



Mental distress and sexual harassment in Italian university students

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Abstract

Only a few studies have analyzed the association between sexual harassment (SH) and mental health controlling for other types of violence. The aim of this study was to describe SH among male and female university students and analyze the association between harassment and mental distress controlling for sexual violence. An observational survey was conducted at Trieste University (Italy). Students answered an anonymous questionnaire about harassment that included three domains—sexual harassment, gender harassment, cyber harassment—and three psychological health indicators. The global harassment index was computed, with three levels: 0, no harassment; level 1, harassment in at least one of the three domains; and level 2, harassment in two or three domains. The symptoms of mental distress were measured by the 12-item General Health Questionnaire (GHQ) for depressive symptoms; a question about panic symptoms; and a question about general health. The sample included 759 students (412 women; 18 to 29 years old). After adjustment for age, birth country, couple relationship, employment status, mother's education, and previous sexual violence, the risk of mental distress was increased with harassment exposure. Men were affected in perceived health and depressive symptoms (GHQ score ≥ 6); women were affected in panic symptoms. Harassment has a strong negative impact on the mental health of victims; in some cases, men may be more affected than women. Clinicians should be aware of the negative impact of SH also on men.

Keywords Mental distress · Panic · Sexual harassment · Cyber harassment · Gender differences

Introduction

Sexual harassment is frequent among young people (Bucchianeri et al. 2014; Eom et al. 2015; Romito et al. 2016). Some studies show increased prevalence among female respondents (Clear et al. 2014; Eom et al. 2015; Petersen and Hyde 2013; Rosenthal et al. 2016) and others find different prevalence between males and females depending on the type of harassment considered (Bucchianeri et al. 2014; Chiodo et al. 2009). A relatively new type of harassment is web-based or cyber harassment, a serious problem

affecting 20 to 40% of adolescents, but few studies have included cyber harassment among the indicators of sexual harassment (Aboujaoude et al. 2015; Lindsay et al. 2016).

All types of victimization have a negative impact on health, the most studied types of violence until now being intimate partner violence and sexual violence (Krug et al. 2002). Recent studies have analyzed the impact of sexual harassment, showing that its exposure is negatively associated with mental health (Bucchianeri et al. 2014; Kaltiala-Heino et al. 2016).

A few studies have considered the differential impact of violence on mental health for young men and women. In a sample of university students, Romito and Grassi (2007) found that some types of violence have similar effects on both genders, whereas other types have different effects. Sexual violence, for instance, was associated with panic symptoms in both men and women, while family violence affected panic only in men, and harassment in a school setting affected panic only in women.

Similarly, Schlack and Petermann (2013) reported a differential effect of violence in young male and female students. Still, another study found stronger associations between sexual harassment and emotional symptoms among adolescent boys than girls (Kaltiala-Heino et al. 2016).

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With each occurrence of violence, people are vulnerable to subsequent victimization, and the impact of violence on health is cumulative (Fergusson et al. 1997; Simmons et al. 2015); nevertheless, only a few studies (Rosenthal et al. 2016) have analyzed the association between sexual harassment and mental health while controlling for other types of violence.

The aims of this study were to describe harassment among female and male university students in Italy and to analyze the association between harassment and mental distress symptoms, taking into account previous sexual violence.

Methods

Study design and participants

Data were collected in classes of the Faculties of Psychology, Law, Pharmacy, and Humanities at Trieste University (Italy) in Spring 2014. The research assistants presented the study and distributed self-administered questionnaires to all students, stressing the right not to participate; a pamphlet, listing local resources for victims of harassment, was given to all students regardless of whether they participated or not. Students were assured that their answers were completely anonymous; all accepted to participate. Five questionnaires were eliminated because they were incomplete. The study was observational, did not imply interventions or experimentation, and used anonymous questionnaires with a sample of young adults (all students were > 18 years old): According to Italian law and the Codice Etico AIP (ethical code for research in psychology, Italian Psychological Association), the study was exempt from full institutional review board approval.

Measures

To measure sexual harassment in the previous 12 months, we used three questions derived from the Sexual Experiences Questionnaire (Fitzgerald 1991): persistent sexual requests, undesired physical contacts, and sexual blackmail or threats. We choose these questions because previous testing has shown that they are well-understood by both male and female students. To be considered sexually harassed, students had to report at least one of the three items of unwanted sexual attention.

As gender harassment is conceptually distinct from sexual harassment, we included this question: inappropriate comments on physical aspects.

