Research article

Sexual harassment victimization in adolescence: Associations with family background

Riittakeru Kaltiala-Heino\textsuperscript{a,b,c,*}, Sari Fröjd\textsuperscript{d}, Mauri Marttinen\textsuperscript{e,f,g}

\textsuperscript{a} University of Tampere, School of Medicine, 33014 University of Tampere, Finland
\textsuperscript{b} Vanha Vaasa Hospital, Vierinkiventie 1, 65380 Vaasa, Finland
\textsuperscript{c} Tampere University Hospital, Department of Adolescent Psychiatry, 33380 Pitkäniemi, Finland
\textsuperscript{d} University of Tampere, School of Health Sciences, 33014 University of Tampere, Finland
\textsuperscript{e} National Institute for Health and Welfare, Mental Health Unit, Box 30, 00271 Helsinki, Finland
\textsuperscript{f} University of Helsinki, Faculty of Medicine, 00014 University of Helsinki, Finland
\textsuperscript{g} Helsinki University Hospital, Department of Adolescent Psychiatry, Box 390, 00029 HUS, Finland

A R T I C L E   I N F O

Article history:
Received 9 August 2015
Received in revised form
15 November 2015
Accepted 7 April 2016
Available online 3 May 2016

Keywords:
Sexual harassment
Adolescence
Family factors

A B S T R A C T

Sexual harassment has been studies as a mechanism reproducing inequality between sexes, as gender based discrimination, and more recently, as a public health problem. The role of family-related factors for subjection to sexual harassment in adolescence has been little studied. Our aim was to study the role of socio-demographic family factors and parental involvement in adolescent’s persona life for experiences of sexual harassment among 14–18-year-old population girls and boys. An anonymous cross-sectional classroom survey was carried out in comprehensive and secondary schools in Finland. 90,953 boys and 91,746 girls aged 14–18 participated. Sexual harassment was elicited with five questions. Family structure, parental education, parental unemployment and parental involvement as perceived by the adolescent were elicited. The data were analyzed using cross-tabulations with chi-square statistics and logistic regressions. All types of sexual harassment experiences elicited were more common among girls than among boys. Parental unemployment, not living with both parents and low parental education were associated with higher likelihood of reporting experiences of sexual harassment, and parental involvement in the adolescent’s personal life was associated with less reported sexual harassment. Parental involvement in an adolescent’s life may be protective of perceived sexual harassment. Adolescents from socio-economically disadvantaged families are more vulnerable to sexual harassment than their more advantaged peers.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Exact definition of the term sexual harassment has been debated ever since the term was coined in 1970s (Pina, Gannon, & Saunders, 2009). Social sciences research has suggested three separate types of sexual harassment: gender harassment, unwanted sexual attention and sexual coercion (Buchanan, Bluestein, Nappa, Woods, & Depatie, 2013; Pina et al., 2009; Schneider, Pryor, & Fitzgerald, 2010). Gender harassment comprises verbal and non-verbal gender-based hostile/derogatory communication or gender related name-calling. Unwelcome sexual attention includes any sexual behaviour, propositions,
invitations, etc., which are distasteful and unwelcome to the target and perceived as offensive. Sexual coercion includes actual sexual assault but also any behaviours where sexual co-operation is extorted via promises/benefits or threats.

Sexual harassment has from the feminist standpoint been seen as a mechanism for reproducing beliefs and attitudes that devalue women because of their sex, and maintain rigid gender roles that reproduce inequality, even when targeting men (Pina et al., 2009; Street, Gradus, Stafford, & Kelly, 2007). From the legal viewpoint, sexual harassment is gender based discrimination, manifesting in a variety of actions that impair the target’s work performance or, in schools, limit the target’s ability to participate in and benefit from the educational programme, and create a hostile and offensive work/school environment (Fineran, 2002; Gruber & Fineran, 2007; Pina et al., 2009). Public health researchers may study sexual harassment as a form of sexually aggressive behaviour and a traumatizing experience for those who are victimized, and focus on exploring risk factors for perpetration of and submission to sexual harassment (Fineran & Bolen, 2006).

Among adolescents sexual harassment has been studied also as a transitional developmental phenomenon, an extension of aggressive be behaviours influenced and modified by the emerging sexual desires and increased socializing in mixed gender peer groups in early adolescence when social skills and behavioural control are still under construction (Ashbaugh & Cornell, 2008; McMaster, Connolly, Pepler, & Craig, 2002; Pellegrini & Long, 2002; Pepler et al., 2006). When adolescents are the target population, sexually aggressive behaviour may also be studied under the concept of bullying. It has been suggested that among adolescents, a considerable part of bullying is of sexual nature (Ashbaugh & Cornell, 2008; Shute, Owens, & Slee, 2008).

