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THE ARCTIC
UNIVERSITY
OF NORWAY

Department of Education

Peer-harassment prevalence in self-reports by primary and lower secondary school students

Statistical comparisons of samples from years 2000 and 2013, investigating traditional and cyber-harassment

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Master thesis in Master's Degree Programme in Education, May 2015



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Presented to respondents as print on paper
Extract of questionnaire items used in thesis

Teacher questionnaire «My life in School Checklist +» as used in 2013
Thesis present downloaded print from Questback online survey tool
Extract of questionnaire items used in thesis

Student questionnaire «My life in School Checklist +» as used in 2013
Thesis present downloaded print from Questback online survey tool
Extract of questionnaire items used in thesis

Abstract

Context: Comparative investigation of traditional peer-harassment and cyber-harassment prevalence, examining first year baseline sample of a longitudinal project in a North-Norwegian setting. The thesis is a smaller contribution into a main study, “Trivsel i Tromsø” (“Well-being in Tromsø”), which aims to examine psychosocial and psychiatric risk factor associations with bullying and cyberbullying, using a combination of survey tools. The thesis explore one of the three survey tools.

Objective: Contrasting behaviour in the same five schools before and after the “mobile phone revolution” using the “My Life in School Checklist +” at two points in time, years 2000 and 2013.

Design: Comparative investigation of sample from survey administered in school setting, supplemented with survey data from previous study. Descriptive statistics about prevalence and bivariate correlations.

Participants: Samples of 1042 and 878 students aged 9 to 16, attending five schools in Northern Norway.

Main outcome measures: Self-reports, teacher-reports and parent-reports of traditional peer-harassment and cyber-harassment in 2013, using general as well as and operationalized questions, compared with self-reports-only regarding traditional bullying in 2000.

Results: Chronbach alpha values for composite items are in satisfying ranges, between 0.71 and 0.84 for original items, and between 0.64 and 0.77 for recoded dichotomies. Traditional bullying measured as general items report 7,5 % victims within school hours, and 4 % outside of school hours. Item without time-of-day differentiation report 9,9 % victims. Cyber-harassment reported as general items report 1,3 % victims within school hours, and 3,4 % outside of school hours. There is significant difference between traditional harassment and cyber-harassment regarding when victimization occur. Within school hours, risk of seeing traditional bullying is higher than risk for seeing cyber-harassment. Cyber-harassment is as likely to occur within as outside of school hours; compared with traditional harassment; timeframe for victimization is expanded. Investigation compute composite scores of three traditional dimensions of peer-harassment, and one cyber-harassment composite of eight items. In 2000, physical dimension get 23 %, verbal 25,5 % and social 16,4 % of students indicating victim status on one or more of the items in the composite. In 2013, the physical dimension get 14,2 %, verbal 20,5 % and social 16,8 % of students indicating victim status

accordingly. The digital dimension get 6,6 %, lower than the other composite scores. There is significant difference between 2000 and 2013 harassment scores regarding both physical and verbal harassment, but the effect is small. Social harassment is not significantly associated with year of study. The 2000-survey data show significant association between gender and victim status on composite items physical, verbal and social harassment; boys score higher than girls do. All the effect sizes are small. In the 2013-survey data, only physical-harassment scores show significant association with gender. Boys score higher than girls do. The effect is small. In 2000, physical harassment scores show significant association with age, the effect is small. Primary school students report higher levels than lower secondary schools. In 2013, there was no significant association between age groups primary/lower secondary school and victim status on any composite scores of operationalized harassment. One school in particular show notable reduction in harassment between years 2000 and 2013. The cyber-harassment composite scores show significant association with age, the effect is also small. Cyber-harassment as channel for overall aggression is briefly discussed, but as counts for cyber-harassment are low, discussions are not conclusive. For traditional harassment, triple respondents show most combinations rendering significant correlations at 0,01 level on operationalized items; exceptions are parents and teacher reports on the verbal dimension, and parents and students reports on both physical and verbal dimensions. For cyber-harassment, parent and student responses did not render significant correlations.

Acknowledgements

I want to thank Professor Steinar Thorvaldsen at the Arctic University of Norway, who has been my guide through the process of writing a master's thesis, and Professor John Andreas Rønning for appropriate questions to put my writings in wider perspectives. I also want to thank Gunstein Egeberg, for his contribution to this work, and my fellow student Anna-Maria Stenseth.

I would like to thank the schools involved in the “Trivsel i Tromsø” (“Well-being in Tromsø”) project, who made it possible to conduct the study. Thanks to the teachers, parents, students and school leaders who answered the questionnaires and let me listen to discussions.

Finally, I want to thank my family for endless support.

Tromsø, 15 may 2015

Introduction

The thesis present a comparative investigation of Norwegian samples of students in ages 9 to 16 from the same schools before and after the «Smartphone revolution». Online technology has clearly an impact on society. The smartphone has become that all-in-one, portable device that, combining the functions of a cell phone with the functions of a computer, gives online access 24/7. People seldom leave home without their cell phone, and computers are personal items, serving as frequently visited pathways to communicate and interact with others.

Depictions of behaviour made possible by smartphones and personal computers present a variety of terms that in itself reflect the changing nature of a scene still evolving.

Cyberbullying, phone-bullying, electronic social cruelty, and digital harassment are only some of the terms used to describe emerging types of harassment. The term that has received most attention is “cyber”, as in cyber-harassment and cyber-bullying, indicating that at this point in time, the feeling of encountering new and unknown domains for human behaviour appear most relevant. “Cyber” suggest that there is exiting as well as dangerous uncharted territory ahead, and our children and young gain online access rapidly. In Norway, the smartphone is the number one way for children and young to access online activities, with 83 % percent of children and young in ages 9 to 16 stating they have their own phone in 2014 (Medietilsynet 2014:27).

A lot of research have paid attention to peer-harassment in school settings. In later years, cyber-harassment has become a research issue alongside the traditional schoolyard bullying research, and prevalence rates have been documented. I do not find many designs doing comparative investigation across what now appear to be a technological divide. In 2000, it was not common for children to carry personal phones. 13 years later, as a rule of thumb, they do. Comparing samples may present insights that prevalence reports as such does not provide. Studying for Masters degree, I was invited into the project “Trivsel i Tromsø” (“Well-being in Tromsø”) at the Arctic university of Norway (UiT). Within the project setting, selected schools take part in developing knowledge about their students along a range of method designs and research issues. Part of the project foundations was the former large scale studies conducted in the same region in 2000. We discovered that all the schools in the 2013 sample were also investigated in the earlier study. Investigations of cyber-harassment is in focus in the present study, and such a backdrop lead us to a comparative design of samples 13 years apart, looking at both traditional and cyber-harassment across the time divide.

So where is this changing scene at today? In a setting of a small town in Northern Norway, it seems that we are past the point of talking about adults as “digital immigrants”. Today, in this setting, technology and the online world have already become everyday life. Instant access has been available to us for quite some time, adults do have experience with issues of 24/7 accessibility, wide online audiences and permanence of online content, and we have a notion of what is acceptable conduct. The scene is still rapidly changing, and children and young get access to technology at almost the same rate as adults. But at the same time, we have able and eager technology users as teachers and parents. The pressing issue is the seriousness of incidents affecting our children and young, with harshness and severity that appear intimidating to even the most able user of the technology.

When Olweus provided his definition of bullying in the 1970’s (Olweus 1974), it seems to have been into an emerging field of research. The phenomenon of peer-harassment was not unfamiliar, but against a backdrop of cases of student suicide related to harassment in school in the mid 1980’s, there was an urgent need to state procedures about how to appropriately take action when handling bullying in school. Documentation of effective approaches had not yet been issues of specific research. It seems like we are only just coming out of the “emerging field”-phases of research about harassment in digital domains. The depictions of the nature of behaviour in the domain created for us by personal computers and online phones still differ, and research is ongoing across many countries. As with the earlier emerging field of bullying research, in present day research on cyber-harassment, the urgency rest with the question of what to do when incidents occur. A unison suggestion from research communities to apply whole-school approaches and foster kindness in cyber-space are approaches of long term efforts and not easily measured successes. The still changing venue of the digital everyday life only adds to the complexity of issues. When handling the moment of crisis in the classroom setting, teachers leaning on research for their choices of action have to relate to an emerging and thus changing backdrop of results and advice, not making their task any easier. Some cornerstones have appeared, and as with research of traditional harassment, a definition of terms is a welcome tool to grasp and discuss what is going on.

1 Terms used

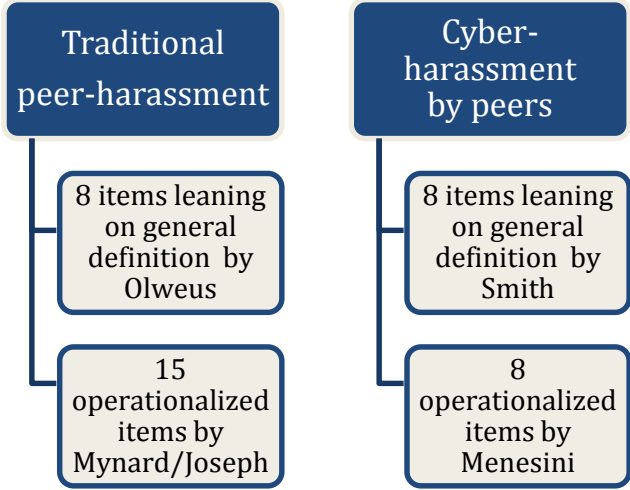
Cyberbullying, phone-bullying, electronic social cruelty and digital harassment are only some of the terms used to describe types of harassment that have come into focus in later years. The term bullying leave associations with unwanted behaviour in school settings. But access to digital online venues for activities becomes more and more part of life for all of us, the context being far wider than a particular school setting. Technological development affect all. During the writing of this thesis, I have learned about threats from “unknown foes”, but also that often victims are targeted by someone they know, by perpetrators among people close to them (Kowalski, Limber et al. 2012). In such a light, the school setting appear as most relevant grounds for countering cyber-harassment. Bullying is a term describing harassment by peers, often investigated in school settings. In research literature, one may find terms bullying and peer-harassment side by side. Prefixes cyber-, digital-, electronic- and phone- are subcategorising what to a certain extent is the same kind of unwanted behaviour, leaning on the definitions of traditional harassment.

Olweus (Olweus 1993) provided a definition of bullying that gained acceptance not only in Norway, where the Olweus prevention programme had its origin in national campaigns, but also in other European countries and later also in the USA. The definition is presented more in depth in section 1.1. Already in 1974, Olweus stress importance of school authorities taking a stance regarding bullying incidents. He highlighted enabling the bystander group of peers to counteract unwanted behaviour in schools, and attention to the “dual position” individuals (bully/victims), those who appear to be both victims and victimized at the same time. Olweus emphasized that the responsibility for forming group moral that reject physical and psychological harassment rest with the adult (Olweus 1974:208-209). When Smith (Smith, Mahdavi et al. 2008) provide a definition for assessing cyber-harassment among schoolchildren, is it along the same lines as the Olewus definition, adapted to the new realities of personal cell-phones and online behaviour.

Other ways of assessing traditional harassment were also documented. Arora presented one of the alternatives in a UK setting in the early 90’s (Arora 1994). Olweus suggested assessment is based on generally defined items and thus require a precise definition along with a rather unified understanding of terms among respondents. Arora suggest operationalizing the items, ranking them in joint effort with the children and young in question, thus emphasizing

adaptation to local school culture over comparable research results between studies. The present study takes on both approaches. The field of cyber-harassment behaviour among schoolchildren has a general definition by Smith that has gained research from different settings, and is used as the equivalent of the Olweus’ definition for traditional harassment in the present survey, as both have wide acceptance. The general item definition by Smith is presented in section 1.4. The investigation continues on operationalized items, and the item selection for cyber-harassment regarded as “work in progress” (Rønning, Thorvaldsen et al. 2012). Operationalized items lean not on quantitative investigation of local school culture, and subsequent testing of item properties. The aim of the study is not to explore and present new items. Instead, pretested measures are used. Traditional harassment prevalence is investigated as suggested by Mynard and Joseph (Mynard and Joseph 2000), and assessment of cyber-harassment as presented by Menesini (Menesini, Nocentini et al. 2011), with some adaptation regarding translation into local context and evaluation against other items in the study. The items still reflect Menesini reported properties. The two operationalized sets of items are presented in section 1.7 and 1.8.

Figure 1 Measures assessing peer-harassment in the “My Life in School Checklist +”



(Rønning, Thorvaldsen et al. 2012)
 Items described in more detail in section 2.3

The term cyber-harassment is used throughout this thesis, even if the term somewhat clouds the notion that internet is becoming all-present. The term “cyber” link to “internet” as venue, maybe suggesting imagery of teenagers left alone with their computers or adults engaged in escalating email-quarrels. But in the aftermath of the smartphone-revolution, the phone in the pocket is more likely to be the “venue” of online activity. Distinctions may become blurred, as core issues more and more seems to lie along lines of human behaviour and aggression, rather than along means of communication. Looking at behaviour by adults, we are not always the best of role models. Good conduct seems to be work in progress not only among

young; maybe even more so in the adult world, as seen in studies of university level cyber-harassment behaviour and coping strategies (Cassidy, Faucher et al. 2013). Longitudinal research on cyber-harassment is naturally yet scarce, but conduct in higher education does not appear to have low scores regarding harassment, and consequences are affecting careers as well as the mental health and psychosocial adaptation issues more often investigated among the young.

In the present study, the term venue is avoided. A time differentiation has been chosen to keep focus on the more private nature of after school hours. In research, terms like “venue” have been used to describe differentiations between different channels for the harassment behaviour (like “Facebook”, “online chat sites”) as well as distinguishing between school grounds and home or other physical arenas, or even referring to a stage or scene as in what kind of access to content is provided for a wider audience. Venue may be a better word when thesis discussions attempt to look at how, tightly linked to where, adults may better the conditions for our children and young. As the term has a lot of other applications too, terms “within“ and “outside of school hours”, borrowed directly from the questionnaire, are used throughout to keep text accuracy.

In the thesis, the comparisons regarding prevalence and correlates rest mainly on reports from UK and USA, Canada, Australia and the Scandinavian countries. Researchers from Italy have contributions that make foundations for the research project, and the authors are part of an ongoing debate with Scandinavian authors. The Italian reports are thus naturally included in my discussion (Menesini, Nocentini et al. 2011). I note that, although not discussed in this text, reviews also present research in the field of cyberbullying from other countries. Some Eastern European countries, Poland and Germany make research public in English text, and in Asiatic regions like South-Korea and China, the topic is also investigated (Cassidy, Faucher et al. 2013:577). Reports from more or wider geographical regions may put the issue of bullying into cultural contexts, issues which are not basis for discussions in this text.

The measures of perceived harassment reactions from peers are derived from the Norwegian “My life in school” study by Rønning et. al. (Rønning 2004). The measures use general items in combination with descriptive events, positively or negatively perceived, and was originally based on Arora’s “My Life in School” checklist (Arora 1994).

1.1 Olweus and the traditional peer-harassment definition

Within **traditional harassment** research, the Olweus' use of the term "bullying" has gained wide acceptance, incorporating issues of **intent**, **repetitiveness** and **power balance** into the definition. Olweus see bullying as a **subset of aggressive behaviour**, and draw lines that distinguish bullying from other forms of aggression, repetition being one of distinguishing elements. "A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative actions on the part of one or more students" (Olweus 2013:755). Olweus discuss the criteria as emphasizing "intentionally negative aggression", "repeatedly and over time", and "certain imbalance of power or strength"; the victim having "difficulty defending himself or herself" (Olweus 2013:755) .

In his research, the definition is presented at a survey questionnaire to measure both pre- and post-interventive prevalence of harassment in whole-school approaches. The Olweus programme is aimed at elementary and middle schools. The pre-interventive assessment is seen as vital to gain knowledge about extent and nature of a perceived problem. By means of an anonymous questionnaire for its students, the school may assess prevalence and nature of the bullying, and then act by intervention to end the bullying behaviour. The programme has school level and classroom level components, seeks to encourage pro-social behaviour and provide support for victims, and adult supervision to eliminate opportunities for unwanted behaviour in areas that are frequent settings. The programme is also known for attention to clear and consistent rules for the whole school, and terms like whole-school or full-school approaches. There is emphasis on building anti-bullying values and norms, and even active parent involvement, but the programme has had its most influential contributions in **interventive components** at individual level to put bullying behaviour to a stop. The approach rest on Olweus seeing bullying as "aggressive behaviour with certain special characteristics" (Olweus 2013:756). Further, the distinctions lead to "a separation of three key groups of key actors involved in bully/victim problems, representing very different reaction patterns and personality profiles: pure **bullies** or bullies only, pure **victims** or victims only, and **bully-victims**" (Olweus 2013:759). In the present study, the term "mobbing" is used on the questionnaire section investigating traditional harassment prevalence.

1.2 Types of aggression

In the UK setting, authors Thompson, Arora and Sharp base approaches on research about peer-harassment in schools, conducted in the Sheffield area. They see that the information

teachers and others need on these topics is often not available in a form that they find helpful or accessible. Sometimes the topic is addressed in ways that are too academic and removed from the practical concerns of everyday school life. But there is also “a converse problem that seems to have become more obvious recently - a tendency to oversimplify and trivialise what is likely to be a complex issue, and offer packaged solutions instead of a full analysis”. They see a need to “bridge the gap between these two types of approach” (Thompson, Arora et al. 2002:vii).

Thompson, Sharp and Arora find Roland's 1998 analysis of the relationship between aggression and bullying is a useful one, as it concerns itself with the two main theoretical frameworks developed to explain aggression. They point towards Dodge (1991) summarizing these as reactive and proactive aggression, and further how Roland argues that it is of importance, for ethical, theoretical and practical reasons, whether we understand bullying as being **proactive** (that is, spontaneous or unprovoked, a “natural” expression of the child's emerging personality) or **reactive aggression** (that is, aggression in response to something else happening). Each type of aggression has a different set of associated factors, with regard to motivation, reward and feelings engendered on the part of those who bully, as well as indicating a different set of social conditions which permit bullying to happen. The theoretical view we take influences the extent to which we see bullying as learned behaviour which may be susceptible to change, or based on “aggressive instincts”, which will be more difficult to change because they are a part of the emerging emotional make-up of the young personality (Thompson, Arora et al. 2002:22). The gain for the aggressor would be **feelings of power and control**. “It is difficult, though, to think of instances of bullying which might be considered examples of reactive aggression” (Thompson, Arora et al. 2002:23), and the authors see the model of proactive aggression as explaining a wider range of bullying behaviour. “It assumes that there is usually a specific **motive**. The behaviour does not necessarily result from feelings of anger or hostility but is intended to gain some reward, although the rewards may be primarily emotional ones. Such a type of aggression does not need a precipitating event for it to occur. Rather, it is behaviour which is learnt through imitation, reinforcement and modelling, although it may be prompted originally by temperamental elements of the young child's physiological make-up” (Thompson, Arora et al. 2002:22).

Many of the academic descriptions start out with the Heinemann definition of 1973 about sudden group violence against a deviant individual, “even if this has limited relevance today, as the terms now are more widely understood” (Thompson, Arora et al. 2002:51). In the 2002 book “Bullying, effective strategies for long-term improvement”, authors discuss how Heinemann came to be a starting point because it was in contrast with the later Olweus definition, which introduced “the notion of there being a psychological aspect to bullying” (Thompson, Arora et al. 2002:52). With this, the definition moved towards how we usually see it today. Further, the 1989 definition by Roland is included: “the long-term and systematic use of violence, mental or physical, against an individual who is unable to defend himself in an actual situation” (Thompson, Arora et al. 2002:52), to illustrate how the mental health aspect enter into definitions. Definitions by Bjørkquist, Besag and Whitney/Smith are also discussed. Thompson, Arora and Sharp conclude that it may be “the lasting or **long-term effect** on the victim rather than the systematic or repeated nature of the action/threat that is the more essential feature of bullying” (Thompson, Arora et al. 2002:52).

1.3 Arora suggest neutral questionnaires and attention to ethics

The list used in the “Trivsel i Tromsø” study is based on the “Life in school checklist”, as presented by Arora (Arora 1994, Thompson, Arora et al. 2002). Of the six items in the original Aurora checklist, only four remain. Items “demand money from me” and “tried to break something of mine” have been discarded in the process (Rønning 2004). The three items “kick, hurt and hit” are incorporated into the physical dimension based on the Mynard/Joseph scales, and the last item of the Arora Index, “threaten to hurt” lie within the verbal dimension of these scales. The survey data of 2013 no longer present possibility of constructing an Arora bullying index. The theoretical backdrop of the original list still deserve attention.

First, Arora sees benefits in sensitizing using a questionnaire to assess peer-harassment in the school setting. “The mere fact that this is used can open up the debate on bullying amongst the staff and make them aware of kinds of behaviours that are happening in school” (Arora 1994:11). Arora pay particular attention to ethics. She aims to present a checklist that does not promote **unnecessary negative focus** within the student group in question. The checklist suggest items of events both positive and negative, mixed so that half are nice or neutral, and the other half more unpleasant. The mixture is «intended to draw attention away from the fact that the main interest is in those items that might be considered to be bullying» (Arora

1994:11). Arora aim to provide a starting point for teachers to discuss with the students “what they feel constitute bullying”, and see results from such discussions as basis of further intervention planning.

Second, the different definitions of bullying has made comparing results a complex issue. Arora prefer avoiding the term bullying altogether, and sidestep the difficulties that rise from different definitions in use, as well as differences between academic understanding and the **concept as perceived by the child**. Behaviours associated with the term bullying can be seen from a very early age. “However, these can be termed bullying only when children have reached a certain level of awareness and understanding. Many of the ways of reducing bullying depend on the children being aware that what they are doing is called bullying, and that it is not an acceptable way to behave because of its consequences for the victims and the other children in the group” (Thompson, Arora et al. 2002:18). Arora argue that children do recognize that the situation in which the act in question occur may differ, and that the same act may not be bullying in all situations. By asking the child itself what he or she perceive as bullying, Arora promote that core issues are what is perceived as bullying within the group.

The Arora questionnaire does not aim to give a measure to be compared between schools, but to stay within that one school culture, examining aspects specific to the group in question. There is a bullying index provided to meet the needs of schools who are interested in a score to use for comparing, preferably within the same group. Arora contrast the “operationalized list of items only”- and “way of inquiry”-combination with approaches that use predefined general items and predefined lists of unwanted behaviour, asking to what degree have you experienced these events, but recognize that both types of questionnaires are bridging the gap when it comes to comparing studies, as standardized questionnaires were been used in a range of studies during the 90’s.

Arora make note that questionnaires, including her own, may have **bias towards physical aggression**. “As a result, boys’ bullying (which is more physical of nature) may be more easily detected with the checklist than girls’ bullying (which tends to be more psychosocial). However, physical and non-physical bullying always co-exist, so a high bullying index can be interpreted as indicating the likelihood of a high level of bullying all round and vice versa” (Arora 1994:15). Arguments along the same lines lead Olweus to suggest that means to

counter traditional harassment are also the means that should be used to handle cyber-harassment (Olweus 2013).

In the present study, the Arora checklist is used as basis for a predefined measure of prevalence, and as such not basis for pre-assessment involvement of students. Neutral mix of items as suggested is discussed in section 4.7.

1.4 Smith defining cyber-harassment

Current definitions of **cyber-harassment** lean on definitions the of traditional harassment already discussed. When constructing an appropriate cyber-harassment definition, issues that arise are not only the repetition of harmful behaviour, but also the intentional harm to a victim, and the power imbalance between victim and perpetrator, all which may not seem as straight-forward in the light of cyber-harassment. There is yet a wide diversity of terms regarding the phenomena of cyberbullying, cyber-harassment or digital harassment. Smith provide a definition that has wide adherence: An “aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself” (Smith, Mahdavi et al. 2008:376). Such a definition stay within a well-known framework of terms established by traditional harassment researchers, while keeping the door open for the variety of issues that arise as cyber-harassment is conducted using a range of ever changing tools and appear through various venues, as well as diverse forms ranging from minor to serious harm.

