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Face-to-Face Versus Online Harassment of European Women: Importance of Date and Place of Birth

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Abstract

This study seeks to improve our understanding of how sexual harassment, whether personal or using new technologies, affects young women under 30 years of age in Europe. First, the definitions of various harassment types are reviewed, and their characteristics analysed. Subsequently, we summarize recent studies on the subject that reflect how harassing behaviours are increasingly supported by new technologies. In a practical section, based on the latest data on gender violence supplied by the European Union Agency for Fundamental Rights, we separate behaviour typical of traditional harassment, face-to-face harassment and online harassment. To improve the analysis and description of both types of harassment by age, three indicators are developed: (1) prevalence (2) intensity of sexual harassment (3) proximity to the aggressor. Particularities of online harassment include its prevalence among younger women, greater intensity and less proximity to the aggressor, although the statistics are only significant for higher prevalence and less proximity.

Keywords Cyber-harassment \cdot Harassment \cdot Europe \cdot Young women \cdot Gender violence \cdot New technologies

Introduction

Among the concerns shared by parents and educators of adolescents and young people is the misuse of social networks, mobile devices and, generally, information and communication technologies (ICT). These concerns are not trivial if one considers that adolescents have changed their way of relating, increasingly using the Internet as a means of communication. In Spain, 95% of adolescents use the Internet on a daily basis to communicate, resulting in a decrease in the time spent in front of the television and playing video games (Torres Albero et al. 2013).

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Possible misuses of technology include exercising violence against peers and partners by relying on new technologies and exposure to violent and pornographic images. In fact, according to Tsitsika et al. (2012), 58.8% of European adolescents have been exposed to sexual images, with 32.8% of them stating that this experience was harmful (18.4% of the total sample). This example suggests a need for education in the area of relationships, sexuality and the use of new technologies for young Europeans.

In this study, we start by examining definitions of different harassment types and analyse their characteristics. We understand the concept of "sexual harassment" as originally stated in the 1970 s, as a broad concept that includes not only flagrant examples of sexual abuse, but also more subtle behaviours (Baker 2007). This term therefore encompasses behaviours of a diverse nature, both verbal and physical, and includes the use of threats in order to carry out an act of a sexual nature (Cuenca-Piqueras 2013). It is evident that this is a "problematic concept" since it is defined in many ways. Moreover, the definition that the researcher uses does not frequently correspond to the daily usage of the term, all of which makes comparison between studies rather difficult (Eurofound 2005; Lamoca Pérez and Pérez Guardo 2008; Cuenca-Piqueras 2013).

Subsequently, studies are reviewed that examine how harassing behaviours are increasingly supported by new technologies and how the range of possibilities for exercising violence has expanded. In a practical section, we separate behaviour typical of traditional harassment, which is not performed through social networks or the Internet (termed "face-to-face harassment") and harassment using new technologies (termed "online harassment"). To empirically validate this classification, we perform a factorial analysis with two components: (1) face-to-face harassment, which includes behaviours such as touching, invitations on dates as well as comments and jokes regarding physical appearance, and (2) online harassment, e.g., sending sexually explicit e-mails and text communication using the short messaging service (SMS) or sending pornographic or offensive imagery.

How does Technology Facilitate Sexual Violence? Online Sexual Harassment and Young Women

Traditionally, the classification of harassing behaviours focuses on the setting in which such behaviours occur. Thus, studies on harassment have been addressed at the workplace or in the academic field. These actions, in both contexts, display several commonly occurring characteristics, such as the fact that the perpetrators are known to their victim. In this sense, Bullying, as Olweus (1993) defines it, would be an intentional aggression carried out repeatedly by one or more individuals, towards someone who cannot easily defend themselves. According to Dooley et al. (2009) these behaviors are also carried out on-line, under the names of cyberbullying and online harassment. In their study, which distinguishes between face to face bullying and cyberbullying, they go into depth about the differences between these two types of aggression.



