

**The connection between classroom behavioral climate
and school well-being of Finnish sixth grade students**

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ABSTRACT

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The aim of this master's thesis is to investigate the connection between classroom behavioral climate and school well-being. The effect of a negative, mediocre or positive classroom behavioral climate on an individual's school well-being is also studied. The participants are 597 Finnish sixth grade students and the data is from the research project Pro Koulu.

The results in this study indicate that all the variables of classroom behavioral climate correlate with the variables of the school well-being measure. However, all correlations remained relatively low. The results show that classroom behavioral climate indicators explain 18% of commitment to school, 18% of feelings of justice at school, 16% of student relations at school, 11% of student-teacher relations and 14% of workload at school. Students in the positive classroom behavioral climate report higher commitment to school, more feelings of justice at school, better student relations, better student-teacher relations and less feelings of high workload at school, than students in groups of less positive behavioral climates.

This study indicates that caring for the classroom environment is an important factor in supporting student well-being. Feelings of psychological and physical safety also have a significant effect on school well-being, while the effect of disruptive behavior and learning climate is smaller. Overall it seems that the ability to learn well is not a deciding factor in school well-being. The teacher's role is significant in nurturing school well-being.

Search words: School well-being, classroom behavioral climate, sixth grade

TABLE OF CONTENTS

1 INTRODUCTION.....	1
1.1 Classroom Behavioral Climate.....	2
1.3 School Well-Being	8
1.3. Research Questions	15
2 METHOD.....	16
2.1. The ProKoulu Project.....	16
2.2. Participants.....	16
2.3. Measures.....	17
2.4 Analysis	17
3 RESULTS	18
4 DISCUSSION	23
REFERENCES	33

1 INTRODUCTION

School well-being is a crucial part of students' school and personal life. Enjoying school gives them a possibility to have a close connection with their peers and teachers, aids them in learning and has various other health benefits, such as higher life satisfaction (e.g. Linnakylä & Malin, 1997, Osterman, 2000 & Välijärvi, 2017). Since students spend most of their school time in classrooms, the classroom behavioral climate has a large impact on students' school well-being. Classroom behavioral climate is the perceived quality of the classroom environment (Adelman & Taylor, 1997) and consists of four components: the learning climate, caring for the classroom environment, physical and psychological safety and disruptive behavior (Närhi, Kiiski & Savolainen, 2017). All the components play a role in shaping the classroom behavioral climate and thus influence the school well-being of students.

According to domestic and international surveys well-being in Finnish schools is not very good (Haapasalo, Välimaa & Kannas, 2010, Välijärvi, 2017),. Commitment to school also shows a decreasing trend (Välijärvi, 2017). These results are interesting, since the most recent PISA study shows that general life satisfaction amongst Finnish students is very good. 45% of 15-year-old Finnish students were very satisfied with their life, and only 6% were not satisfied with their life (Välijärvi, 2017). Thus, while 94% of Finnish 15-year-olds are satisfied with their life, at the same time, only 43% of Finnish ninth graders like being at school (Haapasalo, Välimaa & Kannas, 2010) and 15% of Finnish students feel they are outsiders in their school community (Välijärvi, 2017). It seems that well-being in life does not translate into well-being at school. This is the reason why this topic is significant. This study investigates what effect the different components of the classroom behavioral climate have on school well-being in Finnish students. The classroom behavioral climate is to a large extent created and maintained by the teacher, naturally in addition to the influence of the

students. Knowing how it impacts students' well-being at school gives teachers more reason to work towards a positive classroom behavioral climate.

First, this introduction centers on classroom behavioral climate. It is defined, and prior research on the issue is brought forward, while explaining what creates an ideal classroom behavioral climate. Secondly, school well-being is defined and explained. Attention is on research on well-being of students in the school context. The situation in Finland, regarding students' well-being at school, is explained. Finally, the research questions are outlined.

1.1 Classroom Behavioral Climate

Classroom behavioral climate, according to Adelman and Taylor (1997), is the perceived quality of the classroom environment, which can be seen as a major determinant of learning and behavior. More precisely, the quality of classroom behavioral climate affects how willing and able the students are to learn (Gillen, Wright & Spink, 2011). Adelman and Taylor (1997) describe the climates of the classroom and the school as reflections of the values, belief systems, ideologies and traditions in the school setting. Thus, the classroom and school climates reflect the school's culture. Gillen, Wright and Spink (2011) view classroom climate as the way in which the psychological and physical characteristics of the classroom are experienced by the students. A classroom climate can promote learning, but it can also be a barrier to learning (Freiberg 1998).

Byrne, Hattie and Fraser (1986) claim that the ideal classroom behavioral climate is aimed at maximum learning and achievement. Feelings of trust and respect for students and teachers have also been identified as factors which improve the school and classroom climate (Marshall, 2004). In line with these, Närhi, Kiiski and Savolainen (2017) argue that a good classroom behavioral climate exists when students' behavior is geared towards learning, students do not compromise the rights of others to learn, the learning situation is psychologically

and physically safe and students take care appropriate care of the physical classroom environment. Zedan (2010) reported that the desirable classroom climate for teaching, learning and student integration into the social life of the class would be supportive, democratic, egalitarian and organised according to premeditated rules. Charles (2002) reports that safe, warm, supportive and non-threatening classrooms encourage work and promote a sense of accomplishment. Similarly, Shapiro (1993) notes that in order to create an environment which supports learning, the teacher needs to establish a positive social climate.

A classroom is the setting in which a student spends most of their time at school. Most of their academic and social learning in school takes place in classrooms (Rowe, Sangwon, Baker, Kamphaus & Horne, 2010, Johnson & McClure, 2004). Thus, the behavioral climate in classrooms is extremely significant. Classroom behavioral climate has various effects on students, such as influencing behavior, academic achievements, motivation, self-image, levels of knowledge, and attitudes towards the class, school and schooling (Fraser & Tobin, 1991, Zedan, 2010). There is a wide variety between different classrooms. One class can be lively and supportive and taught by an enthusiastic teacher, while another can be boring and depressing, taught by a teacher on the verge of burnout (Zedan, 2010). This idea of large variety in classroom climates has been seen in Finland as well (Holopainen, Järvinen, Kuusela & Packalen, 2009).

