

Disordered Eating Behaviors and Sexual Harassment in Italian Male and Female University Students

Patrizia Romito, Carlotta Cedolin, Arederica Bastiani, And Marie-Josèphe Saurel-Cubizolles^{2,3}

Abstract

The aim of this study is to describe sexual harassment among Italian university students and analyze the relationship between harassment and disordered eating behaviors. An observational survey was conducted among university students at Trieste University (Italy) in spring 2014. Students answered an anonymous self-administered questionnaire about sexual harassment, including three domains—sexual harassment, unwanted comments on physical appearance, cyber-harassment—and disordered eating behaviors. The global sexual 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. Disordered eating behaviors were classified by at least one of the following: (a) eating without being able to stop or vomiting at least once or twice a month, (b) using laxatives or diuretics at least once or twice a week, (c) monitoring weight every day, and (d) dieting at least very often. The sample included 759 students (347 men and 412 women; 18-29 years old).

Corresponding Author:

Federica Bastiani, Psychology Unit, Department of Life Sciences, University of Trieste, Via Weiss 2, 34128 Trieste, Italy.

Email: FEDERICA.BASTIANI@phd.units.it

¹University of Trieste, Italy

²Institut National de la santé et de la recherche médicale, Paris, France

³Paris Descartes University, Paris, France

Experiencing sexual harassment was related to eating disorder symptoms for both genders with a regular gradient: the higher the harassment score, the more frequent the disordered eating behavior symptoms, even after adjusting for age and previous sexual violence. The association was stronger for males than females. Sexual harassment and disordered eating behaviors have long been considered mainly a female problem. Men are not exempt from these problems and in some cases may be more affected than women. The topics should be assessed in men and women.

Keywords

disordered eating behaviors, sexual harassment, cyber harassment, university students, sexual violence

Eating disorders (ED) have been considered a clinical priority area for Youth Mental Health (Henderson, 2012). About one in 259 females and one in 2,000 males will experience anorexia nervosa (AN), generally in adolescence or in young adulthood and about 3 times that number will suffer from bulimia nervosa (BN; National Collaborating Centre for Mental Health, 2004). According to the Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013), 0.4% of women is affected by AN, and 1.5% by BN, and the most affected are adolescent and young adults, whereas incidence from the male population is still unknown. Swanson, Crow, Le Grange, Swndsen, and Merikangas (2011) find that 0.3% of young people aged 13 to 18 is affected by AN, 0.9% by BN, and 1.6% by binge ED, whereas the prevalence of disordered eating behaviors (DEBs) in community samples of young people is higher, estimated between 14% and 22% (Swanson et al., 2011). The prevalence is difficult to compare across studies because measurements and demographic and cultural characteristics of the samples vary greatly (Mustelin et al., 2016).

EDs are associated with various mental disorders. In a nationally representative sample of 10,123 adolescents in the United States, Swanson and colleagues (2011) found that 55%, 88%, 84%, 80%, and 70% of adolescents with AN, BN, binge eating, subthreshold-AN, and subthreshold-BN, respectively, suffered from one or more comorbidity psychiatric disorders. Furthermore, all subtypes of EDs were associated with lifetime suicidality. When occurring in childhood or adolescence, EDs are predictive of high-risk behaviors and adverse outcomes. Girls with EDs, not otherwise specified, were twice to become overweight or obese (odds ratio [OR] = 1.9), to develop depressive symptoms (OR = 2.3), to use drugs (OR = 1.7), and to start to binge drink

frequently (OR = 1.8; Field et al., 2012). In another study with adolescents, all EDs and other specified feeding and EDs were predictive of anxiety disorders, depression, drug use, and deliberate self-harm (Micali et al., 2015). As in the study of Swanson and colleagues (2011), even subthreshold manifestations implied impaired social life of affected youth: subthreshold-BN and binge ED were predictive of use of drugs and deliberate self-harm (OR = 3.97 and 2.32, respectively; Micali et al., 2015). ED symptoms in adolescence predict eating-disordered behavior, depressive symptoms, overweight, and obesity in young adulthood (Herpertz-Dahlmann, Depfle, Konrad, Klasen, & Ravens-Sieberer, 2014). This suggests that ED symptoms and not only diagnosed EDs are predictive of other health problems.