In addition, the most recent studies on bullying focus on harassment suffered on the street, on public transport or over the telephone (e.g., anonymous obscene calls). When analysing the studies about these behaviours the term "street harassment" is found. In spite of the limitations expressed in the work by Fileborn and Vera-Gray (2017) about the limited space of the street, that should be extended to include other public spaces like transportation and other public/private places such as bars or clubs, this is by far the most commonly used term by academics and activists (Vera-Gray 2016; Holly 2010). Other terms referring to these same behaviours are 'stranger harassment', 'gender based public harassment', 'sexual harassment in public places' (Vera-Gray 2018). The origin of the term would be the 80's, and this term is concerned with gender-based harassment, that takes place in public places (Holly 2010).

Among the behaviours included in "Street harassment" we could find whistles, sexually explicit comments ("catcalling"), offensive comments about the body, honking the horn, exhibitionism or masturbation on public transportation or on the street, among others (Luna-Meza and Elena 2013; Fileborn and Vera-Gray 2017). These behaviours share the characteristic that the victim does not know the perpetrator, which makes such experiences particularly difficult to anticipate and, therefore, to avoid (Gaytán 2007; MacMillan et al. 2000; Observatorio contra el Acoso Callejero de Chile 2015)

Furthermore, these customs show power relations between the sexes, as they are usually performed by men, alone or in groups, and they are generally directed towards women, being a non-consensual relationship, imposing one person's or several peoples' wishes upon others. They are generally performed quickly and, in the street, or in public transportation (Fileborn and Vera-Gray 2017; Janos and Espinosa 2018).

Advancing a step further, it can be stated that at present the different types of harassment can be perpetrated directly or using new technologies. Harassment using new technologies shares with street harassment the possibility that the aggressor is unknown to the victim. In social networks, that the perpetrator is anonymous results in the use of much stronger language (Chacón Medina 2003) and creates in the aggressors the perception of impunity for their actions (Félix-Mateo et al. 2010; Torres Albero et al. 2013).

Experts disagree whether cyber-bullying is a form of harassment or whether it belongs in a different category. Although cyber-bullying is generally considered not to belong to a category of its own, the use of new technologies involves other issues that must be considered because the forms of harassment are broadened by the possibilities that these tools afford (Morales Reynoso et al. 2015).

Therefore, new classifications have appeared. The firsts researchers defined three types of online sexual harassment: unwelcome verbal comments and/or pictures that are specifically related to gender; unwanted sexual attention includes; and sexual coercion describes threats to harm or cyberstalk the victim (Scarduzio et al. 2018). A pioneering view is that developed by Willard (2006), according to which categories are created that represent harassment that is only possible when new technologies are used. This approach emphasizes behaviours, such as "flaming", or incendiary provocation, in which the aggressor tries to initiate a discussion (typically



on a controversial, political, religious or sports topic) through chat rooms or walls on social networks with the intention of causing fights or ruptures in affectionate relationships. Other examples include distributing derogatory and false information regarding a person (e.g., digitally altered photographs, rumours, teasing), disseminating photographs or videos recorded during sexual relations, with or without the consent of the victim (known as "image-based sexual abuse"), excluding a peer from all information dissemination groups or impersonating someone on a social network.

However, because such behaviours are modified as technologies advance, this list of aggressive behaviours requires constant revision. In fact, currently, new violent behaviours are being detected on social networks that become trendy among young individuals, such as "happy slapping", i.e., recording a fight on a mobile telephone and then uploading the recording to social networks (INTECO 2012), or "neknomination", which involves recording oneself drinking a half litter of an alcoholic beverage and posting the video on social networks, then choosing another person to do the same within 24 h (Powell and Henry 2017a, b).

Similarly, ICT can facilitate sexual violence. In particular, dating sites and social networks are being used to facilitate sexual assaults and subsequent blackmail and humiliation of the victims of such aggression. These cases, in which the violations are recorded and subsequently disseminated, obviously involve a double victimization (Powell and Henry 2017a, b).

