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Gender violence and social networks in adolescents. The case of the province of Malaga

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Abstract

Gender violence and the violence exerted on social networks are particularly current issues of interest for both the scientific community and the media. When both types of violence are present during adolescence, a more specific area of study arises that is circumscribed to cyberbullying exerted and suffered by adolescents on the Internet. This work is part of a larger project carried out in secondary schools in Spain, with special focus on Andalusia (financed by BBVA, 2014-2016). The case here presented is the one for the province of Malaga. The educational community of Malaga is of a peculiar and heterogeneous nature that combines a large foreign section of the population that was the result of tourism (since the seventies in the past century) with other migratory phenomena that are shared with other regions of Spain. The purpose of the study was to show the prevalence of gender violence among adolescent students in the 15-17-year age bracket from the province of Malaga, and to identify the predictive factors of occasional and frequent violence on social networks. A survey was designed and validated that was applied in electronic format to a random sample of public schools in Malaga (n=282). The sample size allowed us to work with an error of ± 0.06 (confidence level of 95%). The results and conclusions identify predictive factors of occasional and frequent violence, and suggest improvements to be made in action guidelines and protocols, as well as in the action to foster awareness among adolescents and the general public in regard to these issues.

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1. Introduction

Gender violence and the violence exerted on social networks are particularly current issues of interest for both the scientific community, public opinion and the media. Gender violence, on the one hand, is a growing phenomenon in many countries around the world and requires special attention by scientists and those responsible for decision making within public administrations. The classical and at the same time current work on the subject is that of Dunne, Humphreys & Leach (2006) which shows the relevance of this issue for schools. In Spain, Oliver, Soler & Flecha (2009) examined the problem and offered various strategies for prevention from a diachronic approach. On the other hand, the violence exerted on social networks is another topic of current serious concern for scientists and society. Cyberbullying, as it is known, is being examined from different perspectives. Together with the latest reviews on the subject (Chisholm, 2014; Bauman & Bellmore, 2015; Wittaker & Kowalsky, 2014), the analyses focusing on specific topics must be taken into consideration, such as psychological impact (Schenk & Fremouw, 2012), or the comparison with direct bullying, outside social networks (Schultze-Krumbholz et al., 2014).

When both of these problems are present during adolescence, we find a more specific field of study that is circumscribed to gender-based violence exerted and suffered by adolescents on the web. This topic has not been as amply addressed as the problems that give rise to it, but it is nonetheless relevant (Perry, 2008).

The work presented in this article is part of a larger project conducted at secondary schools throughout Spain, giving special attention to Andalusia (financed by the BBVA Foundation, 2014-2016). This article presents the case of the province of Malaga. The educational community of Malaga is of a peculiar and heterogeneous nature. This province combines a large foreign section of the population that was the result of tourism (since the seventies in the past century) with other migratory phenomena that are more common in other regions of Spain and Europe. According to official data ("INEbase / Demografía y población / Padrón. Población por municipios", 2016), the province of Malaga was inhabited by 246886 foreign nationals (15.17% of total population). These same sources report that Malaga is one of the few Spanish provinces where immigration has been growing despite the crisis. The largest group of foreigners is British (22.63%), followed by Moroccans (12.32%) and Romanians (5.77%). The fourth and fifth places are occupied by citizens from the European Union, Italians (4.52%) and Germans (4.36%), although immigrants whose numbers have increased the most in the last few years are those from Ukraine (3.47%) and Russia (2.26%). Thus, there is great geographical and cultural diversity in Malaga school environments that have singular characteristics when compared to those of Spain and Europe.

The general objective of the research was to determine the prevalence of gender violence among adolescent students in the 15-17-year age bracket in the province of Malaga, and to identify predictive factors of occasional and frequent violence on social networks. To do so, a survey was designed and validated that was applied in electronic format to a random sample of public schools in Malaga (n=284). The results and conclusions identify predictive factors for occasional and frequent violence, and suggest improvements to be made in action guidelines and protocols, as well as in the action to foster awareness among adolescents and the general public in regard to gender violence exerted on social networks by and on adolescents.

2. Objectives

The general objective of the research was to determine the prevalence of gender violence among adolescent students in the 15-17-year age bracket in the province of Malaga, and to identify predictive factors of occasional and frequent violence on social networks. In this study, that focused on the sex variable and on the province of Malaga, the objectives related to the analysis of the differences in perception, consideration and action regarding gender violence on social networks. Thus, the following objectives were identified with respect to adolescents in the 15-17-year age bracket from the province of Malaga:

1. To analyze the different behavior by sex on social networks.
2. To actually identify possible differences between the sexes in regard to the perception of risk on the Internet.
3. To undertake the differential study by sex of violent actions considered as such by adolescents.
4. To determine perceived and/or experienced situations of violence by adolescents as a function of the sex variable.
5. To globally evaluate gender violence on the Internet by sex.