Trickett and Moos (1973) identified three sets of variables that influence classroom behavioral climate. The sets are based on an extensive review of relevant literature. The first set is relationships, which include teacher support and interactions between students, their peers and teachers. The second set is systems' maintenance and change, including organization and order, rule clarity and teacher control. The third set is goal-orientation, which includes task-orientation and competition. Trickett and Moos (1973) also created the Classroom Environment Scale, which has become a widely used measure of classroom

climate. The measure was developed in the United States, and thus it might not be straightly transferable to different countries and cultures.

As Trickett and Moos (1973) argue, relationships and the social factors in a classroom are important in shaping the classroom behavioral climate. More precisely, affiliation, or levels of friendships that students feel for each other, seems to be a significant aspect of the social environment, and thus the classroom climate. High levels of affiliation in a classroom is associated with high levels of motivated behavior in students (Anderson, Hamilton & Hattie, 2004). Shapiro (1993) has also noted the importance of creating a positive social climate for learning to take place.

It has been proposed that examining the classroom behavioral climate from the perspective of the students could be the most promising angle for understanding the entire educational process (LaRocque, 2008). Gillen, Wright and Spink (2011) found that year 7 and year 8 students in the United Kingdom rated being able to choose who they sit with as the most important factor on a classroom climate questionnaire. It was also noted that teachers' attitudes regarding promoting interaction and developing respect in the classroom impacted students' views on the importance of student relationships. "Order" within the classroom was noted as important by many students, connecting it often with the chance for a reward (Gillen, Wright & Spink, 2011). Arab primary school students view following rules as a factor which improve their level of enjoyment in mathematics classes (Zedan, 2010). Children of the ages of 11-16 in the United Kingdom were asked to list their likes and dislikes about school (Glover & Law, 2004). A good school was characterized with four categories: in terms of friendship (28%), the quality of teaching (26%) and the undefined "atmosphere" (14%). Fourth on the list is the relationship with teachers, which was mentioned by 6 %. The dislikes that were mentioned most often were poor teaching (18%), the nature of homework (15%) and oppressive discipline (10%). This questionnaire enquired about the whole school, instead of just the classroom setting, but all of the factors can be found in

a classroom. Moreover, LaRoque (2008) found that students' perceptions of the classroom climate do not differentiate between males and females

The learning climate in a classroom influences the behavioral climate. It determines how well the students are able to learn in that setting. Unsatisfactory classroom acoustics may create a negative learning environment for students and serve as a distraction to everyone (Shield & Dockrell, 2003, Dockrell & Shield, 2004). Only one-third of primary school students in Finland report that there is a good chance to work in peace, while the number is larger in secondary school (Konu & Lintonen, 2006). Dockrell and Shield (2007) suggest that noise from the students in the classroom may interfere mainly with language-based tasks, while sounds from the environment, such as traffic, are most disrupting to tasks which require attention. When there is students' noise in the background, children with special education needs perform more poorly in verbal tasks than children with no special education needs (Dockrell & Shield, 2007). In a Finnish intervention study teachers list the student behaviors that disturb the learning climate the most and one of these is students talking out of turn (Närhi et al., 2014). Prior to this intervention, Närhi et al. (2014) found that teachers spent 29 % of their lessons maintaining a positive learning climate. This means that a large proportion of lessons is spent on other things, such as decreasing the noise level, instead of teaching and learning.

According to PISA results (Adams & Wu, 2003) 41% of Finnish adolescents feel that at least five minutes pass on most lessons before any work is done. 39% feel that teachers need to wait for a long time, before students quiet down at the beginning of lessons. However, only 14% feel that students cannot work well on most language lessons. Learning climates in classrooms are viewed by Finnish principals and students to be much more negative, than the average in OECD countries (Adams & Wu, 2003). However, in 2000 only 0.9 % of Finnish principals claimed there to be a large amount of problems with disruptive behavior (Holopainen et al., 2009). Nevertheless, the learning climate in a classroom is an

issue which requires a lot of effort from teachers. Gillen, Wright and Spink (2011) encourage teachers to share lesson objectives with students, allow collaborative working and to use different seating arrangements for various activities as strategies that can improve a classroom learning climate. In order to improve the learning climate, Gillen, Wright and Spink (2011) also encourage teachers to use lesson beginnings as well as possible. Greeting students and having activities pre-prepared are strategies that they suggest.

When aiming to improve the classroom behavioral climate, the physical environment should not be overlooked. Improving the environmental conditions of a classroom minimizes the likelihood of disruptive behavior, makes students more comfortable, and creates better chances for learning (Levin & Nolan, 2007, Gillen, Wright & Spink, 2011). Schneider (2002) claims that it is a widely known fact that quiet, clean, safe, comfortable and healthy environments are important components of successful learning and teaching. Poor air quality in classrooms has been connected with sickly teachers and students, who then perform less well than healthy ones, as well as increased student absences (Kennedy, 2001). In the United States of America alone, over 50 million students study in schools which need renovation (Levin & Nolan, 2007). There is increasing evidence that occupants in a classroom lacking proper ventilation cannot function normally and use their full capacity for learning (Schneider, 2002). Harner (1974) found that the ability to learn math and reading is negatively affected by temperatures above seventy-four degrees Fahrenheit (23 degrees Celsius). Lackney (1999) found that teachers see thermal comfort as a factor which affects teaching quality and student achievement.

Regarding the physical environment of a classroom, Levin and Nolan (2007) agree that there are many factors which the teacher cannot affect, like renovating or getting a more effective ventilator, but they stress that teachers can make sure they use their environment in the best possible way. On hot days, windows can be opened, lighting can be used as appropriately as possible and any noisy repair

work can be insisted to be completed outside of school hours. Levin and Nolan (2007) stress the importance of taking care of your classroom environment, since humans need to be comfortable for learning to take place. Naturally, teachers have a better chance of taking care of their environments, if they know what effects different factors have on students.