Therefore, an important issue to consider would be making changes in mobile telephony. As Koskela (2004) notes, the increase over the last few years in the number of camera phones will probably radically change the role of visual representation. Currently we can in fact speak of a society in which an empowerment of exhibitionism is occurring, as individuals are freed from shame and the need to hide. Another element that is being analysed is the way in which mobile telephones influence relationships through the many new forms of control they offer. Cameras on mobile devices can function as spies, facilitating extortion and the easy diffusion of intimate digital images. On the other hand, these behaviors are also affected by advances in GPS technologies and location programs (McNeal et al. 2018). This phenomenon must be analysed from a gender perspective because behaviours such as image-based sexual abuse do not inflict the same damage on or are understood in the same way by men and women (Powell and Henry 2017a, b).

New technologies facilitate the dissemination of information and thus the sending of sexually explicit material through mobile telephones and via email or the Internet. Such information can also include jokes, pranks and memes about rape; threats of sexual violence, including the names and addresses of women who "deserve to be raped"; and the use of dating sites to sexually assault someone. Another example of how technologies affect the forms of harassment is anonymously sending sexually explicit or violent images through Bluetooth. With the support of new technologies, this novel form of harassment occurs in public transport or on the street and involves intimidation of a victim who does not know who sent an image but that the harasser is nearby.

The rising number of possible harassment behaviours through new technology has made academics propose new typology. In this sense, Powell and Henry (2017a, b) establish the following categories of 'online sexual harassment', naming (1)



sexual solicitation, (2) image-based harassment, (3) gender-based hate speech, and (4) rape threats (Powell and Henry 2017a, b).

Specifically, the analysis of the behaviours called "image-based harassment" or "image-based sexual abuse", defined as "the non-consensual recording, distribution, or threat of distribution, of nude or sexual images" is highly interesting (Henry et al. 2018:565).

When these behaviours started to occur, the mass media called them "Revenge pornography", "non-consensual pornography" or "involuntary porn". For different reasons these terms have been criticised by academics. On one hand it is highlighted, that they create confusion, as you have to judge which images are pornographic and which are not (McGlynn and Rackley 2017). On the other hand, it is understood that the term "Revenge pornography" is related to behaviours performed by ex-lovers, to get revenge for a rejection or an infidelity. However not all perpetrators act out of revenge, nor does all content have a pornographic purpose. An example is given of videos made during sexual assault, which could have the purpose of silencing or intimidating the victim. The term "revenge pornography" would be more centred on the content of the image than the impact or the assault that the surviving victim has suffered (Powell et al. 2018). In summary, the term "Image based sexual abuse" is to be preferred, as it includes various types of "non-consensual image-based harm", such as the creation, publishing and threatening with sharing the content (Powell and Henry 2017a, b).

Thus, the term "Image based sexual abuse" includes different behaviours that become more and more at the pace of technological development. Among these, we would find 'peeping Tom' and 'upskirt' to 'celebgate' or 'fappening', 'Downblousing' and 'sexualised photoshopping'... (McGlynn and Rackley 2017; Powell et al. 2018). Again, classifications of behaviours within the category of "image-based sexual abuse" is starting to appear, where five groups of behaviours are defined: relationship retribution, sextortion, sexual voyeurism, sexploitation and sexual assault (Powell and Henry 2017a, b).

Regarding the profiles of aggressors and victims, certain groups of students are overrepresented in harassment statistics, such as black students, women pursuing traditionally male careers, students with worse economic conditions or working part-time, students with a physical or psychological disability and lesbian students (Paludi et al. 2006; Blaya et al. 2007; Cortina et al. 1998; Gruber and Fineran 2015; Hill and Kearl 2011).

Sexual minorities are frequent victims of verbal abuse, such as derogatory nicknames and insults, which are typically related to their sexual orientation and are issued with the intention of forcing them to adopt sexual behaviours consistent with heterosexuality, which is thus implied to be the appropriate form of sexuality (Blaya et al. 2007; Mishna et al. 2009; Rivers 2001). According to the Centre for Sociological Research, 77.4% of young people state they have witnessed insults such as maricón, bollera, sarasa, tortilla or travelo, and 76.7% claim to have witnessed negative comments and rumours regarding homosexuals, bisexuals, transsexuals or transgender individuals (CIS 2010).