3. Methods

Participating schools in the province of Malaga were selected by stratified random sampling. The sample was made up of 284 third and fourth grade secondary students from eight schools. The sample size allowed us to work with an error of ± 0.06 (confidence level of 95%). Participants were 48.2% male and 51.8% female. Average age was 15.4 years old (± 0.96). Sexual preference was 91.9% heterosexual. The remaining participants stated having a homosexual preference (2.8%), bisexual (2.5%) and not clear about it (2.8%).

In order to obtain the data, an electronic survey was designed and validated. The survey closely resembled a Likert scale format questionnaire. Information was gathered on 144 variables and was organized into seven sections or blocks:

- Mastery and use of technology
- Perception of virtual environments as being violent
- Cyberbullying
- Degree of gender violence perception
- Gender violence risk perception in virtual environments
- Gender violence experiences 2.0
- Presentation data

The validation process began with the review by experts (12) undertaken throughout Spain. The experts were all experienced researchers and specialists in research methodologies, gender issues and violence among adolescents. After validation, reliability analysis was conducted (internal consistency) and factor analyses were carried out of the main components to study structural validity. For the sample taken into consideration in this research Cronbach's alpha was 0.94. The factor analyses allowed for the establishment of a structure consistent with the survey design: the model chosen obtained 33 factors that explained 76.52% of the variance. Prior study was conducted on the conditions for application of factor analysis having obtained satisfactory results (Kaiser-Meyer Olkin sample fitness measure equal to 0.75, Bartlett sphericity test with chi-square equal to 22,867.07, with 8646 DOF and $p \leq 0.0005$).

Descriptive analyses of the data were conducted (principal frequency and statistical analyses) and studies of relations between variables (ANOVA and *t* tests) as a function of the gender stated by participants.

4. Results

First we will discuss a few descriptive results of the survey and then we will present the significant results regarding the statistical tests conducted to compare opinions according to the participants' sex. Only some of the significant results of the research are commented in this paper that relate to its objectives, highlighting those that pertain to the sex variable.

4.1. A few descriptive results

Only 29.2% of respondents ($n=284$) indicated having a partner, and when asked whether they thought they had a feature that would attract attention to their person, 40.5% answered yes, physical appearance being the most outstanding one with 9.5%.

Surveyed adolescents used instant messaging on a daily basis, WhatsApp being the one most widely used (94%). In regard to other communication applications the one most widely used was Instagram (72.5%), followed by YouTube (58.5%). From the remaining applications, Snapchat was the one most widely used (26.1%).

Curiously, and although they used these applications on a daily basis to remain connected, adolescents perceived that there was a risk of being subject to violence and this risk was associated in a greater percentage to Facebook (58.1%), followed by WhatsApp (52.5%), Instagram (51.1%) and Skype (40.5%).

A considerably high percentage of respondents handled well the resources they access on the Internet. Thus they stated that they knew how to block the persons who bother them, how to deactivate geolocation of their mobile phone

and denounce photographs loaded on the web, even though 75% stated they open e-mails of dubious origin.

A great majority of them believed that people are more violent online than face to face (92.6%) and stated that there is a lot of impunity in this environment: they are not reprimanded or punished when they engage in illegal or harmful activities (82.4%).

Adolescents considered that when somebody engages in an illegal act online the police should act first (94%) or some other entity specializing in violence on the Internet (90.5%), followed by the family (79.6%) or friends (50%), leaving the school in the last place (28.2%).

16.9% acknowledged having been bullied through their mobiles or the Internet, whereas only 10.2% acknowledged having acted now and then as a bully (8.1%) or doing it on a daily basis or frequently (2.2%).

4.2. Results on the sex variable

Perspectives on gender violence among male and female adolescents were, in general terms, very similar. Only 46 statistically significant tests were obtained out of 168 tests performed (27.38%). Nevertheless, there were a good number of significant differences in several of the variables considered. Following a summary of the most significant results is provided. Included in each case in parenthesis are: the t -statistic result, the degrees of freedom and the significance (p). In most cases, after applying Levene's test, group variances were considered to be equal. When Levene's test resulted in a significant value, a t test was performed for non-homogeneous variances, and degrees of freedom were modified accordingly. This is indicated with the symbol * in degrees of freedom (**DOF*).