1.5 Cyber-harassment distinctions presented by Kowalski

Depictions of dangers in cyberspace by the public press and other media may be seen as modern folklore, still the stories help illustrate issues that deserve attention. **Speed off distribution, anonymity, 24/7 accessibility** and **permanence** of online content are characteristics that Kowalski say distinguish cyber-harassment from traditional harassment (Kowalski, Limber et al. 2012:11). Kowalski find that a clear understanding of traditional or schoolyard bullying makes it easier to discuss and understand the cyber-harassment. Kowalski find that to gain knowledge about harassment in the new digital domains, we need to look into methods by which people cyberbully, who perpetrates bullying, who is victimized, and how similar to or different is it from traditional bullying. Kowalskis review of research available regarding the cyber-perpetrators indicate that they share **feelings of**

revenge, enjoyment and power. Kowalski point out that these are cyber-harassment **motives** which are obvious cause for concern, and deserve further study. And as with traditional harassment: where there are no adults, bullying thrives.

Kowalski's first word of caution is avoid concluding that we would be better off without the online access, and the impression that technological advances are bad. The online access opens for positive opportunities by providing a route to open sources of knowledge that might otherwise be out of reach. It may be of most importance to teach children and young to appreciate keeping the net open and retain a sharing online culture, and help them take part in a global community. Kowalski note positive essence in establishing and maintaining contacts, in venues for creative content, and even giving young people opportunity to stimulate social change (Kowalski, Limber et al. 2012:16-17).

But Kowalski also state that cyberbullying is real, and increasing in frequency. The psychological effects may prove devastating, and maybe even more so than for traditional bullying. Kowalski emphasize that adults will never be able to completely shelter youth online. Kowalski says cyberbullying presents some unique challenges for educators, parents and other adults who intend to interact with children, and need to deal with everyday aspects of an online culture. When access to technology and internet is a part of the life of the child and young, it becomes not just a handy tool, but a critical tool for their social life. Further, Kowalski point to how children and young have a comfort level with technology that may be foreign to adults. The unique challenges are centred on the newfound access to a **wider audience** in combination with the **private nature of the tools**. Children and young will take the opportunity to explore the adult world without supervision. For young in particular, this is a preference in line with "their need to test their wings outside the family" (Kowalski, Limber et al. 2012:3). At the same time, they may not pay much attention to how they are opening a window to people who may not have the best intentions. Opportunities for self-affirmation and self-expression provided by the internet can quickly become vehicles for denigration and cyberbullying. The online devices make it easier to target peers through posting comments and messaging throughout the day. One key variable is anonymity, another distribution. The "24 hours a day / 7 days a week"-access may leave victims never off guard. Kowalski also find we should pay attention to the increasing number of perpetrators of online harassment that are friends or acquaintances of the victim.

In results from Kowalski and Limber focus group studies conducted in 2011, it was also of concern that only 16% of the respondents reported talking about their online activity with their parents, results in line with the 17% reported in Norwegian context in the “Barn og medier”-report of 2014 (Medietilsynet 2014:66). At the same time, also in Norwegian context, the «Foreldre om små barns (0-12) bruk av medier» report that among a 3 % of parents who knew their child had posted content online that they later regret, 86 % of parents report having been able to remove the online content altogether (Medietilsynet 2014:64). Older children seem to be more at risk, **not seeking support from adults** (Kowalski, Limber et al. 2012). The thesis findings does not provide material to investigate such issues, but note age investigations appear relevant in such a light. Despite increased parental control with increased level of technological knowledge developing among parents over the years (Kowalski, Limber et al. 2012:7), phones are by nature more private, and are often readily accessible to the cyberbully. With a rising number of social networking applications available, it is reasonable to expect that cyberbullying via Smartphones will increase and stay prevalent among adolescents (Kowalski, Limber et al. 2012:224). Kowalski recommend that teachers/educators as well as parents examine online presence, and take part in the wired culture in which our youth live.

1.6 Severity and impact

Examining the methods by which people cyberbully may tell us more about who perpetrates and who is victimized. The Kowalski and Limber focus group studies suggested that some students are heavily affected by enduring cyberbullying, whereas other young people emerge relatively unscathed from such incidents, indicating that more research is needed to examine which forms of cyber bullying and what conditions surroundings the cyberbullying may be particularly harmful (Kowalski, Limber et al. 2012:226).

The present study has items justified by the issue of **impact** of different forms of harassment. Sourander used the Smith definition in his study of impact, looking at psychosocial risk factors associated with cyberbullying among adolescents in Finnish context. Both victims and perpetrators of cyber-harassment were at risk regarding psychiatric and psychosomatic problems. “The most troubled are those who are both cyberbullies and victims” (Sourander, Klomek et al. 2010:720). It is thus of interest to get to know more about the group that is most at risk. Association with risk factors lead us to see importance of the traditional harassment

prevention and intervention efforts as well as finding means to meet the challenges of cyber-harassment.

Naturally, more is known about effects and long-time consequences of traditional harassment. Canadian researcher Cassidy review literature that show that many of the documented negative effect of cyber-harassment “overlap with the effects noted in earlier studies on traditional bullying”(Cassidy, Faucher et al. 2013:581). She points towards studies that show effects associated with traditional harassment appearing in cyber harassment setting. She find depression, poor self-esteem, anxiety, suicidal ideation and psychosomatic problems like headaches and sleep disturbances are effects stated by researchers like Olweus (Olweus 2012), Kowalski (Kowalski, Morgan et al. 2012), Menesini & Nocentini (2012) and Smith (2012) as related to both traditional and cyber-harassment. In other research literature reviews, Ttofi, Farrington et.al. see indication that “bullying victimization is a major childhood risk factor that uniquely contributes to later depression” (Ttofi, Farrington et al. 2011:63). Against a backdrop of severe consequences, issues have national level attention in Norwegian context, most recently made manifest by the Djupedal committee presenting their report in march 2015, emphasising that all students have legal right to safe psychosocial school settings, without harassment, bullying or discrimination (Djupedal 2015:17).

1.7 Physical, verbal and social harassment operationalized by Mynard and Joseph

Harassment may take on a number of different forms. In the present investigation, terms **physical, verbal and social harassment** are categories of traditional harassment, and operationalized as separate dimensions accordingly. The “My Life in School Checklist +” items list in the present study use subscales of physical, verbal and social dimensions based on the method suggested by Mynard/Joseph, further investigated as described by Rønning et.al. 2004 (Rønning, Thorvaldsen et al. 2012). When more than ten items are involved, measurement tool testing by factor analysis demand large samples, usually more than a thousand to several thousands. “With few exceptions, most studies on harassment employ samples with less than a thousand subjects, which may be one explanation for the paucity of CFA in this kind of research” (Rønning 2004:1068). In the original 2000 sample of 66 schools (N= 4130), CFA was performed, and internal consistency reported as verbal harassment 0.80, social manipulation 0.75 and physical aggression 0.74 (Rønning 2004:1071). In our present findings, internal consistency tests show Chronbach alpha values

of 0.71 for physical dimension, 0.74 for verbal dimension and 0.79 for social dimensions in the 2000 dataset (N=1042), and values of 0.77 for physical dimension, 0.84 for verbal dimension and 0.82 for social dimensions in the 2013 dataset (N=878).

Investigation of traditional harassment on these items lean on work by Mynard and Joseph. In 2000, they stated that although researchers had been distinguishing **direct and indirect** types of peer-victimization, disagreement remained concerning how to best categorize different types of behaviour. Mynard and Joseph considered the harassment categories of direct (as in face to face) and indirect (as in behind ones back) a useful, but broad dichotomy, and wanted to look at more specific facets of victimizing experiences (Mynard and Joseph 2000:170). They point to a problematic interchangeability in term usage at the time, as terms social and relational harassment had both been used to refer to indirect harassment. Also, operational definitions of the same terms were different across studies. They cite Olweus using indirect to refer to a broader range of covert behaviour, and Lagerspetz and colleagues using the term as a circumscribed range of socially manipulative behaviours. Such discrepancies become problematic when studies attempt to compare and contrast psychological effect of peer-harassment (Mynard and Joseph 2000:170).

To pursue further investigations of whether some forms are more hurtful than others, Mynard/Joseph find that there is a need for a categorization into a **psychometric self-report measure**. By principal component analysis, a multidimensional scale was developed. Investigations were made within a sample of 812 secondary school students in UK setting of children in rather the same age ranges as in the present study, and not very large cultural differences between the two study samples. Their conclusions thus may apply well to the present study setting. Four factors were identified, and subscales constructed. These show satisfactory internal consistency as well as convergent validity with general items of self-reports of being bullied. Internal reliability of subscales had Cronbach alpha values of 0.85 for physical dimension, 0.75 for verbal dimension and 0.77 for social dimensions. Verbal and physical forms of harassment were associated, but constituted separable factors. (Mynard and Joseph 2000:174-175). Björkquist (1992) and Campbell (1997) studies had previously shown that the verbal and physical forms constituted one dimension of direct victimisation.

Authors refer to research by Lagerspetz (1988), Olweus(1993), Roland (1980) and Smith et al. (1993) had found that boys experienced more physical victimisation than girls, and

Mynard/Joseph also found such differences. Verbal victimisation showed no gender differences. They still found assessing verbal and physical dimensions separately a useful approach, opening for practical considerations regarding preventive efforts. They also found it “useful to assess two further types of victimization; social manipulation and attacks on property” (Mynard and Joseph 2000:177). They describe social manipulation as acts aimed at manipulating another persons social surroundings to inflict hurt or harm. They compare results with previous research measuring “indirect”, “social” and “relational” aggression, and found consistency with those results, as girls saw more social manipulation than boys. The present study use the scale as originally described, with the exeption that suggested items of attacks on property, which had not earlier been investigated as separate items, is not included.

1.8 Cyber-harassment operationalized by Menesini

In the present study, cyber-harassment investigations lean on work by Menesini et al., who used factor analysis to develop appropriate scales. About the present scene of cyber-harassment research, authors say “the majority of studies have focused on the prevalence of the phenomenon, on the relation between traditional and electronic bullying, and on cyberbullying correlates” (Menesini, Nocentini et al. 2011:267), pointing out that investigation of operationalized measurement tools are more far between. Accordingly, Menesini suggest items to measure cyber-harassment in a study providing first analysis of a multiple item scale of perceived and perpetrated behaviours, “outlining the structure of the cyberbullying construct and investigating the relative severity and discrimination of each behaviour” (Menesini, Nocentini et al. 2011:267). In the next part of the text, I attempt a summary of Menesini CFA results. The present study keep the one-factor model suggested, and eight items, some of them revised.

Menesini et.al. present the one-factor model as adequate fit, and “scales showed acceptable Cronbach’s alphas for the type of behaviour, perpetrated and received, and for both males and females”(Menesini, Nocentini et al. 2011:268). Two bidimensional structures were also investigated, basing distinction on phone and pc means, and the other between written-verbal and visual acts. The items had high factor correlations indicating less support for such distinctions (Menesini, Nocentini et al. 2011:271). They also relate the findings to the issue of low response frequency on some (the visual) items creating difficulties in discerning separate factors, as with the discussion in our own findings about e-mail-responses, particularly at primary level. Menesini et.al discuss how other studies with larger numbers of items along the

visual dimension and more differentiated behaviours along the category may disprove or confirm the results of the one-factor model showing best fit. High correlation between phone and pc may reflect parallel usage and the two having similar functions. Also, even when CFA showed one factor underlying the construct, this was not seen as indication that all items assess the same severity. The construct may “be interpreted as unidimensional measure where each item lies on a continuum of severity of aggressive acts”(Menesini, Nocentini et al. 2011:272).

The most severe acts for both males and females were visual acts: unpleasant pictures / photos / videos of intimate scenes and of violent scenes. Items nasty text messages, nasty or rude e-mails, insults on Web sites and insults on blogs had moderate to high levels of severity. The less severe acts were silent/prank calls and insults in instant messaging, also for both sexes. “In agreement with results by Smith et al. (2008), underlining that picture/video bullying had the most impact, we found that visual forms of cyberbullying behaviours are the most severe acts”(Menesini, Nocentini et al. 2011:272).

There were also reported cultural differences between countries at the time regarding usage of phone, particularly according to age. In Italy at the time there was mobile phone access for “about 80% of adolescents aged between 11 and 14 years and 93% of adolescents aged between 15 and 19 years”, and “percentages of youth aged between 11 and 19 years using the internet ranges from 60% to 76 %” (citing Italian Institute of Statistics 2007) (Menesini, Nocentini et al. 2011:274). In Norwegian context in 2014, 77 % of all children in ages 9-16 state using internet on a daily basis, 94 % have access to a mobile phone, and 83 % have their own smartphone (Medietilsynet 2014:8-10). The two contexts appear to be comparable, cellular phone being the primary tool providing access to online activity.

Other discussions arise about placing of threshold for victim status. As in the Menesini study, the present study items were excluded from analysis if not at all endorsed. Menesini argue that literature on cyberbullying has yet to establish whether repetition has to be a criterion for the definition. A single individual act can be circulated widely or copied by others, thus meeting such criteria. Taking such issues into account, Menesini suggest it is a better choice to use low rather than strict thresholds for what should be considered harassment in cyber-settings. Their studies “underline that the scale structure is the same considering (the) two different thresholds representing different levels of repetition of the acts”, and an “overall

agreement in relation to the severity ordering”(Menesini, Nocentini et al. 2011:273). But repetition may influence the discriminative power of the act, and we have to take into account both type and frequency of the behaviour, “since some are serious per se, and some may become serious in reason of their frequency”(Menesini, Nocentini et al. 2011:273).

The eight operationalized items investigating cyber-harassment are presented in section 4.5, along with comments regarding adaptations and translation into Norwegian terms.

1.9 Cyber-harassment and gender

Traditionally, boys are more often harassment perpetrators than girls. (Olweus når, Smith da? Sourander, Helstela, Helenius, & Piha, 2000). Sjekk mot Cassidy!

Regarding cyber-harassment, results vary. Ybarra & Mitchell, 2004 studies report girls and boys equally likely to be cyber-harassment perpetrators. Slonje and Smith (2008) did not find significant gender differences in self-reports of status as cyber-harassment victims or perpetrators. There was a trend suggesting boys engaged in more acts of cyberbullying than girls, but it did not render significant. Li (2006) studies showed boys more likely than girls to be cyber-perpetrators of harassment. Dooley point out that such variation may indicate that when looking at cyber-harassment, gender differences are not as strong as for traditional harassment (Dooley, Pyzalski et al. 2009). He point to Blair (2003) studies finding girls more likely to communicate using text messaging and e-mail than are girls. If one see this preference in combination with “the more covert (and social) nature of cyberbullying” (Dooley, Pyzalski et al. 2009), Dooley suggest that it is reasonable to find gender differences seen in traditional harassment not appear as strong when it comes to cyber-harassment. Dooley present arguments that “girls tend to have more close-knit relationships/friendships and therefore more readily exchange intimate details and personal secrets, whereas boys socialize in larger groups and share fewer details” (Dooley, Pyzalski et al. 2009). In our findings, we see girls receiving harassment through social media like Facebook more than boys, who have similar scores regarding chat based media. According to Dooleys line of argument, girls may thus be exposed to more opportunities for having their secrets spread online than boys. Investigation of gender differences regarding cyber-harassment appear relevant, and may help directing teacher attention towards behaviour relevant to the specific group.

1.10 Elements that may contribute to change

In the search for elements that may contribute to change, self-esteem has been an issue, as research find harassment have negative correlations with self-esteem and confidence (Smith, Mahdavi et al. 2008, Kowalski, Limber et al. 2012, Olweus 2013). Causation is not implied, harassment may have effect on self-esteem, or the lower self-esteem individuals may attract harassment, or both at the same time. Improving student ability to keep their self-esteem is individual level advice and tactics, sometimes applied as part of the whole-school-approaches recommended by researchers over the last decades. Changes within school cultures may lower rates of incidents that may be of victimizing nature. Intervention efforts have been reviewed by Farrington and Ttofi. By systematic full school intervention, harassment scores have been reduced by around 20% (Farrington and Ttofi 2009:323). It is possible to stop some of the harassment when discovered. When Norwegian rates in rough numbers show around 10% victimization of traditional harassment, if class sizes are around 20, that is one in every classroom. To worried parents and others alike, a 20% reduction rate is the least of what is expected. If one or two discoveries are made in a classroom of 20, then the harassment should be put to a stop. The Djupedal committee take this stance in their recent report relating to Norwegian context (Djupedal 2015). The report press issues that school leaders and teachers are to be more aware also of legal consequences of not intervening when discovery is made, and stress that the responsibility of doing such discoveries also lie with the adult, not with the child or young, and follow-up procedures are obligations that no school management can put aside.

Preventive school cultures are issues for many researchers. For school approaches to counteract traditional harassment there is support of approaches that have more to offer than intervention efforts. Building preventive cultures is also the issue of Nordahl, who point towards teacher classroom management (“klasseledelse”) having high correlation with low rates of harassment. Improving classroom management taps into adult responsibility, and is one element of the complex everyday life in school that may be improved. The strategy of enhanced focus on teacher classroom management is presently an important part of the national strategy for prevention of traditional as well as cyber-harassment in the Norwegian setting (Nordahl, Hemmer et al. 2012). The strategy is expected to improve school cultures and lower harassment rates for the majority of potential victims in Norwegian schools, among other expected outcomes. Whole-school approaches have also been seeing criticism for being

one-size-fits-all, and that there is always a minority among minorities where strategies that are good news for most may not apply, for any number of reasons. Reviews of efficiency of tried and tested programmes by Farrington/Ttofi was recently extended by Evans/Fraser (Evans, Fraser et al. 2014) to cite 67% of studies in their review reporting significant program effects. The Olweus warning that a shift in focus away from what actually do work for the majority appear relevant (Olweus 2012).

Research communities keep looking for information that may provide more and other potential agents for change, also for minorities within minorities. The “Trivsel i Tromsø” approach is to accompany the national strategies. While giving school leaders and teachers information about the local group to cater for local adaptation as well as access to recent research regarding the more uncharted field of cyber-harassment, there is an investigation other types of information that may point us towards elements in the complexity that we may be able to alter. Facing cyber-harassment, issues of early stages detection appear to be less pressing than issues of what appropriate action may be taken once incidents take place and have to be dealt with. Peer-harassment intervention efforts in schools had somewhat the same kind of origins a couple of decades ago, and the shift towards advice about emphasising thriving school communities, not so much stressing the punitive efforts, appear to be somewhere up the road regarding cyber-harassment.

In such a light, the Arora suggestion of anchoring efforts locally (Arora 1994) seems appealing. Still it is a demanding one. Asking the children and young what is relevant issues to them, and next put efforts into lowering rates of such incidents to improve school culture locally, and produce index scores for year to year comparisons within the specified school context must feel most relevant to participants. But such research efforts did not produce easily comparable results with other contexts, and other methods gained more support. Arora kept a shorter timeframe, thus investigating high-frequent harassment, and went straight to operationalized items, whereas Olweus suggested general items and a timeframe of two or three last months, which is the method was wider adopted. The issue of students passing through school stays the same with either method. The desired school culture has to be reinforced again and again as students pass through the school system, and it has shown to be important that teachers get enough first hand experience with benefits from the approach to incorporate strategies in their own “Theoretically Reflective Action”, and keeping up the good work. When “Elevundersøkelsen 2010” find that low loyalty to implementation is part

of what may make effects die away after a few years (Lødding and Vibe 2010), this in itself indicate that local school culture carry important keys. But what to do, when our findings, locally anchored and with an impressive loyalty to efforts to counteract harassment in high participation rates among teachers and parents alike, confirm the arena shift from school grounds towards after school hours?

Removing the technology has not proven efficient, and does not make the task of making reluctant young take contact any easier. If the parent involvement into handling cyber-harassment is based on the assumption that young are more reluctant to take contact with school authorities than with parents, then panic reactions of removing technology and weakening an already fragile bond would not be helpful. One also have to take into account that a focus on preserving online evidence may not prove as fruitful, as escalating conflicts may be the result of evidence wars (Cassidy, Faucher et al. 2013), and there is a need to think beyond the phase of initial reaction. At the same time, it seems that we still know more about what does not work.

2 Methods

The analysis presented in this thesis is a part of the «Trivsel i Tromsø» project, administered by the Arctic University of Norway (UiT). Within the project, the data set selected for analysis was collected during the season of 2013-14, in five schools in a medium size town in Northern Norway. Students in grades 4 to 10 are participants, along with their parents and class teachers. Grades are within the “grunnskole” education of the Norwegian “Kunnskapsløftet”/ “Knowledge Promotion Reform” (2006), parallel to terms primary and lower secondary school. The students in primary grades in the study are between 9 and 13 years old, and the students in lower secondary grades are between 13 and 16 years old. The school leaders and their teachers will gain access to results at school or class level.

The «Trivsel i Tromsø» research project address a range of research questions using a combination of three different measures. The thesis focus on a smaller selection of data from one set of measures only, looking at issues of prevalence of traditional peer-harassment and cyber-harassment. Issues of investigation are prevalence of students who perpetrates, who is victimized, and who take dual positions. Level of investigation is total sample scores, gender differences, and age differences explored at school level. Items include general as well as operational questions, and inside/outside school hour differentiation. The dataset contains items associated with the measurement tools, and categories for demographic items like school attended, boy/girl, and grade. At grades 4,7 and 9, there are three groups of respondents. Students, parents and teachers are each answering questions about the student.

The measures of perceived harassment reactions from peers are derived from the Norwegian “My life in school” study by Rønning et. al. (Rønning 2004, Rønning, Thorvaldsen et al. 2012). The measures use general items in combination with descriptive events, positively or negatively perceived, and was originally based on Arora’s “My Life in School” checklist (Arora 1994). Especially salient questions were selected by Rønning et. al. when revising the list, after considering similarities with other victimization scales. In the present study a section on cyber-harassment by peers is added, looking at harassment by mobile phone and internet, building on work by Smith (Smith, Mahdavi et al. 2008) and Menesini (Menesini, Nocentini et al. 2011). «The survey questions used in this study to measure cyberbullying are still at early and temporary phases» (Rønning, Thorvaldsen et al. 2012:5).

2.1 Procedure

The Regional Ethical Committee and the Norwegian Data Inspectorate approved the study design. The sample data was collected during school year 2013-2014, in five schools in a medium size town in North of Norway, and supplemented with data from the same five schools, collected in a previous study during school year 2000-2001 (Ronning, Handegaard et al. 2004).

Parents were given information about the project and asked for consent. There was an oral presentation at “parent meeting” and information in writing given when answering the survey questionnaire. Project internet pages provided the same information, accessible at any time via the Arctic University of Norway website, as well as in posts at the local school web pages. Students completed questionnaires anonymously during a school lesson. The class teacher administered questionnaires in class. Non-responders were either absent or did not have consent forms signed by parents or guardians. Because of the promise of anonymity, there was no investigation of reasons for not attending.

Students gave self-reports. For grades 4, 7 and 9, parents answered corresponding questions as in the student questionnaire for their child, and teachers answered corresponding questions as in the the student questionnaire for all their students. A Questback online survey was used to collect student and teacher responses. Parent made responses on paper questionnaires, later to be typed into SPSS analytics software.

2.2 Study sample

The five school study explore two samples, one from 2013 and one from 2000. 1084 students participate in the study in 2013-2014. 81 % of the students included in the study completed the questionnaires and were given parent consent. The students come from a study population of 1475 registered students; 73,5 % of attending students in the grades in question in the five schools are included in the 2013 study sample in the same schools. 1042 student cases were collected and approved by parent consent in 2000-2001. Of 1225 attending students in the grades in question in the five schools, 85,1 % participate in the study. This is somewhat higher than 80,2 % given for the total sample of 66 schools in the 2000 “My life in school”-survey (Ronning, Handegaard et al. 2004:1069), and a bit higher than the rate for the same five schools in 2013.

Samples were of rather equal size (1042 cases in 2000 and 1084 cases in 2013). The students were rather equally distributed between genders: 511 girls (49,4 %) and 524 boys (50,6 %), in year 2000 (seven cases coded missing on gender item), 519 girls (48 %) and 563 boys (52 %) in year 2013 (two cases coded missing on gender item). Between school types, the 2000 sample is also rather equally distributed between school level; 471 (45,2 %) primary level and 571 (54,8%) lower secondary level students, only valid cases in the file presented for analysis. The 2013 sample 381 (35,1 %) primary level students and 703 (64,9 %) lower secondary level students. The recent sample does not present equal distributions, but more secondary level students than in 2000.