Henry et al. (2018) point to another group at risk, called CALD -Culturally and linguistically diverse- women. These women, together with indigenous Australian



women, women with disabilities and sexualities different from heterosexuality meet additional barriers when wanting to report their experience to the police, as well as when wanting to receive support and protection.

For all these reasons, we must acknowledge that "street harassment" does not affect all women equally. Some facts as race, social class, and sexuality put some women in a hierarchical relation in respect to others (Fileborn and Vera-Gray 2017; Henry et al. 2018). In this sense, it seems paramount to acknowledge the diversity in the experiences of harassment, which is why we need to make an intersectional analysis of the phenomenon (Vigoya 2016). Cyberfeminism should overrule this lack of intersectionality, and we should consider the diversity of women and their experiences, leaving out the study of exclusively white, heterosexual y cisgender women, giving visibility to other identities in the analysis (Hackworth 2018).

Aggressors are typically male (Cerezo et al. 2016; Peskin et al. 2006; Rodríguez-Piedra et al. 2006). However, certain indirect forms of aggression, such as rumours, occur more commonly among girls (Jolliffe and Farrington 2011; Safran 2008). These statements are not surprising when analysing bullying in relation to traditional gender roles. In this sense, the way of reacting to conflicts between girls and boys is explained in terms of two antagonistic positions. On the one hand, boys are expected to react more directly and to more often consider violence justified. On the other hand, indirect confrontation is typical among young women because in a heteronormative context, femininity is related to being pleasant, good and affectionate. Therefore, a violent woman who practices harassment transgresses against norms regarding femininity (Ringrose and Renold 2010).

In studies on online harassment, the profiles of aggressors and victims have been shown to resemble those of aggressors and victims in cases of academic harassment. Again, most offenders are male (Calvete et al. 2010; Félix-Mateo et al. 2010), and students with fewer relationships and less peer support are more vulnerable (Calvete et al. 2010). Regarding the analysis of cyber-bullying as a form of gender violence, experts highlight not only the personal damage to the victim but also the capacity to harm the victim's public image afforded by the Internet. The Internet amplifies the dissemination of information, which can become known not only in the circle of friends of the victimized adolescent but also to a mass audience of Internet users. Young women are again the most vulnerable to this type of online harassment because of the unequal social value of female behaviours and habits compared to masculine ones and the traditional stereotypes that exist in male–female relationships (Torres Albero et al. 2013). Experts on cyber-bullying in schools concur that there is higher incidence during adolescence and that a decrease occurs as age increases (Cerezo et al. 2016; Félix-Mateo et al. 2010).

There is little research that compares harassment suffered by women workers to that experienced by students. Studies that analyse this question observe that being a worker increases the probability of being harassed. The least harassed are women with a high school diploma compared with students and those with higher education (Caballero 2006; Sánchez 2016). However, this trend may be changing. The latest European data indicate an overrepresentation of young female victims with university degrees and of women in positions that require the highest qualifications (Latcheva 2017).



It is true that face-to-face harassment and cyberbullying overlap on many occasions, where the second becomes an extension of the first. However, experts have focused on what types of behaviour occur more often through social networks and what behaviours are more typical of face-to-face sexual harassment. Of course, physical contact does not occur in sexual online harassment. However, threats are used to obtain sexual benefits. Frequent behaviours include the use of offensive nicknames, humiliating comments related to gender (e.g., "Leave the forum! Go to your natural place: the kitchen.") and sexual comments (e.g., "Nipples make this chat group more interesting."). Communication using new technologies also exhibits an increase in dirty jokes (Barak 2005).

On the other hand, studies made in Europe, comparing the frequency of sexual harassment in different countries, show that higher rates are found in the north. This issue has traditionally been explained by the fact that in the Nordic countries people were more sensitive to harassment and included more behaviors within this concept (Alemany et al. 2001; European Commission 1998). According to some authors, these distinctions are also related to different views of the working environment, which depend on the culture of the country. While in the US and the Anglo-Saxon countries definitions are open, in France it is considered that the workplace is an environment in which you can flirt and seduce, where people meet and can get to marry (Saguy 2012). In Spain this debate has also emerged in response to "Anglo-Saxon puritanism" (Valiente 1999). With the instrument used in this study, and that we explain below, this answer would not be useful, as it uses a list of questions that reflects different behaviors to measure sexual harassment.