Cyber harassment, in its various types, is very common among young people, and there is no scientific evidence concerning the different impact of certain types of harassment or of isolated occurrences on well-being. Cyber harassment was measured by six items from the European survey on violence against women (European Union Agency for

Fundamental Rights 2014): threats, insults, intimate rumors about you, unwanted sexual pictures, sexual requests, and other disturbing messages. As we wanted to avoid considering as “harassment” experiences that young people themselves would consider minor, we selected situations in which at least two types of cyber harassment were experienced. To be considered cyber-harassed, students had to report at least two of six types of cyber harassment.

The global harassment index was computed with three levels: level 0, no harassment; level 1, harassment in at least one of the three domains; and level 2, harassment in two or three domains.

The symptoms of mental distress were measured by three indicators:

- 1) Depressive symptoms in the past month were measured using the General Health Questionnaire (GHQ) with 12 items (Goldberg 1972). To select a group of more seriously distressed students, we choose a cutoff point of ≥ 6 (Romito and Grassi 2007). Students were considered “depressed” when they gave a “pathological” answer to at least six of the GHQ items.
- 2) One specific question about panic symptoms: “In the last year, did you experience anxiety crisis or panic attacks? No/1 or 2 times/more frequently.” Respondents reporting “more frequently” were classified as having panic symptoms.
- 3) One question about perceived health: “Currently, how is your health? Very good/good/moderate/not good.” This self-rated indicator has been demonstrated to be a valid measure of overall health status; it includes psychological well-being (Segovia et al. 1989). Respondents reporting their health as not good were considered unwell.

Data were collected on age, birth country, couple situation, employment status, mother’s education, and lifetime sexual violence. Sexual violence over the lifetime was defined with a Yes response to “Did anyone impose a sexual act on you (using force, blackmail, or when you were drugged or drunk)?”

Analysis

First, the frequency of harassment by gender was described. Then, the associations between respondents’ social characteristics and harassment index and the associations between social characteristics and mental distress were described. The frequency of mental distress related to harassment index was analyzed. The data were compared by chi-square test. Finally, using logistic regression models, odds ratios (ORs) and 95% confidence intervals (95% CIs) for the associations of harassment and mental distress were computed, adjusting for age, place of birth, couple relationship, mother’s education, having

a job, lifetime sexual violence, and sex among the whole sample. Then, the same analysis was performed separately by sex.

The sample analyzed included 759 students (412 women, mean [SD] age 20.6 [1.7] years, range 18 to 29 years). Because of a small number of missing data, the numbers vary slightly in tables. Data analysis involved use of SAS 9.4.

Results

Prevalence of harassment in the previous 12 months

The frequency of harassment was 38.3% among men and 44.2% among women, with a minority of students (12.8% men and 14.9% women) exposed to harassment in 2/3 domains; the harassment index did not differ by gender (Table 1). Overall, sexual harassment and cyber-harassment frequency did not differ by gender. Women were significantly more likely to report inappropriate comments about their physical aspect than men.

Social factors and violence indicators related to harassment index

Among male students, older ones and those with a job reported more harassment in 2/3 domains (Table 2). Place of birth, couple relationship and mother's education were not associated to harassment index. Among female students, those born outside Italy tended to report more harassment in one domain

Table 1 Prevalence of harassment by sex

| | Male | | Female | | <i>p</i> value |
|------------------------------|----------------|------|----------------|------|------------------|
| | <i>n</i> = 347 | | <i>n</i> = 412 | | |
| Sexual harassment | (43) | 12.4 | (61) | 14.8 | ns |
| Persistent sexual requests | (25) | 7.2 | (43) | 10.5 | ns |
| Undesired physical contacts | (25) | 7.2 | (31) | 7.5 | ns |
| Sexual blackmails or threats | (4) | 1.2 | (2) | 0.5 | ns |
| Gender harassment | | | | | |
| Comments on physical aspect | (53) | 15.3 | (105) | 25.5 | <i>p</i> < 0.001 |
| Cyber harassment | (94) | 27.2 | (92) | 22.4 | ns |
| Threats | (21) | 6.1 | (17) | 4.1 | ns |
| Insults | (56) | 16.2 | (47) | 11.4 | ns |
| Rumors about you | (50) | 14.4 | (41) | 10.0 | ns |
| Unwanted sexual pictures | (71) | 20.5 | (49) | 11.9 | <i>p</i> < 0.002 |
| Sexual requests | (48) | 13.9 | (69) | 16.7 | ns |
| Other disturbing messages | (45) | 13.0 | (88) | 21.4 | <i>p</i> < 0.003 |
| Harassment index | | | | | |
| No | (213) | 61.7 | (229) | 55.8 | |
| 1 domain | (88) | 25.5 | (120) | 29.3 | ns |
| 2/3 domains | (44) | 12.8 | (61) | 14.9 | |

and less harassment in 2/3 domains as compared to those born in Italy. As for men, having a job was associated with more harassment in 2/3 domains. Age, couple relationship, and mother's education were not associated with harassment index.