EDs have long been considered a female problem, and few studies have examined ED in community samples of male adolescents or men. These problems are still seen as "decidedly not masculine" (MacLean et al., 2015), so they are likely under-diagnosed and misunderstood among men (Strother, Lemberg, Stamford, & Turberville, 2012). However, although the prevalence of ED symptoms is higher in women than men, they are frequent also among adolescents and adult men. In a sample of university students in the United States (Bonomi, Anderson, Nemeth, Rivara, & Buettner, 2013), 15.5% of females and 8.6% of males reported fasting, 19.5% and 11.4% reported using diet aids, and 10.5% and 2.8% used vomiting to control their weight. In another U.S. university sample (Staples & Bravender, 2003), 23.3% of young women and 4.7% of young men presented behaviors within a "concerning range" for ED. In a study in Spain (Sepulveda, Carrobles, & Gandarillas, 2008), some symptoms (dieting, using laxatives, and vomiting to control weight) were more frequent among female than male students, whereas others (binge eating) were more frequent among male students.

According to a recent review (Mitchison & Hay, 2014) in addition to female sex, risk factors for ED are young age, sexual and physical abuse, participation in esthetic or weight-oriented sports, and heritability; socioeconomic status, education, and urbanity do not appear to have strong associations with ED prevalence.

Sexual harassment is frequent among young people (Bucchianeri, Eisenberg, Wall, Piran, & Neumark-Sztainer, 2014; Eom, Restaino, Perkins, Neveln, & Harrington, 2015). Some studies show increased prevalence among female respondents (Clear et al., 2014; Eom et al., 2015; Petersen & Hyde, 2013) and others show different prevalence among males and females, according to the type of harassment considered (Bucchianeri et al., 2014; Chiodo, Wolfe, Crooks, Hughes, & Jaffe, 2009). A few studies in the United States have shown that sexual harassment affects maladaptive dieting behaviors, lower body satisfaction, or disordered eating symptoms in

female adolescents (Chiodo et al., 2009) or both genders (Bucchianeri et al., 2014; Buchanan, Bluestein, Nappa, Woods, & Depatie, 2013; Petersen & Hyde, 2013).

A relatively new type of harassment is cyberbullying, a serious problem, affecting between 20% and 40% of adolescents (Aboujaoude, Savage, Starcevic, & Salame, 2015; Lindsay, Booth, Messing, & Thaller, 2015), but no study has included web-based harassment (cyber harassment) among the indicators of sexual harassment. Moreover, sexual violence was found associated with EDs in both genders (Jonas et al., 2011), but only one study controlled for sexual violence in analyzing relationships between sexual harassment and ED symptoms in a uniquely female sample (Harned, 2000).

With only few exceptions, the revised studies were carried out in North America or in northern Europe and we cannot take for granted that similar trends will be found also in countries such as Italy where gender relationships and eating habits may be different.

The aim of this study was to describe sexual harassment among female and male university students in Italy and analyze the relationships between harassment and DEBs taking into account previous sexual violence.

Method

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 handed out 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. The study was observational, did not imply interventions or experimentation, and used anonymous questionnaires with a sample of young adult subjects (all students were older than 18 years): 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. All students completed the questionnaire.

Measures

Sexual harassment in the previous 12 months was measured by three questions derived from the Sexual Experiences Questionnaire (Fitzgerald, 1990):

persistent sexual requests, undesired physical contacts, and sexual blackmails or threats. To be included in the category of sexual harassment, students have to report at least one out of the three items of unwanted sexual attention.

Gender harassment was measured by one single question: inappropriate comments on physical aspect.