Method

Study

The EU Agency for Fundamental Rights (FRA) has performed the first survey on the experiences of violence by women in the 28 EU member states. The survey responded to calls from the Council of the EU and the European Parliament for comparable data on violence against women.

¹ Undoubtedly it is difficult to specify the boundary that separates courtship or flirting behaviour from sexual harassment. In this regard, psychological approaches consider that a key factor is whether the behaviours are well received by the person to whom they are directed, and each person must define which behaviours he/she approves of and which are intolerable. However, legal—as opposed to psychological—definitions are more restricted, and are dependent on criteria that are external to the victim and are based on the particular legal framework and judicial system, among other factors (Fitzgerald et al. 1997; Cuenca-Piqueras 2014). We understand that a single act can constitute sexual harassment if it is serious (for example, sexual blackmail), but, in other cases, this behaviour could occur regularly. As Pernas and Ligero (2003: 131) state, "It is evident that any sexual manifestation may not be liked but may not be harassment; we believe that not all sexual misconduct at work can be elevated to the category of sexual harassment; in this case it would be more about "sexism at work" or "micro-sexism". However, there is also no consensus among the studies when specifying the standard criteria, whilst various countries also differ in terms of their legal requirements (Cuenca-Piqueras 2017: 32).



Table 1 Sample and subsamples. *Source*: Prepared by the authors based on FRA survey data

	Frequency	Percentage
18–24 years	3775	9.0
25–29 years	3052	7.3
Subtotal of young individuals	6827	16.3
30 or more years	35,175	83.7
Total	42,002	100.0

Prior to the FRA survey, the data available across the EU on the scale and nature of women's experiences of violence were fragmented and had many gaps. The existing administrative data (for example, data on incidents recorded by the police) are not comparable across countries, and many incidents are not reported to authorities or support services. In addition, the results of national surveys cannot be reliably compared because of differences in question formulation and survey methods. In addition, certain EU member states have not performed national surveys on violence against women or possess only outdated information.

The FRA survey was recently cited in a special monograph of the Journal of Interpersonal Violence (Goodey 2017). According to the monograph, the results of the survey have been used on 1500 occasions by television broadcasters and newspapers and in articles published on the Internet.

Sample and Subsamples

The FRA survey was based on personal interviews with 42,000 women across the EU who were selected based on random sampling. Our research focuses on the young population under 30 years of age, which in the sample represents 16.3% of the total cohort, that is, 6827 young individuals. In certain analyses, we also present results for the youngest cohort, between 18 and 24 years old, which comprises 9.0%, or 3775 interviewees, of the entire sample (Table 1).

Instrument, Scales and Indicators

In the FRA survey questionnaire, the interviewees were asked about their experiences of physical, sexual and psychological violence. The survey included questions regarding violence inflicted by a partner or ex-partner, harassment, sexual harassment, experiences of violence in childhood, safety and fear of crime, as well as knowledge of laws and support services. Based on a battery of 11 questions related to the prevalence of sexual harassment since the age of 15, we found two factors and eliminated two items because of their low scores in the communalities (i.e., "Indecent exhibitionist behaviours" and "Pornographic material that someone forced you to see against your will"). Thus, in the nine items selected for factorial analysis, 54.5% of the total variance was explained using the varimax rotation method. The items related to Component 1 were defined as "face-to-face harassment" and to Component 2 as "virtual or online harassment" (Table 2).