Reports of harassment were more frequent for both female and male students exposed than not exposed to lifetime sexual violence (*p* < 0.001 for both genders) (Table 2).

Social factors and violence indicators related to mental distress

Among men, older students tended to report more often "not good" health than younger ones; men born outside Italy and those with a job tended to report more often GHQ score ≥ 6 (Table 3). Those who had recently ended a couple relationship reported more panic symptoms than other men. All of these differences are at the limit of statistical significance. Mother's education was not associated with the indicators of mental distress.

Among women, the older reported more mental distress than the younger. Women having a job, regular or occasional, evaluated their health as "not good" more frequently and reported panic symptoms more often than women without a job. Being born in Italy and couple relationship were not related to symptoms of mental distress. Mother's education tended to be related to GHQ score.

Previous sexual violence was associated with increased frequency of panic symptoms for women. A similar trend was observed for men but the difference was not significant. Previous sexual violence was not related to frequency of "not good" health or depressive symptoms for either gender.

Associations between harassment and mental distress

For men, the harassment index was associated with increased frequency of perceiving health as "not good" and high GHQ score but not panic symptoms (Table 4). Among women, the association was strong for panic symptoms but not for the other two health indicators.

Even after adjustment for previous sexual violence, age, place of birth, couple relationship, having a job, and mother's education, the risk of mental distress increased significantly with exposure to harassment (Table 5). For men, the adjusted OR (95% CI) of a high GHQ score (≥ 6) was 2.78 [1.06–7.27] with exposure to two or three domains of harassment and 1.75 [0.80–3.84] with exposure to only one domain. The link with self-rated health was also strong. For women, harassment was associated with panic symptoms, with adjusted ORs of 3.22 [1.61–6.43] and 1.34 [0.72–2.50], respectively (*p* < 0.004), but not with perceived health and GHQ score.

Table 2 Prevalence of harassment by students' characteristics stratified for sex

| | Numbers | | Harassment index | | <i>p</i> value |
|---------------------------|---------|------|------------------|-------------|----------------|
| | | no | 1 domain | 2/3 domains | |
| Male students | 345 | 61.7 | 25.5 | 12.8 | |
| Age | | | | | |
| 19 | 115 | 61.7 | 25.2 | 13.0 | 0.06 |
| 20–21 | 148 | 67.6 | 24.3 | 8.1 | |
| 22 or older | 82 | 51.2 | 28.0 | 20.7 | |
| Born in Italy | | | | | |
| Yes | 319 | 62.4 | 25.1 | 12.0 | 0.66 |
| No | 24 | 54.2 | 33.3 | 12.5 | |
| In a couple relationship | | | | | |
| Currently | 126 | 62.7 | 26.2 | 11.1 | 0.13 |
| Ended relation 12 months | 52 | 46.2 | 34.6 | 12.2 | |
| No | 167 | 65.9 | 22.2 | 12.0 | |
| Has a job | | | | | |
| Yes (or occasionally) | 102 | 55.9 | 23.5 | 20.6 | 0.01 |
| No | 242 | 54.5 | 26.4 | 9.1 | |
| Mother's education | | | | | |
| Low | 53 | 71.7 | 17.0 | 11.3 | 0.57 |
| Intermediate (or missing) | 204 | 60.3 | 27.0 | 12.8 | |
| High | 88 | 59.1 | 27.3 | 13.6 | |
| Lifetime sexual violence | | | | | |
| Yes | 9 | 22.2 | 11.1 | 66.7 | 0.001 |
| No | 336 | 62.8 | 25.9 | 11.3 | |
| Female students | 410 | 55.8 | 29.3 | 14.9 | |
| Age | | | | | |
| 19 | 126 | 54.0 | 30.2 | 15.9 | 0.96 |
| 20–21 | 201 | 57.7 | 27.9 | 14.4 | |
| 22 or older | 83 | 54.2 | 31.3 | 14.5 | |
| Born in Italy | | | | | |
| Yes | 369 | 56.6 | 27.6 | 15.7 | 0.06 |
| No | 41 | 48.8 | 43.9 | 7.3 | |
| In a couple relationship | | | | | |
| Currently | 242 | 60.3 | 25.6 | 14.0 | 0.22 |
| Ended relation 12 months | 59 | 45.8 | 35.6 | 18.6 | |
| No | 109 | 54.4 | 33.9 | 14.7 | |
| Has a job | | | | | |
| Yes (or occasionally) | 144 | 49.3 | 31.2 | 19.4 | 0.08 |
| No | 266 | 59.4 | 28.2 | 12.1 | |
| Mother's education | | | | | |
| Low | 106 | 59.4 | 24.5 | 16.0 | 0.26 |
| Intermediate (or missing) | 219 | 53.4 | 29.7 | 16.9 | |
| High | 85 | 57.6 | 34.1 | 8.2 | |
| Lifetime sexual violence | | | | | |
| Yes | 20 | 10.0 | 55.0 | 35.0 | 0.001 |
| No | 390 | 58.2 | 28.0 | 13.8 | |