Female adolescents usually used Facebook ($t=2.08$, 282 *DOF* and $p=0.038$), Twitter ($t=2.23$, 282 *DOF* and $p=0.026$), and Instagram ($t=2.57$, 282 *DOF* and $p=0.011$), more than male adolescents. Only the use of Skype by male adolescents was more significant than the use of Skype by girls ($t=-2.368$, 269.19* *DOF* y $p=0.019$).

The risk of being exposed to violence on social networks was similar for boys and girls, except for WhatsApp ($t=2.07$, 280 *DOF* and $p=0.039$), Twitter ($t=2.05$, 275 *DOF* and $p=0.042$), and Ask.fm ($t=3.67$, 278 *DOF* and $p\leq 0.0005$), where it was perceived as greater by girls.

Violent action consideration was similar for boys and girls. Nevertheless, certain actions were perceived as violent more by girls than by boys. This was the case for insults on the Internet directed to homosexual and transsexual persons ($t=2.80$, 282 *DOF* and $p=0.005$), participating in a web group that targets girls' physical appearance ($t=3.25$, 282 *DOF* and $p=0.001$), calling or sending e-mail or instant messages to a "provocative" girl ($t=2.18$, 282 *DOF* and $p=0.030$), exhibiting a girl as a sexual object on a web page ($t=2.94$, 252.84* *DOF* and $p=0.004$), and blackmailing a girl on social networks into having sex with her ($t=2.46$, 256.85 *DOF* and $p=0.014$).

As regards the perception of risk, the only difference between boys and girls was in relation to the risk perception of having opened a social network profile. In this case, girls perceived this action as more dangerous than boys did ($t=2.07$, 282 *DOF* and $p=0.040$).

As regards particular experiences, girls reported that they have seen the following actions happen to others more than do boys: on-line criticism of a girl for having several partners ($t=2.71$, 273.87* *DOF* and $p=0.007$), asking about or talking on the web regarding the physical appearance of girls, controlling a partner through social networks ($t=3.81$, 264.90* *g. l. y* $p\leq 0.0005$); and taking a partner's mobile to check on calls and inspect it ($t=3.79$, 249.87* *DOF* and $p\leq 0.0005$). Boys reported more than did girls only that they had seen somebody being insulted for having a feminist outlook ($t=-2.45$, 228.47* *DOF* and $p=0.015$).

With respect to experiences they have had themselves, girls have been subject to criticism more than boys for having several partners ($t=2.87$, 228.62* *DOF* and $p=0.004$), for having a less attractive physical appearance ($t=2.66$, 277.78* *DOF* and $p=0.008$) and for controlling a partner on Facebook ($t=2.87$, 228.62* *DOF* and $p=0.004$).

In regard to the frequency with which all kinds of violent situations are experienced, girls also stood out with respect to the number of times they themselves experienced or saw others suffer a certain number of situations (9 to 24). For example, on-line criticism of a girl for having several partners, bullying a girl for being provocative on social networks or through mobile phones, insulting a girl for being unattractive, creating, participating in or accessing a web page that calls attention to a girl's physical appearance, controlling a partner on Facebook or Twitter, knowing your partner's social network password to block friends, getting hold of your partner's mobile to check on calls and inspecting it, forcing a partner to remove friends' photographs from Facebook or to talk to somebody, and insulting a boy for not having a masculine appearance.

Global variables that summarize perception, frequency and the exertion of violence show that girls do indeed stand out when compared to boys as can be seen in table 1.

Table 1. Gender violence global variables 2.0.

Variables	<i>T</i>	<i>DOF</i>	<i>p</i>	<i>Mean girls</i>	<i>Mean boys</i>
Gender violence perception 2.0	2.68	282	.008	4.32	4.08
Partner violence perception 2.0	1.97	258.36*	.050	4.10	3.92
Frequency you have been violent with partner	3.69	265.47*	.000	.24	.10
Engaging in sexual violence	-2.48	266.72*	.013	1.22	1.36
Engaging in violence due to physical appearance	2.24	282.00*	.000	1.51	1.36
Exerting violence on partner	4.27	275.68*	.000	1.44	1.19
Frequency you have suffered gender social violence	.222	281.91*	.825	.09	.08
Frequency sexual violence is suffered by girls	3.01	271.41*	.003	.18	.08
Frequency you have suffered partner violence	1.74	282	.083	.24	.16
Gender social violence suffered	.547	282	.585	1.27	1.23
Sexual violence suffered by girls	4.54	278.13*	.000	1.46	1.19
Violence inflicted by partner	2.80	281.07*	.005	1.44	1.25
Frequency gender social violence has been seen	1.28	282	.200	.59	.51
Frequency sexual and partner violence has been seen	4.48	282	.000	1.01	.67
Seen gender social violence	2.28	276.25	.023	1.99	1.82
Seen sexual and partner violence	5.37	278.75*	.000	2.37	1.95
Global cyberbullying	-.429	282	.668	.19	.21