To provide anonymity, I give the participating schools fictitious names for use in presentations and texts. As intended audience at school level are the local school leaders and teachers as well as parents, oral presentations will be held in native language. I present Norwegian names linked to colour codes in charts, to aid reading results as presentation slides. The names of the two “primary-level-only” schools are Jordbærenga barneskole (red colour in charts), a small primary school of 150 to 200 students, and Moltemyra barneskole (orange colour in charts), a medium size primary school of 300 to 350 students. The two “lower-secondary-level-only” schools are Ballblommen ungdomsskole (yellow in charts), of around 500 students the largest school in the study, and Moseskogen ungdomsskole (green in charts) of 400 to 450 students. The two schools contribute with almost exactly the same number of valid student responses. Blåbærlia barne- og ungdomsskole (blue in charts) is the only “mixed-level” school in the study, and with around 200 students, it is the smallest.

2.3 Measures

The “My Life In School checklist +” part of the 2013 survey has separate sections investigating traditional and digital forms of peer harassment, using both general and operationalized questions.

General questions on frequency of events, as reported by the victim, are split on two separate items of inside/outside of school hours. Self-reported bystander status and perpetrator status are also split accordingly. General questions on who perpetrates, as reported by the victim, are split on three separate variables, boys, girls or a group of students, for both traditional and

cyber harassment. This makes a total of 8 general variables on traditional peer harassment prevalence, and a corresponding 8 general variables investigating cyber-harassment.

Operationalized questions in the section investigating traditional peer-harassment use a total of 15 items; 4 investigating physical, 5 investigating verbal and 6 investigating social peer-harassment, to be combined into composite scores. One of my objectives is to compare the items in the 2013 dataset with corresponding variables from the 2000 survey. All of the 15 items on traditional peer-harassment do have corresponding items in both surveys; and it is possible to make comparisons between years 2000 and 2013 on the composite scores for physical, verbal, social harassment.

The operationalized section investigating cyber-harassment have 8 items. These items were not investigated in 2000. A set of event descriptions are provided, and the item questions ask how often the respondent has experienced such events. Using phone as device, the events are “nasty text messages or unwanted pictures or video on my phone” and “creepy calls to my mobile phone”. E-mail insult description is “nasty or rude e-mail”. The three next items specify the online activities “insults online (Facebook, Twitter or web)”, “insults by chat messages, as at Skype or within games” and “insults on blogs”. One separate item describe the presumed higher impact activity of posting picture and video content: “unpleasant pictures or video of me posted on internet (Facebook, YouTube, web and so on)”. The last item has a description of one form of social exclusion in cyberdomains: «Keeping me from online groups where I would like to be, as on Facebook or alike».

One supplementary item: The SDQ survey tool has one item using a general question investigating traditional peer-harassment prevalence, without the split into inside/outside of school hours. Although not from the “My Life In School checklist +” survey tool, I include this item in analysis. Almost the same question is covered in the middle of and in the last part of the questionnaire, and cover the same topic; it is of interest to see whether items have the expected high correlations.

Not available for comparisons: The 2000-dataset present 14 positively and 11 negatively perceived questions that had no corresponding items in the 2013 dataset, and were left out of analysis. Adults or unknown perpetrators are not investigated in any of the sets. Bystander status or the split between inside / outside of school hours are issues not available in the 2000

survey. Gender or group perpetrator as nominated by victim is not an item in 2000, but available in 2013.

Prevalence is thus investigated by means of 23 items + 1 item on traditional harassment and 16 items on cyber-harassment, and the 15 items referring to traditional harassment appear in both surveys. Composite scores of physical, verbal and social harassment may be constructed in both sets, accompanied by the composite score for digital harassment for 2013.

Accompanying the self-reports, students were asked to do nomination of gender or group of perpetrators, as seen by victim or bystander. The responses are divided on three separate items for girls, boys or group. The peer-nominations are not investigated in this thesis, only victim and perpetrator status as self-reports along with correlation within triple respondents on some selected items.

2.4 Scales

The 2013 dataset use several scales in the different survey sections. I choose to transform two of the scales of general items to obtain clear reports of victim status and make comparisons possible. Scales in question are the five-point “My Life In School Checklist +” scales and the four-point scales associated with the SDQ item of traditional harassment. But most important is matching the recent survey of 2013 with the three-point scale of the 2000 survey to make dichotomous comparisons of the operational items between years.

For the “My Life In School checklist +” items investigating peer-harassment there is a five-point scale. Values are “never” (1), “only once or twice” (2), “two or three times a month” (3), “about once a week” (4) and “several times a week” (5). The two surveys do not use the same scales. The 2000 data set use a three-point scale for the items in question, investigating operationalized peer-harassment on physical, verbal and social factors: “not at all” (0), “once” (1) and “more than once” (2). The 23 items on traditional harassment use these scales, as do the 16 on digital harassment. (This includes the peer-nominated perpetrator responses, divided on three separate items for girls, boys or group.)

When making dichotomy items, the 5-point scales of 2013 were transformed by recoding into new variables. Values 1 and 2 (“never”/“only once or twice”) were recoded into 1 (“non-victim status”), values 3,4 and 5 (“two or three times a month”/“about once a week”/“several times a week”) are recoded into 2 (“victim status”). For the 3-point scales of 2000, values 0

and 1 (“not at all”/“once”) were recoded into 1 (“non-victim status”), and value 2 (“more than once”) is recoded into 2 (“victim status”). After recoding, the “My Life In School checklist +” items indicate non-victim or victim status according to experiences “two or three times a month or more”.

The supplementing SDQ item question is “Andre elever plager eller mobber meg” (other students are harassing or bullying me), to be answered on the three point scale of “is not correct”, “is in part correct” and “is correct”; Norwegian phrases “stemmer ikke/stemmer delvis/stemmer helt”. The item from the SDQ-survey is a general definition item using the term bullying in the question. The item looks at prevalence without the inside/outside school hours split, the approach more common in research literature. To run the item in chi-square tests using the SPSS cross tabulation with my dichotomy items, I need to transform from three-point scale to two-point scale. The recoded “My Life In School checklist +” dichotomies present 1 as non-victim status, and 2 as victim status. To transform the SDQ survey scale, 1 (“is not correct”) get value 1 (“non-victim status”), and 2 and 3 “is in part correct”/“is correct”) get value 2 (“victim status”). The phrase “plaget eller mobbet meg” is not quite the same as the “hvor ofte har du blitt mobbet i skoletiden”, the first including a slightly wider range of events, the latter may call for a more conservative interpretation by the respondent. In conclusion, I may expect slightly higher scores than on the “My Life In School checklist +” items.

2.5 Sources of data

From the open database of “Grunnskolen informasjonssystem”, I retrieve the number of students attending each of the schools. The database may be accessed by the public at the internet address <https://gsi.udir.no/>, and required files as text information were downloaded on March 4th 2015. The SPSS-file provided by the project administrators give the number of valid student cases in the survey. I receive the required SPSS-files for the two samples to investigate, from professor Steinar Thorvaldsen of prosjekt “Trivsel i Tromsø”, Norges Arktiske Universitet, Tromsø, on December 10th 2014.

The 2000 dataset provided had a “100 % valid response” in the items of investigation. The set had been prepared for analysis at an earlier stage, to cater for the needs of the original study, and the SPSS-file provided did not contain information about expected number of cases,

missing cases or non-responses. The original study collecting the 2000 sample do present their participation rates as 80.2% of the total population in the grades in question in the target area, analyzing a large sample of students from 66 schools (Ronning, Handegaard et al. 2004). To state participation rates for the five schools in question, I needed additional information, which ought to come from a reliable source.

The 2013 dataset use lists of attending students provided directly from the school as source for data input into SPSS. At the start of a school year, student status is not fixed; some students may no longer attend the specific school or class after a while for any number of reasons, and some students may be added. Thus, as school year starts in late august, the GIS choose to make October 1st as date of reporting. Examining data revealed that the number of cases in the provided SPSS-file and the GIS count were not matching exactly, but without any major differences. The GIS database present data for all the Norwegian primary and secondary schools, from 1992 and onwards. The local school administration report status regarding students attending on October 1st. Data collecting procedures are according to quality standards used by UDIR/SSB. I choose to present participation rates according to the GIS numbers. Information about participation rates for the two sets of data then come from the same source; have been collected within the same procedures, in line with the GIS preferred timeframe.

As a masters' student associated with the "Trivsel i Trimsø" project, I have been participating in data input of parent questionnaires. Parent responses were collected at "foreldremøte" (parents' meeting) at the local school. I took part in the session informing the parents about the survey and collecting the paper questionnaires at one of the schools, as an assistant to professor Steinar Thorvaldsen. I took part in data input of responses from paper questionnaires from two of the schools into excel data files, typing a total of 96 valid parent responses of 114 items, and sorting the non-consent forms in separate envelopes. Excel files were handed in to project management, 5 % of my typing was checked for accuracy and approved, and the file transformed into SPSS files without identification information. The lists presenting keys for matching personal information with case numbers are kept by project management, not available for the analyst, according to the promise of anonymity. My contribution at collecting and typing data was made on the second year of the study, whereas my analysis was based on the first or baseline year of the study.

2.6 Statistics

IBM SPSS Statistics Standard Edition, release 21, was used for data management and statistical procedures.

Introductory inspections of the data

The 2013 dataset has a total of 206 missing cases of the 1048, leaving 878 cases valid, with a loss of 19 % of the cases. The lost cases are divided into 8,7 % loss from full classes not completing questionnaires at two of the secondary level schools, and 10,3 % random losses of individual cases. The total loss is 19 % of the expected survey cases, still making the survey total 81 %, indicating more than sufficient data validity.

Visual inspection of histograms and box plots for general student items of traditional and cyber-harassment show the expected skew distribution, as do the operationalized variables. A test statistic confirm the impression. Items of traditional harassment within and outside of school hours, bullied others within and outside of school hours, both on victim and perpetrator self-reports, and the items of victim nomination of who does the bullying (girl/boy/group) all have p-values below 0,000 for the Kolmogorov-Smirnov test of normality ($p < 0.05$). The same applies for cyber-harassment items on the same issues, and the items for sum scores of physical, verbal, social and digital harassment. I conclude that data are skew, and may not be subject to procedures that assume linearity in data distribution. Non-parametric tests make no assumptions of data distribution, and in this thesis, it is the preferred option for comparisons between years.

Preparing dichotomies for Chi-square tests

Data being skew calls for non-parametric tests. Scales in the two surveys not matching, I will have to recode items for comparisons. Recoding into dichotomy variables to treat data as categories open for Chi-square analysis. I may use dichotomy items to make table layouts with counts to reflect hypothesis about associations. There are sufficient number of cases to obtain valid test statistics in the majority of analysis of significant differences within the dataset. For very low counts, the Fisher's exact test is an available option for analysis of the contingency tables.

Within each of the surveys, I investigate items measuring peer-harassment as dependent variable, for the independent variables gender, grade and school. I look at whether two variables are related, without a definite hypothesis one way or another. If the frequencies show only a very small difference between for instance boys and girls in their scores on an item, the difference may be result of sampling variability, so after comparing frequencies as percentages, the significance test of Chi-square on counts test whether there is a significant relationship there. When investigating only the counts of those who answer according to “yes” on the “being bullied”-question, I may use two survey years 2000 and 2013 as a dependent variable, and question item as independent. Gender, school and age are variables provided in the set. Gender is already a dichotomy. School level information may be provided by operations of splitting the file/selecting cases.

Using SPSS for cross tabulation, to get survey years “2000/2013” to be independent, and “yes/no” on victim status to be dependent, I have to do some preparation procedures before the computing. The data sets are merged, first adding a year item of values “2000/2013”. Some variable combinations for corresponding items are recoded into items collecting responses from both years. The items available for comparisons between years are all items used in construction of sum scores about physical, verbal and social harassment, 15 items in total, making 3 sum scores. Such frequency counts may also be run directly in tools available online, like the Chi-Square test of association page at <http://vassarstats.net/tab2x2.html>.

In some parts of the sample, counts are too low to meet assumptions for the Chi-square test, rendering less than 5 counts in more than 20 % of the cells. Analysis of statistical significance in contingency tables may also use the Fisher's exact test, which does apply to small counts. We still should consider the small counts a warning when discussing confidence in findings.

Procedures for group comparisons

I use both the “split file” and “select cases” operations and the “recode into new variables” operations to make comparisons between groups. Prevalence is to be examined along the issues of **traditional and cyber-harassment differences**, and **inside/outside school hours**. 48 new variables were made by recoding to provide for dichotomy comparisons. First, the five investigating traditional and the five investigating digital harassment on basis of the questions generally defined. Second, the fifteen items of operationalized **physical, verbal and social harassment** in both sets, a total of 30 items. Last, the eight operationalized items

of **digital harassment**, to make comparable composite scores. The composite cores for the physical, verbal, social and digital dimensions are constructed using the “max” function in SPSS. I crosscheck for corresponding items in the two datasets by comparing the value labels, as they contain the questions used. After defining what items combine into each factor, the composite score items are constructed separately in each survey data set.

The selected literature discuss **age differences**. To investigate, I make a variable to differentiate between the primary and the lower secondary school level. As contributors to the “Trivsel i Tromsø” project, both school leaders and teachers working at class level will be interested in **differences at school level**. There are already variables in the set to accommodate for splitting files at school as well as class level. We do not report at individual level, according to the promise of anonymity. Discussions about differences between schools will be leaning on the theoretical backdrop of **age** and **gender** differences, already available as items from the survey questions. Some items investigating socioeconomic issues are available, but the theoretical foundations for discussions are not within the scope of this thesis.

Bully-victim investigations

The bully-victim status is not rendered on a separate item, and I choose to do recode preparations to make investigation possible. I lean on the procedure for dividing my sample into separate groups used by Sourander et.al. (Sourander, Klomek et al. 2010:721). The issue of priority is differences between cyberbullying and traditional bullying. A gender difference had already been presented. For traditional bullying boys saw the most bullying, but after school hours, girls and boys had equal chances of seeing cyberbullying, at school the girls made lower scores than boys. In light of such findings, when investigating prevalence of bully/victims in the sample, I choose to keep the differentiation of within or outside of school hours.

About traditional bullying within school hours, the survey ask two questions referring to a timeframe of within the last two or three months. “How often have you been bullied by others?” and 2) “How often have you bullied others?”. The question was answered on the five point scale, and recoded into dichotomies with 1=non-victim and 2= victim on the first question, and 1=non-bully and 2= bully on the second question. On the basis of these two questions, the sample was divided into four groups on two new variables in SPSS, with values

of 1) Never a victim or bully group; 2) victim only group; 3) bully-only group and 4) bully-victim group.

The issue of cyberbullying has the same possibilities for investigation. About cyber-bullying within school hours, the again survey ask two questions referring to the timeframe of within the last two or three months. Questions are “How often have you been cyber-bullied by others?” and 2) “How often have you cyber-bullied others?”, recoded into dichotomies with 1=non-cybervictim and 2=cybervictim on the first question, and 1=non-cyberbully and 2=cyberbully on the second question. Again, the sample was divided into groups, this time 1) Never a cyber-victim or cyber-bully group; 2) cyber-victim only group; 3) cyber-bully-only group and 4) cyber-bully-victim group.

The procedure was repeated for “outside of school hours”-items, making bully/victim investigations possible on 4 items of 4 values. Analysis was made on the total sample, presenting 16 scores.

Triple respondent correlation tests does not require dichotomy data, as they are not issues investigated between years, but within the recent dataset only. Pearson correlation tests were performed on original 5 point scales, and preparations for tests include making composites based on the 5 point scale items over the same item combinations as for the dichotomous composites, for all three respondent groups.

3 Results

3.1 Participation rates at school level

Participants of the project expect school level presentations. To provide such analysis, I do a check of participation rates at each school, to indicate confidence in findings at lower levels of the study.

At Jordbærenga barneskole, 88,4 % of the students attending the school in the grades in question take part in the study. Moltemyra barneskole have 87,6 %, Ballblommen ungdomsskole have 64,1 %, Moseskogen ungdomsskole have 76,2 % and Blåbærlia barne- og ungdomsskole have 72,2 % of the students attending the school in the grades in question take part in the study.

Of these students, 96,4 % complete questionnaires and have parent consent at Jordbærenga barneskole. 91,0 % at Moltemyra barneskole, 68,0 % at Ballblommen ungdomsskole, 89,1 % at Moseskogen ungdomsskole and 74,9 % at Blåbærlia barne- og ungdomsskole did complete questionnaires and have parent consent.

At grades 4,7 and 9, the parent and the class teacher answer the questionnaires too, in appropriate words for the respondent group, but on the same items. 81,3 % of students in these grades get a corresponding parent questionnaire, and 92,5 % of teachers mark corresponding questionnaires for all their students.

For school level discussions, the numbers for parent participation were: Jordbærenga barneskole have 42 students in 4 and 7 grade, making a parent answering rate of 97,6 %. 74 students in grade 4 and 7 make 98,6 % at Moltemyra barneskole, 112 students in grade 9 make 59,8 % at Ballblommen ungdomsskole, 128 students in grade 9 make 89,8 % at Moseskogen ungdomsskole and 82 students in grade 4,7 and 9 make 73,2 % at Blåbærlia barne- og ungdomsskole.

The numbers for teacher participation at school level, counting students with parent consent: Jordbærenga barneskole have 82 teacher answers from 84 students in 4 and 7 grade, making a teacher answering rate of 97,6 % (equal to parents' rates). 150 teacher answers from 155

students in grade 4 and 7 make 96,8 % at Moltemyra barneskole. 294 teacher answers from 322 students in grade 9 make 91,3 % at Ballblommen ungdomsskole. 312 teacher answers from 320 students in grade 9 make 97,5 % at Moseskogen ungdomsskole, and finally; 165 teacher answers from 203 students in grade 4,7 and 9 make 81,3 % at Blåbærlia barne- og ungdomsskole.

Section A: General items investigating prevalence of peer-harassment

Questions use the term “bullied”, supplying a definition on general terms at the top of the survey. Scales are discussed in section 2.4.

Harassment reported without the inside/outside school hours differentiation

The item from the SDQ-survey use the general definition, and the term “bullying” in the question. The item looks at prevalence without the inside/outside school hours split, the approach more common in research literature. Compared with the “My Life In School Checklist +”-item, keeping the “within school hours” differentiation, the prevalence checklist item is presented early in the questionnaire, and the SDQ-item in the very last section, so results may serve as indicator of survey fatigue.

In response to the question “Have you been bullied or harassed by others”, presented late in the questionnaire, 87 (9,9 %) of students report according to victim status. The SDQ-item render higher scores than the 7,5 % reporting victim status of within school hours peer-harassment, and the 4 % reporting outside of school hour harassment. The scores indicate an overlap between inside/outside of school hour bullying on the “MyLifeInSchool Checklist +” items.

Crosstabulation of items of victim status within school hours and the SDQ item without time of day differentiation produce a Chi square test statistic value of 3,16, with $p = 0,075$. There is no significant difference between the two item scores regarding victim status.

Table 1 Tests of significant association between mid and last part of survey items

Traditional victim status, within school hours vs. no time differentiation					
My Life In School Checklist +, within school hours	Non-victims	812 (92,5 %)	Victims	66 (7,5 %)	Chi square test value 3,16 (p = 0,075)
	SDQ-item, no time differentiation	Non-victims	791 (90,1 %)	Victims	
Gender differences, traditional victim status, within school hours vs. no time differentiation					
My Life In School Checklist +, within school hours	Girl victims	28 (6,4 %)	Boy victims	38 (8,7 %)	Chi square test value 0,07 (p = 0,791)
	SDQ-item, no time differentiation	Girl victims	35 (8,0 %)	Boy victims	

Table 2 General items self-report correlations; “time of day”-differentiations

		Traditional harassment in first part of questionnaire		Cyber-Harassment in first part of questionnaire		Traditional harassment SDQ-item in last part of questionnaire
		Within school hours	Outside of school hours	Within school hours	Outside of school hours	No time of day differentiation
Traditional	Within school hours	1				
	Outside of school hours	0,613**	1			
Cyber	Within school hours	0,375**	0,473**	1		
	Outside of school hours	0,385**	0,534**	0,590**	1	
Traditional, SDQ-item	No time of day differentiation	0,447**	0,360**	0,262**	0,242**	1

**Correlation is significant at the 0,01 level (2 tailed)

3.2 Prevalence rates in the 2013 total sample

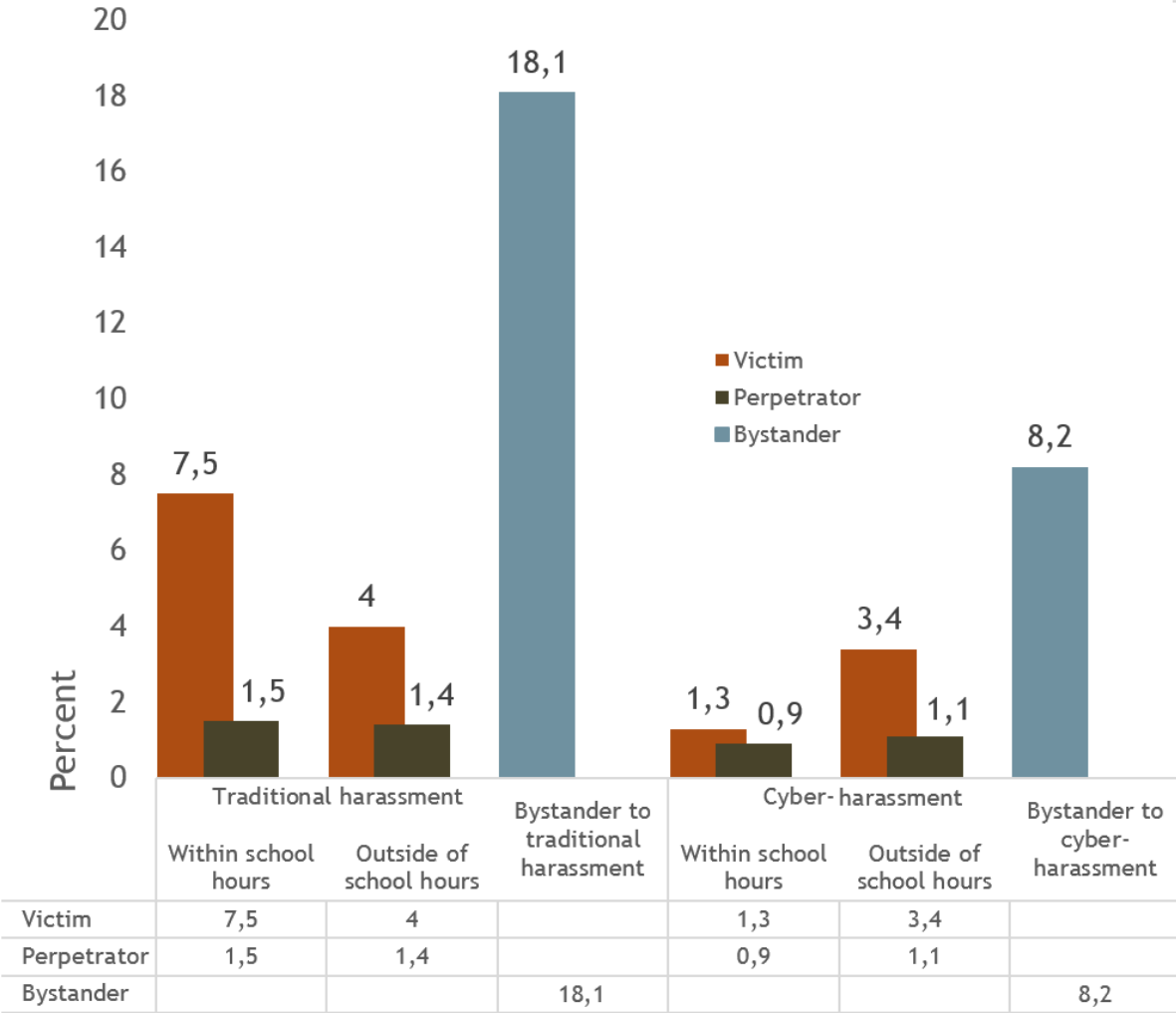
Victims

For victims of traditional peer-harassment on the “My Life in School Checklist +” items, the investigation has separate items for within and outside of school hours. Items have been recoded as discussed in chapter 2: “Methods”. To indicate self-nomination of non-victim or victim status. In the 2013 total sample, response to the question «How often have you been bullied within school hours?», 812 (92,5 %) respond as non-victims and 66 (7,5 %) as victims. To the question “How often have you been bullied outside of school hours?”, 483 (96 %) respond as non-victims and 35 (4 %) as victims.