Whether a student can feel safe at school or not, naturally has a vital effect on how they perceive their classroom behavioral climate. Feeling unsafe at school is connected with lower school engagement, lower class engagement, unexplained absences and lower academic achievement (Nijs et al., 2014, Milam, Furr-Holden & Leaf, 2010, Janosz et al., 2008, Côté-Lussier & Fitzpatrick, 2016). Côté-Lussier and Fitzpatrick (2016) studied 13-year-old youth and found a moderate connection between positive feelings of safety and working effortlessly and autonomously in their classrooms, following directions and finishing their work on time. Charles (2002) also notes the connection between safe and non-threatening classrooms and promoting enjoyment and a willingness to work. However, it may be possible, that students who are more engaged in their classrooms may be less sensitive to environmental factors and thus feel safer at school, than those who are less engaged in their classes (Pagani, Fitzpatrick & Parent, 2012, Côté-Lussier & Fitzpatrick, 2016). Similarly, Nijs et al. (2014) found a strong connection between perceived school safety and self-reported mental health problems in secondary school students. Milam and Furr-Holden (2010) suggest that students who are fearful and often worried about their safety, compromise their focus on academics.

Disruptive behavior is naturally harmful to the classroom behavioral climate. There is a widespread and increasing concern in the educational environment about the unsuitable behavior of students in classrooms (Esturgo-Deu & Sala-Roca, 2010). Disruptive behavior can occur in many forms. For example, various forms of aggression, disruptions and defiance are classified as disruptive behavior (Ellis & Magee, 1999, Du Paul & Hoff, 1998). Children can produce more

than one type of disruptive behavior at the same time, the most common form being students' not respecting their turn to speak and the least common damaging objects (Esturgó-Deu & Sala-Roca, 2010). Most disruptive behavior occurs during lessons and is relatively mild (Skiba, Peterson & Williams, 1997). Problems with behavior tend to be more common in middle school, than in elementary schools (Kaufman et al., 2009). This may be because in elementary school most lessons are taught by one teacher, while in middle school teachers change between classes (Närhi, Kiiski, Peitso & Savolainen, 2014). This makes it harder to follow the principles of good classroom management in middle school

Disruptive behavior in a classroom may have various negative impacts on students and teachers (Närhi et al., 2014). Närhi et al. (2014) noticed a clear reduction in the strain felt by teachers during an intervention, which reduced disruptive behavior in classrooms. They suggest that this may be in relation to the reduction in disruptive behavior, but also mention other possible explanations. Other researchers support the idea, that disruptive behavior creates stress in teachers (Boyle, Borg, Falzon & Anthony, 1995) In students, disruptive behavior may result in a failure to adapt to the school environment. (Nelson, 1996.) Gorard and See (2011) found disruptive behavior to be a determinant of disengagement. Problem behavior may help students escape the demands of their school tasks and to provide them with the teacher's attention (Sarno et al., 2011). This results in less time to spend on teaching and helping students, and thus reducing disruptive behavior means more time to be spent on teaching and learning (Närhi et al., 2014). Teachers' attention, such as requests to return to work, has been found to increase problem behavior (Sarno et al., 2011, Mueller, Sterling-Turner & Moore, 2005).

1.3 School Well-Being

Well-being in general can be simplified to mean life satisfaction (Konu, Lintonen & Rimpelä, 2002). Thus, in a school context, well-being can be said to mean

satisfaction in school life. The School Well-Being model divides school well-being into four categories: school conditions, social relationships, means for self-fulfillment and health status (Konu, Lintonen & Rimpelä, 2001). World Health Organization uses a different division in their school well-being surveys. This definition includes six categories: commitment to school, being strained by schoolwork, feelings of justice, relationships between the student and their parents, relationships between students and relationships between students and their teachers (Roberts et al., 2009).

A large amount of childrens' days are spent in a school setting, and thus it is very important to know, how they perceive their school life (Haapasalo et al., 2012). School is an important place for students to work, grow and improve. At school they develop a conception of themselves as individuals and as members of social groups and the society (Linnakylä & Malinen, 2008). Experiences at school happen when children and adolescents are in developmentally important stages. These experiences are connected to self-esteem and health related behavior, which in turn may influence future health and life satisfaction (Bradsha & Keung, 2011). School well-being is influenced by everything that is connected to a student in a school, including the students themselves (Soininen, 1989).

All students do not experience school in the same way. Some students enjoy school and find learning essential to their present, as well as long-term, well-being (Linnakylä & Malin, 2008, Malin & Linnakylä, 2001). They feel that school is fun, work challenging, teachers motivating and fellow students encouraging (Malin & Linnakylä, 2001). A positive attitude towards school is reflected in students' participation in learning and social activities. Students with a positive attitude towards school, usually tend to have a positive relationship with their teachers, as well as with other students and a sense of belonging in the school community (Linnakylä & Malin, 1997, Osterman, 2000). On the other hand, some students find school to be dull, fellow students to be depressing, teachers unfair and school days boring (Malin & Linnakylä, 2001). According to reports of

OFSTED (The Office for Standards in Education, UK), 58% of primary and secondary stage students enjoy school most of the time, thus indicating that 42 % do not (OFSTED 2007). The report indicates that 79% of the students hope for more interesting and fun lessons. In Finland the numbers are even less positive, as data from the Health Behavior in School-Aged Children (HBSC) study (2006) shows that only 43% of 7th graders in Finland like being at school and 49% of the 7th graders look forward to going to school. This number is only 43% for ninth graders. (Haapasalo, Välimaa & Kannas, 2010.)

The quality of school life is mainly a result of the interaction between the school community and the individuals (Malin & Linnakylä, 2001). Peers are very influential in determining whether a student enjoys coming to school and how he or she behaves in the classroom (Steinberg, Dornbusch and Brown, 1992, Gorard and See, 2011). The high value of friendships at school is recognized by students and their parents. Almost all students also make a positive link between social interaction and learning. Many students indicate that social aspects of learning, such as working in a group, are enjoyable and support learning (Gorard & See, 2011). Students who feel special and important to key social partners are more likely to feel positive emotions, such as interest and enthusiasm, and less likely to feel negative emotions, such as boredom and anxiety (Furrer & Skinner, 2003). Furrer and Skinner (2003) also suggest that students who feel unconnected to key social partners tend to be more easily bored, worried or frustrated. Students who are rejected by their peers, are more likely to become disaffected from academic activities and to leave school (Hymel et al., 1996). Finnish students, more often than students in other countries, find school to be a place for developing peer relations and their personal social growth (Linnakylä & Malin, 2008).

