# Dimensions of Peer Sexual Harassment in Swedish High Schools: What Factor Structures Show the Best Fit to Girls' and Boys' Self-Reports?

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Dimensions of peer sexual harassment in schools were analyzed with confirmatory factor analyses of data from a questionnaire study of 980 Swedish high-school students. The factorial structures suggested in the literature on sexual harassment in the workplace showed a bad fit to the student data, especially for boys. A nested structure, with one general factor and two specific factors (closest to the hostile environment and sexual attention categories), appeared to offer the best fit-to-data for female students. For male students, however, the structure was less clear, and the fit worse, but the presence of a general sexual harassment factor was supported also there. No acceptable model common to boys and girls could be identified.

**KEY WORDS:** gender differences; school violence; sexual bullying; sexual harassment; sexualized violence.

Sexual harassment in schools has received everincreasing attention over the last decade. Pervasive across cultures, it has come to occupy a visible position on the continuum of school violence. Sexual harassment as a social problem can be viewed from different perspectives-as a form of discrimination (Stein, 1999) or as a manifestation of violence in organizations (Hearn & Parkin, 2001). There are also reasons to regard it as a health problem (Dahinten, 1999; Gillander Gådin, 2002) because victims of sexual harassment face a multitude of negative psychosomatic consequences (AAUW, 2001; Dahinten, 1999; Danski & Kilpatrick, 1997; Fitzgerald, Gelfand, & Drasgow, 1995; Hand & Sanchez, 2000). Sexual harassment in school creates a hostile environment that interferes with the educational process and impedes realization of the full potential of affected individuals and groups. In addition, awareness of the presence of harassment in an organization causes psychological distress to individuals who have not been directly victimized (Schneider, 1997).

Despite the recent attention paid to peer sexual harassment in schools, there is still little research in the arena, and there seems to be little or no agreement among disciplines, researchers, or the general public concerning what defines harassment in a school setting. Continuing efforts to improve the theoretical construct and measurement tools, so as to enable valid and comparable scientific research, are therefore imperative (Fineran & Bennett, 1998; Fitzgerald et al., 1995; Mazzeo, Bergman, Buchanan, Drasgow, & Fitzgerald, 2001; Stark, Chernyshenko, Lancaster, Drasgow, & Fitzgerald, 2002). Most recently, McMaster, Lacasse, and Dahinten included a structural approach in their analysis of the students' data (Dahinten, 2001, 2003; Lacasse, Purdy, & Mendelson, 2003; McMaster, Connolly, Pepler, & Craig, 2002). They used different questionnaires and definitions in their studies, and found different structures, which will be discussed further in this article. This article is based on data collected in a 2001 Swedish national study of high-school students. Its

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design, as it was the case with many youth studies, was based on theoretical frameworks from the much better researched area of adult sexual harassment.

#### **Defining Sexual Harassment**

Research into sexual harassment in the workplace preceded research on school sexual harassment, and it offers some models and classifications. Most of these are based on the US legal definition of sexual harassment as either "quid pro quo" harassment (sexual coercion by a person in power, e.g., teacher-to-student harassment in schools) or "hostile environment" harassment (behavior that is sexual or related to sex, which creates a working climate that impedes the academic performance of a student, e.g., peer harassment and gender harassment [GH]) (Stein, 1999). The definition of sexual harassment at work adopted by the European Commission in 1991 refers to unwanted conduct of a sexual nature or other conduct based on sex that affects the dignity of women and men at work. This includes unwelcome physical, verbal, or nonverbal conduct. The definition specifies three alternative conditions for a behavior to be unacceptable: (1) that it is unwanted, improper, or offensive; (2) that its refusal or acceptance may influence decisions concerning a job; and (3) that it creates a working climate that is intimidating, hostile, or humiliating for the person in question (Aeberhard-Hogdges, 1996).