Table 3 Victim status, tests of significant associations, general items

Victim status, total sample					
Traditional harassment and cyber-harassment victim status, within vs. outside of school hours					
Traditional harassment	Within school hours	66 (7,5 %)	Outside of school hours	35 (4 %)	Chi square test value 17,43 (p < 0,0001)
Cyber-harassment	Within school hours	11 (1,3 %)	Outside of school hours	30 (3,4 %)	

Figure 2 Prevalence of peer-harassment as measured on general items (2013 only)



Cyber-harassment investigations also has separate items for within or outside of school hours. In response to the question “How often have you been cyberbullied within school hours?”, 867 (98,7 %) respond as non-victims and 11 (1,3 %) as victims. To the question “How often have you been cyberbullied outside of school hours?”, 848 (96,6 %) respond as non-victims and 30 (3,4 %) as victims.

Traditional forms of peer-harassment mainly appear within school hours; this item get the most scores. Within school hours, the risk of seeing traditional bullying is much higher than the risk for seeing cyber-harassment. For cyber-harassment, there is not a large difference between within and outside of school hours. Cyber-harassment is as likely to occur outside of school hours. The timeframe for victimization has expanded.

Crosstabulation of traditional harassment and cyber-harassment on “within..” and “outside of school hours” items produce a Chi square test statistic value of 17.43, with $p < .0001$. There is significant difference between traditional harassment and cyber-harassment regarding when victimization occur. The effect size Phi value of -0,35 indicate a medium effect (King, Rosopa et al. 2011:376).

Perpetrators

Traditional bully prevalence is also investigated on two items differentiating between within or outside of school hours. The recoded dichotomy items indicate status as perpetrator by self-nomination.

In response to the question «How often have you bullied others within school hours?», 13 (1,5 %) respond as traditional harassment perpetrators. To the question “How often have you bullied others outside of school hours?”, 12 (1,4 %) respond as perpetrators. When it comes to cyberbullying, the same split of inside or outside of school hours is presented. In response to the question «How often have you cyberbullied others within school hours?», 8 (0,9 %) respond as perpetrators. To the question “How often have you done cyberbullying to others outside of school hours?”, 10 (1,1 %) respond as perpetrators.

Looking at victim to perpetrator ratios, on the within school hours scores, the 7,5 % of self-reported victims to 1,5 % self-reported perpetrators ratio show a disproportion, and the 4 % victim to 1,4 % perpetrator ratio of outside school hour harassment does the same, although not as large. There are more self-reported victims than self-reported perpetrators.

Examining time differentiations of within or outside of school-hours, there is no significant association between perpetrator status and type of harassment. Tests of traditional vs. cyber-harassment produce Chi square statistic values of 1,2 ($p=0,273$) within school hours, and 0,18 ($p=0,671$) outside of school hours.

Table 4 Perpetrator status, tests of significant associations, general items

Within school hours					
Crosstabulation of perpetrator status (victim/non-victim) and type of harassment (trad/cyber)					
Traditional harassment within school hours	non-perpetrator	865 (98,5%)	perpetrator	13 (1,5%)	Chi square test value 1,2 ($p = 0,273$) Phi = 0,03
Cyber-harassment within school hours	non-cyberperpetrator	870 (99,1%)	cyberperpetrator	8 (0,9%)	

Outside of school hours

Crosstabulation of perpetrator status (victim/non-victim) and type of harassment (trad/cyber)

Traditional harassment within school hours	non-perpetrator	866 (98,6%)	perpetrator	12 (1,4%)	Chi square test value 0,18 (p = 0,671) Phi = 0,01
Cyber-harassment within school hours	non-cyberperpetrator	868 (98,9%)	cyberperpetrator	10 (1,1%)	

Bystanders

Bystander prevalence is investigated as self-reports without the differentiation of within or outside of school hours, on one item. 159 (18,1 %) have seen someone get bullied according to traditional definition, as much as “two or three times a month or more”. 72 (8,2 %) have seen someone get cyberbullied according to the general definition, as much as “two or three times a month or more”. There are more bystanders than both victims and perpetrators, but the difference is larger with traditional forms of harassment.

Looking at victim to bystander ratios, cyberbullying has the most scores outside of school hours, and on these scores there is a 3,4 % score of cybervictims to the 8,2 % bystanders to cybervictimization, The traditional harassment appear primarily within school hours, rendering a 7,5 % score of victims to the 18,1 % bystanders. Looking at perpetrator to bystander ratios, there are 1,5 % scores of perpetrators to the 18,1 % bystanders, and 1,1 % score of cyberperpetrators to the 8,2 % bystanders to cybervictimization. Traditional harassment victims have the most bystanders, and cyber-perpetrators have the least bystanders, but the differences between traditional and cyber domains are not significant.

A crosstabulation of ratios of victim to bystanders produce a Chi square test statistic value of 0, and a p=1, the actual counts and the expected counts for a null hypothesis of no difference are almost an exact match. There is no difference between traditional and cyber-harassment regarding victim to bystander ratios. Crosstabulation of ratios of perpetrators to bystanders produce a Chi square test statistic value of 1,45, with p=0,247. There is no significant difference between traditional and cyber-harassment scores regarding perpetrator to bystander ratios. But the main line of enquiry, differences between traditional harassment and cyber-harassment show varying results. Perpetrator status and type of harassment, rendered no significant association, but by crosstabulating bystander status and type of harassment, the table produce a Chi square test statistic value of 37,73, with p<0,0001, effect size = 0,15. There is significant association between bystander status and type of harassment, although the

effect is small. Comparing traditional and cyber-harassment, there are significantly fewer bystanders to the reported cyber-harassment.

Table 5 Bystander status, tests of significant associations, general items

Bystander to victim ratios, (traditional / cyber)					
Traditional harassment	Victims	66 (7,5 %)	Bystanders	159 (18,1 %)	Chi square test value 0 (p=1)
Cyber-harassment	Cybervictims	30 (3,4 %)	Cyberbystanders	72 (8,2 %)	
Bystander to perpetrator ratios, (traditional / cyber)					
Traditional harassment	Perpetrators	13 (1,5 %)	Bystanders	159 (18,1 %)	Chi square test value 1,45 (p = 0,247)
Cyber-harassment	Cyberperpetrators	10 (1,1 %)	Cyberbystanders	72 (8,2 %)	
Bystander and type of harassment (traditional / cyber)					
Traditional harassment	Non-bystander	719 (81,9%)	Bystander	159 (18,1 %)	Chi square value 37,73 (p<0,0001) Phi = 0,15
Cyber-harassment	Non-Cyberbystander	806 (91,8%)	Cyberbystanders	72 (8,2 %)	

Bully-victims

The recoded item produce victim-only, bully-only and dual position scores. In the sample, there are only a few students in dual positions. Traditional harassment as well as cyber-harassment show counts at the edge of requirements for tests of significance. The scores are only one or two counts away from the 5 counts in a cell assumption for running Chi-Square procedures.

Table 6 The "bully-victim" group, prevalence rates

	Traditional harassment		Cyber-harassment	
	Within school hours	Outside of school hours	Within school hours	Outside of school hours
Victim only	59 (6,7 %)	32 (3,6 %)	7 (0,8 %)	25 (2,8 %)
Dual positions ("bully-victim")	7 (0,8 %)	3 (0,3 %)	4 (0,5 %)	5 (0,6 %)
Perpetrator only	6 (0,7 %)	9 (1,0 %)	4 (0,5 %)	5 (0,6 %)

Victim status only get scores parallel to the scores of the general items of victimisation, trends discussed under the section "victim" are not altered by separating victim only and dual position scores. The scores of victim-only are well above the 5 count limit for both time of day investigations and traditional /cyber-harassment investigations, and may produce test results for differences we wish to investigate. Among the categories with minor scores, the most scores present themselves on the "perpetrator-only after school hours" combination, with a count of 9 students (1%). The combination "dual position within school hours" render 7 students (0.8 %). The last category to produce scores of more than 5 is "perpetrator only

within school hours”, at 6 (0.7 %). The remaining combinations of within/outside of school hours and traditional/cyber-harassment get scores of 5 or less.

The “victim only” scores are: for traditional harassment on general items, within school hours: 59 students (6,7 %) within school hours and 32 students (3,6 %) outside of school hours, and for cyber-harassment on general items, within school hours: 7 students (0,8 %) within school hours and 25 students (2,8 %) outside of school hours. The “dual positions” scores are: for traditional harassment on general items, within school hours: 7 students (0,8 %) within school hours and 3 students (0,5 %) outside of school hours, and for cyber-harassment on general items, within school hours: 4 students (0,5 %) within school hours and 5 students (0,6 %) outside of school hours. The “perpetrator only” scores are: for traditional harassment on general items, within school hours: 6 students (0,7 %) within school hours and 9 students (1,0 %) outside of school hours, and for cyber-harassment on general items, within school hours: 4 students (0,5 %) within school hours and 5 students (0,6 %) outside of school hours. Looking at differences between traditional and cyber-harassment; within school hours as well as outside of school hours, there is no significant association between status as bully-victim and type of harassment.

There are more scores for “perpetrator-only” outside of school hours, and there are more scores for “dual position” (bully-victim) within school hours. For cyber-harassment, there is no difference between “dual positions” and “perpetrator only” regarding time of day, scores are exactly the same. The scores intended to investigate bully-victim issues, the “dual position” scores, show low scores overall and no noticeable differences regarding traditional harassment/cyber harassment.

Table 7 Bully-victim status, tests of significant associations, general items

Bully-victims vs. victim only + perpetrator only (traditional / cyber)					
Traditional harassment within hours	Bully-victims	7	All others	65	Fisher test: one-tailed 0.091, two-tailed 0.091 Phi = 0.19
Cyber-harassment within hours	Cyber-bullyvictims	4	Cyber, All others	11	
Traditional harassment outside of hours	Bully-victims	9	All others	41	Fisher test: one-tailed 0.443, two-tailed 0.771 Phi = 0.05
Cyber-harassment within hours	Cyber-bullyvictims	5	Cyber, All others	30	

3.3 Gender differences in the 2013 total sample

Gender investigations of general questions indicating victim, bystander or perpetrator

We can break the 1084 cases of the 2013 sample down into 438 girls and 438 boys, 2 who do not state category, and 206 missing cases. When comparing small frequencies one may keep in mind that equal percentages rarely render equal counts; this time small divergences will show clearly directly on the counts.

Victims

Gender investigations of **traditional peer-harassment victim** status explore the separate items for within or outside of school hours. Within school hours, 28 girls (6,4 %) and 38 boys (8,7 %) make responses as victims. Fewer state peer-harassment outside of school hours. The difference between genders is smaller, which shows even more when looking at the counts: 17 girls (3,9 %) and 18 boys (4,1 %) make replies as victims outside of school hours.

For the SDQ item investigating peer-harassment prevalence without the within/outside of school hours split, 35 girls (8,0 %) score as victims, and 52 boys (11,9 %) score as victims. As with the total sample, scores are still higher than both within and outside of school hours scores of the “My Life In School Checklist +”, and boys’ victim scores are still higher than for girls.

The differentiation made little difference to the gender investigations. Gender and items of victim status according to time of day did not indicate significant association.

Crosstabulation of gender (girl/boy) and categories within versus outside of school hours did not render significant (Chi square test value 0,35, $p = 0.554$), as well as time differentiation of within school hours versus no differentiation on the SDQ-item (Chi square test value 0.07, $p = 0.791$).

For **cyber-harassment victims**, the gender investigation makes the same split into within and outside of school hours. Within school hours, 5 girls (1,1 %) and 6 boys (1,4 %) are victims of cyber-harassment. The gender difference is small. Outside of school hours, the frequencies are the same for both girls and boys. 15 girls and 15 boys, a 3,4 % make responses as victims of cyber-harassment after school hours.

Compared with traditional harassment, for the total scores we noted that cyber-harassment has shifted arena from “school grounds” to after school hours, and gender scores show the same tendency. When it comes to cyber-harassment, girls and boys in the sample are as much at risk after school hours.

Tests of gender differences in cyber-harassment victim status, crosstabulation of girl/boy and categories within/outside of school hours did not render significant result. There is not significant association between gender and time of day for the harassment when it comes to cyber-harassment (Chi square test value 0.07, $p = 0.791$).

Table 8 Tests of significant gender associations, victim status

Traditional peer-harassment victim status					
Gender differences, traditional harassment victim status, within vs. outside of school hours					
Within school hours	Girl victims	28 (6,4 %)	Boy victims	38 (8,7 %)	Chi square test value 0,35 ($p = 0.554$) Effect size Phi = 0,06
Outside of school hours	Girl victims	17 (3,9 %)	Boy victims	18 (4,1 %)	
Cyber-harassment victim status					
Gender differences, cyber-harassment victim status, within vs. outside of school hours					
Within school hours	Girl victims	5 (1,1 %)	Boy victims	6 (1,4 %)	Chi square test value 0,07 ($p = 0.791$) Effect size Phi = 0,04
Outside of school hours	Girl victims	15 (3,4 %)	Boy victims	15 (3,4 %)	
Fisher Exact Probability Test: one-tailed 0.538, two-tailed 1					

Perpetrators

Status as self-nominated perpetrator is reported on general questions, again investigating within and outside of school hours rates separately, both for traditional and cyber-harassment. The questions investigating **traditional harassment perpetrator** rates ask: “Have you taken part in bullying others inside of school hours?” and “Have you taken part in bullying others outside of school hours?” Within school hours, 5 girls (1,1 %) and 8 boys (1,8 %) make scores as perpetrators. Outside of school hours, 5 girls (1,1 %) and 7 boys (1,6 %). Some more boys than girls say they have taken part in traditional harassment “once or twice a month or more”.

Looking at gender differences, there is approximately a 1:4 ratio of perpetrator to victim except for girls within school hours, where ratio is approximately 1:6. The within/outside of school hours split appear relevant to victim/perpetrator gender differences. For traditional harassment by peers, there are fewer girl perpetrators per girl victim for within-school-hours

harassment than with the other three combinations of gender and timeframe. Using Chi-Square to test for significance, results are only just within test range, and I choose to report both Chi Square and Fischer test statistics.

Gender and items of perpetrator status according to time of day did not indicate significant association. Crosstabulation of gender (girl/boy) and categories within versus outside of school hours did not render significant (one-tailed 0.596, two-tailed 1), using Fisher test for the small counts.

Cyber-harassment perpetrator scores also have the separate items of within and outside of school hours. Scores of 2 girls (0,5 %) and 6 boys (1,4 %) score as self-reported cyber-perpetrators within school hours. Outside of school hours, 3 girls (0,7 %), and 7 boys (1,6 %) make such scores. The girls' and boys' scores are different. There are more boys as cyber-perpetrators than girls. All the low counts of 5's and 6'es in my results section tell me it is rather a balancing act at the very edge of the assumptions of the Chi-square test. The required 5 counts in each cell are there, but any number of reasons might have tipped the scores and violated the requirements of the test, and render differences in scores that would show well. For girls' rates of cyber-harassment perpetrators, we do not meet the criteria for doing a valid Chi square test for significant differences. Low count boy/girl differences about cyber-harassment may still be tested for significance, by using the Fisher Exact test of probability.

Gender and items of cyber-perpetrator status according to time of day did not indicate significant association. Again, crosstabulation of gender (girl/boy) and categories within versus outside of school hours did not render significant (one-tailed 0.618, two-tailed 1), using Fisher test for the small counts.

Table 9 Tests of significant gender associations, perpetrator status

Traditional perpetrator status

Gender perpetrator differences, traditional harassment, within vs. outside of school hours					
Within school hours	Girl perpetrators	5 (1,1 %)	Boy perpetrators	7 (1,8 %)	Fisher Exact Probability Test: one-tailed 0.596, two-tailed 1 Effect size Phi = -0,03
Outside of school hours	Girl cyber-perpetrators	5 (1,1 %)	Boy cyber-perpetrators	8 (1,6 %)	

Cyber-perpetrator status

Gender perpetrator differences, cyber-harassment, within vs. outside of school hours					
Within school hours	Girl perpetrators	2 (0,5 %)	Boy perpetrators	6 (1,4 %)	Fisher Exact Probability Test: one-tailed 0.618, two-tailed 1 Effect size Phi = 0,06
Outside of school hours	Girl cyber-perpetrators	3 (0,7 %)	Boy cyber-perpetrators	7 (1,6 %)	

Bystanders

Bystander gender differences show traditional harassment scores of 80 girls (18,3 %) and 79 boys (18 %). There are more bystanders than those being involved as victims or perpetrators. For cyber-harassment, the bystander rates are 41 girls (9,4 %) and 31 boys (7,1 %). A few more girls than boys witness cyber-harassment. Both scores are about half of the scores for traditional bystander rates.

Tests of bystander gender differences in types of harassment, crosstabulation of girl bystander/ boy bystander and categories traditional/cyber-harassment did not render significant result. There is not significant association between bystander gender and type of harassment (Chi square value 0.87, p = 0.351).

Table 10 Tests of significant gender associations, bystander status

Bystander status					
Gender differences of bystander, type of harassment (traditional/cyber)					
Traditional harassment	Girl bystanders	80 (18,3 %)	Boy bystanders	79 (18 %)	Chi square value 0,87 (p = 0.351) Effect size Phi = 0,06
Cyber-harassment	Girl cyber-bystanders	41 (9,4 %)	Boy cyber-bystanders	31 (7,1 %)	

**Section B:
Operationalized items, computed composite scores**

Operationalized items recoded into dichotomies report item scores and a computed sum scores for each of the dimensions. The dichotomy item value of “2” indicates status as “victim”, and percentages of the total sample quoted in the following text. Using max to compute the composite score, the total score include those students who give affirmative response on one or more of the items.

The Chronbach alpha give indication of internal consistency within the composite scores. It can be used for dichotomous as well as continuously scored variables. The alpha coefficient varies between 0 (no consistency in measurement) and 1 (perfect consistency). The composite scores were tested both with original scales and with dichotomous scales.

Table 11 Chronbach alpha of composite items

Harassment items of	physical	verbal	social	physical	verbal	social	cyber
	4 items	5 items	6 items	4 items	5 items	6 items	8 items
Scale of 5 values in 2013				.767	.843	.826	.806
Scale of 3 values in 2000	.71	.74	.788				
Transformed into dichotomous items	.665	.687	.742	.639	.784	.735	.767

All items are in acceptable ranges, or may be considered high values, as items share most of the variance in scores. The dichotomous items stay well within acceptable ranges.

3.4 Prevalence rate comparisons 2000 and 2013 total samples

On the dimension of **physical** peer-harassment, scores show differences in between the two years. There are four items investigating the dimension. The item for “sparke” (kick) get 11,9 % in 2000 and 5,6 % in 2013, a difference we may check for significance. The “spenne ben på” (trip) item get 10,7 % in 2000 and 7,7 % in 2013. The “true” (threaten) item get 3,3 % in 2000 and an equal 3,3 % in 2013. The “Slå” (hit) item get 13,1 % in 2000 and 5,9 % in 2013, also a difference we may check for significance. The composite score computed using max function to include respondents who score according to victim status on one or more of the items give a total of 23 % in 2000 and 14,2 % in 2013.

Dichotomies items on the dimension of **verbal** peer-harassment show some differences in scores between the two years. There are five items investigating the dimension. The item “kalle stygge ting” (call names) get 18,9 % in 2000, and 13,8 % in 2013. The item “anderledes” (because I’m different) get 4,4 % in 2000, and 5,2 % in 2013. The item “si stygge ting om familie” (hurtful comments about family) get 3,7 % in 2000 and 4,9 % in 2013. The item “erte” (tease) get 11,9 % in 2000 and 12,1 % in 2013. The item “såre” (hurt) get 8,2 % in 2000, and 7,2 % in 2013. The composite score computed using max function to

include respondents who score according to victim status on one or more of the items give a total of 25,5 % in 2000 and 20,5 % in 2013.

Dichotomies items on the dimension of **social** peer-harassment also show some differences in scores between the two years. Six items investigate the dimension. The item “fått de andre til å være slem mot meg” (made others be mean to me) get 3,8 % in 2000 and 4,2 % in 2013. The item «Fått meg til å gjøre noe jeg ikke hadde lyst til» (made me do something I didn't want to) get 4,0 % in 2000 and 3,2 % in 2013. The item «prøvd å få meg til å være slem mot andre» (made others be mean to me) get 5,4 % in 2000 and 3,6 % in 2013. The item « truet med å sladre» (threaten to tell on me) get 5,3 % in 2000 and 5,9 % in 2013. The item «prøvd å få meg til å gjøre noe galt» (made me do something wrong) get 4,0 % in 2000 and 3,3 % in 2013. The item «fortalt en løgn om meg» (told a lie about me) get 8,7 % in 2000 and 10,9 % in 2013. The composite score including respondents who score according to victim status on one or more of the items give a total of 16,8 % in 2000 and 16,4 % in 2013.

The composite score on **cyber**-harassment is computed on eight items, in the 2013 sample. Victimization by unwanted events using phone as device, item 1 and 2: “nasty text messages or unwanted pictures or video on my phone” has a score of 1,3 %, and “creepy calls to my mobile phone” has 1,9 %. E-mail insults, item 3: “nasty or rude e-mail” has a score of 0,8 %. Insults online according to added specifications, items 4, 5 and 6: “insults online (Facebook, Twitter or web)” has 2,5 %, “insults by chat messages, as at Skype or within games” has 3,2 %, whereas “insults on blogs” has 0,6 %. Pictures/video content posted about me, item 7: “unpleasant pictures or video of me posted on internet (Facebook, YouTube, web and so on)” has 0,9 %. Social exclusion, item 8: «Keeping me from online groups where I would like to be, as on Facebook or alike» has 0,6 %. By including respondents who score according to victim status on one or more of the items, the total composite score get 6,6 %.

Comparing all the composite scores, in 2000, the physical dimension get 23 %, the verbal get 25,5 %, the and the social get 16,4 % of students indicating victim status on one or more of the items. In 2013, the physical dimension get 14,2, % the verbal get 20,5 %, the social get 16,8 % of students indicating victim status accordingly. The digital dimension get 6,6 %, lower than the other composite scores.

To see if harassment composite scores show significant differences between the two studies,

I do crosstabulation of item victim status (victim/non-victim) and year of study (2000 and 2013).

Crosstabulation of physical harassment victim status (victim/non-victim) and studies (2000/2013) produce a Chi square test statistic value of 23,87, with $p < 0,0001$, effect size = 0,11. There is significant difference between 2000 and 2013 harassment scores regarding physical harassment, but the effect is small.

Crosstabulation of verbal harassment produce a Chi square test statistic value of 6,69, with $p = 0,009$, effect size Phi = 0,06. There is significant difference between 2000 and 2013 harassment scores regarding verbal harassment, but the effect is small.

Crosstabulation of social harassment produce a Chi square test statistic value of 0,05, with $p = 0,823$, effect size Phi = 0. There is not significant difference between 2000 and 2013 harassment scores regarding social harassment.

Table 12 Prevalence rate comparisons of 2000 and 2013 total samples (composites of operationalized items)

Victim status (victim/non-victim) and studies (2000/2013)						
Physical harassment	2000	Non-victims	799 (77 %)	Victims	239 (23,0 %)	Chi square test value 23,87 ($p < 0,0001$) effect size Phi = 0,11
	2013	Non-victims	753 (85,8 %)	Victims	125 (14,2 %)	
Verbal harassment	2000	Non-victims	774 (74,5 %)	Victims	265 (25,5 %)	Chi square test value 6,69 ($p = 0,009$) effect size Phi = 0,06
	2013	Non-victims	698 (79,5 %)	Victims	180 (20,5 %)	
Social harassment	2000	Non-victims	854 (83,2 %)	Victims	172 (16,8 %)	Chi square test value 0.05 ($p = 0.823$) effect size Phi = 0
	2013	Non-victims	734 (83,6 %)	Victims	144 (16,4 %)	

There is significant difference between 2000 and 2013 harassment scores regarding both physical and verbal harassment, but the effect is small. The item of social harassment is not significantly associated with year of study.