Cyber harassment was measured using six items from the European survey on violence against women (European Union Agency for Fundamental Rights [FRA], 2014): threats, insults, intimate rumors about you, unwanted sexual pictures, sexual requests, and other disturbing messages. To be included in the category of cyber harassment, students have to report at least two types of cyber harassment out of six.

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.

Disordered eating behaviors were measured by the questions developed by Killen et al. (1994). Students were asked how often they eat without being able to stop or until they feel sick, self-induce vomiting, use laxatives or diuretics, and monitor their weight: Responses were "every day or almost every day," "once or twice a week," "once or twice a month," "less often," or "never." Another question asked whether students had been on a diet in the past year: Responses were "constantly," "very often," "once or twice," or "no." Respondents who presented at least one of the categories—eating without being able to stop or vomiting at least once or twice a month, using laxatives or diuretics at least once or twice a week, monitoring their weight every day, or dieting at least very often—were classified as having DEBs. This category corresponds to the "mild eating problems" described by Killen et al. (1994). Questions assessing DEBs were placed at the beginning of the survey, before the assessment of sexual harassment.

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

Analysis

First, we described the characteristics of the sample and the frequency of harassment by gender. Then we analyzed the frequency of DEBs by whether respondents had experienced harassment. The data were compared by chisquare test. Statistical significance was defined as p < .05. Finally, with logistic regression models, we computed ORs and 95% confidence intervals (95% CIs) for the association of sexual harassment and EDs, adjusting for previous

sexual violence, age, couple relationship, mother's education, and sex among the whole sample. Then we carried out the same analysis separately by sex. Because of a small number of missing data, the numbers may vary slightly in tables. Data analysis involved use of SPSS 22.0 (SPSS Inc., Chicago, IL).

Results

Sample Characteristics

The sample included 412 women and 347 men, aged between 18 and 29 years (M age 20.6 years, SD = 1.7; Table 1). Most respondents (91.4%) were born in Italy, and 32% had a job, with no difference by gender. Female students' mothers had a lower educational level than those of male students. These characteristics 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 included in our sample were born in Italy compared with, respectively, 93% and 95% of students in Trieste in 2014-2015.

Women were more likely to be in a couple relationship than men. More women than men had a lifetime experience of sexual violence, but the difference was not significant.

The frequency of DEBs was 31.8% for men and 40.3% for women. The frequency of the different symptoms of DEB varied according to respondents' gender. Women were more likely than men to report eating without being able to stop (31.6% vs. 24.9%), and dieting (16.3% vs. 6.1%); there were no gender differences concerning vomiting (2.4% of women vs. 2.3% of men), using laxatives or diuretics (1.7% vs. 0.6%), and monitoring their weight every day (7.5% vs. 6.6%).

Prevalence of Harassment in the Previous 12 Months

Sexual harassment and cyber harassment frequency did not differ by gender (Table 2). Young women were significantly more likely to report inappropriate comments about their physical aspects than men. The harassment index did not differ by gender or social characteristics of respondents (age, mother's education, place of birth, couple relationship, and having a job; data not shown). Female and male students who had experienced sexual violence were more likely to report harassment (p < .001, for both genders; data not shown).

Correlates of DEBs

Frequency of DEBs was higher for older than younger males (p < .05); a similar but not significant trend was observed for female students (data not shown). The frequency did not vary by place of birth, mother's education,

Table I. Characteristics of Students.

	Males (n = 347) 20.6 (1.7)		Females (n = 412) 20.5 (1.5)		p value ns
Age, M (SD)					
	n	%	n	%	
Born in Italy	321	93.0	371	90.0	ns
In a couple relationship					
Currently	126	36.3	244	52.2	
Previous 12 months	53	15.3	59	14.3	<.001
No	168	48.4	109	26.5	
Has a job					
Yes or occasionally	102	29.4	146	35.5	ns
No	244	70.5	266	64.6	
Mother's education					
Low	53	15.3	108	26.2	
Intermediate	194	55.9	215	52. I	<.001
High	90	25.9	85	20.6	
Missing	10	2.9	4	1.0	
Previous sexual violence	10	2.9	20	4.8	ns
Disordered eating behaviors	110	31.8	166	40.3	<.02

 Table 2. Frequency of Harassment Exposure.