For the present study, sexual harassment is defined as inappropriate and unacceptable conduct of a sexual nature or other conduct based on sex that interferes with a student's right to a supportive, respectful and safe learning environment in school and affects, a student's dignity in a negative manner. The definition encompasses different types of conduct with verbal, physical, and other manifestations. It encompasses both "quid pro quo" and "hostile environment" types of harassment and also the three conditions of sexual harassment listed by the European Commission. It covers a broad spectrum of behaviors so as better to describe the nature of sexual harassment in school. Further, it takes into account the fact that, because schools are primarily educational institutions, it is necessary to evaluate their standards of sexual harassment in a learning context. The definition is not based on an "unwelcome" or "unwanted" criterion but on the inappropriateness and unacceptability of a behavior. The behavior may be found unacceptable not only by the recipient but also by the school.

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## **Dimensions of Adult Sexual Harassment**

The first classification of sexually harassing behaviors was introduced by Till (as cited in Fitzgerald, Swan, & Magley, 1997), who classified the experiences of a large sample of college women into the following five categories, organized by their level of severity: GH, seductive behavior, sexual bribery, threat, and sexual imposition. GH comprises generalized sexist remarks and behaviors, not necessarily designed to elicit sexual cooperation, but rather to convey insulting, degrading, or sexist attitudes about women. Seductive behavior comprises inappropriate and offensive advances that are not based on abuse of power in the organization. Sexual bribery, by contrast, involves the solicitation of sexual activity or other sex-related behavior by promise or reward. Threat involves the coercion of sexual activity by means of punishment. Finally, sexual imposition entails assault.

Gruber's typology of sexual harassment was based on a review of existing research results and the American Equal Employment Opportunity Commission's definition and categories (as cited in Gruber, 1992). Gruber (1998) used this information to construct what he called an Inventory of Sexual Harassment, which includes three main categories and several subcategories. The categories, which focus on both personal and environmental sexual harassment, are verbal requests, verbal comments, and nonverbal displays. Verbal requests are attempts to initiate and secure sexual cooperation. Verbal request subcategories encompass sexual bribery, sexual advances, relational advances, and subtle pressure/advances. Verbal comments encompass personal remarks (directed at a particular person), subjective objectification (rumors and/or comments made about a person), and sexual categorical remarks about the genders "in general." Nonverbal displays comprise sexual assault, sexual touching (brief sexual or contextually sexualized), sexual posturing (gestures, violations of personal space, or attempts at personal contact), displaying sexual/pornographic materials (such as sexually demeaning objects), and profanation of someone's sexuality. In all categories, subcategories are listed in order from more to less severe.

In a number of studies, the structure of sexual harassment has been studied by means of factor analysis (Baldwin & Daugherty, 2001; Fitzgerald et al., 1995; Stockdale & Hope, 1997). Fitzgerald's repeated applications of her Sexual Experience Questionnaire yielded results that did not support Till's division

#### **Structural Analysis of Sexual Harassment**

(Fitzgerald et al., 1995). Analysis of the data eventually supported only three factors: GH, sexual coercion (a combination of sexual bribery and threat in Till's system), and unwanted sexual attention (USA; seductive behavior and sexual imposition according to Till). Fitzgerald et al. (1995) proposed that sexual harassment is a behavioral construct composed of these three related, but conceptually distinct and nonoverlapping, dimensions. She also identified severity as another axis of her model. A confirmatory factor analysis of three samples (US students. Brazilian, students and US university employees) showed that the three-factor structure was invariant across the three samples (Gelfand, Fitzgerald, & Drasgow, 1995). In other studies (Baldwin & Daugherty, 2001; Stockdale & Hope, 1997), however, her model was found at best weakly stable across male and female subsamples and the discriminant validity between the factors was weak. This illustrates the difficulties involved in establishing clear crossgender and cross-setting factors from different data sets collected using different questionnaires and statistical methods (exploratory or confirmatory factor analysis).