Table 2 Analysis of principal components: "How often since age 15 have you...". *Source*: Prepared by the authors based on FRA survey data

	Component 1	Component 2
Received comments or jokes with sexual content that are offensive	0.782	
2. Been observed by someone in a lascivious way and felt intimidated	0.748	
3. Suffered unwanted touching, hugs or kisses	0.722	
4. Suffered indiscreet questions about privacy that were offensive	0.702	
5. Received indiscreet comments about physical appearance that were offensive	0.700	
6. Received inappropriate invitations to dates	0.602	
7. Received unwanted and sexually explicit emails or MSM that were offensive		0.788
8. Suffered inappropriate and offensive approaches on social networks or websites, such as Facebook, or in chats		0.735
9. Received or been shown sexually explicit illustrations or pictures that are offensive		0.628

Extraction method: principal component analysis. Rotation method: Varimax with Kaiser normalization

From this analysis, two scales were constructed that correspond to the two components and their items, one on face-to-face harassment with six questions (Cronbach's alpha=0.83) and the other on online harassment or virtual harassment with three questions (Cronbach's alpha=0.61).

Finally, three indicators were developed for further analysis: (1) the prevalence of each type of harassment, represented by the percentage of European women who have suffered it; (2) the intensity of face-to-face and virtual harassment, following the responses referring to the frequency of harassment in each of the questions (i.e., never, one, two to five, six or more times); (3) the proximity of the harasser following a weighting from greater to lesser proximity (i.e., partner or ex-partner, family relative or someone from one's social environment and a stranger). For improved clarity, a linear transformation was performed on each of the last two indicators to present the intensity and proximity of the harassment on a scale of 0–10.

Results

In developing our research hypotheses, we started from the idea that online harassment would be experienced more often by the younger European women in the sample. To test this hypothesis, we calculated the prevalence of different types of bullying according to age grouped into three categories: 18–24 years old, 24–29 years old and 30 years old or older. The results show that more online harassment is experienced by the youngest groups (21.1%) and decreases significantly for the oldest group (9.4%) (Table 3). Among young women aged 18–24, online harassment is more prevalent than among young women aged 24–29, with a difference of 3.5 percentage points. In addition, young European women have experienced more harassment in general (57.3%) than older such women (50.7%). The data are even more



	Only cyberbullying (%)	Both cases (%)	Only face-to-face harassment (%)	Not harassed (%)
18–24	2.7	19.9	34.5	42.8
25-29	2.4	16.7	38.2	42.7
30 or more	1.3	8.1	41.3	49.3
Total	1.6	9.9	40.4	48.2

Table 3 Prevalence of sexual harassment and online harassment among European young women by age. *Source*: Authors' elaboration based on FRA survey data

revealing if we recall that the interviewees were asked about behaviours experienced since the age of 15 years. Therefore, the rates of harassment would be expected to be higher for older women. However, this outcome is not the case according to the FRA data. The differences between the three age groups and the types of harassment are statistically significant (Chi square = 757.88; p = .000).

The results broken down by country are surprising if one consults the literature on sexual harassment. Such studies have traditionally stated that harassment is often more reported (i.e., more women are identified as harassment victims) in northern European countries than in southern European countries because the northern countries are considered more sensitized to this type of violence (Table 4). Northern women also report a larger variety of harassment behaviours (Alemany et al. 2001; European Commission 1998). However, when answering a battery of questions on harassment, a woman's greater or lesser awareness does not play the same role. Therefore, lower rates of violence would be expected because the Nordic countries are considered to be less discriminatory than the countries of the southern region. In any case, all European countries follow the same pattern except the Czech Republic, i.e., more harassment among young individuals than in older age groups (6.5 percentage points of difference on average) and more online harassment among young individuals (11.7% more).

The second indicator used to determine the types of harassment experienced by European young women is the frequency with which the behaviours were experienced. Table 5 shows the results for this indicator through means and standard deviations by age and harassment type. Only in the youngest age bracket (18–24 years) is online harassment more intense or frequent than face-to-face bullying. The difference in means is significant, t(732) = 9.89; p < .001, although this outcome occurs for all age groups. In addition, an analysis of variance (ANOVA) confirmed that among young women aged 25–29 years face-to-face harassment was more intense, F(2, 18,577) = 4.917; p < .01; Tukey's HSD post hoc test showed differed significantly at p < .01 between the group of 25–29 year olds and the group aged 30 years or more. ANOVA was not significant only in the case of online harassment as a dependent variable and as a factor in the age groups, F(2, 4241) = 2.650; p = .071; Tukey's HSD post hoc test showed at p = .058 between the group aged 18–24 years and the group aged 30 years or more.