	Males		Females		
	n	%	n	%	p value
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
Comments on physical aspect	53	15.3	105	25.5	<.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	<.002
Sexual requests	48	13.9	69	16.7	ns
Other disturbing messages	45	13.0	88	21.4	<.003
Harassment score					
2 or 3 domains	44	12.8	61	14.9	
I domain	88	25.5	120	29.3	ns
No	213	61.7	229	55.8	

Table 3. Harassment Exposure and DEBs.

	Males			Females	
	n	% with DEBs	n	% with DEBs	
Sexual harassment					
Yes	43	46.5	61	52.5	
No	302	29.5	350	38.0	
		p < .03		p < .03	
Comments on physica	aspect			•	
Yes	53	52.8	105	48.6	
No	292	27.7	307	37.5	
		p < .001		p < .05	
Cyber harassment				•	
Yes	94	41.5	92	50.0	
No	250	28.0	319	37.3	
		p < .02		p < .03	
Harassment index				-	
2 or 3 domains	44	52.3	61	55.7	
I domain	88	34.1	120	40.8	
No	212	26.4	229	35.4	
		p < .003		p < .02	

Note. DEBs = disordered eating behaviors.

couple relationship, and having a job. Previous sexual violence was associated with increased frequency of DEBs for females (p < .001) but not for males.

Relationship Between Sexual Harassment and DEBs

On bivariate analysis, for both genders, any harassment victimization was associated with increased frequency of DEBs; the association was stronger for males (Table 3). The differences were significant for each component of the harassment index: sexual harassment, comments on physical aspect, and cyber harassment.

Even after adjustment for previous sexual violence, age, couple relationship, and mother's education, the risk of DEBs increased significantly with exposure to harassment (Table 4). For all students, the risk of DEBs was more than doubled among respondents exposed to a high-level of harassment as compared with no exposure. For males, the adjusted OR (95% CI) for DEBs

Table 4. ORs of Disordered Eating Behaviors in Students by Harassment Exposure.

		OR [95% CI] Disordered eating	
	All (N = 754)	Males (n = 344)	Females (n = 410)
Crude ORs			
Harassment index			
2/3 domains	2.60 [1.68, 4.01]	3.05 [1.57, 5.93]	2.30 [1.30, 4.08]
I domain	1.34 [0.94, 1.89]	1.44 [0.84, 2.46]	1.26 [0.80, 1.98]
no	I	I	I
	p < .001	p < .005	p < .05
Adjusted ORs			
Harassment index			
2/3 domains	2.43 [1.54, 3.81]	3.12 [1.51, 6.43]	2.22 [1.22, 4.04]
I domain	1.29 [0.90, 1.85]	1.46 [0.84, 2.53]	1.14 [0.70, 1.83]
no	I	I	I
	p < .001	p < .01	p < .05
Sexual violence			
No	I	I	I
Yes	2.07 [0.92, 4.65]	0.68 [0.14, 3.35]	3.27 [1.18, 9.09]
	ns	ns	p < .05
Age			
18-19	I	I	I
20	1.48 [0.95, 2.31]	0.93 [0.47, 1.78]	2.17 [1.18, 4.01]
21	1.12 [0.74, 1.69]	0.75 [0.38, 1.47]	1.47 [0.86, 2.49]
22	1.77 [1.08, 2.93]	1.30 [0.59, 2.86]	2.11 [1.08, 4.11]
23 or older	1.67 [0.95, 2.93]	1.21 [0.57, 2.56]	2.09 [0.88, 4.96]
	ns	ns	ns
In a couple relationship			
Currently	I	I	I
Previous 12 months	0.80 [0.50, 1.28]	0.70 [0.33, 1.47]	0.78 [0.42, 1.44]
No	0.99 [0.70, 1.40]	0.83 [0.50, 1.39]	1.13 [0.70, 1.83]
	ns	ns	ns
Mother's education			
Low	1.25 [0.85, 1.84]	1.27 [0.66, 2.44]	1.23 [0.76, 2.01]
Intermediate	 	l	
High	1.09 [0.74, 1.59]	0.85 [0.48, 1.50]	1.32 [0.78, 2.24]
Sex	ns	ns	ns
Male	1		
Female	1.39 [1.00, 1.92] p = .05	_	_