## **Dimensions of School Sexual Harassment**

In her study of students in grades 8 and 11, Lacasse performed an exploratory factor analysis of data from administration of the Sexual Experiences Questionnaire-High School version (SEQ-HS), which was directly adapted from Fitzgerald's questionnaire, and identified two factors-moderate and severe sexual harassment-both of which differed from Fitzgerald's original model (Fitzgerald et al., 1995; Lacasse et al., 2003). McMaster, in a confirmatory factor analysis of her data from grades 6 to 8, found support for a nested model with a general sexual harassment factor and two specific factors: same sex and other sex harassment (McMaster et al., 2002). In both studies, the structures differed from those identified in adult workplaces. However, Dahinten (2001, 2003), in an exploratory factor analysis of her data from students in grades 9-11, obtained two factors, GH and sexual advances/imposition, which are close to Fitzgerald's original dimensions of GH and USA, although Dahinten's questionnaire was not based on the SEQ, but on White's (1997) revision of the American Association of University Women' Hostile Hallways scale (AAUW, 1993). Another classification common in school sexual harassment studies (Larkin, 1994; Timmerman, 2002) is a simple three-factor classification with qualitative origins introduced by Larkin (1994). It is based on practical, easily observable characteristics of behaviors, not on statistical analysis: (1) verbal harassment: calling offensive names, "putdowns," sexist comments and jokes, sexual propositioning, rating of physical attractiveness, and threats; (2) physical harassment: grabbing, touching, rubbing, and sexual assault; (3) other types of harassment: leering, sexual gesturing, etc.

It is not clear from the above efforts what the measurable stable dimensions of school sexual harassment are or to what extent the factors identified in research on adult workplaces are applicable (Dahinten, 2003; Hand & Sanchez, 2000; Lacasse et al., 2003; McMaster et al., 2002). The most prominent and validated sexual harassment classifications and instruments, such as those of Fitzgerald and Gruber, are based on data from samples of adult women (Fitzgerald et al., 1995; Gruber, 1992). The factors involved need to be reviewed for application to men and also to schools. Most workplace classifications seem to define categories according to their positioning in relation to the issues of sexual cooperation and disciplinary, work-related sanctions for refusal. This type of classification is difficult to sustain when applied to peer sexual harassment in schools, which is often perpetrated without clear sexual intent in mind (Duncan, 1999; Gillander Gadin & Hammarstrom, 2000).

Among the workplace classifications of sexual harassment, Gruber's typology was judged the most suitable to be adapted for a school survey when the questionnaire was developed in 2001. It is based on a two-dimensional model, which encompasses type and severity, but differs from Fitzgerald's in its interpretation of "type" of sexually harassing behaviors. Gruber's model defines type of harassment on the basis of objective characteristics of a situation (e.g., verbal or nonverbal) rather than on appraisal (e.g., "quid pro quo" or "hostile environment"). Gruber's dimensions were chosen, on grounds that they are specific, detailed, and fairly well defined, to provide clear guidelines to organize survey items, and possibly general enough to remain valid across the settings.

# **Gender Differences in Sexual Harassment**

The findings from workplace sexual harassment studies are that similar behaviors are likely to have

different meanings for men and women and will not be found equally upsetting by both genders. Men do not seem to feel threatened by some behaviors that for women constitute harassment; in particular, men do not seem to experience loss of control in response to those behaviors (Berdahl, Magley, & Waldo, 1996; Fitzgerald & Hesson-McInnis, 1989). Similar trends have been presented for adolescent students (AAUW, 2001; Eliasson, Isaksson, & Laflamme, 2005; Fineran, 2002; Fineran & Bennett, 1998; McMaster et al., 2002; Murnen & Smolak, 2000), despite the fact that exposure to relevant behaviors show less gender differences in schools than in higher education and the workplace (Hand & Sanchez, 2000). In the studies of adolescent students, boys were more likely to be less upset by the majority of the relevant experiences-except for the homophobic incidents and pressure for relationship-and more likely to interpret situations as a "horseplay" (AAUW, 2001; Roscoe, Strouse, & Goodwin, 1994; White, 2000). Whether actors are of the same or different genders also seems to be of importance for the interpretation of the incidents (McMaster et al., 2002; Roscoe et al., 1994). Hence, men and womenand boys and girls-will be harassed in a different manner, and the factor structures obtained from women's data so far have not proven stable for men (Baldwin & Daugherty, 2001; Stockdale & Hope, 1997). In recognition of this fact, Waldo revised Fitzgerald's SEO to include additional groups of questions (lewd comments, negative remarks about men, and enforcement of the masculine gender role) in his Sexual Harassment of Men scale (Waldo, Berdahl, & Fitzgerald, 1998). In terms of adolescent data, however, the only available study that analyzed the genders separately, produced a structure that fit both boys' and girls' data (Dahinten, 2001).