In the more severe end of the continuum, when referring to sexual coercion, the concept of sexual harassment overlaps with the concept of (child) sexual abuse. Among children, any sexual act involving an older child or an adult may be considered child sexual abuse. Age difference of 3–5 years is often used to exclude sexual activity among peers (Stoltenborgh, van Ijzendoorn, Euser, & Bakermans-Kranenburg, 2011). Sexual acts defined as sexual abuse may vary from non-contact experiences, such as exhibitionism, to sexual coercion and rape involving serious violence (Senn, Carey, & Vanable, 2008). However, child sexual abuse research often focuses on more severe experiences than sexual harassment literature, particularly on acts involving physical contact/penetration (Stoltenborgh et al., 2011).

Research studying sexual harassment experiences of adolescents often explicitly focuses in school context (American Association of University Women, 2001; Chiodo, Wolfe, Crooks, Hughes, & Jaffe, 2009; Goldstein, Malanchuk, Davis-Kean, & Eccles, 2007; Marshall, Faaborg-Andersen, Tilton-Weaver, & Stattin, 2013; McMaster et al., 2002). Sexual harassment may be more detrimental to adolescent mental health than other types of harassment (Bucchianeri, Eisenberg, Wall, Piran, & Neumark-Sztainer, 2014). Negative experiences in the field of sexuality may be particularly traumatizing during adolescence, a period of rapid physical, and particularly sexual development, when emotional development, the ability to cope with stressors and identity are still in the making. Experience of sexual harassment has been associated in cross-sectional studies with discomfort and avoidant behaviours at school, low self-esteem, mental and physical health complaints, trauma symptoms, low life satisfaction, substance abuse and eating pathology (American Association of University Women, 2001; Buchanan et al., 2013; Gruber & Fineran, 2007). Being a victim of sexual harassment has also been found longitudinally predictive of emotional and behavioural symptoms, feeling unsafe at school, and further sexual and other violent victimization (Chiodo et al., 2009; Goldstein et al., 2007), Marshall et al. (2013), however, found that while being sexually harassed was predictive of later self-injury, self-injuring behaviour was clearly more strongly predictive of later victimization to sexual harassment.

The majority of 15–16-year-old adolescents report having been subjected to unwanted sexual attentions, mostly to verbal or non-verbal harassment (Bruijn, Burrie, & vanWel, 2006; Petersen & Hyde, 2009). The American Association of University Women (2001) reported that 81% of adolescents in the 8th to 11th grades of public schools in the USA had experienced sexual harassment at school, 27% often. Chiodo et al. (2009), in the USA, found that 42.4% of boys and 44.1% of girls had experienced any of the elicited six sexually harassing interactions on at least two occasions. Petersen and Hyde (2009), also in the USA, reported an increase in sexual harassment victimization as the adolescents grew older: of girls (boys) in 5th grade 35% (55%), in the seventh grade 55% (68%), and in the 9th grade 65% (78%) had experienced any of the elicited nine sexually harassing behaviours during the past year. McMaster et al. (2002) in Canada likewise reported increasing victimization in higher grades, with experience of sexual harassment in 38% of girls and in 42% of boys in elementary/middle school. Increased subjection to sexual harassment with higher grade was also found in the study in the USA by Gruber and Fineran (2007).

Among adults, experiences of sexual harassment are more common in women than men (Buchanan et al., 2013; Street et al., 2007), and a similar gender difference has been suggested for adolescents (American Association of University Women, 2001; Fineran & Bolen, 2006; Goldstein et al., 2007; Mitchell, Ybarra, & Korchmaros, 2014), although not consistently (Chiodo et al., 2009; McMaster et al., 2002; Petersen & Hyde, 2009). Other risk factors have been reported early puberty, advanced pubertal maturation, risky (delinquent, older) peers, early dating, more romantic/sexual partners, belonging to a sexual minority, depression, substance use, delinquency, being a bully and being a sexual harassment perpetrator (Bruijn et al., 2006; Fineran & Bolen, 2006; Goldstein et al., 2007; Gruber & Fineran, 2007; McMaster et al., 2002; Miller et al., 2013; Mitchell et al., 2014; Pepler et al., 2006) but also greater attractiveness and greater perceived personal power (Petersen & Hyde, 2009). If sexual harassment is to be seen as a transitional developmental phenomenon arising from emerging sexuality in the context of immature social skills and increasing contact with the opposite sex, typical for early adolescents and likely to level off towards late adolescence (Ashbaugh & Cornell, 2008; McMaster et al., 2002; Pellegrini & Long, 2002; Pepler et al., 2006), mainly same aged peers could be expected to be targeted, and subjection to sexual harassment would also peak in early adolescence.
Sexual harassment experiences have also been found to be more common among adolescents reporting family violence, coercive discipline by and poor emotional bond with parents, and who are from lower than average income families (Fineran & Bolen, 2006; Mitchell et al., 2014). Similarly, increased risk of child sexual abuse has been associated with family psychosocial factors such as family discord and lack of parental commitment (Fergusson, Horwood, & Lynskey, 1996; Martin et al., 2011). Family-related factors are of the outmost importance to adolescent development, and unfavourable family factors increase risk for behavioural and emotional symptoms (Frojd, Kaltiala-Heino, & Rimpela, 2007; Kaltiala-Heino, Koivisto, Marttunen, & Frojd, 2011). Negative family factors are associated with earlier pubertal timing (Ge, Brody, Conger, Simons, & Murry, 2002) and earlier sexual debut (Kotchick, Shaffer, Forehand, & Miller, 2001; Wight, Williamson, & Henderson, 2006), and these again increase the risk of being sexually harassed. Negative family factors may result in less than optimal parental involvement, supervision and emotional support to the adolescent, and this may increase the risk of both involvement in risky peer groups and emotional symptoms that make the adolescent vulnerable to sexual harassment. However, family background has been little considered in adolescent sexual harassment studies, particularly not in Northern Europe. If adolescent sexual harassment experiences are associated with family-related factors, this may open entries for prevention and intervention.