Table 3 Prevalence of mental distress symptoms by students' characteristics stratified for sex

| | Numbers | Self-rated health as "not good" | | GHQ score ≥ 6 | | Panic symptoms | |
|---------------------------|---------|---------------------------------|----------------|--------------------|----------------|----------------|----------------|
| | | % | <i>p</i> value | % | <i>p</i> value | % | <i>p</i> value |
| Male students | 347 | 9.8 | | 11.8 | | 7.5 | |
| Age | | | | | | | |
| 19 | 115 | 6.1 | 0.15 | 11.3 | 0.69 | 7.8 | 0.56 |
| 20–21 | 149 | 10.1 | | 10.7 | | 8.7 | |
| 22 or older | 83 | 14.5 | | 14.5 | | 4.9 | |
| Born in Italy | | | | | | | |
| Yes | 321 | 10.3 | 0.33 | 10.9 | 0.14 | 7.2 | 0.34 |
| No | 24 | 4.2 | | 20.8 | | 12.5 | |
| In a couple relationship | | | | | | | |
| Currently | 126 | 9.5 | 0.22 | 13.5 | 0.42 | 5.6 | 0.07 |
| Ended relation 12 months | 53 | 3.8 | | 15.1 | | 15.1 | |
| No | 168 | 11.9 | | 9.5 | | 6.6 | |
| Has a job | | | | | | | |
| Yes (or occasionally) | 102 | 8.8 | 0.77 | 15.7 | 0.15 | 7.9 | 0.86 |
| No | 244 | 9.8 | | 10.2 | | 7.4 | |
| Mother's education | | | | | | | |
| Low | 53 | 11.3 | 0.91 | 11.3 | 0.66 | 3.8 | 0.38 |
| Intermediate (or missing) | 204 | 9.3 | | 10.8 | | 7.4 | |
| High | 90 | 10.0 | | 14.4 | | 10.1 | |
| Lifetime sexual violence | | | | | | | |
| Yes | 10 | 10.0 | 0.98 | 10.0 | 0.86 | 20.0 | 0.13 |
| No | 337 | 9.8 | | 11.9 | | 7.1 | |
| Female students | 412 | 12.6 | | 22.6 | | 18.9 | |
| Age | | | | | | | |
| 19 | 126 | 8.7 | 0.001 | 15.9 | 0.09 | 12.7 | 0.04 |
| 20–21 | 203 | 9.8 | | 26.1 | | 19.7 | |
| 22 or older | 83 | 25.6 | | 24.1 | | 26.5 | |
| Born in Italy | | | | | | | |
| Yes | 371 | 12.7 | 0.93 | 22.4 | 0.77 | 18.6 | 0.60 |
| No | 41 | 12.2 | | 24.4 | | 22.0 | |
| In a couple relationship | | | | | | | |
| Currently | 244 | 11.1 | 0.52 | 21.3 | 0.49 | 21.3 | 0.22 |
| Ended relation 12 months | 59 | 15.2 | | 20.3 | | 11.9 | |
| No | 109 | 14.7 | | 26.6 | | 17.4 | |
| Has a job | | | | | | | |
| Yes (or occasionally) | 146 | 17.2 | 0.04 | 24.0 | 0.61 | 24.0 | 0.05 |
| No | 266 | 10.2 | | 21.8 | | 16.2 | |
| Mother's education | | | | | | | |
| Low | 108 | 11.1 | 0.82 | 17.6 | 0.15 | 20.4 | 0.33 |
| Intermediate (or missing) | 219 | 12.8 | | 22.4 | | 16.4 | |
| High | 85 | 14.1 | | 29.4 | | 23.5 | |
| Lifetime sexual violence | | | | | | | |
| Yes | 20 | 15.0 | 0.75 | 25.0 | 0.79 | 40.0 | 0.02 |
| No | 392 | 12.5 | | 22.4 | | 17.9 | |

