviours when they recognize that such behaviours are beneficial for their learning. Different versions of social cognitive training seem to have limited effects in reducing proactive aggression in trainees (Coie, Underwood, & Lochman, 1991). Because these highly aggressive pupils are an important source of disruptive behaviours, the positive effect of the cognitive strategy on disruptive classes may indirectly influence proactively aggressive pupils because social cognitive training seems to be effective in reducing reactive aggression and in positively influencing mainstream children (Beelmann, Pfungsten, & Lösel, 1994; Feindler & Gerber, 2008; Gundersen & Svartdal, 2006).

We described the *cognitive* and *the social systems strategies* as the two main thoroughfares, with some cases with eclectic strategies positioned between them. Success could depend on the expert's ability to approach every single turnaround with careful awareness, choosing tools that fit each class perfectly. This assumption implies that classes develop towards disruptiveness for different reasons and thus need different solutions, which the experts will choose from their repertoire. However, by considering proactive aggressiveness the main driver of the collapse in teacher authority, a combination of the two approaches seems interesting. A main element of the systems strategy is the direct takeover of power, which all pupils in the class observe. This takeover could weaken the rulers' grip on the class and release positive energy from mainstream pupils. The cognitive approach could give this process momentum. In addition, studying the timing of the two approaches more closely – and possibly the elements within each of them – is important.

If a turnaround succeeds, we still need long-term evaluations to investigate how sustainable these positive changes are. Introducing external experts for a classroom turnaround signals the seriousness of the problem. This external jolt may trigger an awakening that contributes to behavioural changes, which implies that many different approaches could be effective in changing the class. However, as time passes, changes will not necessarily be sustainable. More research and knowledge on the approaches to managing highly disruptive classes are needed. We must know

more about the differences between classes and approaches and about how to structure the most promising approach for each hard class.

#### 4.1. Methodological considerations

Our study used experts' presentations as sources of information, which was gathered during a workshop. Researchers commonly recommend that case study designs include different sources of information and that the study occur in the natural setting of the case (Eisenhardt, 1989; Yin, 2009). We sought to investigate the models or guidelines for turnaround operations, which are appropriate research objects in case studies (Woodside & Wilson, 2003; Yin, 2009). A mental model cannot be observed in any natural field. In our situation, the models were strongly person-related, and the information could hardly be collected through other sources. Alternatively, the field data from several turnaround operations performed by each expert could have been studied in natural settings with multiple data sources and informants. Such an approach would have been very time consuming, and it would not have guaranteed us a true picture of that expert's opinion concerning the model that guided his or her work. Consequently, as long as our purpose was to capture the informants' aggregated experience and practices and their decisions regarding purposeful actions and core issues, the most relevant sources were the experts' presentations and reflections.

Cases and informants were strategically chosen for this purpose and were not considered representative of all cases; thus, in terms of generalizability, one should proceed with caution when interpreting these findings. Because the results build on several cases, we believe the insights achieved serve as stepping stones for future studies, which should include a broader foundation and other research designs to further knowledge development.

The procedures for data collection were described, and the analyses were systematically performed in accordance with the described procedures. Two researchers cooperated during the analyses, and the third researcher who participated in the workshop has thoroughly revised the results to ensure their validity. In sum, we consider the methodological questions solved, leading to empirical data that substantiate the concepts and theoretical framework that are the outcomes of the study.

Our long-term purpose is to provide schools with well-described, evidence-based approaches for turnaround operations; obviously, this purpose requires additional work. However, we believe that our results are meaningful, as they describe, discuss, compare and analyse some important aspects of the approaches to managing highly disruptive classes. Good theory is stringent, testable and logically coherent (Eisenhardt, 1989). In terms of coherence, the suggested framework shows the relationships between concepts, and a tentative coherent picture emerges. These results are testable, although they are not final in terms of a stringent and logically coherent theory. More work is required to test, revise and further develop the framework that we suggest as a useful starting point.

#### Funding

The author received no direct funding for this research.

#### Author details

Grete S. Vaaland<sup>1</sup>  
E-mail: [grete.s.vaaland@uis.no](mailto:grete.s.vaaland@uis.no)

<sup>1</sup> Norwegian Centre for Learning Environment and Behavioural Research in Education, University of Stavanger, N-4036 Stavanger, Norway.

#### Citation information

Cite this article as: Back on track: Approaches to managing highly disruptive school classes, Grete S. Vaaland, *Cogent Education* (2017), 4: 1396656.

#### References

Allan, J., Gregory, A., Mikami, A., Lun, J., Hamre, B., & Pianta, R. (2013). Observations of effective teacher-student interactions in secondary school classrooms: Predicting student achievement with the Classroom Assessment

Scoring System- secondary. *School Psychology Review*, 42, 76–98.

Allen, J. P., Pianta, R. C., Gregory, A., Mikami, A. Y., & Lun, J. (2011). An interaction-based approach to enhancing secondary school instruction and student achievement. *Science*, 333, 1034–1037. [10.1126/science.1207998](https://doi.org/10.1126/science.1207998)

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, 374–382. [10.1177/0143034309106945](https://doi.org/10.1177/0143034309106945)

Baumrind, D. (1991). Parenting styles and adolescent development. In J. Brooks-Gunn, R. Lerner, & A. C. Peterson (Eds.), *The encyclopedia of adolescence* (pp. 746–758). New York, NY: Garland Publishing House.