Note. OR = odds ratio; CI = confidence interval.

was 3.12 [1.51, 6.43] with exposure to two or three domains of harassment, and 1.46 [0.84, 2.53] with exposure to only one domain (p < .008). For females, the adjusted ORs were 2.22 [1.22, 4.04] and 1.14 [0.70, 1.83], respectively (p < .03).

Women who reported a previous experience of sexual violence presented 3 times higher risk of DEBs as compared with other women; this association was not found among men.

Discussion

We found a clear relationship between having experienced harassment and DEBs for both female and male university students in Italy: The higher the harassment score, the more frequent the DEBs symptoms. The risk of DEBs with harassment was greater for males than females. These links were not affected by previous sexual violence, age, couple relationship, and mother's education.

Our study was unique in looking at the associations between harassment and DEBs in a sample homogeneous for age and in male and female university students. We used a definition of harassment that included cyber harassment and were able to control several factors, most importantly previous sexual violence. This study is one of the few on this topic in a southern European country.

The frequency of symptoms of DEBs was high: 31.6% of females and 24.9% of males reported eating without being able to stop or until feeling sick at least once or twice a month in the previous year, and 16.3% and 6.1%, respectively, were very often on a diet in the previous year. Other authors also found a high prevalence of symptoms of disordered eating: Among university students in the United States, 33.6% of females and 21.7% of males reported recent binge eating (Kelly-Weeder, Jennings, & Wolfe, 2012), a percentage close to what we found. In another study, 10.5% of females and 2.8% of males used vomiting to control their weight (Bonomi et al., 2013). In a sample of U.S. young adults (18-35 years), 29.6% of women and 20.0% of men reported loss of control over eating (Striegel-Moore et al., 2009); vomiting was less frequent, concerning 3.7% of women and 1.5% of men, similar to what we found.

In a 2001 study in Italy, also with university students and using the same definition of DEBs as in the present study (Romito & Grassi, 2007), the prevalence of DEBs was lower: 22.1% for females and 19.3% for males, which suggests an increase in these symptoms in a student population. Micali, Hagberg, Petersen, and Treasure (2013) reported an increased incidence of diagnosed DEBs in patients in general practice in the United Kingdom,

especially among young people. An increase in DEBs was also reported in Australia (Hay, Mond, Buttner, & Darby, 2008).

The frequency of harassment was 41.8% in our sample, with 15.7% of students exposed to severe harassment (Level 2) in two or three domains considered. Small gender differences were observed: Women more frequently reported unfair comments on physical aspect, with no differences by gender concerning sexual or cyber harassment.

There are few studies on the associations between sexual harassment and EDs among male and female university students. Harned (2000) found an association between sexual harassment, body image, and ED symptoms but in a female sample of college students. A study in Norway (Sundgot-Borgen, Fasting, Brackenridge, Torstveit, & Berglund, 2003) also found an association between sexual harassment and EDs among female athletes (15-30 years old). The other few studies investigating the impact of sexual harassment on DEBs for both genders concerned younger adolescents. A longitudinal survey of youths 11 to 15 years old (Petersen & Hyde, 2013) found that victims of sexual harassment in Grade 5 were more likely to report disordered eating in Grade 9; girls reported more upsetting sexual harassment and more disordered eating symptoms than did boys. In a longitudinal study of students 14 to 17 years old (Chiodo et al., 2009), sexual harassment predicted maladaptive dieting for girls but not for boys. In a study investigating body satisfaction (M age of the sample: 14.4 years), harassment, especially weight-based harassment, was associated with low body satisfaction in both genders (Bucchianeri et al., 2014). A study of mixed-aged university students (Buchanan et al., 2013) found increased eating problems for students exposed to sexual harassment. Depending on the type of EDs symptoms, the effect of sexual harassment was stronger for women (eating concerns) or for men (vomiting).