Table 4 Prevalence of mental distress symptoms by harassment exposure stratified for sex

| | Self-rated health as “not good” | | GHQ score ≥ 6 | | Panic symptoms | |
|--|---------------------------------|----------------|--------------------|----------------|----------------|----------------|
| | % | <i>p</i> value | % | <i>p</i> value | % | <i>p</i> value |
| Male students | 9.8 | | 11.8 | | 7.5 | |
| Sexual harassment | | | | | | |
| Yes | 18.6 | 0.04 | 16.3 | ns | 4.6 | ns |
| No | 8.6 | | 11.3 | | 7.9 | |
| Gender harassment: Comments on physical aspect | | | | | | |
| Yes | 24.5 | 0.001 | 18.9 | 0.10 | 11.3 | ns |
| No | 7.2 | | 10.6 | | 6.8 | |
| Cyber harassment | | | | | | |
| Yes | 12.8 | ns | 21.3 | 0.001 | 11.7 | 0.05 |
| No | 8.8 | | 8.4 | | 5.6 | |
| Harassment index | | | | | | |
| 2/3 domains | 18.2 | 0.01 | 22.7 | 0.02 | 9.1 | ns |
| 1 domain | 14.8 | | 14.8 | | 11.4 | |
| No | 6.1 | | 8.4 | | 5.2 | |
| Female students | 12.6 | | 22.6 | | 18.9 | |
| Sexual harassment | | | | | | |
| Yes | 11.5 | ns | 29.5 | ns | 31.2 | 0.007 |
| No | 12.9 | | 21.1 | | 16.6 | |
| Gender harassment: Comments on physical aspect | | | | | | |
| Yes | 17.1 | 0.11 | 23.8 | ns | 25.7 | 0.04 |
| No | 11.1 | | 22.2 | | 16.6 | |
| Cyber harassment | | | | | | |
| Yes | 12.0 | ns | 26.1 | ns | 28.3 | 0.01 |
| No | 12.9 | | 21.6 | | 16.3 | |
| Harassment index | | | | | | |
| 2/3 domains | 13.1 | ns | 24.6 | ns | 34.4 | 0.002 |
| 1 domain | 15.0 | | 25.0 | | 19.2 | |
| No | 11.4 | | 20.5 | | 14.4 | |

Discussion

In this sample of university students in Italy, the frequency of harassment was 38.3% among men and 44.2% among women, with a minority of students exposed to harassment in 2/3 domains, with few gender differences. Harassment was related to mental distress for both women and men, although the symptoms were different in the two genders. Male students with harassment exposure more often perceived their health as “not good” and reported symptoms of depression, whereas women reported panic symptoms, even after adjustment for social factors and previous sexual violence.

Sexual harassment has a negative effect on victim’s psychological health (Bucchianeri et al. 2014) but whether it has a differential impact on the health of men and women is still open to discussion. Some studies of adolescents or young adults found stronger negative effects for female than male respondents or no differences (Chiodo et al. 2009; Mitchell

et al. 2014), whereas others found that male respondents were more strongly affected than female (Kaltiala-Heino et al. 2016; Romito et al. 2016). Kaltiala-Heino et al. (2016) found that the associations between most items of sexual harassment and depression were stronger for boys than girls. Romito et al. (2016) found that when exposed to a high level of sexual harassment, the rate of disordered eating behavior symptoms increased twofold among young women and threefold among young men.

Some studies of army staff also found that men appear to be more affected by sexual harassment than women. In a study of US Marines (Shipherd et al. 2009), sexual harassment was linked to post-traumatic stress symptoms for both genders, but the association was stronger for men; sexual harassment had also a more negative effect on self-perceived health for men than women. In another study of a military sample, gender differences depended on the indicators considered: When exposed to high levels of sexual harassment, mental health