Previous research on prevalence and correlates of sexual harassment victimization among adolescents has almost exclusively been carried out in the USA and in Canada. The aim of the present study is to explore experiences of sexual harassment in Finnish 14–18-year-old adolescents, and to study the role of family background in perceived sexual harassment in adolescence. In more detail, we set out to ascertain:

1. How commonly are 14–18-year-old Finnish adolescents subjected to sexual harassment?
2. Do experiences of sexual harassment differ according to sex and age?
3. Do experiences of sexual harassment differ according to family sociodemographic factors and parental involvement in the adolescent’s life?

2. Materials and methods

The School Health Promotion Study (SHPS) of the National Institute for Health and Welfare is a school-based survey designed to examine the health, health behaviours, and school experiences of teenagers. The survey is sent to every municipality in Finland, and the municipalities decide if the schools in their area will participate in the survey. The survey is run primarily for health policy and administrative purposes, and the data are available for scientific research at request. The main aim of the survey is to produce national adolescent health indicators that municipalities can utilize in planning services and that can nationally be used to assess effectiveness of health policies. The survey is conducted among 8th and 9th graders of comprehensive school and 2nd year students of secondary education (junior high school and vocational school) biennially in the same regions in Finland so that a pooled 2-year data (here 2010–2011) covers the whole country.

Participants completed the questionnaire anonymously during a school lesson under the supervision of a teacher, who did not interfere with the responses. Participants were informed about the nature of the study as well as the voluntary nature of participation in both oral and written form, and returning the survey was considered to be consent to participate. The questionnaire took 30–45 min to complete and was then placed in an envelope, sealed, and returned directly to the research centre. The study has been duly approved by the ethics committee of Pirkanmaa Hospital District and National Institute of Health and Welfare. The respondents are advised to talk with their parents or contact school health and welfare services (school nurse, doctor, psychologist or social worker), available in all schools in Finland, if they desire to discuss further anything elicited in the survey. The topics covered in the 2010–11 survey are listed in Appendix 1.

In 2010–2011, 90,953 boys and 91,746 girls aged 14–18 participated. Altogether, this comprises 57.1% of all 14–18-year-old population in 2011; of different age groups we reached 50.3% of 14-year-olds, 79.0% of 15-year-olds, 70.1% of 16-year-olds, 62.0% of 17-year-olds and 25.4% of 18-year-olds in the country. The mean (sd) age of both the boys and the girls was 16.3 (1.2) years.

2.1. Measures

An introduction to the whole survey advised the adolescents that the survey focuses on school experiences, health and lifestyle.

As part of a section titled Sexual health, the adolescents were asked if they had ever experienced any of the following: (1) Disturbing sexual propositions or harassment via telephone or the Internet; (2) Sexually insulting name-calling such as poop or whore; (3) Being touched in intimate body parts against one’s will; (4) Being pressured or coerced into sex; (5) Being offered money, goods or drugs/alcohol as payment for sex. The response alternatives to all five questions were yes/no. The five items were all statistically significantly inter-correlated at level p < 0.001, Pearson correlation coefficients ranging from 0.12 (between sexual name-calling and being offered payment for sex) to 0.54 (between being coerced or pressured to sex and being offered payment for sex) among boys, and from 0.20 (between sexual name-calling and being offered payment for sex) to 0.40 (between being coerced or pressured to sex and being offered payment for sex), and when explored as a scale, the five items displayed rather good internal consistency (Cronbach alpha 0.68). We studied prevalence and correlates of each of these items separately. According to the literature, the items could be divided to gender harassment (sexual name-calling),
unwanted sexual attention (propositions, touching) and sexual coercion (pressured/coerced to se, offered payment for sex), or the first two items (names-calling, propositions) could be studied as gender harassment and the other three (touching, pressure/coercion, payment offered) as sexual abuse. We, however, particularly wanted to explore whether the correlates of the experiences are different for milder and severe forms of sexual harassment, or for common and rare experiences.