The third indicator used was the proximity of the harasser. Those defined as strangers were considered as the most distant, while partners or ex-partners were



 Table 4
 Prevalence of sexual harassment by type and European country (youth under 30 years).
 Source:

 Authors' elaboration based on FRA survey data

	Only cyberbullying (%)	Both cases (%)	Only face-to-face harassment (%)	Not harassed (%)	
Denmark	2.5	33.6	54.1	9.8	
France	1.5	23.4	54.8	20.3	
Netherlands	3.4	28.6	47.6	20.4	
Sweden	2.7	40.7	34.5	22.1	
Finland	2.9	21.4	52.4	23.3	
United Kingdom	2.8	21.2	49.3	26.7	
Luxemburg	1.0	15.2	55.2	28.6	
Belgium	1.3	24.5	42.8	31.4	
Malta	1.7	18.8	47.2	32.4	
Croatia	2.9	19.6	39.7	37.8	
Estonia	4.0	17.8	39.6	38.7	
Germany	1.6	21.0	37.6	39.8	
Italy	2.3	17.3	37.6	42.8	
Spain	2.9	17.3	37.0	42.8	
Total	2.6	18.5	36.2	42.8	
Greece	5.4	12.0	37.6	45.0	
Latvia	4.0	19.4	31.3	45.3	
Slovakia	7.8	25.0	22.0	45.3	
Hungary	3.2	13.4	35.5	47.9	
Ireland	2.9	17.8	30.7	48.5	
Slovenia	0.0	12.6	36.3	51.1	
Czech Republic	2.8	11.7	32.3	53.2	
Cyprus	1.1	16.7	28.6	53.6	
Austria	3.9	19.9	22.3	53.9	
Portugal	1.3	8.3	32.5	58.0	
Romania	2.8	6.0	33.1	58.0	
Bulgaria	0.6	20.1	20.8	58.4	
Poland	2.2	12.3	23.8	61.7	
Lithuania	0.4	12.4	24.8	62.4	

Table 5 Indicator of intensity by type of sexual harassment and age (0–10). *Source*: Prepared by the authors based on FRA survey data

Age (years)	Face-to-	face harassn	nent	Online l	narassment	ssment t test		
	Mean	N	SD	Mean	N	SD	Student's t	Sig.
18–24	2.98	2004	2.20	3.00	833	1.92	9.890	0.000
25-29	3.12	1615	2.25	2.84	562	1.82	12.230	0.000
30 or more	2.94	14,961	2.21	2.83	2849	1.87	30.336	0.000
Total	2.96	18,580	2.21	2.87	4244	1.87	33.653	0.000

Age (years)	Face-to-	face harassn	nent	Online harassment			t test		
	Mean	N	SD	Mean	N	SD	Student's t	Sig.	
18–24	4.09	1523	1.77	4.75	462	1.95	4.810	0.000	
25-29	4.21	1317	1.75	5.10	314	2.23	5.730	0.000	
30 or more	4.55	13,130	1.77	5.29	1885	2.06	13.018	0.000	
Total	4.48	15,970	1.77	5.17	2661	2.07	14.983	0.000	

Table 6 Proximity indicator by type of sexual harassment and age (0–10). *Source*: Prepared by the authors based on FRA survey data

considered the closest. Table 6 shows the results for the proximity indicator according to the type of sexual harassment and the defined age groups. In all age groups, the source of online harassment suffered by Europeans is closer than that of face-toface harassment. That is, online harassment is inflicted most often by those who are the best known. By age group, both types of harassment are inflicted more by strangers among the younger women. According to an ANOVA, the proximity indicator of harassment or online harassment according to age was significant. Face-to-face harassment is significantly more anonymous or perpetrated by those less close to young women than among those women 30 years or older, F(2, 15.967) = 63.108; p < .001; Tukey's HSD post hoc test showed differed significantly at p < .001between the group aged 18-24 years and the group aged 30 years or more and between the group aged 24-29 years and the group aged 30 or more years. In addition, the online harassment results were significant according to an ANOVA, F(2,2658) = 12.645; p < .001. We only found significant differences between the group aged 18-24 years and the group aged 30 or more years (Tukey's HSD post hoc test: p < .001).