*Modified degrees of freedom derive from the *t* test for non-homogeneous variances according to the Levene test.

As can be seen in table 1, practically all global variables slant towards the female side. Only in two variables is the mean for boys higher, and moreover in one of them differences are not significant (global cyberbullying). Despite the fact that the behavior of girls and boys is very similar, adolescent girls show more marked results, significantly different from those for boys, in practically all global variables: Perception of gender and partner violence (both high), frequency in having engaged in it (albeit very low); exerting sexual violence, due to physical appearance or partner violence; the frequency (low) of having suffered it as social-gender violence, as sexual violence and as partner violence; suffering social-gender violence, sexual violence on girls and partner violence (albeit low), frequency in seeing social-gender and sexual violence and partner violence; and seeing social-gender and sexual violence and partner violence.

5. Conclusions

The results allowed us to analyze the differential behavior by sex on social networks (objective 1). Although the behavior of all adolescents is quite similar, there were significant differences in regard to preferential use of certain social networks. While adolescent girls preferred Facebook, Twitter and Instagram, male adolescents used Skype more. Perceived risk on the Internet was very similar for both boys and girls. Only on two of the social networks (Twitter and Ask.fm) did girls perceive risk is higher. For the remaining social networks risk perception was the same (objective 2). Opening a social network profile was considered more risky by girls than boys. Thus, the researches of García-Jiménez; López de Ayala, & Catalina. (2013) are corroborated. In these researches an intensive use was stood out, both in duration and activities on social networks and messaging programs, to keep in touch and share content with peers.

Greater differences were observed when giving consideration to violent action by boys and girls (objective 3). Girls deemed that some actions are violent or more violent which are not so considered by male adolescents, such as

insulting homosexuals and transsexual individuals, participating in a web page where the physical appearance of girls is highlighted; instantly calling, messaging or e-mailing a “provocative” girl; showing a girl as a sexual object on a web page, and blackmailing a girl on social networks to have sex with her. The results did not show that boys fail to consider such actions as violent; however, girls consider them significantly more violent. Evidently in this case the gender perspective plays a very relevant role. Thus, the results obtained by Aviles (2009) in his research on cyberbullying are confirmed.

Personal experiences or those perceived as inflicted on others were also similar for boys and girls (objective 4). Nevertheless, once more, girls had a greater awareness or were more vigilant than boys in these situations. Girls reported that they were aware that other girls had been criticized more for having several partners, of the control exercised by partners over girls, that the partner’s mobile is taken to check on calls or to inspect it. It is interesting to highlight the result on how boys had greater awareness than do adolescent girls of behaviors involving insulting a person because the person has a feminist outlook. Again in this instance a few interesting aspects of the gender perspective manifested themselves that have to be taken into account from the educational point of view. Girls also had greater awareness when they themselves were the victims of violence in aspects such as having been criticized for having several partners, or for not being physically attractive, or for being controlled by their male partner on Facebook. As regards the frequency with which such actions were exercised on other classmates or on themselves, girls surpass boys.

As can be observed from the previous data and from the whole of the results obtained, the instrument used revealed itself to be a very useful resource to globally evaluate gender violence on the Internet from the gender perspective (objective 5). The analyses showed that differences were more a matter of nuance than they were of substance. Girls and boys both rejected gender violence in general, and were aware of violent behaviors as regards this matter, but girls stood out because they had a more subtle perspective, and they were capable of identifying violence in situations that were sometimes not perceived as such by boys. The above results are also supported by researches like the Marcos one. In this research, the author conducted a study on the habits of adolescents using Internet and social networks, and the risks that young people face.

Therefore, we can conclude that the results obtained and the resulting conclusions have aided in the identification of some predictive factors of occasional and frequent violence. This information can be used to improve action guidelines and protocols, and also to foster differential awareness by gender in adolescents and the public at large on these issues.

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