The adolescents were asked if their family included mother and father/mother and stepfather/father and step-mother/mother alone/father alone/some other guardian/a spouse. In the analyses, family structure was dichotomized to mother and father/any other family constellation. Of the adolescents, 77.7% were living with both their parents.

Parental education was elicited separately for the father and the mother: “What is the highest education your father/mother has completed?” The response alternatives were comprehensive school only/junior high school or vocational school/junior high school or further vocational studies/university or university of applied sciences. For the analyses, parental educational level was coded low if neither of the parents had completed more than comprehensive school. Low parental education was reported by 6.2% of the respondents.

Parental unemployment was elicited “During the past year, have your parents been unemployed or laid off work?” The response alternatives were no/one of the parents/both parents. Of the respondents, 69.2% reported no parental unemployment during the past year, 27.2 reported that one of the parents had been unemployed or laid off, and 3.6% reported that both parents had been unemployed or laid off during the past year.

Parents’ involvement in the adolescent’s personal life was elicited with three questions: (a) “Do your parents know most of your friends?”. The response alternatives were “both know them (coded for the analyses =2)/only mother knows them (=1)/only father knows them (=0)/neither parent knows them (=0)”, (b) “Do your parents know about your whereabouts on Friday and Saturday nights?”, with response alternatives “always (=2)/sometimes (=1)/mostly not (=0)”, (c) “Can you talk with your parents about matters important to you? Hardly ever (=0)/now and then (=1)/fairly often (=2)/often (=3)”. A sum score was formed of these responses so that increasing scores indicated greater parental involvement.

### 2.2. Statistical analyses

Distributions of the sexual harassment variables studied are given for girls and boys (Table 1). The roles of sex and age for experience of sexual harassment were studied entering age and sex together in the logistic regression analyses as independent variables, with each sexual harassment variable in turn as the dependent variable. Next, family-related sociodemographic factors were entered into the logistic regression analyses controlling for age and sex, with sexual harassment variables each in turn as the dependent variable. Finally, parental involvement was further entered into the models. Odds Ratios with 95% confidence intervals are given.

### 2.3. Attrition

About 10% of pupils are absent from school on any given day. No information is available on those who did not attend on the day of the survey. Missing data on the variables of interest for the present analyses were negligible (Table 1).

### Table 1
Experiences of sexual harassment among 14–18-year-old Finnish adolescents (%).

<table>
<thead>
<tr>
<th></th>
<th>Girls n=91.746</th>
<th>Boys n=90.953</th>
<th>( p ); OR (95% CI) for girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disturbing sexual propositions or harassment via telephone or the Internet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>31.2</td>
<td>6.6</td>
<td>(&lt;0.001; 6.3 (6.1–6.5))</td>
</tr>
<tr>
<td>No</td>
<td>67.6</td>
<td>90.8</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1.1</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Sexually insulting name-calling such as whore or poo</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>40.9</td>
<td>36.1</td>
<td>(&lt;0.001; 1.2 (1.2–1.2))</td>
</tr>
<tr>
<td>No</td>
<td>57.9</td>
<td>61.3</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1.2</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Being touched in intimate body parts against your will</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>17.2</td>
<td>5.4</td>
<td>(&lt;0.001; 3.6 (3.5–3.8))</td>
</tr>
<tr>
<td>No</td>
<td>81.5</td>
<td>91.9</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1.3</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Being pressured or coerced into intercourse or other sexual behaviours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7.8</td>
<td>2.2</td>
<td>(&lt;0.001; 3.7 (3.5–3.9))</td>
</tr>
<tr>
<td>No</td>
<td>90.8</td>
<td>95.0</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1.3</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>Being offered money, goods or substances in return for sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5.9</td>
<td>2.4</td>
<td>(&lt;0.001; 2.5 (2.7–2.6))</td>
</tr>
<tr>
<td>No</td>
<td>92.8</td>
<td>94.7</td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1.3</td>
<td>2.9</td>
<td></td>
</tr>
</tbody>
</table>
Table 2
Experiences of sexual harassment by age in years among 14–18-year-old Finnish adolescents (% [n/N]).