The aim of the present study was to test two structures of workplace sexual harassment, those proposed by Gruber and Fitzgerald, and a qualitative school-based peer sexual harassment structure by Larkin, in a sample of high-school students and to test whether the fit of the models is the same for boys and girls. The models proposed by Gruber, Larkin, and Fitzgerald implicated different structures of the questionnaire responses, and their fit to data from a high-school sample could therefore be compared. A further aim was to use the data to develop models with the best fit. The results are discussed in relation to results from similar studies (Dahinten, 2001, 2003; Lacasse et al., 2003; McMaster et al., 2002).

# METHOD

#### **Study Group and Data Collection**

A random sample of 16- and 17-year-olds was chosen from all types of municipalities in Sweden from a national computerized register. Nine hundred and eighty mail questionnaires acceptable for analysis were eventually obtained—540 from female students and 440 from male students. The response rate, after adjustment for the proportion of school dropouts in the general population, was 59% among female students and 43% among male students. The study group largely comprised students in the second year of Swedish high school (corresponding to 11th grade). For more detailed analysis of the sampling and administrative methods employed see Witkowska and Menckel (2005).

# Questionnaire

Among other items related to the school environment, the survey instrument included a group of questions concerning personal experience of peer sexual harassment over the previous school year (see Table I). The questions were based on existing, unpublished adolescent peer sexual harassment instruments, such as Hostile Hallways' "School Life" and Fineran's "Peer Sexual Harassment Survey" (all scales obtained from their authors). The questions were selected to represent the wide range of students' experiences related to peer sexual harassment and to fit Gruber's three categories of harassment: verbal requests (three questions), verbal comments (seven questions), and nonverbal displays (five questions). For the purpose of tailoring the questionnaire to a school setting, minor changes were made. The category of sexual assault, which is a legal term and, as such, well defined, was removed. Sexual coercion through work-related threats was also removed. Strictly gender nonspecific terms were used to address both girls and boys and to include gay and lesbian students. Responses were made on a 5-point scale:  $1 = every \, day$ ,  $2 = every \, week$ ,  $3 = every \, month$ , 4 = now and then, and 5 = never.

The questions were translated, back translated, and pilot-tested in four focus groups with 16 Swedish high-school students. Most of the questions were found relevant by the participants, and the nonrelevant questions were excluded. The final version of the questionnaire was then tested with seven

Gruber's typology	Fitzgerald's	Larkin's
Verbal requests		
1. Pressuring for sex	USA	Verbal
Made suggestions, propositions, or demands to you for sexual favors or sexual relationship		
2. Pressuring for relationship	USA	Other
Bothered you by asking for dates, leaving messages or soliciting information from others, and not taking "no" for an answer		
3. Sexualized conversations	GH	Verbal
Bragged about their sexual prowess repetitively, or talking about sex all the time in your presence		
Verbal comments		
4. Name calling—slut, whore	GH	Verbal
Called you slut, whore, bitch, cunt, or similar words		
5. Name calling—lesbian, fag	GH	Verbal
Called you dyke, lesbian, fag, or similar words (also included in the "Hostile hallways" survey)		
6. Personal sexual comments/jokes	USA	Verbal
Made sexual comments or jokes about your looks, body, or private life (also included in "Hostile		
hallways")		
7. Sexual rumors	GH	Verbal
Spread sexual rumors about you (also included in "Hostile hallways")		0.1
8. Sexual messages/grathti	GH	Other
Wrote sexual messages/grafifit about you on bathroom walls, in locker rooms, etc. (also included in "Usefile hellwayer")		
Desting attractiveness	СЦ	Varbal
9. Katilig attractiveness Publicly "rated" your attractiveness	ОП	verbai
10 Demeaning comments/ickes about gender/sexuality	GH	Verbal
Made demeaning comments or ickes about your sexuality e.g. "all girls are whores" or "I hate fags"	OII	verbai
Nonverbal diantana		
11 Prushing up or rubbing against	LISA	Dhysical
11. Drushing up of rubbid against Brushed up or rubbed against you in a sexual way also "by accident" (also included in "Hostile	USA	riiysicai
hallways")		
12. Pulling clothing	USA	Physical
Pulled at your clothing in a sexual way (also included in "Hostile hallways")		)
13. Sexual looks	USA	Other
Looked you up and down in a sexual way		
14. Sexualized contact seeking	USA	Other
Made sexual gestures, comments, or jokes to you (also included in "Hostile hallways")		
15. Showing pornography	USA	Other
Showed, gave, or left you sexually offensive pictures, photos, or messages (also included in "Hostile		
hallways")		