Our results suggest that the effects of sexual harassment on DEBs are stronger for men than women. Studies with army staff or worker samples, looking at other health problems, also found that men appear to be more affected than women. In a study of U.S. Marines (Shipherd, Pineles, Gradus, & Resick, 2009), sexual harassment was linked to posttraumatic stress symptoms for both genders but the association was stronger for men, which suggests that the same level of harassment was particularly detrimental to male participants. Sexual harassment had also a more negative effect on self-perceived health for men than women (Shipherd et al., 2009). 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 (de Haas, Timmerman, & Hoeing, 2009; Johnson, Mitchell, Bean, Richeson, & Shelton, 2010). Our study is the first to show this trend in a southern European country, in a university student sample.

Limitations

Data are based on self-reporting. Because the study was cross-sectional, we were unable to determine the direction of the association between sexual harassment and DEBs. Future longitudinal studies are necessary for causal inferences. This sample is not representative of young people in Italy. In addition, excessive exercise as a mean of controlling weight is more typical for men than women, but we did not assess it. Future studies should include this item to broaden our understanding of weight or shape concerns and eating disturbances for both genders.

Conclusion

DEBs imply impaired social life of affected young people and may predict adverse outcomes (Field et al., 2012; Micali et al., 2015; Swanson et al., 2011). Although sexual 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 various health problems, including DEBs. Sexual harassment, EDs, and DEBs have long been considered mainly female problems. However, men are not exempt from the problems 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 sexual harassment and the strategies they use to cope with it.

Acknowledgments

The authors thank the students who answered the questionnaire and agreed to share their experience. They also thank Rossella Pisacane for her help in collecting and coding the questionnaires.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

Aboujaoude, E., Savage, M. W., Starcevic, V., & Salame, W. O. (2015). Cyberbullying: Review of an old problem gone viral. *Journal of Adolescent Health*, *57*, 10-18.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.