Beelmann, A., Pfingsten, U., & Lösel, F. (1994). Effects of training social competence in children: A meta-analysis of recent evaluation studies. *Journal of Clinical Child Psychology*, 23, 260–271. [10.1207/s15374424jccp2303\\_4](https://doi.org/10.1207/s15374424jccp2303_4)

- Berkowitz, L. (1993). *Aggression: Its causes, consequences and control*. New York, NY: McGraw-Hill.
- Brophy, J. (2006). History on classroom management. In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of Classroom Management* (pp. 17–43). Mahwah, NJ: Lawrence Erlbaum Associates.
- Card, N. A., & Little, T. D. (2007). Differential relations of instrumental and reactive aggression with maladjustment: Does adaptivity depend on function? In P. H. Hawley, T. D. Little, & P. C. Rodkin (Eds.), *Aggression and adaptation. The bright side to the bad behavior* (pp. 107–134). New Jersey, NJ: Lawrence Erlbaum Associates, Publishers.
- Coie, J. D., Underwood, M., & Lochman, J. E. (1991). Programmatic intervention with aggressive children in the school setting. In D. J. Pepler & K. H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 389–410). New Jersey, NJ: Lawrence Erlbaum Publishers.
- Dodge, K. A. (1991). The structure and function of reactive and proactive aggression. In D. J. Pepler & K. H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 201–218). New Jersey, NJ: Lawrence Erlbaum Publishers.
- Dodge, K. A., & Coie, J. D. (1987). Social-information-processing factors in reactive and proactive aggression in children's peer groups. *Journal of Personality and Social Psychology*, 53, 1146–1158. [10.1037/0022-3514.53.6.1146](https://doi.org/10.1037/0022-3514.53.6.1146)
- Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review*, 14, 532–550.
- Eisenhardt, K. M., & Bourgeois, L. J. (1988). Politics of strategic decision making in high-velocity environments: Toward a midrange theory. *Academy of Management Journal*, 31, 737–770. [10.2307/256337](https://doi.org/10.2307/256337)
- Emmer, E. T., & Evertson, C. M. (2013). *Classroom management for middle and high school teachers* (9th ed.). Upper Saddle River, NJ: Pearson.
- Ertesvåg, S. K., Roland, P., Vaaland, G. S., Størksen, S., & Veland, J. (2010). The challenge of continuation. Schools' continuation of the Respect program. *Journal of Educational Change*, 11(4), 323–344. [10.1007/s10833-009-9118-x](https://doi.org/10.1007/s10833-009-9118-x)
- Ertesvåg, S. K., & Vaaland, G. S. (2007). Prevention and reduction of behavioural problems in school: An evaluation of the respect program. *Educational Psychology*, 27, 713–736. [10.1080/01443410701309258](https://doi.org/10.1080/01443410701309258)
- Feindler, E. L., & Gerber, M. (2008). TAME: Teen anger management education. In C. W. LeCroy (Ed.), *Handbook in evidence-based treatment manuals for children and adolescents* (2nd ed., pp. 139–169). Oxford, NC: Oxford University Press.
- Flyvbjerg, B. (2011). Case study. In N. K. Denzin & Y. S. Lincoln (Eds.), *Qualitative research* (pp. 301–316). Thousand Oaks, CA: Sage.
- Freiberg, H. J., & Lapointe, J. M. (2006). Research-based programs for preventing and solving discipline problems. In C. M. Evertson & C. S. Weinstein (Eds.), *Handbook of classroom management* (pp. 735–786). Mahwah, NJ: Lawrence Erlbaum Associates.
- Galloway, D. (1983). Disruptive pupils. In R. Harré & R. Lamb (Eds.), *The encyclopaedic dictionary of psychology* (p. 159). Oxford: Blackwell.
- Galloway, D. (1987). Spurious categories. In L. Cohen & A. Cohen (Eds.), *Disruptive behavior: A sourcebook for teachers* (pp. 26–33). London: Harper & Row.
- Geetzels, J. W., & Thelen, H. A. (1971). The classroom group as a unique social system. In A. Yee (Ed.), *Social interaction in educational settings* (pp. 6–24). Englewood Cliffs, NJ: Prentice-Hall.
- Gregory, A., & Ripski, M. B. (2008). Adolescent trust in teachers: Implications for behavior in the high school classroom. *School Psychology Review*, 37, 337–353.
- Gundersen, K. K., & Svartdal, F. (2006). Aggression replacement training in Norway: Outcome evaluation of 11 Norwegian student projects. *Scandinavian Journal of Educational Research*, 50, 63–81. [10.1080/00313830500372059](https://doi.org/10.1080/00313830500372059)
- Hamre, B., & Pianta, R. C. (2010). Classroom environments and developmental processes. In J. L. Meece & J. S. Eccles (Eds.), *Handbook of research on schools, schooling, and human development* (pp. 25–41). New York, NY: Routledge.
- Hughes, J. N. (2002). Authoritative teaching: Tipping the balance in favour of school versus peer effects. *Journal of School Psychology*, 40, 485–492. [10.1016/S0022-4405\(02\)00125-5](https://doi.org/10.1016/S0022-4405(02)00125-5)
- Kvale, S., & Brinkmann, S. (2009). *Det kvalitative forskningsintervju [The qualitative research interview]* (2nd ed.). Oslo: Gyldendal Akademisk.
- Postholm, M. B. (2010). Kvalitativ metode. *En innføring Med fokus på fenomenologi, etnografi og kasusstudier* (2 utgave) [Qualitative method] (2nd ed.). Oslo: Universitetsforlaget.
- Rogers, B. (2000). *Cracking the hard class. Strategies for managing the harder than average class*. London: Paul Chapman Publishing.
- Roland, E. (1998). *Elevkollektivet 2. utgave [The collective of pupils]* (2nd ed.). Stavanger: Rebell forlag.
- Roland, E. (2014). *Mobbingsens psykologi [The psychology of bullying]*. Oslo: Universitetsforlaget.
- Roland, E., & Galloway, D. (2002). Classroom influences on bullying. *Educational Research*, 44, 299–312. [10.1080/0013188022000031597](https://doi.org/10.1080/0013188022000031597)
- Roland, E., & Idsøe, T. (2001). Aggression and bullying. *Aggressive Behavior*, 27, 446–462. [10.1002/ab.1029](https://doi.org/10.1002/ab.1029)
- Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 443–466). Thousand Oaks, CA: Sage.
- Stormshak, E. A., Bierman, K. L., Bruschi, C., Dodge, K. A., Coie, J. D., & The Conduct Problems Prevention Research Group. (1999). The relation between behavior problems and peer preference in different classroom contexts. *Child Development*, 70, 169–182. [10.1111/cdev.1999.70.issue-1](https://doi.org/10.1111/cdev.1999.70.issue-1)
- Tharp, R. G. (2012). *Delta theory and psychosocial systems: The practice of influence and change*. Cambridge: Cambridge University Press.
- Tharp, R. G., & Wetzel, B. J. (1969). *Behaviour modification in the natural environment*. New York, NY: Academic Press.
- Vaaland, G. S. (2011). God start – utvikling av klassen som sosialt system [A good start; development of the class as a social system]. In U. V. Midthassel, E. Bru, S. K. Ertesvåg, & E. Roland (Eds.), *Tidlig intervensjon og systemrettet arbeid for et godt læringsmiljø [Early intervention and a systems approach to creating a good learning environment]* (pp. 18–33). Oslo: Universitetsforlaget.
- Vaaland, G. S., & Ertesvåg, S. K. (2013). Leading or losing? Lost in the classroom. Retrieved February 1, 2013, from <http://laringsmiljosenteret.uis.no/getfile.php/SAF/Til%20nedlast/leading-losing-classroom.pdf>
- Vaaland, G. S., Idsøe, T., & Roland, E. (2011). Aggressiveness and disobedience. *Scandinavian Journal of Educational Research*, 55, 1–22. [10.1080/00313831.2011.539850](https://doi.org/10.1080/00313831.2011.539850)
- Vaaland, G. S., & Roland, E. (2013). Pupil aggressiveness and perceptual orientation towards weakness in a teacher who is new to the class. *Teaching and Teacher Education*, 29, 177–187. [10.1016/j.tate.2012.09.006](https://doi.org/10.1016/j.tate.2012.09.006)
- Veland, J., Midthassel, U. V., & Idsøe, T. (2009). Perceived socio-economic status and social inclusion in school: Interactions and disadvantages. *Scandinavian Journal of Educational Research*, 53, 515–531. [10.1080/00313830903301994](https://doi.org/10.1080/00313830903301994)