Young adolescents need warm and positive relationships, but they transition into organizational structures, such as secondary school, which makes establishing and maintaining such relationships harder than in for example elementary school

(Smith et al., 2016). However, in Finland students are older during this transitional stage, than in many other countries. Sixth grade students, which are the participants of this study, have not yet reached this transitional stage, and are still studying in an elementary school in Finland at the age of approximately 12. Smith et al.'s (2016) study concentrates on students between the ages of 10 and 14, whom are already categorized into middle grades students.

Another factor, which nurtures a sense of enjoyment at school, is a good relationship with one's teacher (Gorard & See, 2011). Students believe that it is very important for teachers to care about them (Alder, 2002). A caring relationship with their teacher aids students' success, makes them work harder academically, encourages them to engage in academic tasks and to be less likely to engage in health risk behaviors (Cothran, Kulinna & Garragy, 2003, Cothran & Ennis, 2000, Daniels & Araposthathis, 2005, McNeely & Falci, 2004). On the other hand, when a teacher was perceived as not caring, students did not care about class-management strategies or classroom rules as much as students in a classroom with a caring teacher (Cohran et al., 2003). Being able to get support from their teacher in case of struggling at school was also a determinant of school enjoyment (Gorard & See, 2011). Sammons et al. (2013) found students with a special education needs to enjoy school less, than those who did not. Lack of trust in their teachers was one determinant of disengagement (Gorard & See, 2011).

In Finland, a big problem regarding student-teacher relationships is the feeling, that teachers do not listen to what young people are really saying. Student-teacher relations were reported to be second weakest in comparison to other Nordic countries in the 2003 PISA results (Linnakylä & Malin, 2008). Students feel that they have no say in decisions regarding their learning or school life. These findings are alarming in the light of Gorard and See's (2011) findings that autonomy at school increases school enjoyment. Even though engagement among Finnish students was rather modest in the PISA 2003, the results still provide reason for optimism, since many students were strongly engaged with

learning and school lives, and many schools seem to provide an encouraging and motivating social environment (Linnakylä & Malin, 2008). In order to make students feel like their voice is heard, a teacher should listen to the student and respect their views, a skill which also requires constant updating. This increases the teacher's awareness of the strengths and needs of their various students. (Linnakylä & Malin, 2008).

At the elementary level, student-teacher relationships have an added influence on students due to their developmental stage (Jeffrey, Auger & Pepperell, 2013). Research indicates that supportive relationships between teachers and students at the elementary level are associated with a decrease in student suspensions, and an increase in academic engagement among students (Decker, Dona & Christenson, 2007; Furrer & Skinner, 2003). Supportive teacher-student relationships seem to be especially important during times of transition, such as moving from elementary school to middle school (Furrer & Skinner, 2003). In elementary school, the quality of teacher-student relationships also seems to predict students' feelings about their relative autonomy, engagement in school, positive coping and perceived control (Ryan, Stiller & Lynch, 1994).

Age or grade level seems to affect well-being at schools (Haapasalo, Välimaa & Kannas, 2010; Konu, Joronen & Lintonen, 2015). Younger students are pleased with their school more often than older students (Haapasalo, Välimaa & Kannas, 2010). Currie et al. (2008) found a significant decline in young people, between ages 11 and 15, reporting that they like school a lot. This he found to be true in most of the 41 studied countries in Europe and North America. Gorard and See (2011) found that only 44% of grade 11 students in the United Kingdom enjoyed being at school, with only 38% of students in grade 11 stating that their lessons were interesting. Sammons et al. (2013) found that at younger ages in primary education students were more positive towards school than in year 9. However, they also found that in year 9 69% agreed with liking school and 20% strongly agreed.

Gender has been found to affect school well-being. Girls seem to have a more positive view about school. Girls of all ages in Europe and North America are more likely to say they like school a lot (Currie et al. 2008). The findings are significant for 11-year-olds in almost all countries, for 13-year-olds in over half of the countries and for 15-year-olds in a little under half of the countries. Finnish girl students found school to be to their liking more often than boys (Linnakylä & Malinen, 2008). In the United Kingdom, just under 50% of girls report enjoying school, compared to just over 40% for boys (Gorard & See, 2011).

Commitment to school is closely related to school well-being. Smith et al. (2016) define school enjoyment as a positive emotional connection to school. In the United Kingdom, policymakers have acknowledged that a major aim should be supporting students in enjoying school and learning (Gorard & See, 2011). Gorard and See (2011) have listed determinants of disengagement, which included disruptive behavior of other students, lack of trust with their teachers and unimaginative lesson delivery. By improving these factors, it is possible to improve students school enjoyment.

Commitment to school has declined between 2003 and 2015 in Finland and in OECD-countries in general (Väljærvi, 2017). In the PISA results from 2003, Finnish students reported the weakest sense of belonging at school, amongst the Nordic countries (Linnakylä & Malin, 2008). In general, Finnish teenagers are more committed to school than the average of OECD countries, but the declining trend is alarming. The PISA 2015 results show that approximately 15% of Finnish students feel that they are outsiders in their school community (Väljærvi 2017). There is national and international evidence, which suggests that Finnish adolescents are not so satisfied with school, and data shows that it has been so at least since the 1990s (Haapasalo, Välimaa & Kannas, 2010, Malin & Linnakylä, 2001). Väljærvi (2017) reports that Finnish boys are much more committed to school than Finnish girls, which is also the case in other OECD countries while

the difference is usually smaller than in Finland. Commitment to school is higher in students from higher socioeconomic status families, than in students with the lowest socioeconomic status. (Väljærvi, 2017)

Students who feel a strong commitment to school also have higher life satisfaction (Väljærvi, 2017). Väljærvi (2017) reports that no connection can be found in the PISA 2015 results between high academic success and commitment to school in Finland. In OECD countries, below average school commitment predicted only a slightly lower success in PISA. In Finland commitment to school is related to the behavioral climate in classrooms. In schools where the behavioral climate is rated as low, commitment to school is clearly lower than in schools where students feel that the behavioral climate is positive. Results from other OECD countries are similar.