Figure 3 Physical harassment operationalized, with computed composite score

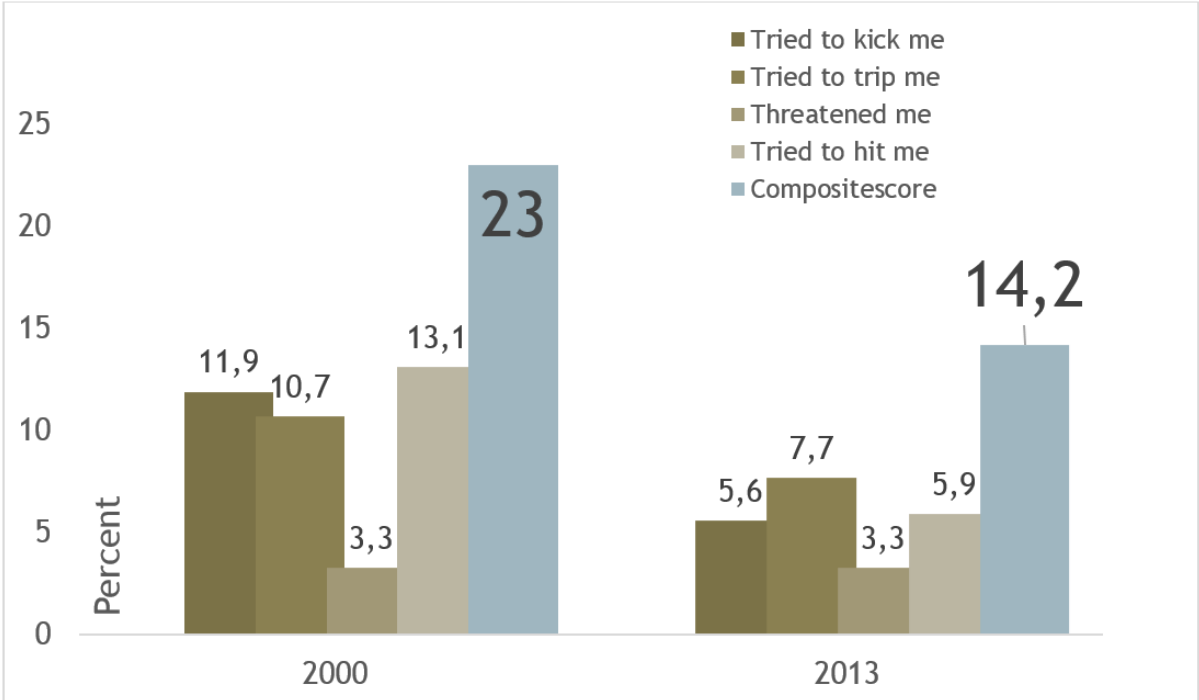


Figure 4 Verbal harassment operationalized, with computed composite score

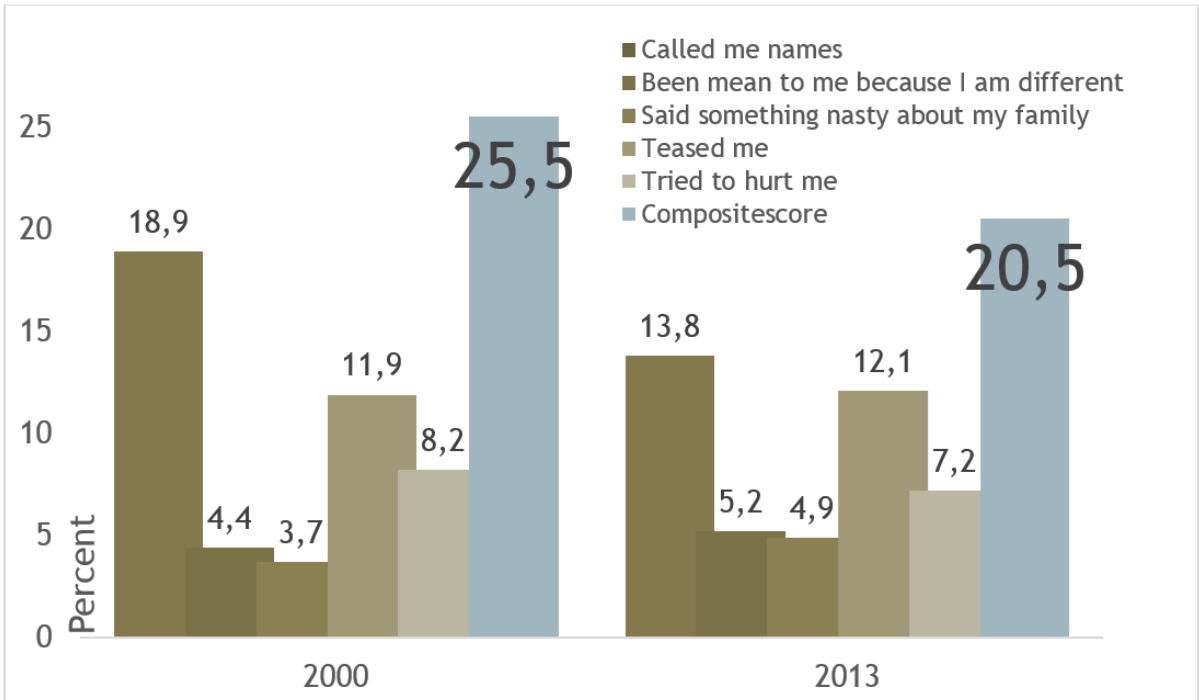


Figure 5 Social harassment operationalized, with computed composite score

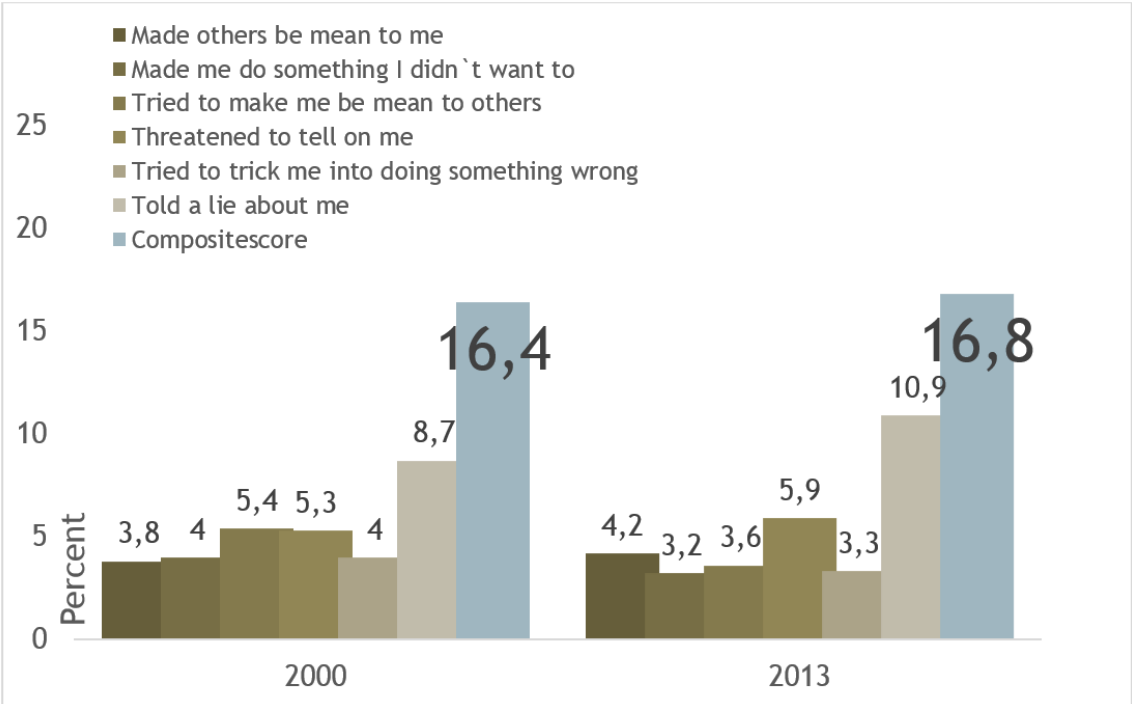
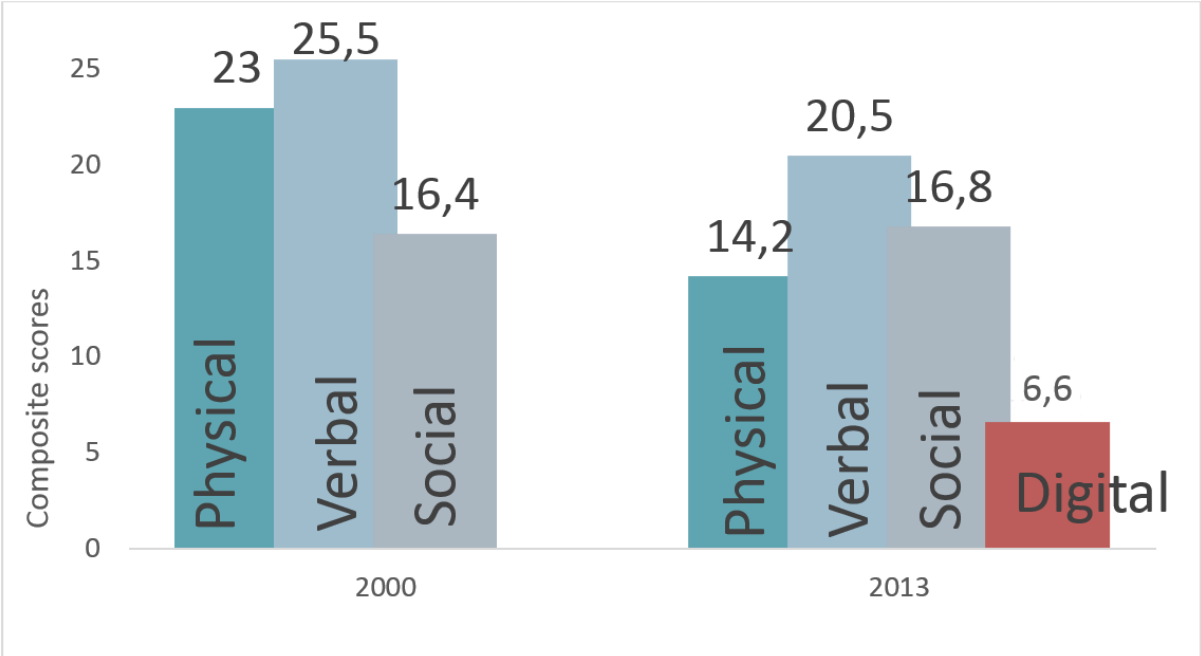


Figure 6 Composite scores compared, operationalized peer-harassment



3.5 Gender differences within 2000 and 2013 total samples

Gender investigations of physical, verbal and social dimensions of harassment

There are four composite items investigating physical, verbal, social and digital dimensions on operationalized questions.

In the 2000 survey the total sample is 1042 cases. On gender items there are 4 cases missing, 7 do not state category, and there are 509 girls and 522 boys as rather equal portions of the sample. For physical peer-harassment, of 509 girls, 92 score (18,1 %) as victims. Of 522 boys, 145 (27,8 %) score as victims. For verbal peer-harassment, 106 girls (20,8 %) score as victims, and 157 boys (30,0 %) score as victims. For social peer-harassment, 64 girls (12,6 %) score as victims, and 108 boys (21,1 %) score as victims.

In the 2013 survey, the valid cases in the total sample are 878, with 438 girls and 438 boys. For analysis, the sample is split to differentiate between gender scores, so that girl and boy scores are out of the 438, and percentages indicate responses according to victim status. For physical peer-harassment, of 438 girls, 41 (9,1 %) score as victims. Of 438 boys, 84 (19,2%) score as victims. For verbal peer-harassment, 85 girls (19,4 %) score as victims, and 95 boys (21,7%) score as victims. For social peer-harassment, 72 girls and 72 boys score as victims, an equal 16,4 %.

In the 2013 survey, boys score approximately twice as often on the “physical” item than the girls. For verbal peer-harassment, the scores are almost equal between genders. For social peer-harassment, the scores are exactly the same. For the digital or cyber dimension, the scores are also almost the same, but quite lower than for the other dimensions. Girls make the lowest scores within the traditional harassment, on the physical dimension.

Comparing the scores from the 2000 and the 2013 surveys, we see that girls score approximately twice as much as in 2013 on the physical peer-harassment item (9 % more). Boys in 2000 also make higher scores on the physical dimension item, approximately one third more than in 2013 (6,1 % more). For verbal harassment, girls' scores in years 2000 and 2013 are almost the same, (1,4 % more). Verbal dimension scores for boys are higher in 2000; as with the physical dimension the scores are approximately one third more than in 2013, but on slightly higher scores (8,3 % more). For social harassment, girl scores go down and boys'

scores go slightly up. Girls score almost one third lower than in 2013, (8,2 % less), and boys score a bit higher (4,7% more).

Table 13 Gender differences between years, operationalized items

The chi square test of association on items of 2000 gender (girl/boy) vs. composite scores of operationalized harassment (victim/non-victim)

	Chi-square test value	Sig. (two tailed)	
physical harassment in 2000 (gender/victim status)	13,706	0,000	Sig, effect size Phi 0,115
verbal harassment in 2000 (gender/victim status)	11,482	0,001	Sig, effect size Phi 0,105
social harassment in 2000 (gender/victim status)	12,825	0,000	Sig, effect size Phi 0,112

The chi square test of association on items of 2013 gender (girl/boy) vs. composite scores of operationalized harassment (victim/non-victim)

	Chi-square test value	Sig. (two tailed)	
physical harassment in 2013 (gender/victim status)	17,25	0,000	Sig, effect size Phi -0,14
verbal harassment in 2013 (gender/victim status)	0,699	0,403	No sig.
social harassment in 2013 (gender/victim status)	0,000	1,000	No sig.
cyber-harassment in 2013 (gender/victim status)	0,074	0,786	No sig.

Examining the 2013-survey data, the chi square test of association on items of gender and composite scores of operationalized harassment show no significant association regarding likely victim status for verbal, social or cyber-harassment. The physical-harassment scores do show significant association with gender, but the effect is small. Examining the 2000-survey data, the test does show significant association between gender and victim status on all items; physical, verbal and social harassment. All the effect sizes are small.

Gender investigations of the cyber-harassment dimension

Gender investigations continues on the total sample, presenting scores of cyber-harassment on operationalized items. For the composite item of the digital or cyber dimension, 30 girls (6,8 %) score as victims, and 28 boys (6,4 %) score as victims.

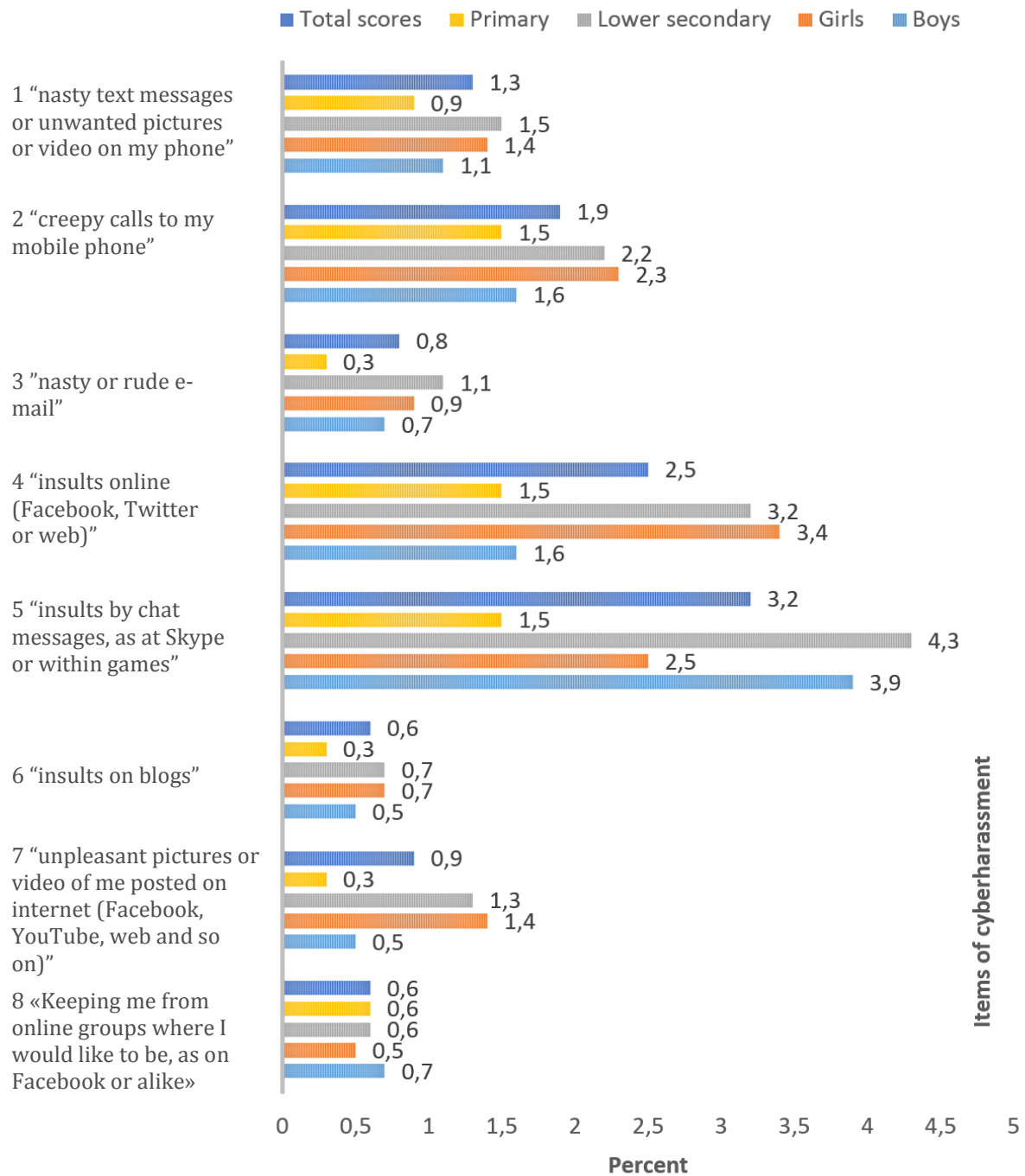
At the questionnaire, items are presented according to device used. Items 1 and 2 investigate harassment by phone. On item 1 “nasty text messages or unwanted pictures or video on my phone”, there are 6 girls (1,4 %) and 5 boys (1,1 %) making score as victims. On item 2 “creepy calls to my mobile phone”, 10 girls (2,3 %) and 7 boys (1,6 %) make victim scores.

Harassment by E-mail insults, item 3, “nasty or rude e-mail”, show responses of 4 girls (0,9 %) and 3 boys (0,7 %) as victims. Items 4,5 and 6 look at insults online according to added

specifications: On item 4 “insults online (Facebook, Twitter or web)”, 15 girls (3,4 %) and 7 boys (1,6 %). On item 4, twice as many girls than boys report victim scores, and it is the second most scored item of the eight. On item 5 “insults by chat messages, as at Skype or within games”, 11 girls (2,5 %) and 17 boys (3,9 %) make victim scores. Boys scores on item 5 are the highest of the eight, and the girls are not too far behind, making this the item with the most scores in total. (Boy girl differences on this item may be tested for significance.) On item 6 “insults on blogs”, 3 girls (0,7 %) and 2 boys (0,5 %) make victim scores.

Harassment by posting unwanted pictures or video content of the victim online, on item 7 “unpleasant pictures or video of me posted on internet (Facebook, YouTube, web and so on)”, 6 girls (1,4 %) and 2 boys (0,5 %) make victim scores. Finally, looking at social exclusion, on item 8 «Keeping me from online groups where I would like to be, as on Facebook or alike», 2 girls (0,5 %) and 3 boys (0,7 %) make victim scores.

Figure 7 Cyberharassment scores, operationalized items, gender and age differences



3.6 Age differences of operationalized items

Table 14 Age differences of operationalized items split into primary and secondary level

2000: chi square test of association

Age (primary/lower secondary school) and composite scores of operationalized harassment

	Chi-square test value	Sig. (two tailed)	
physical harassment in 2000 (non-victim/victim status)	7,957	0,005	Sig, effect size Phi 0,09
verbal harassment in 2000 (non-victim/victim status)	0,894	0,344	No sig.
social harassment in 2000 (non-victim/victim status)	0,046	0,831	No sig.

2013: chi square test of association

Age (primary/lower secondary school) and composite scores of operationalized harassment

	Chi-square test value	Sig. (two tailed)	
physical harassment in 2013 (non-victim/victim status)	3,400	0,065	No sig.
verbal harassment in 2013 (non-victim/victim status)	1,099	0,295	No sig.
social harassment in 2013 (non-victim/victim status)	2,773	0,096	No sig.
cyber-harassment in 2013 (non-victim/victim status)	8,710	0,003	Sig, effect size Phi 0,10

Age differences of operationalized items as school level investigations

The next section present differences between schools on the operationalized composite scores, as recoded into dichotomies. Responses are included if according to victim status on one or more of the items. First, the 2000 scores are presented, then the 2013 scores. There is a four item combination in the composite investigating **physical harassment**, a five item combination investigating **verbal harassment**, a six item combination investigating **social harassment**. Last, there is an eight item combination in the composite investigating **cyber-harassment**, only investigated in 2013, no comparisons between years available.

Table 15 Physical harassment in five schools in 2000 and 2013

	Moltemyra primary	Jordbærenga primary	Blåbærlia combined	Ballblommen lower secondary	Moseskogen lower secondary
2000					
Item 5 (kick)	13,8 %	19,5 %	14,7 %	9,2 %	6,9 %
Item 9 (threaten)	2,1 % (4)	5,1 % (9)	2,9 % (3)	3,2 % (11)	3,2 % (7)
Item 34 (trip)	10,3 %	17,8 %	18,6 %	6,7 %	7,9 %
Item 40 (hit)	12,8 %	13,1 %	14,4 %	15,0 %	9,3 %
2013					
Item 3 (kick)	7,8 %	1,2 % (1)	9,2 %	3,7 %	5,3 %
Item 5 (threaten)	7,1 %	1,2 % (1)	5,3 %	1,8 % (5)	2,1 % (6)
Item 12 (trip)	7,1 %	4,9 % (4)	7,2 %	5,9 %	10,5 %
Item 15 (hit)	9,9 %	2,5 % (2)	7,9 %	4,1 %	5,3 %

Where there are low counts, the counts are noted beside the percentages.

Light shade in cells mark rather high scores, darker shade in cells mark high scores.

Table 16 Verbal harassment in five schools in 2000 and 2013

	Moltemyra primary	Jordbærenga primary	Blåbærlia combined	Ballblommen lower secondary	Moseskogen lower secondary
2000					
Item 2 (Call names)	17,8 %	21,7 %	17,5 %	19,9 %	16,4 %
Item 4 (Family)	3,1 % (6)	4,5 % (4)	3,9 %	3,4 %	3,7 % (8)
Item 7 (Different)	3,7 % (7)	6,3 % (11)	4,0 %	4,6 %	3,2 % (7)
Item 16 (Tease)	12,1 %	13,6 %	17,6 %	10,3 %	10,1 %
Item 25 (Hurt)	8,1 %	10,5 %	13,5 %	7,0 %	5,6 %
2013					
Item 1 (Call names)	17,0 %	7,4 %	15,8 %	9,6 %	16,1 %
Item 2 (Family)	7,0 %		7,2 %	3,2 % (7)	5,3 %
Item 4 (Different)	8,5 %	2,5 %	7,2 %	3,7 % (8)	4,6 %
Item 6 (Tease)	12,1 %	4,9 %	12,5 %	9,6 %	15,8 %
Item 10 (Hurt)	7,8 %	2,5 %	9,9 %	4,6 %	8,8 %

Empty cells had zero scores. Where there are low counts, the counts are noted beside the percentages.
Light shade in cells mark rather high scores, darker shade in cells mark high scores.