<table>
<thead>
<tr>
<th>Age in years</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>p; OR (95% CI) for age as continuous variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propositions</td>
<td>16.6</td>
<td>19.1</td>
<td>20.4</td>
<td>20.0</td>
<td>20.4</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>(4970/2929884)</td>
<td>(9182/48035)</td>
<td>(9106/44659)</td>
<td>(8040/40187)</td>
<td>(3372/16548)</td>
<td>1.1 (1.1–1.1)</td>
<td></td>
</tr>
<tr>
<td>(12613/29902)</td>
<td>(20498/48016)</td>
<td>(17286/44649)</td>
<td>(14238/40176)</td>
<td>(5734/16545)</td>
<td>0.9 (0.9–0.9)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Name-calling</td>
<td>42.2</td>
<td>42.7</td>
<td>38.7</td>
<td>35.4</td>
<td>34.7</td>
<td></td>
</tr>
<tr>
<td>(12797/29850)</td>
<td>(5360/47939)</td>
<td>(5323/46618)</td>
<td>(4922/40155)</td>
<td>(2283/16522)</td>
<td>1.1 (1.1–1.1)</td>
<td></td>
</tr>
<tr>
<td>(1008/29829)</td>
<td>(2158/47909)</td>
<td>(2433/44595)</td>
<td>(2398/40125)</td>
<td>(1210/16517)</td>
<td>1.2 (1.2–1.2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Touching</td>
<td>9.4</td>
<td>11.2</td>
<td>11.9</td>
<td>12.3</td>
<td>13.8</td>
<td></td>
</tr>
<tr>
<td>Coerced/pressured</td>
<td>3.4</td>
<td>4.5</td>
<td>5.5</td>
<td>6.0</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>Offered payment</td>
<td>3.7</td>
<td>4.3</td>
<td>4.3</td>
<td>4.4</td>
<td>4.7</td>
<td></td>
</tr>
</tbody>
</table>

3. Results

Of the boys, 40.1% had experienced at least one form of sexual harassment and of the girls, 55.1% (p < 0.001). Girls reported all forms of sexual harassment more commonly than boys (Table 1).

Experiences of the different forms of sexual harassment were reported more commonly by older adolescents, except for sexual name-calling, which was less common with increasing age (Table 2).

As sex and age were statistically significantly associated with all the studied sexual harassment experiences, they were later controlled for in multivariate analyses. When family-related socio-demographic factors were entered into the logistic regression analyses controlling for age and sex, Odds Ratios for all the experiences of sexual harassment elicited were higher when the adolescent was not living with both parents and if there had been parental unemployment. Low parental education was associated with all forms of sexual harassment except sexual name-calling. Odds Ratios according to not living with both parents ranged from 1.3 (95% CI 1.3–1.4; p < 0.001) for sexual name-calling to 1.7 (95% CI 1.7–1.8; p < 0.001) for being offered payment for sex. Odds Ratios according to parental unemployment were between 1.2 (1.2–1.3; p < 0.001) and 1.3 (1.2–1.3; p < 0.001) when one of the parents had been unemployed, and 1.7 (1.6–1.7; p < 0.001) for name-calling to 3.3 (3.0–3.5; p < 0.001) offered payment for sex when both parents had been unemployed. Excluding sexual name-calling, Odds Ratios for experiences of sexual harassment according to low parental educational level ranged from 1.1 (1.0–1.1; p = 0.001) for disturbing sexual propositions/harassment via telephone/Internet to 1.4 (1.2–1.5; p < 0.001) for being offered payment for sex.

Finally, parental involvement was further entered into the models. All the experiences of sexual harassment elicited were inversely related to parental involvement in the adolescent’s personal life. Not living with both parents, parental unemployment and low parental education persisted as associated with being touched in intimate body parts against one’s wishes, being pressured/coerced into sex, and with being offered payment for sex. As to disturbing sexual propositions or harassment via telephone and Internet and sexual name-calling, low parental education did not persist as significantly associated with these forms of harassment, but not living with both parents and parental unemployment did (Table 3).

We finally ran stratified analyses, carrying out the analyses presented in Table 3 separately among 14, 15, 16, 17 and 18-year-old Finnish adolescents.