A sense of autonomy at school has been found to affect well-being at schools. This includes being able to work at their own pace and discuss issues with the staff and other students at the school (Gorard & See 2011). Finnish students' feelings about teachers treating them unjustly are in line with the OECD countries' average (Väljærvi, 2017). Väljærvi (2017) reports that 8% of Finnish students have experienced mockery and derogatory speech from their teacher at least twice a month. 15 % of students feel that grading had been unjust and 18% feel that discipline has been tighter towards them than other students, at least twice in a month. Almost one fourth of Finnish students feel that teachers do not acknowledge them as often as other students. The average in OECD countries is slightly higher at 35%. 18% of Finnish students feel that their teachers underestimate their intellectual abilities. This value is higher than the 14% average in OECD countries. Boys feel that they receive unjust treatment more often than girls. This is true in Finland and in OECD countries in general. Feelings of unjust treatment are slightly higher in students with a lower socioeconomic background. Success in the academic questions in PISA is related to feelings of unjust treatment. Those who receive lowest points in science, also feel that they

have received unjust treatment from their teachers' more often than any other students. This connection is not as striking in any other OECD country.

1.3. Research Questions

The chosen participants for this study are sixth graders, because that allows for a wider usage of research studies. In many other countries, the primary school phase is shorter than in Finland, and thus there is less research from that time period. Furthermore, a large quantity of the existing research on the elementary level concentrates on young learners in the very first grades. By choosing Finnish sixth graders, it is possible to use research done on middle school students, since their age group is the same or very close to that of Finnish sixth graders. A second reason for choosing this age group is that the latest PISA report concentrates on secondary school students (Väljärvi, 2017). This report is very relevant to this study, which further determined the choice to use sixth graders, since they are the closest to that age in the ProKoulu participant pool. As discussed later on, younger students enjoy school more than older students, which is alarming. This study sheds light on the factors which make school enjoyable for sixth graders, and thus can propose solutions, that may improve school well-being at a later age.

The overall aim of this study is to investigate, which factors of classroom behavioral climate are most closely related to the well-being of Finnish sixth grade students. A secondary aim is to find out, how a certain classroom behavioral climate affects the student's well-being in that classroom.

More specifically, the following three research questions are set for this study.

1. Which of the classroom behavioral climate indicators has the strongest correlation with different well-being dimensions?

2. How do the different indicators of classroom behavioral climate predict the school well-being dimensions of Finnish 6th grade students?
3. How are extreme overall classroom behavioral climate conditions related to the well-being of students in that classroom?

2 METHOD

2.1. The ProKoulu Project

The data used in this study was collected as a part of the ProKoulu project. The ProKoulu project is an experimental study on a whole school intervention model, which aims at preventing disruptive behavior. The project is funded by the Ministry of Education and Culture and has been developed as a collaboration between the University of Jyväskylä, the University of Eastern Finland and the Niilo Mäki Institute. Since 2013, the model has been studied and used in over 60 schools. It is a Finnish version of the School Wide Positive Behavior Interventions and Support (SWPBIS). ProKoulu aims at improving the willingness and ability of teachers to prevent problem behaviors and manage classrooms, as well as the behavioral learning of students. Behavior is being changed primarily through positive feedback and by teaching the students what good behavior is. The project also includes more intensive, research-based methods to support the behavior of students who are not responding well enough to primary level support.

2.2. Participants

The data used in this study was gathered in the fall of 2013, as a part of the baseline measurement of the study. The participants of the present study were a random sample of 50 % of the sixth-grade students who participated in the ProKoulu study in the first measurement (N=597). It included students from

experimental and control groups. The experimental setup does not confound the results of this study, because the data was collected from the baseline measurement.

2.3. Measures

The present study includes two measures, the classroom behavioral climate measure and the school well-being measure. The classroom behavioral climate measure includes four sub-scales: the learning climate ($\alpha=.80$ to $.82$), disruptive behavior ($\alpha=.83$ to $.85$), physical and psychological safety ($\alpha=.66$ to $.73$) and caring for the physical environment ($\alpha=.63$ to $.73$) (Närhi et al., 2017). The questionnaires for this measure were developed, tested and modified in a preparatory study (Peitso, Kiiski and Närhi, 2011). The school well-being measure is based on a study by the World Health Organization and has been used in Finland in various nationwide surveys (THL, 2013). Variables in the school well-being measure include commitment to school ($\alpha=.86$), being strained by schoolwork ($\alpha=.66$), feelings of justice ($\alpha=.77$), relationships between students ($\alpha=.74$), relationship between the student and their teachers ($\alpha=.73$) and relationships between students and their parents. The last variable was not used in this study. Both measures have been tested and found functioning in prior studies, thus their validity is good.

2.4 Analysis

All analyses were performed with the SPSS 24 -program.

As a first step, it was investigated, how the four different classroom behavioral climate variables correlated with the indicators of school well-being. Pearson's correlation coefficients were used, because the indicators were normally

distributed. The safety variable was recorded into a two-class variable, in order to improve the normal distribution.

Regression analysis was used to investigate to what extent the four classroom behavioral climate indicators are related to school well-being. Linear regression analysis was performed five times. The school well-being variables served as dependent variables, one at a time. The independent variables were the four classroom behavioral climate variables, learning climate, caring for classroom environment, safety and disruptive behavior.

The final phase of data analysis consisted the use of a multivariate analysis of variance (MANOVA). The students were divided into three groups based on the standardized behavioral climate score. The division was based on one standard deviation. Group one consisted of those reporting a score of -1 standard deviation or lower than the average score, group two having a score between -1 and 1 standard deviation, and group three having a score of +1 standard deviation above the average score. Mean level differences between the three groups of classroom behavioral climate were investigated with the multivariate analysis of variance.