Table I. Survey Questions Representing the Three Structures Tested in the Confirmatory Factor Analyses

*Note*. USA = unwanted sexual attention. GH = gender harassment.

adolescents through a process of concurrent and retrospective probing (Nolin & Chandler, 1996). None of the final questions was found objectionable or irrelevant by the participants. At the end of each questionnaire, a list of support contacts was attached. Standard ethical procedures for self-administered questionnaire surveys were followed.

# **Models Tested**

To test the models, the variables were assigned to the categories in Fitzgerald's and Larkin's models (Table I). Eight items were assigned to Fitzgerald's category USA and seven to GH. Larkin's categories verbal harassment, physical harassment, and other types of harassment were assigned eight, two, and five questions, respectively.

## **Statistical Analyses**

The tenability of the three models (Gruber's, Fitzgerald's, and Larkin's) and two new proposed structures were tested with confirmatory factor analyses using LISREL version 8.3 (Jöreskog & Sörbom, 1993). For comparison, a one-factor model was also tested. Separate analyses were made of the boys' and girls' data, as initial analyses clearly indicated differences between their factor structures. The fit

Model	$\chi^2(df,p)$	$\chi^2/df$	RMSEA (90% confidence interval)	CFI
Fitzgerald	330 (89, <i>p</i> < .001)	3.71	.073 (.065–.082)	.89
Larkin	355 (88, <i>p</i> < .001)	4.03	.078 (.007086)	.88
Gruber	320(87, p < .001)	3.68	.074 (.065082)	.90
One factor	340 (90, p < .001)	3.78	.075 (.066083)	.89
Nested: one general factor, two specific factors (model with best fit)	241 (86, p < .001)	2.80	.061 (.052070)	.93
Nested: one general factor, two specific factors (boys' model)	Failed to converge			

Table II. Model Fit Indices for Girls

*Note.* RMSEA = root mean-square error of approximation; CFI = comparative fit index.

of the models was assessed by chi-square, normed chi-square (chi-square/df), root mean-square error of approximation (RMSEA), and the comparative fit index (CFI).

Normed chi-square was calculated because the chi-square statistic is sensitive to sample size; even with a large sample, trivial differences may result in the rejection of the specified model (Hu & Bentler, 1995). Values below 1.0 indicate an "overfitted" model (Shumacker & Lomax, 1996) and values larger than 2.0, or the more liberal limit of 5.0, indicate that the model does not fit observed data and requires improvement.

The RMSEA is a measure of discrepancy per degree of freedom for any particular model (Browne & Cudeck, 1993). Values of about 0.05 or less indicate a close fit of the model to data and values of about 0.08 or less indicate reasonable approximation (Browne & Cudeck, 1993). The third index used was the CFI. It is an incremental index (Kline, 1998); values greater than 0.90 indicated acceptable fit-to-data.

#### RESULTS

#### **Tests of the Three Proposed Models**

Fit indices derived from confirmatory factor analyses of the proposed models are shown in Tables II and III. For girls, the fit was close to acceptable, although not particularly good for all models; by contrast, all models showed a very bad fit for boys. Chi-square analyses showed a significantly better fit for Gruber's model than for the other models, but the other indicators of fit differed very little among the models.

None of the three proposed models showed a substantially better fit than the one-factor model. In the one-factor model for girls, the five variables with the highest loadings were personal sexual comments, pressuring for sex, sexualized contact seeking, brushing up or rubbing against, and attractiveness rating; an index based on these variables had an estimated reliability (alpha) of .83. For boys, the variables with highest loadings were brushing up or rubbing against, pressuring for sex, rating of attractiveness, having sexual rumors spread, and personal sexual comments; the alpha value for an index based on these items was .77.