- Vitaro, F., & Brendgen, M. (2005). Proactive and reactive aggression. A developmental perspective. In R. E. Tremblay, W. W. Hartup, & J. Archer (Eds.), *Developmental origins of aggression* (pp. 178–201). New York, NY: The Guilford Press.
- Walker, J. M. T. (2009). Authoritative classroom management: How control and nurturance work together. *Theory into Practice*, 48, 122–129. doi:10.1080/00405840902776392
- Wentzel, K. R. (2002). Are effective teachers like good parents? Teaching styles and student adjustment in early adolescence. *Child Development*, 73, 287–301.10.1111/cdev.2002.73.issue-1
- Woodside, A. G., & Wilson, E. J. (2003). Case study research methods for theory building. *Journal of Business & Industrial Marketing*, 18, 493–508.10.1108/08858620310492374
- Yin, R. K. (2009). *Case study research. Design and methods* (4th ed.). Thousand Oaks, CA: Sage.



© 2017 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.

You are free to:

Share — copy and redistribute the material in any medium or format

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.



**Cogent Education (ISSN: 2331-186X) is published by Cogent OA, part of Taylor & Francis Group.**

**Publishing with Cogent OA ensures:**

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

**Submit your manuscript to a Cogent OA journal at [www.CogentOA.com](http://www.CogentOA.com)**