3 RESULTS

The first research question asks which of the classroom behavioral climate indicators has the strongest correlation with different well-being dimensions. The results for the correlation analysis can be seen in table 1. There is a positive correlation between most of the variables of the classroom behavioral climate and the school well-being indicators. The strongest positive correlation can be found between the learning climate and feelings of justice at school ($r=.36$), indicating that the better the learning climate, the higher are the students' feelings of justice at school. As an effect size this relationship is moderate. In addition to this, caring

for the classroom environment is positively related to feelings of justice at school ($r=.35$), commitment to school ($r=.35$), student relations at school ($r=.35$) and student-teacher relations at school ($r=.28$). Feelings of safety has a positive correlation with commitment to school ($r=.27$), feelings of justice at school ($r=.29$), student relations at school ($r=.18$), and student-teacher relations at school ($r=.24$). Disruptive behavior has a positive correlation to the workload at school ($r=.23$). Learning climate correlates positively with commitment to school ($r=.31$), feelings of justice at school ($r=.36$), student relations at school ($r=.32$) and student teacher relations at school ($r=.25$).

TABLE 1: Pearson's Correlation Coefficients Between Indicators of School Well-Being and A Positive Classroom Climate

	Commitment to school	Feeling of justice at school	Student relations at school	Student- teacher relationship at school	Workload at school
Learning climate	.309***	.357***	.324***	.248***	-.298***
Disruptive behavior	-.236***	-.273***	-.286***	-.177***	.230***
Safety	.270***	.290***	.182***	.240***	-.224***
Caring for classroom environment	.353***	.347***	.354***	.277***	-.302***

Note: *** $p < 0.001$

However, even though the values indicate a correlation between certain indicators of school well-being and a positive classroom climate, all correlations are relatively low and stay under .4. The lowest positive correlation can be found

between feelings of safety at school and student relations ($r=.18$). This indicates that there is no significant connection between student relations at school and feelings of safety at school. The strongest negative correlation can be found between caring for the classroom environment and workload at school ($r=-.30$): the less the students care for the classroom environment, the more strained they feel with the workload. The lowest negative correlation can be found between student-teacher relationships at school and disruptive behavior ($r=-.18$). This indicates that there is no significant connection between disruptive behavior and student-teacher relationships at school.

The second research question asks how the different indicators of classroom behavioral climate predict the school well-being dimensions of sixth grade students. The results of the linear regression analyses are presented in Table 2. Results indicate that classroom behavioral climate indicators explained 18% of commitment to school, 18% of feelings of justice in school, 16% of student relations in school, 11% of student-teacher relations in school and 14% of workload in school. Out of the indicators of classroom behavioral climate, only caring for the classroom environment predicts all of the four school well-being dimensions.

Caring for the classroom environment (std. beta= .23) and safety (std.beta= .21) are the best predictors of students' commitment to school. Learning climate also has a statistically significant, but weaker (std.beta= .17) effect on commitment, while students' observation of disruptive behavior in the class is not related to their commitment to school.

Caring for the classroom environment (std.beta= .21) and safety (std.beta= .18) were also the best predictors for feelings of justice in school. Learning climate had a statistically significant, but smaller (std.beta= .17) effect on feelings of justice in school. The level of disruptive behavior had no effect on feelings of justice in school.

TABLE 2: Results of Linear Regression Analyses on the relationship between indicators of classroom behavioral climate and school well-being.

Classroom behavioral climate	School well-being				
	Commitment to School	Feelings of Justice at School	Student relations at School	Student-teacher relationships at school	Workload at school
	Standardized Beta				
Learning Climate	.168**	.174**	.128*	.094	-.171**
Caring for Classroom Environment	.225***	.214***	.227***	.183***	-.158**
Safety	.209***	.184***	.058	.151**	-.144**
Disruptive Behavior	.077	.035	-.095	-.002	.004
R ²	.178	.178	.162	.112	.137

Note: *** p < 0.001 ** p < 0.01 *p < 0.05

Caring for the classroom environment has the strongest effect (std.beta= .23) on student relations in school. The learning climate also has a statistically significant, but smaller (std.beta= .13) effect on student relations at school. Safety and level of disruptive behavior has no effect on student relations in school.

Caring for the classroom environment (std.beta= .18) and safety (.15) are the best predictors for student-teacher relationships at school. The learning climate and level of disruptive behavior has no effect on student-teacher relationships.

Learning climate (std.beta= -.17), caring for the classroom environment (std.beta= -.16) and feelings of safety (std.beta= -.14) all has a statistically significant negative effect on the feelings of a strenuous workload in school. Level of disruptive behavior in the class has no effect.

TABLE 3: Means and standard deviations of commitment to school, feeling of justice at school, student relations at school, student teacher relationships in school and workload at school divided between groups of classroom climate.

School Well-Being	Groups of Classroom Climate	Mean	Standard Deviation	Pairwise Comparisons, p-value ^a		
				Group 1	Group 2	Group 3
				n=94	n=413	n=89
Commitment to School	Group 1	2.920	.898	-		
	Group 2	3.445	.771	.000	-	
	Group 3	3.828	.742	.000	.000	-
Feeling of Justice at School	Group 1	3.296	.838	-		
	Group 2	3.930	.720	.000	-	
	Group 3	4.288	.846	.000	.000	-

Student Relations at School	Group 1	3.408	.775	-		
	Group 2	3.963	.605	.000	-	
	Group 3	4.258	.611	.000	.000	-
Student Teacher Relations at School	Group 1	3.213	.940	-		
	Group 2	3.643	.696	.000	-	
	Group 3	3.865	.728	.000	.033	-
Workload at School	Group 1	3.144	.844	-		
	Group 2	2.743	.720	.000	-	
	Group 3	2.230	.705	.000	.000	-

Note: ^aBonferroni

The third research question asks how extreme overall classroom behavioral climate conditions are related to the well-being of students in that classroom. Classroom behavioral climate groups differ from each other in the mean level of school well-being, $F(10, 1178) = 15,520$, $p < 0.001$, $\text{partial-}\eta^2 = .116$. As can be seen from Table 3, students in the positive behavioral climate group (group 3) report higher commitment to school, more feelings of justice in school, better student relations in school, better student-teacher relations in school and less feelings of a high workload at school, than students in groups of less positive behavioral climates.

4 DISCUSSION

The aim of this study was to investigate which factors of classroom behavioral climate are most closely related to the well-being of Finnish sixth grade students,

and thus further study the relationship between a classroom's behavioral climate and the well-being of students at school. A secondary aim was to find out, how a positive, negative or mediocre classroom behavioral climate affected the well-being of students in that classroom. The aims of this study were met, since the results give a clear image of which classroom behavioral climate factors are connected to the school well-being of sixth grade students, and how a certain classroom behavioral climate affects the students of that classroom.