#### **Development and Testing of Alternative Models**

Because no model showed a satisfactory fit—for either boys or girls—alternative models with a better fit were constructed. The fact that the one-factor model did not show a substantially worse fit than any of the other models makes it reasonable to suppose that there is a general sexual harassment factor. However, because even the fit of the one-factor

Model	$\chi^2 (df, p)$	$\chi^2/df$	RMSEA (90% confidence interval)	CFI
Fitzgerald	648 (89, p < .001)	7.30	.136 (.130150)	.77
Larkin	654 (88, p < .001)	7.43	.134 (.130140)	.77
Gruber	587 (87 $p < .001$ )	6.75	.129 (.120140)	.79
One factor	671 (90, p < .001)	7.45	.137 (.130150)	.76
Nested: one general factor, two specific factors (model with best fit)	282 (79, p < .001)	3.56	.079 (.069–.089)	.92
Nested: one general factor, two specific factors (girls' model)	520 (86, p < .001)	6.05	.123 (.110–.130)	.82

Note. RMSEA = root mean-square error of approximation; CFI = comparative fit index.

	Girls' nested model			Boys' nested model		
Survey items	General factor	Specific factor A	Specific factor B	General factor	Specific factor C	Specific factor D
2. Pressuring for relationship	.88			.76		
10. Demeaning comments/jokes about gender/sexuality	.88			.30		.85
7. Sexual rumors	.86			.78		
15. Showing pornography	.85			.40	.58	
3. Sexualized conversations	.81			.26		.81
13. Sexual looks	.79			.75		
9. Rating attractiveness	.74			.25		.77
1. Pressuring for sex	.72			.73		
6. Personal sexual comments/jokes	.71			.44		.74
14. Sexualized contact seeking	.67			.24	.75	
8. Sexual messages/graffiti	.23	.94		.51	.73	
4. Name calling—slut, whore	.51	.81		.63		.67
5. Name calling—lesbian, fag	.63	.72		.71		.58
12. Pulling clothing	.19		.81	.74		
11. Brushing up or rubbing against	.64		.36	44	.55	

 Table IV. Factor Structure Matrix for Boys and Girls, with Loadings from Confirmatory Analyses of Nested Models with One

 General and Two Specific Factors

*Note.* Specific factor A = verbal/symbolic; specific factor B = direct physical; specific factor C = pornography and sexualized horseplay; specific factor D = sexual banter.

model was not satisfactory, the variance of some of the behaviors was not explained fully by a general harassment factor.

A proper model, therefore, would be a nested model with one general factor and one or more specific factors. A basis for the development of such nested models was, apart from theoretical considerations, modification indices in the test of the onefactor model. The model generated for girls was also tested for boys, and vice versa. The models and factor loadings derived from these analyses are given in Table IV (see Tables II and III for the indices).

The nested model for girls comprised one general harassment factor and two specific factors (A and B). The specific factor A, labeled verbal/symbolic, included three verbal items: two sexual name-calling items (slut/whore and fag/lesbian) and personal sexual messages/graffiti. No improvement to fit was achieved by having any of the other items in the models load on A. The specific factor B, labeled direct physical contact, comprised brushing up or rubbing against, and pulling clothing—two directly physical types of behaviors.

The nested model with the best fit for the boys' data also comprised one general harassment factor and two specific factors (C and D), but the specific factors were different from those found for girls. The specific factor C, labeled pornography and sexualized horseplay, included personal sexual messages/graffiti, exposure to pornography, sexualized

contact seeking, and also brushing up or rubbing against. The boys' second specific factor (D), labeled sexual banter, comprised sexual name-calling, personal sexual comments, demeaning comments about gender and sexuality, sexualized conversations, and rating attractiveness. The nested model constructed for girls showed a very bad fit to the boys' data. In addition, the boys' nested model was tested on the girls' data, but the iterations failed to converge.

## DISCUSSION

This article is a contribution to the small body of research on dimensions of peer sexual harassment in schools and their relation to the dimensions proposed in studies of adult workers. The existing models tested in this study-two workplace-based factor analytic models (Fitzgerald & Hesson-McInnis, 1989; Gruber, 1992) and a qualitative peer harassment model (Larkin, 1994)-showed close to acceptable, although not very good-fit to the girls' data, whereas for boys all models showed a very bad fit. None of the three proposed models showed a substantially better fit than a one-factor model, which indicated the need to test the presence of a general harassment factor. The nested models with one general sexual harassment factor and two specific factors turned out to be the ones with the best fit. However, the specific factors differed between girls and boys.