Table 3
Odds Ratios (OR, 95% confidence intervals) for experience of various forms of sexual harassment according to age, sex, family demographics, and relationship with parents among 14–18-year-old Finnish adolescents.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Disturbing propositions</th>
<th>Sexual name-calling</th>
<th>Unwanted touching</th>
<th>Pressured/coerced into sex</th>
<th>Offered payment for sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boy</td>
<td>Ref</td>
<td>1.2 (1.2–1.3)</td>
<td>1.2 (1.2–1.3)</td>
<td>1.4 (1.3–1.5)</td>
<td>1.4 (1.3–1.4)</td>
</tr>
<tr>
<td>Girl</td>
<td>6.8 (6.6–7.0)</td>
<td>1.2 (1.2–1.3)</td>
<td>1.3 (1.2–1.3)</td>
<td>1.3 (1.2–1.3)</td>
<td>1.6 (1.0–1.1)</td>
</tr>
<tr>
<td>Age (cont.)</td>
<td>1.1 (1.1–1.1)</td>
<td>0.9 (0.8–0.9)</td>
<td>1.1 (1.1–1.1)</td>
<td>1.2 (1.2–1.3)</td>
<td>1.1 (1.0–1.1)**</td>
</tr>
<tr>
<td>Family structure</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>Both parents</td>
<td>1.2 (1.2–1.3)</td>
<td>1.2 (1.2–1.3)</td>
<td>1.3 (1.2–1.3)</td>
<td>1.4 (1.3–1.5)</td>
<td>1.4 (1.3–1.4)</td>
</tr>
<tr>
<td>Any other</td>
<td>1.2 (1.2–1.3)</td>
<td>1.2 (1.2–1.3)</td>
<td>1.3 (1.2–1.3)</td>
<td>1.3 (1.2–1.3)</td>
<td>1.3 (1.2–1.3)</td>
</tr>
<tr>
<td>Parental unemployment</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>No</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
<tr>
<td>One</td>
<td>1.2 (1.2–1.3)</td>
<td>1.2 (1.2–1.3)</td>
<td>1.2 (1.1–1.2)</td>
<td>1.2 (1.1–1.2)</td>
<td>1.2 (1.1–1.2)</td>
</tr>
<tr>
<td>Both</td>
<td>1.8 (1.7–1.9)</td>
<td>1.5 (1.4–1.6)</td>
<td>1.8 (1.7–1.9)</td>
<td>2.4 (2.3–2.7)</td>
<td>2.6 (2.4–2.9)</td>
</tr>
<tr>
<td>Parental education</td>
<td>Low</td>
<td>(1.0–1.1)**</td>
<td>1.0 (0.9–1.0)**</td>
<td>1.1 (1.0–1.1)**</td>
<td>1.2 (1.1–1.3)</td>
</tr>
<tr>
<td></td>
<td>Intermediate or high</td>
<td>0.8 (0.8–0.8)</td>
<td>0.8 (0.8–0.8)</td>
<td>0.8 (0.8–0.8)</td>
<td>0.7 (0.7–0.7)</td>
</tr>
<tr>
<td>Parental involvement</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
<td>Ref</td>
</tr>
</tbody>
</table>

**p < 0.006; **p < 0.005; in all other cells in all comparisons, p < 0.001.
4. Discussion

The reported experiences of sexual harassment were common, 40.1% in boys and 55.1% in girls. Even if some there are reports of clearly higher prevalence in both sexes (American Association of University Women, 2001) most of the studies, carried out in the USA and in Canada, conclude that of adolescents, one third to two thirds report these experiences (Chiodo et al., 2009; Gruber & Fineran, 2007; McMaster et al., 2002; Petersen & Hyde, 2009). The phenomenon appears similar in Finland as it is in Northern America, even if there are differences in methodology between the studies. Many have used questionnaires shortened to different number of items from the AAUW questionnaire (Chiodo et al., 2009; Gruber & Fineran, 2007; Miller et al., 2013; Petersen & Hyde, 2009), and the elicited time frame has varied. Our formulation allowed considering lifetime experiences, yet the figures were lower than or comparable to studies limiting the elicited time frame to 3–12 months (Chiodo et al., 2009; Gruber & Fineran, 2007; Petersen & Hyde, 2009). This may be due to the limited number of items in our questionnaire. We did not, for example, encourage the respondents to consider jokes, gestures, pictures or spreading sexual rumours commonly mentioned in earlier studies (American Association of University Women, 2001). As among adults (Buchanan et al., 2013; Street et al., 2007), girls reported more subjection to sexual harassment than boys, but this has not always been the case in adolescent studies (Chiodo et al., 2009; McMaster et al., 2002; Petersen & Hyde, 2009), even if it is to be noted that what boys report more is usually less severe forms of harassment such as sexual name-calling, sexual pictures, jokes and gestures.