The results of this study show, that all of the variables of classroom behavioral climate are connected to the school well-being variables. The correlations between variables are small, but statistically significant. The strongest positive correlation indicates that the better the learning climate, the higher are the students' feelings of justice at school. Gillen, Wright and Spink (2011) connect teachers telling lesson objectives to students with an improved learning climate, which would be in line with these results. Interestingly, the lowest positive correlation is between student relations at school, and feelings of safety at school. It would be easy to assume, that close and positive relationships between students would ensure feelings of safety among students, but at least these results do not support that idea. These results are supported by the second analysis, according to which safety has no effect on student relations in school. The results also indicate that there is no significant connection between disruptive behavior and student-teacher relationships at school, which is interesting.

When investigating how the different factors of classroom behavior climate predict the school well-being indicators, caring for the classroom environment emerged as an important factor. It is the best predictor of student commitment to school, their feelings of justice at school, student relations and student-teacher relations. It is the only factor, which has a statistically significant effect on all the well-being indicators. Caring for the classroom environment does not emerge from other studies as a leading factor influencing school well-being. Konu, Lintonen and Rimpinen (2002) for example found that school conditions like

ventilation, temperature, dirtiness and inappropriate desks had a lesser impact on subjective well-being than predicted. However, the physical environment is stressed in some research studies. Gillen, Wright and Spink (2011) remind teachers of the importance of the quality of the physical environment. They recognize that students have a better chance to learn in a clean, well-organized environment, but they do not connect a clean environment with a heightened well-being at school. Other studies also stress the importance of ensuring, that the physical environment is as good as possible (Schneider, 2002, Levin & Nolan, 2007, Harner, 1974, Lackney, 1999), but also only in connection to learning. Levin and Nolan (2007) claim that likelihood for disruptive behavior can be minimized by improving the environmental conditions. Physical elements emerging as an important factor has been explained by it answering to our basic human needs, which need to be met before psychosocial needs are considered (Gillen, Wright & Spink, 2011).

Importance of taking care of the physical environment is further underlined, since the strongest negative correlation indicates that the decrease in students taking care of the classroom environment resulted in an increase in feeling that the workload at school is strenuous. Improving the cleanliness of the classroom is something that the teacher can have great influence on, by demanding students to clean up after themselves and naturally by showing good example.

Safety is the other factor that has a stronger effect on school well-being, as opposed to disruptive behavior and the learning climate. Safety has a significant effect on all of the well-being indicators, except for student relationships. Safety is naturally one of our basic needs, and thus it is not surprising that feelings of safety would affect well-being at school. Feelings of safety have previously been connected to higher school engagement, higher class engagement and higher academic achievement (e.g. Nijs et al., 2014 & Milam, Furr-Holden & Leaf, 2010), which further underlines that a connection between safety and school well-being is very natural. The connection between safe classrooms and enjoyment has also

been noted by Charles (2002). Milam and Furr-Holden (2010) suggest that worrying about one's safety takes mental energy away from other things, which could indicate that students in threatening settings do not have the mental power to enjoy school.

Disruptive behavior, surprisingly, does not have a significant effect on any of the school well-being indicators. However, it must be noted, that the safety elements are very closely related to those in the disruptive behavior factor. One of the safety elements asks if the students call each other with rude names, the second if students ridicule each other for wrong answers, and the third if students threaten to or attack each other. All of these elements could also be seen as behavior that disturbs other students. Nevertheless, these results are very interesting, since the basic assumption could be, that disruptive behavior is very harmful towards school well-being.

The insignificant effect of disruptive behavior on school well-being raises questions, whether there really is as much disruptive behavior on lessons, as it is commonly thought. If the level of disruptive behavior on lessons is very low, that would partially explain the insignificant connection to school well-being. Skiba, Peterson and Williams (1997) claim that most disruptive behavior is relatively mild and occurs during lessons, however it has to be noted that the study is relatively old. Esturgo-Deu and Sala-Roca (2010) on the other hand emphasize that concern about the unsuitable behavior of students is increasing. There seems to be some conflicting evidence on the amount of disruptive behavior on lessons, since in 2000, only 0.9 % of Finnish principals claimed there to be a large amount of problems with disruptive behavior (Holopainen et al., 2009). The trend was positive between 2000 and 2003. Holopainen et al. (2009) report that while in 2000 60 % of principals in Finland reported disruptive behavior to prevent learning at least somewhat, the number was only 38 % in 2003. In the light of these Finnish results on the level of disruptive behavior, it does not seem so surprising that disruptive behavior does not have an effect on students' well-being in Finland.

Furthermore, disruptive behavior is more common in secondary schools (Kaufman et al., 2009), and in this study the participants are in primary school.

It has been said that school well-being emerges from a sense of belonging in the school community, a positive emotional connection to school, being able to discuss issues with the staff and other students, the social aspects at school and a positive relationship with the teacher (Osterman, 2000, Smith et al., 2016, Gorard & See, 2011) These are all factors, which disruptive behavior does not prevent, even though it may naturally affect them. For example, Gorard and See (2011) list disruptive behavior as a determinant of disengagement. However, the results of the present study show that disruptive behavior has no effect on student relations at school, a factor which students' themselves rate very highly regarding their school well-being (Gorard & See, 2011) It may be that the importance of recess and free time on the creation of social bonds is more important, than time spent in class. The disruptive behavior factor includes items which may hinder your learning, but do not harm your personal safety. For example, students were asked whether the teacher must wait a long time for the students to calm down at the beginning of the lesson, and if students disturb the teacher when she is speaking. Thus, it seems that in line with previous research, the ability to learn well is not a deciding factor of school well-being.

Overall, taking care of the environment and feelings of safety are the most important factors in predicting school well-being, while the learning climate has a lesser effect and disruptive behavior has no effect. The first two factors are ones, which describe what kind of an environment the teacher has created in the classroom. If the teacher has been able to create a safe and organized environment, the students are more likely to enjoy school. Since the effect of the learning climate stays below the other two factors, it seems that the method of teaching is not so significant. Since the environment created by teachers seems to be very significant to school well-being, the teacher's role as an implementor of well-being is highlighted. Interestingly, safety has no effect on student relations

at school, which further supports the idea, that feelings of safety are largely dependent on the teacher. According to research, student-teacher relationships are increasingly significant in primary school (Jeffrey, Auger & Pepperell, 2013), which could be one explanation why teacher influenced factors emerge when studying sixth graders.