Table 17 Social harassment in five schools in 2000 and 2013

	Moltemyra primary	Jordbærenga primary	Blåbærlia combined	Ballblommen lower secondary	Moseskogen lower secondary
2000					
Item 20 (Trick others be mean to me)	3,7 % (7)	5,7 %	1,9 % (2)	3,5 %	3,7 %
Item 21 (Trick me be mean to others)	1,1 % (2)	3,4 % (6)	3,9 % (4)	7,9 %	7,4 %
Item 23 (Trick me do something wrong)	1,6 % (3)	4,6 % (8)	4,9 % (5)	5,0 %	3,8 %
Item 27 (Trick me do what I didn't want to)	2,7 % (5)	7,5 %	4,9 % (5)	3,5 %	2,8 % (6)
Item 37 (Threaten to tell on me)	3,7 % (7)	9,7 %	5,8 % (6)	5,3 %	2,8 % (6)
Item 39 (Say lie about me)	5,9 %	11,4 %	13,5 %	8,5 %	7,0 %
2013					
Item 7 (Trick others be mean to me)	5,0 % (7)	1,2 % (1)	2,6 % (4)	3,2 % (7)	6,3 %
Item 8 (Trick me be mean to others)		3,7 % (3)	7,2 % (4)	2,7 % (6)	4,2 %
Item 9 (Trick me do something wrong)	2,1 % (3)	3,7 % (3)	5,3 % (8)	2,3 % (5)	3,5 %
Item 11 (Trick me do what I didn't want to)	3,5 % (5)	2,5 % (2)	2,6 % (4)	2,3 % (5)	4,2 %
Item 13 (Threaten to tell on me)	9,2 % (13)	4,9 % (4)	9,2 %	3,2 % (7)	4,9 %
Item 14 (Say lie about me)	14,2 %	7,4 % (6)	13,2 %	5,0 % (11)	13,7 %

Empty cells had zero scores. Where there are low counts, the counts are noted beside the percentages.
Light shade in cells mark rather high scores, darker shade in cells mark high scores.

Table 18 Cyber-harassment in five schools (2013 only)

	Moltemyra primary	Jordbærenga primary	Blåbærli combined	Ballblommen lower secondary	Moseskogen lower secondary
Item 1	1,2 % (3)		0,7 % (1)	1,4 % (3)	1,4 % (4)
Item 2	2,1 % (3)	1,2 % (1)	1,3 % (2)	1,8 % (4)	2,5 % (7)
Item 3	0,7 % (1)		0,7 % (1)	0,9 % (2)	1,1 % (3)
Item 4	1,4 % (2)	1,2 % (1)	2,6 % (4)	2,7 % (6)	3,2 % (9)
Item 5	2,1 % (3)	1,2 % (1)	2,0 % (3)	4,6 % (10)	3,9 % (11)
Item 6	0,7 % (1)		0,7 % (1)	0,5 % (1)	0,7 % (2)
Item 7	0,7 % (1)		0,7 % (1)		2,1 % (6)
Item 8	1,4 % (2)		0,7 % (1)		0,7 % (2)

Empty cells had zero scores. Where there are low counts, the counts are noted beside the percentages. Light shade in cells mark counts of more than five.

3.7 Cyber-harassment age investigations, operationalized items (2013 only)

Moving to school level, most of items have low counts outside of test range regarding significance. 1's, 2's or 4's as counts present insecurity to interpretations, and tests will not run as test-assumptions are violated. Looking at age differences, only lower secondary level have enough scores for there to be anything to tell. The only items that reach level where significance may be tested, are "insults online (Facebook, Twitter or web)" and "insults by chat messages, as at Skype or within games". The cyber-harassment scores large enough for statistical tests appear not even on the mixed level school, but only on the two lower secondary level schools with larger student samples.

Ballblommen ungdomsskole has 6 students (2,7 %) marking victim scores on item 4 "insults online (Facebook, Twitter or web)", and 10 students (4,6 %) marking victim scores on item 5 "insults by chat messages, as at Skype or within games". At Moseskogen ungdomsskole, 9 students (3,2 %) mark victim scores on item 4 "insults online (Facebook, Twitter or web)", and 11 students (3,9 %) mark victim scores on item 5 "insults by chat messages, as at Skype or within games".

Two more cyber-harassment items produce frequencies barely large enough to peek through, and only at one of the secondary level schools. The item 2 "creepy calls to my mobile phone", 7 students (2,5 %) and item 7 "unpleasant pictures or video of me posted on internet (Facebook, YouTube, web and so on)", get 6 students (2,1 %) scoring as victims, both items only at Moseskogen ungdomsskole. Considering the "5 counts in a computation cell"

assumption of tests of the categorical variables, the rest of the items produce no age differences at school level, as scores are all between 1 and 4 students, rendering conclusive reports not possible with the Chi-Square test. The Fisher's exact test may also be used for testing statistical significance in the analysis of contingency tables, and does apply to small counts. We still should consider the small counts a warning when discussing confidence in findings.

When doing the chi square test of association on items of age and composite harassment scores, I get the results presented in table 12.

Table 19 Age differences between years, operationalized items

The chi square test of association on items in 2013:

Age (primary/lower secondary school) and composite scores of operationalized harassment

	Chi-square test value	Sig. (two tailed)
physical harassment in 2013 (non-victim/victim status)	3,400	0,065 No sig.
verbal harassment in 2013 (non-victim/victim status)	1,099	0,295 No sig.
social harassment in 2013 (non-victim/victim status)	2,773	0,096 No sig.
cyber-harassment in 2013 (non-victim/victim status)	8,710	0,003 Sig, effect size Phi 0,10

The chi square test of association on items in 2000:

Age (primary/lower secondary school) and composite scores of operationalized harassment

	Chi-square test value	Sig. (two tailed)
physical harassment in 2000 (non-victim/victim status)	7,957	0,005 Sig, effect size Phi - 0,09
verbal harassment in 2000 (non-victim/victim status)	0,894	0,344 No sig.
social harassment in 2000 (non-victim/victim status)	0,046	0,831 No sig.

In the 2013-survey data, the chi square test of association on items of age and composite scores of operationalized harassment show no significant association between primary/lower secondary school and victim status. The cyber-harassment scores do show significant association, but the effect is small, as Chramer's Phi is 0,10. In the 2000-survey data, the test show no significant association between primary/lower secondary school and victim status of verbal and social harassment. The physical harassment scores do show significant association, but the effect is small, as Chramer's Phi is -0,00.

Section C: Triple respondents

3.8 Student/parent/teacher correlations

General item correlations

Triple respondent responses on traditional harassment general items of the “My life in school checklist +” items (with time of day differentiation) show significant correlations on all combinations but one: the outside of school hours depictions of students and parents do not render significant correlation ($r=0.010$, $p = 0.082$). The “SDQ”-item of no time differentiation show significant correlations by all respondents.

Table 20 Triple respondent victim status correlation, no time differentiation

	Students N=878		Teachers N=832		Parents N=294	
	Pearson correlation	Sig.	Pearson correlation	Sig.	Pearson correlation	Sig.
Students	1					
Teachers	0,229**	($p = 0,000$)	1			
Parents	0,119*	($p = 0,041$)	0,209**	($p = 0,000$)	1	

* Correlation is significant at the 0,05 level (2 tailed)

** Correlation is significant at the 0,01 level (2 tailed)

Student responses of victim status, on general items, within/outside of school hours’ differentiation, responses from **one respondent group** show correlations that are significant at 0,01 level. The highest correlations in student responses are on items of traditional harassment within and outside of school hours (0,613), and also on cyber-harassment within and outside of school hours. The correlation results are in line with results on tests of significant associations in victim status presented earlier in the text. In our sample, traditional and cyber-harassment seems to be overlapping phenomena.

Table 21 Triple respondents correlations, general items victim status

		Students N=878		Teachers N=832		Parents N=294	
		Within school hours	Outside of school hours	Within school hours	Outside of school hours	Within school hours	Outside of school hours
Students	Within school hours	1					
	Outside of school hours	0,613**	1				
Teachers	Within school hours	0,335**	0,206**	1			
	Outside of school hours	0,249**	0,251**	0,482**	1		
Parents	Within school hours	0,284**	0,205**	0,305**	0,325**	1	
	Outside of school hours	0,118*	0,010	0,159**	0,168**	0,831**	1

**Correlation is significant at the 0,01 level (2 tailed)

Operationalized item correlations

Looking at triple respondent responses on traditional harassment, most combinations reach significant results at 0,01 level when using operationalized items. But there are exceptions:

On both the physical dimension ($r=0.106$, $p = 0.069$) and the verbal dimension ($r=0.068$, $p = 0,247$), parents and students reports do not make significant correlations, but the social dimension get significant correlation at the 0,01 level ($r=0,212$).

Parents and teacher reports make significant correlations at 0,01 level on the physical dimension ($r=0.142$, $p = 0.008$), and 0,05 level on the social dimension ($r=0.108$, $p = 0.046$), but no significant correlation on the verbal dimension ($r=0.007$, $p = 0,893$).

Table 22 Traditional victim status correlation by triple respondents, operationalized items

Composite of harassment dimensions:	Respondent:	Physical			Verbal			Social		
		Student	Teacher	Parent	Student	Teacher	Parent	Student	Teacher	Parent
Physical Pearson correlations	Student	1								
	Teacher	0,164**	1							
	Parent	0,106	0,182**	1						
Verbal Pearson correlations	Student	0,538**	0,145**	0,182**	1					
	Teacher	0,193**	0,475**	0,142**	0,283**	1				
	Parent	0,008	0,003	0,063	0,068	-0,005	1			
Social Pearson correlations	Student	0,502**	0,109** $p = 0,002$	0,164** $p = 0,005$	0,623**	0,199**	0,088	1		
	Teacher	0,147**	0,339**	0,101	0,199**	0,623**	0,007	0,160**	1	
	Parent	0,099	0,070	0,344**	0,155**	0,121*	0,344**	0,212**	0,108*	1

* Correlation is significant at the 0,05 level (2 tailed)
 ** Correlation is significant at the 0,01 level (2 tailed)
Students N=878, Teachers N=832, Parents N=294

When it comes to **cyber-harassment**, students and teachers have correlating depictions of victim status, significant at the 0,01 level. Parents and teachers also have correlations in their responses of victim status, at the 0,05 level. Students and parents have the lowest correlations, not reaching significant level (sig 0,067, $p=0,255$).

Table 23 Cyber-victim status correlation by triple respondents, operationalized item

	Students N=878		Teachers N=832		Parents N=294	
	Pearson correlation	Sig.	Pearson correlation	Sig.	Pearson correlation	Sig.
Students	1					
Teachers	0,127**	($p = 0,000$)	1			
Parents	0,067	($p = 0,255$)	0,114*	($p = 0,035$)	1	

* Correlation is significant at the 0,05 level (2 tailed)
 ** Correlation is significant at the 0,01 level (2 tailed)

4 Discussion

4.1 Limitations to consider when interpreting the findings

The study contribution into the field of traditional harassment is limited, as patterns in bullying behaviour that has been confirmed by a number of studies over the years. Also, the study sample size is sufficient for full school approaches to assess peer-harassment and for local school comparisons. As nationwide surveys are presented regularly, large-scale reports present corresponding results from Norwegian context. The measurement items have been thoroughly discussed by others (Mynard and Joseph 2000, Ronning, Handegaard et al. 2004, Menesini, Nocentini et al. 2011), and expected properties like prevalence rates stated. Staying within Norwegian context, the “Elevundersøkelsen 2013” (Wendelborg, Røe et al. 2014) does investigations into what we may treat as expected values, and our results do not differ to much from expected patterns.

Complementing the prevalence assessment, the survey questionnaire has measures of well-being; the KINDL in Norwegian context (Reinfjell and Jozefiak 2012), and of mental health; the Norwegian version of the screening instrument “Strengths and Difficulties Self-Report” (Ronning, Handegaard et al. 2004, Goodman and Goodman 2009). The contribution is limited by investigating only the part of the survey traditionally associated with bullying prevention work in school settings, leaving the more “uncharted territory” of cross-comparisons with measures of well-being and mental health untouched.

The study intend to report at school and class level, to provide information for local school authorities. It is thus necessary to discuss participation rates at school level, as well as proportions of missing data, and state which data need to be treated with more caution regarding conclusions. This is the focus of section 4.2 and 4.3. Response rates are in good ranges, two schools show somewhat lower rates than the others, and one of these below 70%.

The “My Life In School Checklist +” survey tool of 2013 is a more refined version of the tool developed in 2000 (Ronning, Handegaard et al. 2004). In the process of comparative investigations of samples 13 years apart, some of the nuances in the recent data were lost, especially when recoding data into dichotomies. Some words on how appropriate it was to simplify the data like this are also essential, presented in section 4.4. To cater for comparative

investigations between years, we accept loss of detail, and choose recoding of data into dichotomies.

When cyber-harassment is concerned, the measurement items are in introductory phases, and including a more thorough discussion of the item terms is required. The terms do not have to be precise translations of the item terms developed in the Menesini study (Menesini, Nocentini et al. 2011). Adaptations should function well as measurements of the issues we wish to investigate in the context at hand. This is the theme of section 4.5. Adaptations to Northern Norway context appear to keep underlying concepts like impact variation and gender/age differences, opening for comparisons with findings in other studies, and investigation of local school culture in line with issues of recent research.

Section 4.6 do a short presentation of the schools included in the study, providing background information of smaller or larger schools, and student count changes between years 2000 and 2013. Schools are small and medium size; later we see one of the smaller schools show notable reduction on physical and verbal items between years 2000 and 2013.

The results section present finding related to both traditional and cyber-harassment and section 4.7 and 4.8 proceed to discussions of the findings. Items from mid and later parts of the questionnaire, investigating almost the same issues, appear correlated. There is reduction between years on physical and verbal harassment, at the same time digital harassment appear with low scores. Social harassment show no significant difference between years. The cyber-harassment composite show no significant gender difference. Younger grades show less cyber-harassment than older grades. Regarding types of harassment, girls receive more cyber-harassment through social media and websites, whereas boys receive more through chat as at Skype or within games. Cyber-harassment counts are generally low.

4.2 Participation rates at school level

For the 2000 dataset, we assume good validity, citing conclusions in the former study (Rønning 2004). For the 2013 dataset, we also assume good validity. The 2013 survey may report 73,5 % of GIS registered students included in the 2013 survey, and 85,1 % in the 2000 survey. For the 2000 survey, we do not have information regarding proportions of non-respondents or missing data within the survey, not for the total for the five school in question

in this study, nor for school level rates. We can only cite the response rate results for the main study of 66 schools, which reported rates of 80,1 % of students in the selected grades in the area participating in the study. The rates cited are very good, and we may assume that interpretations are based on results with good validity.

Response rates from student participants in the 2013 survey were good, but two of the schools show larger differences between possible and actual participants than the rest. Ballblommen ungdomsskole has the lowest rates (68,0%), just below the 70 % limit for acceptable rates. Blåbærlia barne- og ungdomsskole, at 74,9 %, is well within acceptable range. Still, this is considerably lower than the others who have participation rates of around 90 %, which again must be considered very good.

Rates for completed questionnaires are very high, and when inspecting variables, I find that when a student answer the questionnaire there are answers to complete sets of variables. The computer based setting did not give opportunity to leave out answers. It may be discussed whether it is ethically correct to “force” answers, and parents did indeed use the opportunity to “step outside” of provided answering options.

At grades 4,7 and 9, the parent and the teacher answer the questionnaires too, in appropriate words for the respondent group, still referring to the same items. A student get one corresponding parent questionnaire, and teachers mark corresponding questionnaires for all their students. For teachers, this is a lot of extra work, and such a high rate may be discussed as indicating both loyalty to the survey and well-functioning administration by the staff at the local school. Parents fill out the form at parents’ night at school. Many thing may step in the way of collecting a complete questionnaire. Not all parents attend meetings, and answering on paper introduce opportunity to mark variables inconclusively. Since parents answer in the least “secure” setting, the response rates are very good.

If we expect at least 70 % participation rates to ensure validity, teacher response rates are very good; above 90 % on all schools except Blåbærlia (at 81,3 %) , and parent response rates are very good too. Triple respondent investigations may be performed. There are two exceptions. At Ballblommen ungdomsskole, student response rates are below expected, with 59,8 %, and Blåbærlia barne- og ungdomsskole have just above expected rates, 73,2 %. For these schools,

validity results may be considered not as good as for the other schools, and interpretations for Ballblommen ungdomsskole in particular should be treated with more caution.

Data were rather equally distributed between gender, and in the 2000 sample also between school types. The 2013 sample have more of the lower secondary level students. For discussions about age differences, splitting the sample into primary and lower secondary levels cater for separate analysis, to avoid effects of disproportions in favour of the majority. I see no need for weighting primary level cases for this purpose.

4.3 Data validity - the mystery of the 206 missing cases

Larger portions of data were missing from two of the schools in particular, but as approximately half of these turn out to be system level losses identified as full classes, they do not carry bias, and remaining losses are 10,3%, leaving the survey total with the already cited 73,5 %. Regarding triple responses at the schools affected, lost student responses did not make participation rates dip below 70 %, but parent responses did at one school.

The 2013 dataset has a total of 206 missing cases of the 1048, leaving only 878 cases valid, with a loss of 19 % of the cases. Visual inspection of the datagrid give me some clues as to what might have happened. Some loss seem to be random. There are also some indications of where larger portions of data were lost, to keep in mind when interpreting data.

At Blåbærlia barne- og ungdomsskole, a full class set of responses is missing from grade 9, leaving out 23 cases. Being a small school of only 427 students, and grades 1 to 3 not taking part in the survey, the loss has effect on data validity at local school level, but the visual inspection show that there are also random losses. The total loss for this school is not explained by the loss of one of the classes. Still, a school participation rate of 72,2 % is within acceptable range and interpretations may be regarded as based on data with acceptable validity.

Ballblommen ungdomsskole is a rather large school, of 502 students registered in GIS, all students included in the survey. Visual inspection of the data grid show that five full classes have loss of cases. These classes have no completed questionnaires registered, leaving out 18, 16, 12, 11 and 14 student responses missing. Cases are omitted from analysis when parents´

consent is not given, but in these cases the grid show no data points. The general procedure was having class teacher administer the survey in class using the Questback internet based solution. There was also a backup solution. As a negative response to parents' consent would mean excluding data already collected, the data points would be on the grid, but not to be included in analysis. Loss from full classes is then most likely caused by questionnaires not completed. The school is in a period of renovating and remodelling their school buildings, and this alone may have caused more obstacles than expected when administering a survey on top of keeping up ordinary day-to-day services. The school has many parallel classes in grades 8 to 10. The loss is of two classes out of six in 8th grade, two classes out of seven in 9th grade and one class out of seven in 10th grade. The distribution does not seem to follow any particular pattern, and when five classes did not complete questionnaires, while fifteen classes did, one may conclude that the school did have good routines for administering the survey. The one school alone contributes to the survey with 322 of 878 valid cases, 37 % of the total data.

The loss of data from full classes from both Ballblommen ungdomsskole and Blåbærlia barne- og ungdomsskole make a total of 94 students, which is 8,7 % of the loss, thus placing the main data loss on the lower secondary level. When not including the instances where full classes have been lost, we get 112 lost cases of 1084 possible within the survey. This makes 10,3 % random non-respondents in a survey, which is better than what might be expected. The lost cases are divided into 8,7 % loss from full classes not completing questionnaires and 10,3 % random losses of individual cases. The total loss is 19 % of the expected survey cases, still making the survey total 81 %, indicating more than sufficient data validity.

We have triple respondents on 9th grade, which may give us opportunity to check whether parents, students and teachers depictions of student life inside and outside of school have high correlations. Do the lost cases placed on lower secondary level affect validity of such comparisons? Parents' answers on Ballblommen ungdomsskole are 67 of 112 possible (GIS registered) cases, a rate of 59,8 %. Teacher responses are 104 of 112, a rate of 93%, and student response is 78 of 112 possible cases, a rate of 69,8 %. We see that the lost student responses were not the ones rendering insufficient validity on the 9th grade on Ballblommen ungdomsskole. Parent response rates were outside of acceptable range, and such comparisons on Ballblommen ungdomsskole should still be treated with caution.

4.4 Treating skew data and mismatching scales

Inspecting data distribution on the general variables of traditional harassment show a considerable skew. This is as expected. Bullying as measured in the 2013 survey data with the scale of five-point scale of “never” (1), “only once or twice” (2), “two or three times a month” (3), “About once a week” (4) and “several times a week” (5) should not follow a normal distribution bell curve. That would imply that a type of behaviour that is unwanted in our schools is distributed along the same lines as height in samples of army recruits, where most data gather along mid values as sample size increases. If the majority of students say they were victimized or bully others about once a week, it would truly be an unwanted scenario. Shifting variables around on the scale would not be an option either as we expect a considerable skew, not a bell shape with equal tails to move around. If data had been approximately normally distributed for each category of an independent variable, we would have used parametric methods to explore the data. With skew data, we make use of nonparametric methods, as they make no assumption about the distribution.

To obtain comparable data between the two years, I choose to make dichotomies. Before recoding the scales to make comparisons over data from scales that do not match, there are some issues to consider. First; do we make a good choice when analysing data as categorical, and second; what timeframe cut-off point for victim status give data that make analysis possible.

The threshold for victim status is set at self-reported victimization events “2 or three times a month or more”. This is by intent a choice of little controversy. The same timeframe was used by the “Elevundersøkelsen”, doing annual large scale study on bullying in Norwegian schools, and thus present data we wish to look to in our discussions. We know there are lines of argumentation for selecting other timeframes. Arora present reasons to use a much shorter timeframe of one week to accompany operationalized items, and recommend an even shorter timeframe for the youngest children (Arora 1994). Olweus claim that global items with timeframe two or three months have shown good properties and stood the test of time as useful tools (Olweus 2013). Results of similar studies have been presented over the last decades, and the “knowledge body” becomes more consistent, thus contributing to make the research community able to draw conclusions across studies.

In the Norwegian context, the “Elevundersøkelsen” is leaning on the approach and the timeframe suggested by Olweus, who favours using general items first, supplemented with events described, and splitting the data into categories of victim and non-victim. It may be an issue to investigate prevalence of lowfrequent and highfrequent harassment. But as we are going to take advantage of a dataset of a previous study, and will be focusing on differences presented in samples with more than ten years between, I need to consider that the older survey had less fine-tuned scales. We do not have the data to make comparisons or present assumptions between the two points in time regarding high- or low frequency harassment.

We may “stretch” the scales of the less fine-tuned scale to match the five-point scale, to keep as much data as possible. This may be done by recoding from three-point to five-point by estimating values in-between. I could also transform the five-point scale items into three-point scales to hold back on data loss when recoding. But the comparisons between years rest on data within which I expect considerably skew in both sets. The portions of the sample that we are interested in, are expected minorities of victims and perpetrators, an even lower expected prevalence of bully-victims, cyber-victims and cyber-perpetrators. To put the spotlight on those issues, we may let go of the nuances, state study limitations clearly, and argue that the method of using categorical data is the right tool for the job.

Also, the dataset of 2013 will form baseline for consecutive years of the study, and the comparisons between years 2000 and 2013 will give indications of what trends might be interesting to follow. There is a long timespan between samples, with insecurity added. We may have seen a year of very high or very low scores for any of the items, and the variations of in-between may have been low or high. These possible variations are also indications that the nuances may be discarded. We do not remove uncertainty by holding on to the finer scales. I find that the dichotomous approach fit the needs of the task at hand.

4.5 Items investigating cyber-harassment

Do the items measure what they are supposed to? Are the items appropriate for investigating the chosen issues? Can results reported be compared with other research? Investigation of cyber-harassment is leaning on work by Italian researchers Menesini et al. (Menesini, Nocentini et al. 2011). In their journal article discussing item discrimination and properties, I find ten items of harassment events described, divided by means of communication. In the

present “My Life in School checklist +” 2013 survey, eight items are presented. These are answered on the 5-point scale discussed in chapter 2 “Methods”. The eight items are later reduced in this analysis into two categories of victim or non-victim of such events. The questionnaire present issues without specified headings, but still in clusters according to themes. In the following text, items of the present study are presented, and translation and revisions commented. The original items are referred to as Menesini items a) to j) (Menesini, Nocentini et al. 2011:269). I assume from my inspection that the three first Menesini items investigating various content send by phone have been merged into number 1), the next six items are corresponding in both surveys, and one last item of social exclusion online has been added.

Phone as device

Two of the items cited by Menesini are merged into one by Rønning/Thorvaldsen in the “My Life in School checklist +” questionnaire: Menesini item a) “Nasty text messages”, item b) “Phone pictures/photos/video of violent scene” and item c “Phone pictures/photos/video of intimate scene” is replaced by item 1) “Nasty text messages or unwanted pictures or video on my phone”. Nasty has been translated into the Norwegian term “Ekkel”, which may be considered a milder term so that events from a wider contexts may be included. The word violent is also left out, making “Ekkel” do the job of differentiating the unwanted content as not limited to violent, but any offensive video. The content of the question still appear to be along the same lines as the Menesini items, indicating unwanted content brought to you by your phone for you to receive as asynchronous events, not communicating in real time with the perpetrator. The Menesini item d) “Silent/prank calls” has a corresponding item in the “creepy calls to my mobile phone”. Again, the term “ekkel” is used to differentiate, and “creepy calls” is my suggestion for a more corresponding translation of the Norwegian question phrase. Menesini item d) and our survey item 2) appear to carry the same content, keeping the simultaneous communication at heart. The phone is used to communicate in real time, the perpetrator has access to instant feedback. Audience is kept within the physical range of the device, like friends listening in on the conversation, but not transferred online to a wider audience with asynchronous access.