Discussion

The results of our analysis of the FRA survey indicate a prevalence of harassment in general and of online harassment, which is significantly higher among European young women than among women 30 years or older or among adults generally. Particularly striking is the subdivision of young individuals between the two age groups (18–24 and 25–29 years), especially with respect to online harassment.

Although the prevalence of face-to-face bullying is greater than online harassment at all ages, among the youngest, the intensity indicator for online harassment is greater than for face-to-face bullying. That is, although younger women suffer more from face-to-face harassment, those who suffer from online harassment suffer more intensely or frequently. Although the differences of means in the intensity between age groups are not significant, we note in the same group of younger individuals, the tendency toward a higher prevalence of online harassment combined with a greater frequency and intensity.



European young women suffer from bullying and online harassment by individuals with less proximity than the older women in a statistically significant way. Although online harassment is inflicted by individuals closer to the victims than in the case of face-to-face bullying, new modalities and avenues of online anonymous harassment are linked to technological advances, increased literacy and the development of social engineering.

This last consideration leads us to demand improved measurement instruments, particularly for online harassment. This is complicated, as the behaviors of online bullying increase every day due to technological advances, which offer new opportunities for good and bad uses of social networks among others. In this regard, we will have to pay attention to prevalence studies, international surveys and the instruments they use to improve their measurement (Dreßing et al. 2014; Fernández-Prados et al. 2019) In addition, to prevent online harassment, special attention in ICT education should be focused on the youngest. We believe that society, should be warned, that the unceasing development of the information society should not be permitted to become an opportunity to increase the harassment of women. Thus, politics have the challenge of responding to less permissive social reactions to cyberbullying and social movements such as #MeToo that give greater visibility to the problem (McNeal et al. 2018). In the same way, the educational response to prevent these behaviors among the young population must be aimed at creating greater involvement of this group in solving this problem (Redondo-Sama et al. 2014).

The primary response to online harassment is focused on prevention, from the moment teenagers get into contact with Internet or social networks, and from the educational point of view, to inform and shape attitudes and behaviours (Hobbs 2010; Hinduja and Patchin 2017; White and Carmody 2018). Likewise, educating in prevention among teens in order to avoid online harassment requires collaboration from all scientific branches, along with an approach with tested intervention programs (Bocij 2018; Henry and Powell 2014) that provide concrete measures at all levels and areas (Powell and Henry 2017b; Wurtele 2017). Specifically, on one hand Powell and Henry (2017b) argue in favour of a micro level of education for digital citizenship, a meso level, requiring a proper training for police force and providers or intermediates of the Internet, and finally a macro level to implement laws to condemn these behaviours and preventive campaigns to educate the population.

On the other hand, Wurtele (2017) highlights three areas, firstly, that of the education of teens, who, besides from learning to avoid risks and guarding their privacy online, should also be given a place on the Internet where they are taught educationally about sexuality, as this is the place they turn to, to find sexual information, when they do not want to reach out to adults. Secondly, the scope of parenting or parent–child relations considers that in addition to monitoring children's use of the Internet, installing filters for navigation or making agreements for responsible use of technologies, parents should improve communication with their teens about online harassment and other risks. Finally, the scope of institutions and organizations that work with adolescents, such as youth associations should protocolise communication between adults and young people, so that it always takes place through public and non-private social networks.



In short, we claim the need for education in digital citizenship (Lozano-Díaz and Fernández-Prados 2018, 2019) that not only develops skill learning or digital competences, but also teaches teens about democratic values, critical awareness and active responsibility in virtual environments.

Compliance with Ethical Standards

Conflict of interest The authors report no conflicts of interest.

Informed Consent The interviews of survey were collected from data secondary (more information: https://fra.europa.eu/es).

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