Sexual harassment experiences in our and previous studies were more common than reported subjection to child sexual abuse. A meta-analysis on prevalence of child sexual abuse across nations suggested a total prevalence of 18% in females and 7.6% in males (Stoltenborgh et al., 2011) In the review by Pereda, Guilera, Forns, and Gomez-Benito (2009) the prevalence rates varied by country but the median prevalence reported was 10% among males while among females the most frequent rates fell between 10 and 20%. Even if the concepts of child sexual abuse and sexual harassment partially overlap, child sexual abuse tends to focus on more coercive and violent form of abuse, and by definition includes a certain age difference between the victim and the perpetrator; thus studies on child sexual abuse will not include peer to peer sexual name-calling, sexual pictures, jokes and gestures and alike.

As in several studies, (Gruber & Fineran, 2007; McMaster et al., 2002; Petersen & Hyde, 2009), sexual harassment experiences were more common among older adolescents. Some research has suggested that sexual harassment is related to the developmental phase of early adolescence, with increasing sexual desire, increasing involvement in mixed-gender peer groups and imperfectly developed behavioural controls and social skills (McMaster et al., 2002; Pellegrini & Long, 2002; Pepler et al., 2006). Consequently, assuming that mainly same aged peers are targeted, subjection to sexual harassment would also peak in early adolescence. This may, however, explain only peer-to-peer gender harassment experiences (name-calling in our data). As adolescents grow older, they are increasingly in contact with people from all age groups, and become targets of attention from adults. We did not elicit who had harassed the respondents. Some of the experiences likely came from peer-to-peer interactions, but some also from interactions with older adolescents and adults. Experiences of sexual name-calling decreased with age, contrary to the other harassment experiences. Perhaps sexual name-calling is mostly related to interactions with same-aged peers and decreases as adolescents learn behavioural control, social skills and how to deal with their sexual desires.

Not living with both parents, low parental educational level and parental unemployment were associated with increased Odds Ratios for reporting any of the sexual harassment experience, even if the effect sizes for parental education were indeed small and did not persists after adding parental involvement. All the associations were further stronger regarding sexual coercion than gender harassment or unwanted sexual attention, and regarding parental unemployment, clear increase was seen from reporting unemployment of one parent to that of both parents. Strongest associations according to family structure and parental unemployment were from considerable to very strong. Two-parent families with favourable socioeconomic conditions may have better resources to supervise their adolescent offspring, which again may result in less involvement in situations where sexual harassment occurs. Less favourable socio-demographic family characteristics could result in less parental involvement in the adolescent’s life, thereby predisposing adolescents to risky situations or poor coping. Regarding child sexual abuse, some studies have reported increased risk according to low SES, but not all (Brown, Cohen, Johnson, & Salzinger, 1998; Fergusson et al., 1996; Martin et al., 2011) In a large Israeli study (Attar-Schwartz, 2009), subjection to sexual harassment was more common in schools where there were greater shares of adolescents from low SES families. The authors discussed, as above, the possibility that in low SES families, parental stress may result in less supervision, which may contribute to juvenile delinquency and aggression, and consequently also to victimization. As to sexual harassment, it is known that perpetration and victimization often overlap (Gruber & Fineran, 2007; Miller et al., 2013). Our findings on the associations between family socio-economic factors and suffering sexual harassment are in line with those of Attar-Schwartz (2009), although we studied the role of socio-economic factors on the individual, not the group level.

Sexual harassment can also be seen as a form of bullying, and sexual harassment and bullying perpetration coincide in adolescence (Ashbaugh & Cornell, 2008; DeSouza & Ribeiro, 2005; Gruber & Fineran, 2007; Miller et al., 2013). It is characteristic of bullying that it targets peers who are weaker (physically, psychologically or regarding social status in peer group) than the perpetrator(s) and thus unable to defend themselves (Kaltiala-Heino & Frojd, 2011; Pepler et al., 2006). Low parental
education, parental unemployment and not living with both parents are all likely to indicate less advantaged economic resources that may make the adolescent vulnerable to becoming target of bullying/harassment.

Greater parental involvement in the adolescent’s personal life was inversely associated with subjection to sexual harassment on any kind. Even if our data do not allow for causal conclusions, possible ways how the association may be created are discussed. Adolescents from families with more involved parents may acquire better resources themselves to withdraw from risky interactions, and it is also possible that they have better resources to cope with negative experiences such as sexual harassment, and therefore perhaps report it less than those who are more burdened by it. Lack of parental involvement is associated with emotional and behavioural problems in adolescents (Frojd et al., 2007), and these problems may further be vulnerability factors predisposing them to subjection to bullying and sexual harassment (Kaltiala-Heino & Frojd, 2011; Marshall et al., 2013). On the other hand, if sexual harassment occurs in the context of the home, it could also be the very reason for low parental involvement. After sexual harassment experiences in the home adolescents could be willing to distance themselves from the parents and be less likely to disclose to parents information elicited in parental involvement questions in the present study. Unfortunately the SHPS does not contain information on who had perpetrated the forms of harassment the adolescents reported. We cannot rule out the possibility that some of the sexual harassment takes place within the families, and this may be more common in less advantaged and less cohesive families, who likely suffer from greater psychosocial stress than do more advantaged families.