E-mail insults

Menesini item e) “Nasty or rude e-mail” correspond well to the survey item 3) using the Norwegian term “skremmende eller stygg epost”. This item appear dated or out of context; do Norwegian children and young use email on a regular basis as means of communication? Our

study is not looking at patterns of online activities as such. Still, to put our findings in a context of other research, it may be of interest to state research sources for usage patterns applicable to the sample, and confirm expected low activity. Also, rather neutral items are welcome in a questionnaire if one wants to make a break in an expected responses pattern.

Insults online according to added specifications

Menesini item f) “Insults on web sites” is modified in the survey item 4) using specification by examples. Insult has been translated into “erte eller fornærme”, concepts which may correspond well to the same content. “Facebook, Twitter, web” are used as examples, indicating social media as venue, and the asynchronous communication with a wider audience 24/7 as a key issue. A translation of the Norwegian question may be “insults on social media services”, but as video services like SnapChat also make it into the same categories, and Facebook also has video content functionality, then possible investigation into the issue of video or picture content and perceived impact would be lost. To keep the differentiation, the phrase “insults online (Facebook, Twitter or web)” seems appropriate. Menesini item g) “insults on instant messaging” has the same application of terms as discussed under item f), and specification in the survey item 5) is “by chat messages, as at Skype or within games”. The same intended differentiation from video and picture content applies.

One might expect boys to be more gamers than girls, thus having access to chat alongside gaming activity, and gender differences may be of interest, along with research arguments for such a hypothesis. Usage pattern discussions as under item e) applies. Menesini item h) “insults in chat rooms” may be considered covered under the same item, but the chatroom activity as such is less apparent in the Norwegian wording, the differentiation is on the instant nature of text flowing before a wider audience. By exclusion, as no other question applies, responses about chat room activity would fit best under this item in the questionnaire.

Menesini item i) “insults on blogs” use the same terms as in items 4 and 5, “erte eller fornærme”. Specification given in item 6) is “by blog”, emphasising content created by the author himself/herself for all to see, content creator may be both victim or perpetrator. Comments on blog may be turned off, introducing an element of technical skill. Both age and gender differences may be of interest, as one might expect teenage girls to be more active on this venue than the younger children or the boys.

Pictures/video content

Menesini item j) is the one Menesini present as the one with most impact. “Unpleasant pictures/video on web sites” is presented in item 7), where terms “unpleasant” and “ubehagelig” are corresponding terms. Additional specification is provided, as with items 4,5 and 6. Specification is “pictures or video of me posted on internet (Facebook, YouTube, web and so on)”. The item appear well contrasted with the other items, according to the assumption that this is an item with more impact. The SDQ survey tool has indicators of perceived impact, and scores reported by the “My Life in School checklist +” may provide information as basis for further investigation in other parts of the project, although outside the scope of his thesis.

Social exclusion

Item 8) has no Menesini reference. “Utestengt meg fra Facebook-gruppe eller lignende der jeg ønsker å være» may translate into «Keeping me from online groups where I would like to be, as on Facebook or alike». The item may appear most relevant to both boys and girls on different venues. Shutting people out is considered a social type of harassment in traditional settings, and as such may appear more with older children or more with girls than with boys, according to Olweus research (Olweus 2013). Both age and gender differences are thus of interest.

Concluding remarks on the items investigating cyber-harassment

The age differences will be of interest. There is a mix of levels of abstraction; although presented as operationalized concepts, the interpretation of what may be an insult is an issue to discuss. If one assumes that younger students may be more dependent on operationalized concepts when reporting on items, we may see that older students may report more conservative scores according to being more strict on interpretation of what is considered an insulting event. Then again, younger students may not have access to or developed as intense a relationship to communication in cyberdomains, thus being less exposed to events than older students.

The added specifications on items may items less generally defined. As the items are intended for use alongside general questions, the more operationalized wording seem appropriate. It seems that the underlying differentiations of the Menesini items are kept, recognizable for students in the Norwegian setting, and item scores may be compared with the Menisini results and other research using items accordingly.

4.6 School sizes in the study

One of the schools in the study shows considerable lower peer-harassment scores in the recent study compared with the study conducted in 2000, and I note that this school is “rather small”. Before entering into discussions, I will here pay some attention to how terms small or a large school vary between regions, countries and school systems.

SSB statistics show that for the 2013-14 school year, 30,8 % of schools in Norway have less than 100 students, 40 % have between 100 and 300 students, 23,9 % have between 300 and 500 students, and 5,4 % have more than 500 . These statistics show that in the Norwegian setting, it is more common with schools of less than 300 students. In international context, it is common to refer to schools of up to 300 students at primary level as “small school” sizes, and above 1000 as “large school” sizes, and at higher education levels above 1500 to be referred to as “large school” sizes. In the remainder of the text, keeping local audience in mind, I will use terms “smaller”, “medium” and “larger” schools. By this, in the town in question there are smaller schools in ranges 150 to 200 students, medium sized schools of about 300 to 400 students, and larger schools in this context at around 500 students.

The two “primary-level-only” schools have grades 4 to 7 participating in the study. Jordbærenga barneskole is a small primary school of 150 to 200 students in grades 1 to 7. The school have 84 students participating in 2013, and 176 students taking part in the 2000 study. The school has nearly half as many students in 2013. Moltemyra barneskole is a medium size primary school of 300 to 350 students in grades 1 to 7. In 2013, 155 students take part in the study, and in 2000, 190 students took part. The school has somewhat fewer students in the recent study. The two “lower-secondary-level-only” schools have all grades participating. Ballblommen ungdomsskole is the largest school in the study. It is a lower secondary school of around 500 students in grades 8 to 10. In 2013, 322 students take part in the study, and in 2000, 352 students took part. This school also have somewhat fewer students in the recent study. Moseskogen ungdomsskole is a lower secondary school of 400 to 450 students in grades 8 to 10. In 2013, 320 students take part in the study; almost exactly the same as for the other large lower secondary school Ballblommen. In 2000, 219 students took part, the school has about 100 more students in the recent study, a 1/3 increase in school size. Blåbærlia barne-og ungdomsskole is the only “mixed-level” school in the study, a medium size school of 400 to 450 students in grades 1 to 7 and 8 to 10, grades 4 to 10 participating in the study. In

2000, 203 students took part in the study. The school also has about 100 more students participating in the recent study, and has doubled its school size in 13 years.

4.7 Harassment prevalence in the samples

4.7.1 General items

Victim status differences between “SDQ” item and “inside school hour” item

The difference between the victim status of 9,9 % of the SDQ item and the 7,5 % of the inside school hour item calls for attention. Self-reports may render slightly elevated scores, but in this case, parent response on the same item is 10,4 %, and teacher response is 10,2 %, and student scores thus do not appear very elevated. Looking at the counts, there are 66 victims within school hours and 35 victims outside school hours. These may and may not be the same individuals, and according to literature, one should expect a considerable overlap. The item not differentiating between at school and after school bullying report 87 victims, scores to be considered slightly elevated in the comparison. The overlap may not be as large as expected. There may be students who experience bullying outside of school hours without being victimized at school. The score might not be higher just because of method chosen.

Victim status inside of and out of school hours

Comparing cyber- and traditional harassment within and outside of school hours, traditional get 7,5 % and cyber get 1,3 % score within school hours, whereas outside of school hours traditional- get 4 % and cyber-harassment get 3,4 % of the victim status scores.

One is more likely to experience traditional bullying at school. After-school-hours` victims make about half the scores. Cyberbullying show the opposite tendency; inside-of-school-hours` rates are low, but after-school-hours` get almost as high scores as the low score for traditional bullying. Going home does not make you safer, quite the opposite; the arena of cyber-harassment appear to be outside of school. The inside/outside of school hours issue appear relevant. We may keep in mind Olweus` warning that cyberbullying may have origins with events at school (Olweus 2013:768), and events in cyberdomains may at least have impact during the school day too. We have no items to indicate such complexities, but note that the after-hours` digital component is almost as high as after-school-hours` traditional bullying. One is almost as likely to get bullied and cyberbullied once leaving school.

Few bullies?

There is a disproportion between self-reports of traditional victims and bullies. Self-reports by victim tend to render higher scores than nominations by others, and a check on the three-respondent combination seems appropriate. Self-report on perpetrator status may be held back by now wanting to admit to unpleasant issues, and may be prone to underreporting. We may see the effect of underreporting meeting underreporting. One perpetrator may also target more than one victim, thus rendering a realistic disproportion.

Bystander ratios: cyber-perpetrators have few bystanders

One event can be witnessed by more than one student, so higher scores for bystander status than for both victim and perpetrator may be expected. The item as such give no information on whether the bystander is passive or taking action in favour of any of the involved. It seems like cyberbullies are seen by fewer, and the awareness of the act is higher. More than with traditional harassment, cyberbullies appear to know what they do and stay out of sight. Cyber-victims do not have as much opportunity to get support from peers as victims of traditional harassment.

4.7.2 Composite scores of physical, verbal, social and cyber-harassment

The operationalized variables in 2000 and 2013 may be interpreted as following a pattern. Visually inspecting the data as bar charts, we see the scores lie steadily between 14 % and 25,5 %, with the verbal factor on top, the two others factors lingering alongside, and it may seem like the values have gone down a notch on all factors when the digital “little brother” composite score is added to the mix.

Looking at the scores: verbal harassment has the most scores, on composite scores rendering a 25,5 % reporting victim status on one or more of the items within the composite. The corresponding variable in 2013 is 20, 5 %, also the highest of the three dimensions, but a bit lower than 13 years ago. The composite score of the social dimension is almost unchanged; 16,4 % in 2000 and 16,8 % in 2013. The composite on the physical dimension has changed; with 23 %, it is no longer above the social factor of about 16 %, but has dipped below, to 14,2 %. The change is/is not significant between the two years.

As expected, the 6,6 % digital factor of 2013 is lower than the other three factors. All scores on the operationalized cyber-harassment items are rather low. Items 6 on blogs and item 8 on social exclusion both get lowest score of 0,6, email and picture/video posting online has scores just below 1 %, “by phone” items lie below 2% and only two of the items pass 2,5 %: the social media insults score 2,5% and the chat scores of 3,2 %.

4.8 Results in light of theory

The “Trivsel i Tromsø”-project is part of a “University school project” at the Arctic University of Norway”, and enabling teachers to draw upon recent research is part of this larger setting. Cyber-harassment research is in itself a field of rapid growth, and giving participants access to relevant international research agendas is in line with Arora advice (Thompson, Arora et al. 2002) about not talking down to teachers, but bridging the gap between research community and practitioner to provide the teacher facing the issues first hand with coping-strategies. The project participants will most likely gain from sensitizing already at baseline year of study.

According to literature, the cyber factor is smaller, but may have another and at times more serious kind of impact, and is not to be disregarded. Arguments by Olweus (Olweus 2013) stress that digital harassment has co-variation with traditional harassment, and warns that less effort on keeping traditional harassment at bay in favour of focus on digital harassment would be the wrong turn. If reducing traditional harassment by means of intervention strategies that have proven effect, the digital will follow.

4.8.1 Questionnaire length and ethics

The questionnaire has just above 100 items of varying wording complexity. The survey is split into separate 12-16 year age group and 8-11 year age group questionnaires, the latter with somewhat simplified wording to aid comprehension. Language is still quite complex, and the latter part presenting the mental health screening tool has the most complex terms. The questionnaire starts out with questions about your well-being (KINDL). Some of the questions are in reverse order, so respondents have to pay attention, but at this point survey fatigue is not an issue. School setting administrating ensured very high response rates, completed questionnaires have responses on all items, and correlation between mid and last section answers on almost same items show correlation. There is support in other research for victims usually taking the opportunity to use their voice.

Next, the section about harassment prevalence focus on incidents, hinting on severity. There are reversed items in-between, some wording sounds rather the same, the section demanding more attention. I see from parent responses that survey fatigue does set in, as some skip ticking boxes of who perpetrates after already completing a row of items of confirming low or no prevalence. Such effects may be handled with imputation of data if appropriately investigated. But my personal impression after completing the second section, the “My Life in School Checklist +” (on which the thesis rest), was that OK, now I have done a fair share of contribution to help someone, and I was content with doing the effort, but had lost sight of the neutral grounds that Arora recommend. The questionnaire part does not provide a feeling of “us” being OK, reinforcing positive impressions about the group of which I am a part. As final part, I encounter a mental health screening tool. The experience of measures combined is a heavy one, even for me in the role of data puncher with keen interest in both appropriate and correctly marked responses. Ethics always imply attention to both number of items and complexity of wording. In lower grades, one might need to assist students to apply appropriate answers. Teachers have already taken the task of answering survey questionnaires about each and every one of their students. Is it a teacher task to aid younger students answering the latter part? If no aid is given, do we get answers that can be trusted, in light of survey fatigue effects? Our findings do not indicate survey fatigue. Still, maybe the task of applying the mental health screening tool should be taken by some other means but teacher/student self-reports. If mental health screening in schools is vital, then help to apply such means may be necessary to keep up the high loyalty of teachers and parents (those in position to reject the project altogether) and quality of responses against a 7 year horizon.

4.8.2 The findings

The dataset provided opens for a wide variety of investigations. Issues span across a range of disciplines too. When entering into an investigation, discussions arise about what associations and correlations will provide useful information. Linked to harassment prevention efforts, combinations ought to point towards areas where change is possible.

Some of the research contribution in the present study may appear odd when seen from student respondent perspective. The e-mail section in particular may appear less relevant to the setting of primary school, and even with lower secondary students, scores were almost not apparent. Qualitative approaches into the group may reveal whether students find that this is a channel for potential harassment at all, and according to scores, it may not appear relevant to

this setting. But other items in the present survey have a documented high impact, and it is reasonable to observe such items, also with low scores. It may be seen as a good sign regarding local school culture, and thus it is of interest to report such low scores. In a larger research context, it may be of interest to report even the expectation of low email harassment scores in the Norwegian small town setting at this point in time. The rapid development of a changing scene is yet another issue of cyber-harassment research, but the appearance of some scores, although very few, of posting of video at primary level may be important because of the higher impact on such items as discussed by Menesini among others (Menesini 2012). In our findings, there was very little cyberbullying to report, but within the kind of scores we see, some are on high impact items, and within the younger grades.

Do the adults see what is going on? In our findings, the indications do not point towards a simple answer even to such a question. Looking at triple respondent responses on traditional harassment, most combinations show significant correlations at 0,01 level when using operationalized items. But parents and teacher reports on the verbal dimension did not reach significant level of association. Parents and students reports on both physical and verbal dimensions did not show significant association. For cyber-harassment, parent and student responses did not show significant correlations. If self-reports tend to over-report victim status, and triple responses aid interpretation, then parent and student responses do not differ alarmingly. Parents and teachers have corresponding stories to tell about physical as well as social harassment, but for verbal harassment they differ.

If we think adults have a grasp of what is going on, the Olweus intervention seem appropriate. Within such a frame, the adults are kept accountable for both discovery and preventive as well as interceptive efforts. The enhanced focus on “klasseledelse” in the present day Norwegian setting stress attentive teachers, enabling detection of signs of harassment. But as of now, traditional harassment research still has the upper hand at sketching out what to keep an eye on. Kowalski suggest appealing to digital citizenship among the young themselves, as trying to keep schoolyard watch duty by adults in cyberspace is a task that may be seen as both illusory and insufficient. Empowerment of bystanders and victims, and empathy sensitisation are individual level tactics. As research point at tendencies of young confiding in their friends, the tactics do have potentials for change. But as teachers and parents take on the responsibility for improving conditions for our children and young, there is a constant search for appropriate ways to handle cyber-harassment from the side of adults.

In our findings, we see that there were more bystanders to traditional bullying, and fewer saw cyber-harassment. The ratios could indicate that for traditional bullying, there may be latent influence on harassment in involving the bystander group to counteract harassment, and investigations into what makes some bystanders take part in preventive or even intervention efforts have indeed been an issue for researchers from Olweus in the 70s' and onwards (Olweus 1974). For traditional harassment, proportions of how many bystanders there are and how they react may be found in research by both Scandinavian, British and American researchers (Slonje and Smith 2008, Kowalski, Limber et al. 2012, Olweus 2013). Several have contributions regarding what support is needed to empower young, to enable positive peer-support for victims. But based on our findings, there is a word of caution regarding bystander as potential agent of change. There are more ways one may become a bystander to cyber-harassment; either by being with the perpetrator at the time, being with the victim at the time, or later being directed towards or stumbling upon content online, opportunities to become a bystander seems to be wider. Still, in our findings, the cyber-perpetrator is less seen by others, and the cyber-victim is seen by fewer. Even if ratios of bystander to victim does not render significant differences between cyber- and traditional domains, and regardless of what the bystander group may or may not do when witnessing cyber-harassment, our findings indicate that there is not as much to gain from the bystander group as for traditional harassment, the group being smaller.

For victims and bystanders alike, "youth are not inclined to report cyberbullying to adults, even less so than with traditional bullying" (Cassidy, Faucher et al. 2013:590). "Most cyber-victims do not alert adults" (Cassidy, Faucher et al. 2013:585) Also, the evidence base for successful strategies is very limited when addressing cyberbullying, and many coping strategies focus on individual victims (Cassidy, Faucher et al. 2013:585). In our findings, cyber-harassment distributed among grades and classes. The dataset has no apparent problem class or problem grade where intervention is appropriate. This is in itself a useful piece of information. There is no intervention tactics to apply, but a problem nonetheless. One should not brush aside the effect of being alone facing harassment, and harassment of the more serious nature into the bargain. Most of the cyber-harassment scores appear at lower secondary school.

School sizes were discussed briefly, because reduction in prevalence rates were particularly apparent at one of the smaller schools. Olweus research indicate that school size or location is

not the distinguishing element in the complex mix of school life that has effect on harassment reduction (Olweus 2013), and other explanations have to be discussed. Staff attention to high levels of prevalence within the school in question may have contributed to change, but further investigation require other methods than those within scope of the thesis.

The ever increasing requests about information on how to address cyber-harassment in particular are often rooted in the perceived as well as experienced high impact and seriousness of issues at hand. Recommended approaches about enhanced awareness and empowerment of both victim and bystander by building on ideals of digital citizenship are again tasks that require efforts long term, and are in nature preventive, not aimed at handling moments of crisis. The Kowalski recommendation about peer-support seems sound advice, but does not meet the demand to enable adults to act in appropriate manner. At school level, potential may be found in involving parents in the work regarding cyber-harassment. School level efforts also mean addressing how to prevent tendencies of victims rejecting adults as relevant contributors. Teachers and parents, as well as other adults, may need to be supported and encouraged to step into being that significant other that is both present and an able observer. Several researcher point to how students are reluctant to involving adults, leaving it to the young and their closest friends to come up with tactics to deal with issues at hand, and raise discussion about their ability to provide appropriate solutions, lacking both in life experience, insight and means of an adult world. In our findings, we see that students affected may be primary grade students, facing the high impact type of harassment. Then such issues become even more pressing.

Olewus argue that we may still use the approach recommended, tried and tested for traditional harassment. As the different types of harassment show association and overlap, by taking both preventive and intervening efforts seriously for traditional harassment, cyber-harassment reduction will follow. There are indications that incidents in cyber-domains may start at school, and that cyber-harassment incidents, even if origins were after school hours, they have impact during the school day (Olweus 2012, Cassidy, Faucher et al. 2013, Olweus 2013). It follows that teachers may not outrun their responsibility to deal with cyber-harassment. Even for cyber-harassment, school is the arena where the most students may be reached, and if sensitizing of bystanders, young or adult, is a chosen strategy, the arena appear even more important. When our findings show very low scores regarding cyber-harassment, we may not have the option to target cyberbullying in particular, but resort to Olweus advice about

leaning on tried and tested ways to handle traditional harassment, to make cyber-harassment follow. At this point in time, and in the Norwegian setting, Nordahl recommendations of “klasseledelse” has been chosen strategy for prevention of harassment in schools, a strategy intended to improve conditions for majorities of potential victims (Nordahl, Hemmer et al. 2012). When incidents do occur, whole-school approaches and intervention has gained recognition over the years as strategies that have effect. But for cyber-harassment, in our findings, one was just as exposed to cyber-harassment as traditional harassment after school hours. The venue has changed. And why is it important to researchers to discuss meaning of the word venue, and the issue of cyber-harassment as a added component or a supplementary component in the mix of complex human behaviour. To students in particular, the debate must seem of little practical use. But such issues come down to whether we as adults take guard at the right playground. If the watch duty is not in the schoolyard, then where is it? The question of what to do is tightly linked to the question of where to act. In our findings, participation rates indicate that there are two already dedicated groups, the teachers and the parents. Motivation is already in place. That is not always the case, and even our case, it is necessary to take one look at what may shake this starting point of good intentions.

The triple response is a means of stepping up quality compared with the 2000 survey (Rønning 2004). One may argue that the 2000 survey had extraordinary good response rates, and thus already did present high quality validity. In this thesis, selected school have samples near 1000, which is also good, and triple responses and finer tuned scales improve validity and reliability compared with the methods of the earlier study. Three measures combined answers to current research advice to look beyond prevalence rates (Kowalski, Limber et al. 2012, Cassidy, Faucher et al. 2013, Ertesvåg 2014). The project contribution is first at local school level; we may be enabling positive culture by addressing well-being, while at the same time considering mental health measures in the search for opportunities for the teacher to take appropriate action. Teachers also gain insight into the evolving backdrop of cyber-harassment research, which may aid knowledge based thus more confident choices in midst of all “every-day-decisions” they have to make. School leaders take steps to put researchers and teachers in close encounters over current issues of school practices, in line with revised regulations for teacher training emphasising competence to enable evaluating and applying research principles when building knowledge needed in local school settings (Vedeler 2013). Parent support of the project is also high, results showing solid participation rates in the 2013-14 dataset.

Conclusion

Regarding prevalence rates, my impression is that the harassment overall within the five schools lies rather steady, and by that, the small cyber-harassment factor is not necessarily an addition to the mix. If we see this as a new channel for aggression, the addition may have most effect on the physical factor. If one finds physical bullying reduction a positive outcome, then the reduction between years in our five-school sample is a welcome outcome. But if perceived severity indicates that the added component is of a more aggressive nature, then the level of aggression has not changed, the channel has, and preventive efforts within school setting stays equally important.

The phone in the pocket, with all its possibilities of online instant social communication, is expected to be more of a sophisticated social skills tool, as text and video is communicated at the same speed as speech, with possibility of being an effective social exclusion tool. These are not the characteristics traditionally associated with physical aggression events. But the child with the phone may be aware of the added severity of an “attack”, and thus put an event of cyber-harassment into the more “violent” category, along with the ethically unacceptable, extreme event of “kicking”.

When finding ways to act when challenged by incidents of cyber-harassment, findings within our sample are counts too low for specific cyber-harassment interventive or interceptive tactics. The world around us is ever changing, fast. We see our results as mere ripples on water, not even tips of icebergs, and have to go for “safe and all-round choices”. The Olweus tested and approved recommendations for handling traditional incidents is all we have got. The current knowledge base to which we invite the teachers stress attention to high impact issues relevant to the group. Cassidy calls for less punitive approaches (Cassidy, Faucher et al. 2013), and like Kowalski, recommend that we do our share to foster kindness in cyberspace and take part in digital everyday life of our children and young (Kowalski, Limber et al. 2012). Youth reluctance to contact adults, and preference of parents before teachers indicate taking parents involvement into even more consideration. This is advice on general level. Results indicate that adults may pay attention to activity concerning chat and social media, as these are items of most scores within the group, and also harassment by means of visual media like pictures and video among younger grades. Findings also indicate that in the five schools, issues of peer-harassment already have attention from parents and teachers.

Litterature

Arora, T. (1994). "Measuring Bullying with the "Life in School" Checklist." *Pastoral Care in Education* 12(3): 11-15.