When investigating to what extent the classroom behavioral indicators as a whole explain the different indicators of well-being, it was found that they predicted 18% of commitment to school and feelings of justice at school. 16% of student relations at school were explained by classroom behavioral climate factors and 11% of teacher-student relationships. 14% of feelings of strenuous workload at school was explained by classroom behavioral climate factors. If the teacher's role has been highlighted in the earlier results, these results indicate that the classroom behavioral climate factors do not have a large impact on the relationship between students and teachers. However, these results do not contradict the idea that a teacher is very influential in creating an environment in which students can enjoy school. Naturally it would be very interesting to know, what the other factors which predict each of these well-being indicators are, since the highest percentage is only 18.

When the classes are divided into three groups depending on their classroom climates, the results are not surprising. In the group with a positive classroom climate the students feel more committed to school, feel safer at school, have better relations with their peers and better relations with their teachers, compared to groups with either a negative classroom environment or a neutral one. They also feel less strained under their workload. Even though the results are not surprising, they are very interesting, since they underline all the positive effects of a positive classroom behavioral climate. These results can and should encourage teachers to pay attention to improving the climate in their classroom.

The latest PISA results show, that overall life satisfaction is very high in Finland,

with only 6% of 15-year-olds claiming that they are not satisfied with their life. 45% are very satisfied with their lives, which is substantially higher than the average in OECD countries (34%). In Finland the difference between genders is especially high, with boys being more satisfied with their lives than girls. Life satisfaction is connected to commitment to school, and Finnish boys are more committed to school than girls. However, when looking at school well-being, and how much students like school, girls deliver the higher ratings in Finland and internationally (Currie et al., 2008, Linnakylä & Malinen, 2008, Gorard & See, 2011). Thus, it seems that boys are more satisfied with their lives and more committed to school, but girls like school more, and overall neither boys nor girls like school very much.

One explanation for the lack of connection between general life satisfaction and school well-being could be found from the student-teacher relations, which are relatively low in Finland. It has already been said, that teachers have a large role in establishing a positive classroom behavioral climate in their classes, and thus influence the student's well-being. One of the main problems in Finland seems to be that students feel they have no say in regard to their learning or school life (Linnakylä & Malin, 2008). However, Välijärvi (2017) reported that Finnish students feel more positively about the aid they receive from their teachers, in comparison to the average in OECD countries. Välijärvi (2017) also found that the feelings about aid received from their teachers was strongly related to their overall life satisfaction. This supports the idea that student-teacher relations are significant to students' school well-being. The results in this study show a positive correlation between most of the classroom behavioral climate factors and student-teacher relationships at school. Even though the results show a connection between the classroom behavioral climate and student-teacher relations, these results do not say anything about the effect of student-teacher relationships on school well-being. From the results it can be seen that the classroom behavioral climate indicators predict the least percentage from

student-teacher relations (11%), which indicates that student-teacher relations are a complex issue and a result of many factors.

One explanation for the gender differences between liking school can also be found from relationships between teachers and their students. In Finland, boys feel that teachers have treated them unjustly more often than girls. Boys also feel that they have systematically received worse grades than the other students. 10% of boys in Finland also feel they have received derogatory comments and ridicule from their teachers, while the number for girls was around 5%. (Väljjarvi, 2017) These are factors, which naturally do not nurture positive student-teacher relationships or enjoyment in school. Since there are no comparisons between genders in the present study, it is impossible to make any predictions based on these results.

As already mentioned, practical implications of these results include reasons why teachers should make efforts to improve the behavioral climate in their classrooms, and thus improve the school well-being of their students. The results reveal which areas the teachers should concentrate on, in order to have the largest effect on school well-being. In the present study, the strongest negative correlation indicates that the less strenuous the workload is at school, the more the students take care of their classroom environment. As the results also show that a clean and organized environment improves school well-being, it is important for teachers to try to find a good level of workload for the students. Since previous research demonstrates how school well-being is even a larger problem in secondary school (Sammons et al., 2013) and in general school well-being decreases by age (Haapasalo, Välimaa & Kannas, 2010, Currie et al., 2008), improving the classroom behavioral climate is even more crucial in secondary school. The results in this study raise the question, whether emphasis should be placed on decreasing disruptive behavior, or if more attention should actually be geared towards creating a comfortable and clean environment.

Sixth grade students were chosen as participants for this study, because they were the closest age group in the participant pool to the transition to secondary school. Choosing sixth graders allowed for a wider range of research studies, since in many countries such as the US, students transition to secondary school at a much younger age than in Finland. Thus, it was possible to use studies done on secondary stage students and young adolescents. This decision proved to be a good one, since a vast amount of research concentrated on a secondary school age group. Especially beneficial this decision was, because of the PISA data, which is collected from secondary school students. The PISA data was extremely useful to this study.

Limitations in this study include clustered data, since in the data students are supposed to be independent of each other, but in reality, they are individuals who study in a classroom with each other. Another limitation is that gender differences have not been studied at all, even though for example Välijärvi (2017) found a significant difference between the overall life satisfaction of boys and girls.

Since the results in this study highlight the importance of a positive physical environment, this would be a useful area for future research. The effects of the physical environment have been studied very little. Specific aspects, such as temperature and air quality (Kennedy, 2001, Lackney, 1999, Harner, 1974) have been studied, but it was difficult to find research data on the effects of a positive physical environment. Especially recent studies seem to be lacking in this area. Thus, there seems to be a clear need for further research in the effect of a positive physical environment on student well-being. It would also be very interesting to gain similar data on secondary school students, since it has been shown that school well-being decreases by age. Secondary school is overall a very different environment in comparison to primary school, so comparison between these two age groups could be very beneficial in further understanding the connection between classroom behavioral climates and school well-being. Comparisons

between genders would also be an interesting area for future research, especially in light of the most recent PISA results, which found large differences between the genders in regard to life satisfaction (Väljjarvi, 2017).

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