- Bonomi, A. E., Anderson, M. L., Nemeth, J., Rivara, F. P., & Buettner, C. (2013). History of dating violence and the association with late adolescent health. BMC Public Health, 13, Article 821.
- Bucchianeri, M. M., Eisenberg, M. E., Wall, M. M., Piran, N., & Neumark-Sztainer, D. (2014). Multiple types of harassment: Associations with emotional wellbeing and unhealthy behaviors in adolescents. *Journal of Adolescent Health*, 54, 724-729.
- Buchanan, N. T., Bluestein, B. M., Nappa, A. C., Woods, K. C., & Depatie, M. M. (2013). Exploring gender differences in body image, eating pathology, and sexual harassment. *Body Image*, 10, 352-360.
- Chiodo, D., Wolfe, D. A., Crooks, C., Hughes, R., & Jaffe, P. (2009). Impact of sexual harassment victimization by peers on subsequent adolescent victimization and adjustment: A longitudinal study. *Journal of Adolescent Health*, 45, 246-252.
- Clear, E. R., Coker, A. L., Cook-Craig, P. G., Bush, H. M., Garcia, L. S., Williams, C. M., . . . Fisher, B. S. (2014). Sexual harassment victimization and perpetration among high school students. *Violence Against Women*, *20*, 1203-1219.
- de Haas, S., Timmerman, G., & Hoeing, M. (2009). Sexual harassment and health among male and female police officers. *Journal of Occupational Health Psychology*, 14, 390-401.
- Eom, E., Restaino, S., Perkins, A. M., Neveln, N., & Harrington, J. W. (2015). Sexual harassment in middle and high school children and effects on physical and mental health. *Clinical Pediatrics*, *54*, 430-438.
- European Union Agency for Fundamental Rights. (2014). *Violence against women:* An EU-wide survey. Retrieved from http://fra.europa.eu/en/publication/2014/violence-against-women-eu-wide-survey-main-results-report
- Field, A. E., Sonneville, K. R., Micali, N., Crosby, R. D., Swanson, S. A., Laird, N. M., . . . Horton, N. J. (2012). Prospective association of common eating disorders and adverse outcomes. *Pediatrics*, 130, e289-e295.
- Fitzgerald, L. F. (1990). Sexual harassment: The definition and measurement of a construct. In M. A. Paludi (Ed.), *Ivory power: Sexual harassment on campus* (pp. 21-44). Albany: State University of New York Press.
- Harned, M. (2000). Harassed bodies: An examination of the relationship among women's experiences of sexual harassment, body image, and eating disturbances. *Psychology of Women Quarterly*, *24*, 336-348.
- Hay, P. J., Mond, J., Buttner, P., & Darby, A. (2008). Eating disorder behaviors are increasing: Findings from two sequential community surveys in South Australia. *PLoS ONE*, 3, e1541.
- Henderson, J. (2012). Costs of eating disorders in England: Economic impacts of anorexia nervosa, bulimia nervosa and other disorders, focusing on young people. Retrieved from https://www.b-eat.co.uk/assets/000/000/146/ CostsofEatingDisordersinEnglandReport_original.pdf?1403538000
- Herpertz-Dahlmann, B., Depfle, A., Konrad, K., Klasen, F., & Ravens-Sieberer, U. (2014). Eating disorder symptoms do not just disappear: The implications of

- adolescent eating-disordered behavior for body weight and mental health in young adulthood. European Child & Adolescent Psychiatry, 24, 675-684.
- Johnson, S., Mitchell, M., Bean, M., Richeson, J. A., & Shelton, J. N. (2010). Gender moderates the self-regulatory consequences of suppressing emotional reactions to sexism. *Group Processes & Intergroup Relations*, 13, 215-226.
- Jonas, S., Bebbington, P., McManus, S., Meltzer, H., Jenkins, R., Kuipers, E., . . . Brugha, T. (2011). Sexual abuse and psychiatric disorder in England: Results from the 2007 Adult Psychiatric Morbidity Survey. *Psychological Medicine*, 41, 709-719.
- Kelly-Weeder, S., Jennings, K. M., & Wolfe, B. E. (2012). Gender differences in binge eating and behavioral correlates among college students. *Eating and Weight Disorders*, 17, 200-202.
- Killen, J. D., Taylor, C. B., Hayward, C., Wilson, D. M., Haydel, K. F., Hammer, D., . . . Kraemer, H. (1994). Pursuit of thinness and onset of eating disorder symptoms in a community sample of adolescent girls: A three-year prospective analysis. *International Journal of Eating Disorders*, 16, 227-238.
- Lindsay, M., Booth, J. M., Messing, J. T., & Thaller, J. (2015). Experiences of online harassment among emerging adults: Emotional reactions and the mediating role of fear. *Journal of Interpersonal Violence*. Advance online publication. doi:10.1177/0886260515584344
- MacLean, A., Sweeting, H., Walker, L., Patterson, C., Raeisaenen, U., & Hunt, K. (2015). "It's not healthy and it's decidedly not masculine": A media analysis of UK newspaper representations of eating disorders in males. BMJ Open, 5, Article e007468.
- Micali, N., Hagberg, K. W., Petersen, I., & Treasure, J. L. (2013). The incidence of eating disorders in the UK in 2000-2009: Findings from the General Practice Research Database. *BMJ Open*, 3, Article e002646.
- Micali, N., Solmi, F., Horton, N. J., Crosby, R. D., Eddy, K. T., Calzo, J. P., . . . Field, A. E. (2015). Adolescent eating disorders predict psychiatric, high-risk behaviors and weight outcomes in young adulthood. *Journal of the American Academy of Child & Adolescent Psychiatry*, 54, 652-659.
- Mitchison, D., & Hay, P. (2014). The epidemiology of eating disorders: Genetic, environmental, and societal factors. *Clinical Epidemiology*, 6, 89-97.
- Mustelin, L., Silén, Y., Raevuori, A., Hoek, H. W., Kapiro, J., & Kesi-Rahkonen, A. (2016). The DSM-5 diagnostic criteria for anorexia nervosa may change its population prevalence and prognostic value. *Journal of Psychiatric Research*, 77, 85-91.
- National Collaborating Centre for Mental Health. (2004). Eating disorders: Core interventions in the treatment and management of anorexia nervosa, bulimia nervosa, and related eating disorders. Leicester, UK: British Psychological Society.
- Petersen, J. L., & Hyde, J. S. (2013). Peer sexual harassment and disordered eating in early adolescence. *Developmental Psychology*, 49, 184-195.
- Romito, P., & Grassi, M. (2007). Does violence affect one gender more than the other? The mental health impact of violence among male and female university students. *Social Science & Medicine*, *65*, 1222-1234.