Cassidy, W., Faucher, C., Jackson, M. (2013). "Cyberbullying among youth: A comprehensive review of current international research and its implications and application to policy and practice." *Sch. Psychol. Int.* 34(6): 575-612.

Djupedal, Ø. (2015). «Å høre til: virkemidler for et trygt psykososialt skolemiljø»: Uutredning fra utvalg oppnevnt ved kongelig resolusjon 9. august 2013: avgitt til Kunnskapsdepartementet 18. mars 2015. Oslo, Departementenes sikkerhets- og serviceorganisasjon, Informasjonsforvaltning. NOU 2015:2.

Dooley, J., Pyzalski, J., Cross, D. (2009). "Cyberbullying Versus Face-to-Face Bullying A Theoretical and Conceptual Review." *Z. Psychol.-J. Psychol.* 217(4): 182-188.

Ertesvåg, S. K. (2014). "Improving anti-bullying initiatives: The role of an expanded research agenda." *Journal of Educational Change.*

Evans, C. B. R., Fraser, M. W., Cotter, K. L. (2014). "The effectiveness of school-based bullying prevention programs: A systematic review." *Aggression and violent behavior* 19(5): 532-544.

Farrington, D. P. and M. M. Ttofi (2009). "How to reduce school bullying." *Victims and Offenders* 4(4): 321-326.

Goodman, A. and R. Goodman (2009). "Strengths and Difficulties Questionnaire as Dimensional Measure of Child Mental Health." *Journal of the American Academy of Child & Adolescent Psychiatry* 48(4): Vol.48(44), p.400.

King, B. M., Rosopa, P. J., Minium, E. W.(2011). *Statistical reasoning in the behavioral sciences.* New York, Wiley.

Kowalski, R. M., Limber, S. P., Agatston, P. W. (2012). *Cyberbullying: bullying in the digital age.* Chichester, Wiley-Blackwell.

Lødding, B. and N. Vibe (2010). "Hvis noen forteller om mobbing...": utdypende undersøkelse av funn i Elevundersøkelsen om mobbing, urettferdig behandling og diskriminering. Oslo, NIFU STEP. 48/2010.

Medietilsynet (2014). *Barn og medier 2014 : fakta om barn og unges (9-16 år) bruk og opplevelser av medier.* Fredrikstad, Medietilsynet.

Medietilsynet (2014). *Foreldre om småbarns mediebruk 2014 : foreldres syn på barns (1-12 år) bruk og opplevelser av medier,* Medietilsynet.

Menesini, E. (2012). "Cyberbullying: The right value of the phenomenon. Comments on the paper "Cyberbullying: An overrated phenomenon?." *European Journal of Developmental Psychology* 9(5): 544-552.

Menesini, E., Nocentini, A., Calussi, P. (2011). "The Measurement of Cyberbullying: Dimensional Structure and Relative Item Severity and Discrimination." *Cyberpsychology Behav. Soc. Netw.* 14(5): 267-274.

- Mynard, H. and S. Joseph (2000). "Development of the Multidimensional Peer-Victimization Scale.(Statistical Data Included)." *Aggressive Behavior* 26(2): 169.
- Nordahl, T., Hemmer, K. J., Hansen, O. (2012). *Klasseledelse*. Oslo, Gyldendal akademisk.
- Olweus, D. (1974). *Hakkekyllinger og skolebøller : forskning om skolemobbing. Hackkycklingar och översittare*. Oslo, Cappelen.
- Olweus, D. (1993). *Bullying at school: what we know and what we can do*. Oxford, Blackwell Publ.
- Olweus, D. (2012). "Cyberbullying: An overrated phenomenon?" *Eur. J. Dev. Psychol.* 9(5): 520-538.
- Olweus, D. (2013). "School Bullying: Development and Some Important Challenges." *Annual Review of Clinical Psychology* 9: 751–780.
- Reinfjell, T. and T. Jozefiak (2012). "Måleegenskaper ved den norske versjonen av Kinder Lebensqualität Fragebogen (KINDL®)." *PsykTestBarn*.
- Rønning, J. A., Handegaard, B. H., Sourander, A., Morch, W. T. (2004). "The Strengths and Difficulties Self-Report Questionnaire as a screening instrument in Norwegian community samples." *Eur. Child Adolesc. Psych.* 13(2): 73-82.
- Rønning, J. A. (2004). "Self-perceived peer harassment in a community sample of Norwegian school children." *Child abuse & neglect* 28(10): 1067-1079.
- Rønning, J. A., Thorvaldsen, S., Pettersen, G. O., Eidsvik, A. K. , Skaalvik, K. (2012). *Trivsel i Tromsø, prosjektbeskrivelse*. D. H. F. Institutt for klinisk medisin, Universitetet i Tromsø and Institutt for lærerutdanning og pedagogikk, Samfunnsvitenskap og Lærerutdanning, Universitetet i Tromsø.
- Slonje, R. and P. K. Smith (2008). "Cyberbullying: Another main type of bullying?: Personality and Social Sciences." *Scandinavian Journal of Psychology* 49(2): 147-154.
- Smith, P. K., Mahdavi, J.,Carvalho, M., Fisher, S., Russell, S., Tippett, N. (2008). "Cyberbullying: Its nature and impact in secondary school pupils." *Journal of Child Psychology and Psychiatry and Allied Disciplines* 49(4): 376-385.
- Sourander, A., Klomek, A. B., Ikonen, M., Lindroos, J., Luntamo, T., Koskelainen, M., Ristkari, T., Helenius, H. (2010). "Psychosocial Risk Factors Associated With Cyberbullying Among Adolescents A Population-Based Study." *Arch. Gen. Psychiatry* 67(7): 720-728.
- Thompson, D., Arora, T., Sharp, S. (2002). *Bullying: effective strategies for long-term improvement*. London, RoutledgeFalmer.
- Vedeler, G. W. (2013). "Universitetsskoleprosjektet i Tromsø: Oppsummering 2010-2013. Innspill til veien videre."
- Wendelborg, C., Røe, M., Federici, R. A. (2014). *Elevundersøkelsen 2013: analyse av Elevundersøkelsen 2013*. Trondheim, NTNU Samfunnsforskning, Mangfold og inkludering. 2014.

Appendix

The 2000 and the 2013 data set:

Checklist to confirm corresponding items for student response
to three dimensions of traditional harassment

Eight items investigating the cyber-dimension of peer-harassment

Authors' translation of Norwegian terms in the 2013 questionnaire

Student questionnaire «My life in School Checklist +» as used in 2000

Presented to respondents as print on paper

Parent questionnaire «My life in School Checklist +» as used in 2013

Presented to respondents as print on paper

Teacher questionnaire «My life in School Checklist +» as used in 2013

Thesis present downloaded print from Questback online survey tool

Student questionnaire «My life in School Checklist +» as used in 2013

Thesis present downloaded print from Questback online survey tool

**The 2000 and the 2013 data set:
Checklist to confirm corresponding items for student response
to three dimensions of traditional harassment**

Physical peer-harassment items, 2000 and 2013 survey questions compared				
	SPSS item name 2000	Item label	SPSS item name 2013	Item label
2000	var 5	Prøvd å sparke meg		
2013			asKtrak3	Prøvdåsparkemeg.
2000	var 9	Truet meg		
2013			asKtrak5	Truetmeg.
2000	var 34	Prøvd å sparke krokfot på meg		
2013			asKtrak12	Prøvdåsparkekrokfotpåmeg.
2000	var 40	Prøvd å slå meg		
2013			asKtrak15	Prøvdåslåmeg.

Verbal peer-harassment items, 2000 and 2013 survey questions compared				
	SPSS item name 2000	Item label	SPSS item name 2013	Item label
2000	var 2	Kalt meg stygge ting		
2013			asKtrak1	Kaltmegstyggeting.
2000	var 4	Sagt noe stygt om min familie		
2013			asKtrak2	Sagtnoestygtomminfamilie.
2000	var 7	Vært slem fordi jeg er annerledes		
2013			asKtrak4	Værtekkelmedmegfordijegerannerledes.
2000	var 16	Ertet meg		
2013			asKtrak6	Ertetmeg.
2000	var 25	Prøvd å såre meg		
2013			asKtrak10	Prøvdåsåremeg.

Social peer-harassment items, 2000 and 2013 survey questions compared				
	Variable name 2000	Item label	Variable name 2013	Item label
2000	var 20	Fått de andre elevene til å være slem mot meg		
2013			asKtrak7	Fåttdeandreelevenetilåværeslemmotmeg.
2013	var 21	Prøvd å få meg til å være slem mot andre		
2013			asKtrak8	Prøvdåfåmegtilåværeslemmotandre.
2000	var 23	Prøvd å lure meg til å gjøre noe galt		
2013			asKtrak9	Prøvdåluremegtilågjørenoegalt.
2000	var 27	Fått meg til å gjøre noe jeg ikke hadde lyst til		
2013			asKtrak11	Fåttmegtilågjørenoejegikkehaddelysttil.
2000	var 37	Truet med å sladre på meg		
2013			asKtrak13	Truetmedåsladrepåmeg.
2000	var 39	Fortalt en løgn om meg		
2013			asKtrak14	Fortaltenløgnommeg.

**Eight items investigating the cyber-dimension of peer-harassment
Authors' translation of Norwegian terms in the 2013 questionnaire**

Items of cyber-harassment by peers, 2013 survey questions	
Item number	Item question
1	"nasty text messages or unwanted pictures or video on my phone"
2	"creepy calls to my mobile phone"
3	"nasty or rude e-mail"
4	"insults online (Facebook, Twitter or web)"
5	"insults by chat messages, as at Skype or within games"
6	"insults on blogs"
7	"unpleasant pictures or video of me posted on internet (Facebook, YouTube, web and so on)"
8	«Keeping me from online groups where I would like to be, as on Facebook or alike»

Mitt liv i skolen, 4. – 10. klasse

Vi ønsker å finne ut hva som skjer med barn i skolen. I dette skjemaet er det noen spørsmål om hva som kan ha skjedd deg i løpet av siste uke. Svar på hvert spørsmål så nøyaktig som mulig. Sett kryss i den ruta som passer best.

ID-kode:

Skolekode:

Jeg går i klassetrinn:

Jeg er jente:

Jeg er gutt:

Sett kryss i den ruta som passer best.

I løpet av denne uken har en annen elev:	Ikke i det hele tatt	En gang	Mer enn en gang
1. Hjulpet meg med hjemmeleksene			
2. Kalt meg stygge ting			
3. Sagt noe jeg ble glad for			
4. Sagt noe stygt om min familie			
5. Prøvd å sparke meg			
6. Vært veldig snill mot meg			
7. Vært slem fordi jeg er annerledes			
8. Gitt meg en presang			
9. Truet meg			
10. Gitt meg penger			
11. Forlangt å få penger av meg			
12. Prøvd å skremme meg			
13. Spurt meg om noe dumt			
14. Lånt meg noe			
15. Bedt meg om å forsvinne			
16. Ertet meg			
17. Snakket om klær med meg			
18. Fortalt meg en vits			
19. Fortalt meg en løgn			

Vær så snill å snu arket – det er noen spørsmål til på den andre siden

1

I løpet av denne uken har en annen elev:	Ikke i det hele tatt	En gang	Mer enn en gang
20. Fått de andre elevene til å være slem mot meg			
21. Prøvd å få meg til å være slem mot andre			
22. Sett stygt på meg			
23. Prøvd å lure meg til å gjøre noe galt			
24. Hjulpet meg å bære noe			
25. Prøvd å såre meg			
26. Hjulpet meg med skolearbeidet			
27. Fått meg til å gjøre noe jeg ikke hadde lyst til			
28. Snakket med meg om et fjernsynsprogram			
29. Tatt noe fra meg			
30. Delt noe med meg			
31. Vært ekkel med meg p.g.a. min hudfarge			
32. Skreket sint til meg			
33. Spilt et spill med meg			
34. Prøvd å sparke krokket på meg			
35. Snakket om sine interesser med meg			
36. Ledd av meg			
37. Truet med å sladre på meg			
38. Prøvd å ødelegge noen av mine ting			
39. Fortalt en løgn om meg			
40. Prøvd å slå meg			



Trivsel i Tromsø

Spørreskjema for skoler i samarbeid med Universitetet i Tromsø. **Foreldreversjon.**
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Kjære foreldre/foresatte,

Takk for at du har sagt ja til å fylle ut dette spørreskjema om ditt barns trivsel og helsemessige livskvalitet.

Vær vennlig å ta hensyn til følgende når du svarer:

- Les nøye gjennom hvert spørsmål,
- tenk over hvordan barnet hadde det siste uka (eller de siste 2-3 månedene hvis det spørres om det), og
- kryss av det svaret som passer best for barnet ditt.
- Svarene behandles konfidensielt og kun av forskere ved Universitetet.

Unntatt offentlighet

Merk av eller fyll ut !	
Barnet mitt er: <input type="checkbox"/> en jente <input type="checkbox"/> en gutt.	Barnets for- og etternavn er _____
Barnet går i _____ klasse	Barnet går på _____ skole.
Du er: Mor <input type="checkbox"/> Far <input type="checkbox"/> Annet <input type="checkbox"/>	

7. OPPLEVELSER AV KLASSISK MOBBING

En elev kan bli utsatt for negative eller sårende handlinger ofte eller av og til. Denne plagingen kan være verbal (f. eks. navnekalling, trusler), fysisk (f.eks. slag) eller psykologisk (f.eks. rykter, å fryse ut/ekskudere noen). Svar på grunnlag av det du selv kjenner til for barnet ditt de siste 2-3 månedene.

Generell mobbing		Aldri/ vet ikke	Bare en eller to ganger	To eller tre ganger i måneden	Omtrent en gang i uken	Mange ganger per uke
A	Hvor ofte har barnet ditt blitt mobbet i skoletiden?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B	Hvor ofte har barnet ditt blitt mobbet utenom skoletiden?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C	Har barnet ditt vært med på å mobbe andre i skoletiden?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D	Har barnet ditt vært med på å mobbe andre utenom skoletiden?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E	Forteller barnet ditt at det har sett andre elever bli mobbet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Spesielle former for trakassering		Aldri/ vet ikke	Bare en eller to ganger	To eller tre ganger i måneden	Omtrent en gang i uken	Mange ganger per uke
F	Hvor ofte har noen mobbet barnet ditt på følgende måter:					
1	Kalt barnet ditt stygge ting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Sagt noe stygt om barnets familie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Prøvd å sparke barnet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Vært ekkel med barnet fordi det er annerledes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Truet barnet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Ertet barnet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Fått de andre elevene til å være slem mot barnet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Prøvd å få barnet ditt til å være slem mot andre	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Prøvd å lure barnet ditt til å gjøre noe galt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Prøvd å såre barnet ditt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	Fått barnet ditt til å gjøre noe det ikke hadde lyst til	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Prøvd å sparke krokfot på barnet ditt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Truet med å sladre på barnet ditt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	Fortalt en løgn om barnet ditt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Prøvd å slå barnet ditt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. DIGITAL MOBBING

Digital mobbing skjer via mobiltelefoner eller internett når personer blir ertet, eller hvis noen legger ut noe på nettet som personen ikke liker. Svar på grunnlag av det du selv kjenner til for din datter/sønn de siste 2-3 månedene.

		Aldri/ vet ikke	Bare en eller to ganger	To eller tre ganger i måneden	Omtrent en gang i uken	Mange ganger per uke
A	Hvor ofte har barnet ditt blitt digital mobbet i skoletiden?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B	Hvor ofte har barnet ditt blitt digital mobbet utenom skoletiden?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C	Har barnet ditt vært med på å mobbe andre digitalt i skoletiden?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D	Har barnet ditt vært med på å mobbe andre digitalt utenom skoletiden?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E	Forteller barnet ditt at det har sett andre elever bli digitalt mobbet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F	Hvor ofte har noen mobbet barnet ditt digitalt på følgende måter:					
1	Ekle tekstmeldinger (SMS) eller ubehagelige bilder/videoer på mobilen til barnet ditt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Ekle oppringinger på mobilen til barnet ditt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Skremmende eller stygg epost til barnet ditt	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Ertert eller fornærmet barnet ditt på Internett (Facebook, Twitter, web osv.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Ertert eller fornærmet barnet ditt ved hjelp av chat-meldinger i f.eks. Skype eller spill	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Ertert eller fornærmet barnet ditt ved innlegg/kommentar på blog	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Ubehagelige bilder/videoer om barnet ditt på Internett (Facebook, YouTube, web osv.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Utestengt barnet ditt fra Facebook-gruppe eller liknende der hun/han ønsket å være med	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Trivsel i Tromsø, lærerskjema.

Kjære kontaktlærer,

Takk for at du og din skole bidrar til undersøkelsen om dine elevers trivsel og helsemessige livskvalitet. Det fylles ut ett skjema for hver elev. Alle skjema aidentifiseres før de blir analysert.

Vær vennlig å ta hensyn til følgende når du svarer:

- Les nøye gjennom hvert spørsmål,
- tenk over hvordan eleven hadde det de siste 2-3 månedene, og
- kryss av det svaret som passer best for hver elev, og
- husk å trykke "send" når du er ferdig!

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Spørsmål om vansker: © SDQ/Robert Goodman 2005.

Merk av eller fyll ut !

Eleven er: en jente en gutt

Elevens fornavn:

Elevens etternavn:

Eleven går i

4. trinn 5. trinn 6. trinn 7. trinn 8. trinn
 9. trinn 10. trinn

Eleven går på Velg alternativ

OPPLEVELSER AV KLASSISK MOBBING

En elev kan bli utsatt for negative eller sårende handlinger ofte eller av og til, og fra en eller flere elever. Denne plagingen kan være verbal (f. eks. navnekalling, trusler), fysisk (f.eks. slag) eller psykisk (f.eks. rykter, å fryse ut/ekskludere noen). Svar på grunnlag av det du selv kjenner til for din elev de siste 2-3 månedene.

6) * Generell mobbing

	Aldri / vet ikke	Bare en eller to ganger	To eller tre ganger i månedene	Omtrent en gang i uken	Mange ganger per uke
Hvor ofte har eleven blitt mobbet i skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har eleven blitt mobbet utenom skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har eleven vært med på å mobbe andre i skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har eleven vært med på å mobbe andre utenom skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forteller eleven at han/hun har sett andre elever bli mobbet?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Spesielle former for trakassering

Hvor ofte har noen mobbet eleven på følgende måter:

	Aldri / vet ikke	Bare en eller to ganger	To eller tre ganger i måned	Omtrent en gang i uken	Mange ganger per uke
Kalt eleven stygge ting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sagt noe stygt om elevens familie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å sparke eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vært ekkel med eleven fordi vedkommende er annerledes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Truet eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ertet eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fått de andre elevene til å være slem mot eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å få eleven til å være slem mot andre elever	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å lure eleven til å gjøre noe galt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å såre eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fått eleven til å gjøre noe vedkommende ikke hadde lyst til	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å sparke snublefot på eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Truet med å sladre på eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fortalt en løgn om eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å slå eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

DIGITAL MOBBING

Digital mobbing skjer via mobiltelefoner eller internett når personer blir ertet, eller hvis noen legger ut noe på nettet som person ikke liker. Svar på grunnlag av det du selv kjenner til for din elev de siste 2-3 månedene.

	Aldri / vet ikke	Bare en eller to ganger	To eller tre ganger i måneden	Omtrent en gang i uken	Mange ganger per uke
Hvor ofte har eleven blitt digitalt mobbet i skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har eleven blitt digitalt mobbet utenom skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har eleven vært med på å mobbe andre digitalt i skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har eleven vært med på å mobbe andre digitalt utenom skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forteller eleven at han/hun har sett andre elever bli digitalt mobbet?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10) * Hvor ofte har noen mobbet eleven digitalt på følgende måter?

	Aldri / vet ikke	Bare en eller to ganger	To eller tre ganger i måneden	Omtrent en gang i uken	Mange ganger per uke
Ekle tekstmeldinger (SMS) eller ubehagelige bilder/videoer på mobilen til eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ekle oppringinger på mobilen til eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skremmende eller stygg epost til eleven	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ertet eller fornærmet eleven på Internett (Facebook, Twitter, web osv.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ertet eller fornærmet eleven ved hjelp av chat-meldinger i f.eks. Skype eller spill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ertet eller fornærmet eleven ved innlegg/kommentarer på blogg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ubehagelige bilder/videoer om eleven på Internett (Facebook, YouTube, web osv.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Utestengt eleven fra Facebook-gruppe eller liknende der hun/han ønsket å være med	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Trivsel i Tromsø, Elevskjema 12-16 år.

Hei,

Vi vil gjerne vite hvordan du har det for tiden. Derfor har vi tenkt ut noen spørsmål som vi ber deg svare på.

- Alle dine svar blir behandlet på en trygg måte, og dine lærere og de andre i klassen din vil ikke kunne finne ut hva du har svart.
- Les først gjennom spørsmålet.
- Tenk over hvordan du har hatt det den siste uka (eller de siste 2-3 månedene hvis det spørres om det).
- Kryss i hver del av på det svaret som passer best for deg.
- Husk å trykke på "Send" til slutt!

Det er ikke noe som heter riktige eller gale svar. Det som er viktig for oss er din mening.

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Spørsmål om vansker: © SDQ/Robert Goodman 2005.

Fortell oss noe om deg selv. Kryss av eller fyll ut !

Jeg er en jente en gutt

Mitt fornavn er:

Mitt etternavn er:

Jeg går i 8. trinn 9. trinn 10. trinn

Jeg går på Velg alternativ

OPPLEVELSER AV Å BLI MOBBET

En elev kan bli utsatt for negative eller sårende handlinger ofte eller av og til, og fra en eller flere personer. Plagingen kan være verbal (f. eks. navnekalling, trusler), fysisk (f.eks. slag) eller på annen måte (f.eks. rykter, å fryse ut/ekskludere noen). Svar på grunnlag av hvordan du har hatt det de siste 2-3 månedene.

12) * Generell Mobbing

	Aldri	Bare en eller to ganger	To eller tre ganger i måneden	Omtrent en gang i uken	Mange ganger per uke
Hvor ofte har du blitt mobbet i skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har du blitt mobbet utenom skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har du vært med å mobbe andre i skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har du vært med å mobbe andre utenom skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har du sett at andre elever blir mobbet?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Spesielle former for trakassering

Hvor ofte har noen mobbet deg på følgende måter:

	Aldri	Bare en eller to ganger	To eller tre ganger i måneden	Omtrent en gang i uken	Mange ganger per uke
Kalt meg stygge ting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sagt noe stygt om min familie	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å sparke meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vært ekkel med meg fordi jeg er annerledes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Truet meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ertet meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fått de andre elevene til å være slem mot meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å få meg til å være slem mot andre	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å lure meg til å gjøre noe galt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å såre meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fått meg til å gjøre noe jeg ikke hadde lyst til	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å sparke snublefot på meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Truet med å sladre på meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fortalt en løgn om meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prøvd å slå meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

DIGITAL MOBBING

Digital mobbing skjer med mobiltelefoner eller internett når noen blir ertet, eller når noen legger ut noe ubehagelig på nettet om en person de ikke liker. Svar på grunnlag av hvordan du har hatt det de siste 2-3 månedene.

	Aldri	Bare en eller to ganger	To eller tre ganger i måneden	Omtrent en gang i uken	Mange ganger per uke
Hvor ofte har du blitt digitalt mobbet i skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har du blitt digitalt mobbet utenom skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har du vært med å mobbe andre digitalt i skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har du vært med å mobbe andre digitalt utenom skoletiden?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hvor ofte har du sett at andre elever har blitt mobbet digitalt?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16) * Hvor ofte har noen mobbet deg digitalt på følgende måter? Dersom du ikke forstår spørsmålet kan du velge alternativet "Aldri".

	Aldri	Bare en eller to ganger	To eller tre ganger i måneden	Omtrent en gang i uken	Mange ganger per uke
Ekle tekstmeldinger (SMS) eller ubehagelige bilder/videoer på min mobil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ekle oppringinger på mobilen min	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Skremmende eller stygg epost til meg	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ertet eller fornærmet meg på Internett (Facebook, Twitter, web osv.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ertet eller fornærmet meg ved hjelp av chat-meldinger i f.eks. Skype eller spill	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ertet eller fornærmet meg på blog	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ubehagelige bilder/videoer om meg på Internett (Facebook, YouTube, web osv.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Utestengt meg fra Facebook-gruppe eller liknende der jeg ønsket å være med	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>