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For girls, the verbal/symbolic factor in the nested model included three items from Gruber's verbal comments category, which correspond to Fitzgerald's gender harassment factor and Larkin's verbal (two items) and other types (one item) factor. The direct physical contact factor was congruent with Larkin's physical factor, and the factor's items constituted a part of Gruber's nonverbal displays and Fitzgerald's USA. The boys' nested model showed a somewhat worse fit and a less clear factor structure than the girls' model. The pornography and sexualized horseplay factor was made up of a mixture of items and did not correspond to any of the factors proposed by the three tested models. It included one item from Gruber's verbal comments category (which correspond to gender harassment in Fitzgerald and other types in Larkin) and three nonverbal displays (which correspond to USA in Fitzgerald, and one to physical and two to other types in Larkin). The sexual banter factor, however, showed a rather close affinity to Fitzgerald's gender harassment factor and to Larkin's verbal factor. Both of the specific factors above seem to represent male-bonding types of behaviors related to sex-pornography and sexualized horseplay of a nonverbal nature and sexual banter of a verbal nature.

Compared to the other factor analytic studies of peer sexual harassment in schools (Dahinten, 2001, 2003; Lacasse et al., 2003; McMaster et al., 2002), the structure developed in this study-for the girls, although not for the boys-was somewhat compatible with the severity differentiation in Lacasse's data. In addition, in the verbal/symbolic factor all three items corresponded to similar items in Dahinten's gender harassment factor, and the two items in the direct physical contact factor corresponded to two similar items included in Dahinten's sexual advances/imposition factor. However, other variables that were measured by similar questions failed to organize in a similar way. As both Lacasse and Dahinten employed exploratory factor analysis, it is not known whether other structures would be compatible with their data. The present study, and McMaster's, indicates support for the existence of a general sexual harassment factor. However, McMaster identified different specific factors (same sex and other sex harassment). In the present study, no consideration was taken as to whether actors were of the same or different genders, and the presence of such factors thus could not be tested. Because one and the same behavior may have different meanings depending on the sex of the perpetrator and other aspects of context, it would be important to incorporate contextual questions into sexual harassment scales.

Workplace structures did not seem to fit student data well in this study. Lacasse also did not replicate Fitzgerald's workplace factors, whereas Dahinten obtained two factors close to Fitzgerald's original dimensions of gender harassment and USA. One of the problems may be that, although most scales used in the youth studies were adapted from the original Hostile Hallways check list, with the exception of Lacasse's interesting adaptation of the SEQ, they are only compatible with each other to a degree. Earlier studies in workplace and in educational environments also indicated a difficulty in establishing clear cross-gender and cross-setting factors between data sets (Baldwin & Daugherty, 2001; Stockdale & Hope, 1997).

In the present study, possible gender differences were explored by performing separate analyses of male and female students and no acceptable model common to boys and girls could be identified. Furthermore, the severity dimension, which presumes that verbal/symbolic behaviors are less harassing than directly physical ones (Fitzgerald, Drasgow, Hulin, Gelfand, & Magley, 1997; Lacasse et al., 2003; Murnen & Smolak, 2000), was found in the girls' model, but not in the boys' model. In the boys' model, low impact verbal behaviors appeared in the same specific factor as the more severe direct physical ones. Separation of genders appears analytically appropriate on the basis of the body of evidence, which suggests that similar behavioral experiences may have different meanings for men and women and will not be found equally upsetting by both genders (Berdahl et al., 1996; Fitzgerald & Hesson-McInnis, 1989; Waldo et al., 1998). Similar results have been presented for adolescent students (AAUW, 2001; Eliasson et al., 2005; Fineran, 2002; Hand & Sanchez, 2000; McMaster et al., 2002; Murnen & Smolak, 2000), although only Dahinten (2001, 2003) split the genders in her factor analyses (and obtained the same factor structure for both genders), whereas McMaster and Lacasse analyzed both genders together (Lacasse et al., 2003; McMaster et al., 2002).