Table 5 Association of exposure to harassment and mental distress factors—multiple regression analysis

| | Self-rated health as “not good” | GHQ score ≥ 6 | Panic symptoms |
|------------------|---------------------------------|--------------------|------------------|
| Total sample | Adjusted OR* [95% CI] | | |
| Harassment index | <i>N</i> = 751 | <i>N</i> = 752 | <i>N</i> = 751 |
| 2/3 domains | 1.57 [0.80–3.07] | 1.71 [0.98–2.98] | 2.63 [1.46–4.72] |
| 1 domain | 1.70 [1.01–2.87] | 1.40 [0.90–2.19] | 1.54 [0.92–2.56] |
| No | 1 | 1 | 1 |
| | <i>p</i> < 0.11 | <i>p</i> < 0.11 | <i>p</i> < 0.005 |
| Male students | Adjusted OR** [95% CI] | | |
| Harassment index | <i>N</i> = 342 | <i>N</i> = 342 | <i>N</i> = 341 |
| 2/3 domains | 3.85 [1.28–11.5] | 2.78 [1.06–7.27] | 1.92 [0.52–7.02] |
| 1 domain | 3.02 [1.29–7.05] | 1.75 [0.80–3.84] | 2.17 [0.86–5.46] |
| No | 1 | 1 | 1 |
| | <i>p</i> < 0.01 | <i>p</i> < 0.09 | <i>p</i> = 0.23 |
| Female students | Adjusted OR** [95% CI] | | |
| Harassment index | <i>N</i> = 409 | <i>N</i> = 410 | <i>N</i> = 410 |
| 2/3 domains | 1.02 [0.41–2.52] | 1.31 [0.65–2.62] | 3.22 [1.61–6.43] |
| 1 domain | 1.26 [0.64–2.49] | 1.24 [0.71–2.16] | 1.34 [0.72–2.50] |
| no | 1 | 1 | 1 |
| | <i>p</i> = 0.79 | <i>p</i> = 0.64 | <i>p</i> < 0.004 |

OR, odds ratio; 95% CI, 95% confidence interval

*Adjusted for age, place of birth, couple relationship, mother’s education, having a job, occurrence of sexual violence in lifetime, and sex

**Adjusted for age, place of birth, couple relationship, mother’s education, having a job, and occurrence of sexual violence in lifetime

was affected more for men than women (Street et al. 2007), but harmful alcohol use was associated with harassment only among women (Gradus et al. 2008). Schlack and Petermann (2013), in a study of German youth who experienced violence, also observed a gender crossover effect: For instance, when boys were affected by violence, they showed an increase in the symptoms that are less frequent in the male gender.

Other authors have commented that because women are more used to sexual harassment, they have learned to live with it, whereas men find sexual harassment unexpected and more stressful (de Haas et al. 2009; Johnson et al. 2010). In addition, men have been socialized to consider any sexual advance as welcome and to think that always being interested in and ready for sex is a proof of masculinity (Connell 1995; Flood 2009). These stereotypes are still largely socially shared (Studzinska and Hilton 2017). When men exposed to sexual harassment feel uncomfortable or distressed, they may have more difficulties than women coping with their reactions and seeking support.

Limitations

This study has both limitations and strengths. Data were based on self-reporting, and mental distress symptoms were not assessed with a clinical interview. Because the study was

cross-sectional, we were unable to determine the direction of the association between harassment and mental distress symptoms; future longitudinal studies are necessary for determining causal inferences. The sample was not representative of young people in Italy, because it was composed of university students; however, the response rate was very high, with few missing values. Moreover, the characteristics of this sample are consistent with those of the whole population of students enrolled at the University of Trieste, in the same year. For instance, 90% of females and 93% of males in our sample were born in Italy as compared with 93 and 95% of students, respectively, in Trieste in 2014–2015.

The study was unique in looking at the associations between harassment and mental health symptoms while controlling for several factors, most importantly previous sexual violence. We used a detailed definition of harassment, including cyber harassment. In addition, this study is one of the very few on this topic in a southern European country.

Conclusion

Although harassment may seem a less serious form of victimization as compared with intimate partner violence or sexual assault, it has a strong negative impact on the mental health of exposed men and women. Sexual harassment and mental

distress symptoms have long been considered mainly female problems. However, men are not exempt from the problem and, in some cases, may be more affected than women. Future studies should always include men and women in their samples and should analyze males and females separately.

Moreover, more qualitative studies are needed to broaden our understanding of the meaning men and women attach to harassment and the strategies they use to cope with it.

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Author contribution The three authors have worked together at the preparation of the manuscript. PR and FB have specially collaborated to the survey design and data collection. PR, MJSC, and FB have analyzed data and prepared the draft. The three authors have carefully revised final version of this text.

Compliance with ethical standards

Conflicting of interests The authors declare that they have no conflicts of interest.

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