It is noteworthy that the association of socio-economic family factors with sexual harassment experiences also persisted when parental involvement was included in the models. This suggests that their effect is not solely mediated through parental involvement but that they are independent risk factors for experiencing sexual harassment. Even if the data are cross-sectional and does not allow conclusions on causality, it is reasonable to consider socio-demographic factors as risk factors for, not as consequences of any adolescent outcome.

As in some earlier studies (Chiodo et al., 2009; Williams et al., 2014) sexual harassment was, regardless of type, reported more commonly by girls, but the Odds Ratios for reporting harassment by sex varied between the different harassment types. The OR for sexual name-calling according to female sex was only slightly increased, whereas that for disturbing propositions was almost seven-fold, for example. On the other hand, the family factors studied had fairly similar associations with all the five sexual harassment experiences studied. The associations between family variables and sexual harassment experiences were moreover similar across age cohorts. Less favourable family factors are associated with sexual harassment experiences among adolescent off-springs even beyond middle adolescence, and parental involvement in adolescent’s life is inversely associated with sexual harassment experiences even when the adolescent comes of age. It is striking that gender harassment like sexual name-calling and sexual coercion such as being pressured or coerced to sex or being offered payment for sex have similar family-related correlates.

A strength of the present study is a uniquely large population based sample that covers five age cohorts of early and middle adolescents. As a classroom survey the SHPS reaches the majority of adolescents in the age groups studied. The coverage of comprehensive schools is about 99% in Finland, and the coverage of secondary education is about 90% (https://tietoanuorista.fi/hyvinvointi-indikaattorit/koulutus). Of the 15–16-year-olds, more than two thirds of the age group in the whole country was reached, and of the 17-year-olds, almost two thirds. Of 14-year-olds, a great share is not yet attending the 8th grade, and of the 18-year-olds, many have already graduated from secondary school. This, the participants represent a smaller proportion of all in these age groups, but absolute numbers are nevertheless very high. Of the pupils, 10–15% are invariably absent on any given day. It is possible that these adolescents have more experiences of sexual harassment than those present, as unwillingness to attend school is one of the negative consequences of sexual harassment (American Association of University Women, 2001). There has been research in the UK showing that pupils habitually absent from school or out of school for other reasons have higher rates of vulnerability to sexual abuse by peers than others (Barter, 2009; Wood, Barter, & Berridge, 2011). Therefore the present rates of sexual harassment may be slightly underestimates. However, even high levels of non-response may not necessarily have an effect on the associations studied (Van Loon, Tijhuis, Picavet, Surtees, & Ormel, 2003). Even if the topics analyzed in the present study were sensitive, only a few of those who participated had skipped answering these items. This adds to the reliability of the results.

Experiences of sexual harassment were elicited by asking whether the respondent had experienced certain behaviours. The term “sexual harassment” was not mentioned. The questions were a part of a large survey addressing several types of experiences and behaviour. Thus, lengthy and detailed standardized questionnaires on sexual harassment or abuse could not be used. The questions on sexual harassment were placed in a section called Sexual health. It has been shown that the context in which experiences of sexual harassment are elicited influences the reporting of it. The “framing” – the name of the survey, the contents of the rest of the survey, and the associations created by knowing who are responsible for the survey may all affect how respondents understand given questions and how they respond (Galesic & Tourangeau, 2007). In the present data we believe that the questions on sexual harassment were as neutrally posed as possible. Thus, over-reporting due to contextual influences seems unlikely. Unfortunately in a large school survey it was not possible to ask who had harassed the adolescents in the described ways. This is a limitation of the present study.

4.1. Conclusion

Sexual harassment experiences are common in adolescence. They are more common in girls than in boys, and are reported more commonly by older adolescents than younger, except for sexual name-calling. Parental involvement in an
adolescent’s life is associated with less perceived sexual harassment. Adolescents from socio-economically disadvantaged families are more vulnerable to sexual harassment than their more advantaged peers. Professional working with young people and families should encourage parental involvement in the personal lives of adolescents, even those approaching early adolescence. On a societal level, interventions that support disadvantaged families and reduce deprivation may also have positive effects on adolescents’ sexual health and well-being.

Conflicts of interest

None declared.

References


Appendix 1. Topics covered in School Health Promotion Study 2010–11

- School work
- Physical and psychological school environment
- Bullying
- Health
- Mood
- Sexual health
- Smoking
- Alcohol and other substances
- Lifestyle, hobbies
- Nutrition
- Sleep
- Delinquency
- Media and games
- Family and friends