Thus far, most prevalence research in this arena, including the present study, has employed methodologies and tools derived from research into women's exposure to sexual harassment. Data obtained from these types of surveys may be inadequate to map out and understand men's experiences (Waldo et al., 1998; White, 1997). The scales employed also run a risk of not being sensitive to the behavioral

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experiences of men that women do not experience. For example, men may be pressured into engaging in stereotypical, heterosexual, masculine behaviors, or ridiculed in response to crossing that behavioral boundary (Vaux, 1993; Waldo et al., 1998). The significance of many situations differs between the genders, and any meaningful factor structure of sexual harassment would have to differ between boys and girls.

Nested models with a general sexual harassment factor showed a good fit to data both in the present study and in McMaster's study (McMaster et al., 2002). This finding supports the hypothesis that various behaviors in school create a sexualized environment and increase the probability of peer sexual harassment-the dynamic also found in the workplace (Gruber, 1992; Mazzeo et al., 2001; Sev'er, 1996). In the present study, the questions most representative for the general harassment factor were personal sexual comments, pressuring for sex, sexual contact, brushing up or rubbing against, and attractiveness rating. These behaviors are not always offensive or harassing by nature; rather, they belong to a continuum of sexual attention. Nevertheless, they seem to be predictors of peer sexual harassment in school. The embedded character of sexual harassment means that educators responsible for students, who are minors, need to make several important decisions, such as to what degree and in which ways schools are able to accommodate or inhibit expressions of sexual attention amongst students while maintaining an educational approach. It is important to highlight the instances in which certain behaviors become inappropriate and harassing. The strategies employed to deal with sexual expression and sexual harassment, which include "turning a blind eye" or taking extreme measures, may have an impact on students' dignity that will extend beyond the school walls.

## Limitations of the Study

Accuracy of a structural construct obtained from survey data is greatly dependent on the operationalization of the construct in the scales employed. In the present study, the aim to use a questionnaire that fit a theoretical construct had to be combined with a need to produce the best descriptive picture of the actual situation in the surveyed schools. Thus, the representation of the models of sexual harassment may have been distorted. We have made an effort to best match the items used in our questionnaire to the ones originally used by Gruber and Fitzgerald and to allocate them accordingly, but the fact that our items were different than the ones originally used to construct the analyzed workplace models does not allow for any final conclusions regarding the comparison of factor solutions in this study to the factor solutions in workplace studies.

In terms of the quality of the data, home-mail questionnaires are known chronically to suffer from a low response rate. They offer, however, a high level of privacy and anonymity, which is desirable in studies of behaviors related to sexuality. To identify possible sample bias, the survey-respondent group was compared with the population of the same age in Sweden on key demographic variables, such as geographical distribution, school size, and study programs attended. The distributions were generally found to correspond to the national composition of high-school enrollments. The participant group is representative of the Swedish student population on key characteristics, with the exception of gender and type of program attended. The length of the questionnaire, and also self-administration, favored participation of students with good reading and writing skills, and students from vocational programs were under-represented accordingly. The subject matter of the questionnaire and the fact that female respondents in general are more likely to respond to surveys resulted in a higher representation of girls among our respondents. Generally, we believe that the girl respondents' sample was reasonably representative of Swedish students of comparable age, whereas the boys' sample should possibly be regarded as a convenience sample.

Given the limited number of large-scale studies dedicated to sexual harassment in school, crossvalidation of our findings against a new sample of students is needed. This is especially true for the nested models that were developed to fit data and thus were not based on a priori hypotheses.

## CONCLUSIONS

The structures found for workplace sexual harassment did not fit the student data well. A nested structure, with one general factor and two specific factors (closest to the hostile environment and sexual attention categories), appears to offer the best fitto-data for female students. For male students, however, the structure is less clear, and the fit worse, but the presence of a general sexual harassment factor was supported also there. It is likely that the questionnaire in the present study, and most other studies, was more valid for description of the sexual harassment experienced by girls than the harassment experienced by boys'. The reformulations of questions to make them gender neutral was not enough to avoid this bias. Gender and severity are factors that should be considered in harassment questionnaires. Incorporation of these structural aspects into questionnaire design would vastly improve the interpretability of results.

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