Sepulveda, A. R., Carrobles, J. A., & Gandarillas, A. M. (2008). Gender, school and academic year differences among Spanish university students at high-risk for developing an eating disorder: An epidemiologic study. BMC Public Health, 8, Article 102.

- Shipherd, J., Pineles, S., Gradus, J., & Resick, P. (2009). Sexual harassment in the Marines, posttraumatic stress symptoms, and perceived health: Evidence for sex differences. *Journal of Traumatic Stress*, 22, 3-10.
- Staples, B., & Bravender, T. (2003). Prevalence of and risk factors associated with disordered eating among university undergraduates. *Journal of Adolescent Health*, 32, 161-162.
- Striegel-Moore, R. H., Rosselli, F., Perrin, N., DeBar, L., Wilson, G. T., May, A., & Kramer, H. C. (2009). Gender difference in the prevalence of eating disorder symptoms. *International Journal of Eating Disorders*, 42, 471-474.
- Strother, E., Lemberg, R., Stamford, S., & Turberville, D. (2012). Eating disorders in men: Underdiagnosed, undertreated, and misunderstood. *Eating Disorders: The Journal of Treatment & Prevention*, 20, 346-355.
- Sundgot-Borgen, J., Fasting, K., Brackenridge, C., Torstveit, M. K., & Berglund, B. (2003). Sexual harassment and eating disorders in female elite athletes—A controlled study. Scandinavian Journal of Medicine & Science in Sports, 13, 330-335.
- Swanson, S. A., Crow, S. J., Le Grange, D., Swndsen, J., & Merikangas, K. R. (2011). Prevalence and correlates of eating disorders in adolescents: Results from the national comorbidity survey replication and adolescent supplement. *Archives of General Psychiatry*, 68, 714-723.

Author Biographies

Patrizia Romito, PhD, is an associate professor in the Department of Life Sciences—Psychology Unit at the University of Trieste (Italy). Her research interests include the health impact of violence and the response of health services, sexual harassment, pornography, and the evaluation of social programs intended to prevent violence.

Carlotta Cedolin is a MSc in psychology, currently attending a post-graduate course in clinical psychology. Her graduate thesis concerns the impact of violence in young women's health. She has clinical experience in adults' and adolescents' mental health.

Federica Bastiani is a PhD student in the Department of Life Sciences–Psychology Unit at the University of Trieste (Italy). Her current research interests are on the health impact of violence and the social responses to violence.

Marie-Josèphe Saurel-Cubizolles, PhD, is an epidemiologist and a researcher in the Institut National de la santé et de la recherche médicale (INSERM) Unit 1153—EPOPé in Paris (France). Her research interests include social inequalities in perinatal health and the relationship between women' work and health in pregnancy.