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Cyber-harassment victimization in Portugal: Prevalence, fear and help-seeking among adolescents



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ABSTRACT

Cyber-harassment is one of today's problems in adolescent health. This study aimed to determine the prevalence of cyber-victimization among Portuguese adolescents. It also explored its nature, patterns and victim's reactions of fear and help-seeking. A representative sample of 627 adolescents, aged 12–16, enrolled in schools from northern Portugal and Azores answered an online survey. Cyber-victimization was widely experienced by these adolescents, mainly among older adolescents. Results evidenced a high prevalence rate of adolescents (66.1%) double involved as both cyber-victim and cyber-aggressor. Although not all adolescents reported fear (37%) or sought help (45.9%), persistent victimization increased fear. In turn, fear increased help-seeking behaviors. Cyber-victims were more afraid encountering unknown cyber-aggressors (vs. acquainted) and when victimized by older males (vs. younger females cyber-aggressors). Younger girls reported more fear and more help-seeking behaviors while older boys were more often victim-aggressors. The subgroup of victim-aggressors was both the target of a higher diversity of cyber-victimization behaviors than the victim-only subgroup and also engaged in fewer help-seeking behaviors. Those adolescents who sought help considered it helpful. Implications for educational, social and political practices are discussed.

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1. Introduction

Most adolescents in developed countries have been brought up in a technologically dependent world, eager adopters of multiple technologies in order to satisfy personal needs for interaction and exploration (Boyd, 2014; Madden et al., 2013). Consistent with these trends, Portugal has experienced a continuous increase in Internet access (Internet Live Stats, 2014). Most children up to 15 years old (90%) have Internet at home and 87% of them use it via broadband (Statistical National Institute, 2014). The first access to the Internet for Portuguese children and adolescents (9–16 years old) averages about 10 years of age (Livingstone, Haddon, Görzig, & Ólafsson, 2011). More than 50% of them use Internet and laptops daily, 35% use smartphones and 31% use tablets, with increasing rates among boys and older adolescents (Ponte, 2012; Simões, Ponte, Ferreira, Doretto, & Azevedo, 2014).

Despite the many benefits that the time spent online can provide, high levels of information and communication technologies

* Corresponding author. E-mail address: filipa.psi@hotmail.com (F. Pereira). (ICTs) use have been associated with greater online exposure to and experience of ICT-mediated harassment, intrusion and surveillance mediated (e.g., Brake, 2014; Livingstone & Helpser, 2010; Spitzberg & Hoobler, 2002). Adolescents are not the only ones using ICTs to stay in touch with others, share files, learn about sex, test intimate experiences or even harass others (Finn, 2004; Lenhart, Ling, Campbell, & Purcell, 2010; Madden et al., 2013; Spitzberg & Hoobler, 2002), as well as commit crimes (APAV, 2015; Finkelhor, Turner, Shattuck, & Hamby, 2013). However, the unique features of online technology use (e.g., lack of physical boundaries, anonymity, efficiency, comfort and ease, degree of distress) and the unique perceptual and conceptual challenges of adolescence (e.g., lack of maturity, life experience and cognitive ability, tendencies to push boundaries and underestimate the possible costs of their behaviors; Erikson, 1963; Johnson, Blum, & Giedd, 2010), clarify why research focused on cyber-harassment among adolescents is essential.

1.1. Cyber-harassment among young people

Cyber-harassment refers to any kind of repeated, persistent and

unwanted ICT-mediated interpersonal aggression (Bilic, 2013; Bocij, 2004; Hazelwood & Koon-Magnin, 2013; Pereira, Matos, & Sampaio, 2014). Estimates from the U.S. Youth Internet Safety Surveys (YISS) concluded that online harassment increased from 6% in 2000 to 9% in 2005 and 11% in 2010 (Jones, Mitchell, & Finkelhor, 2013). Victims were mostly female and older in age, whereas cyberaggressors tended to be boys and people known to the victims (e.g., friends: Jones et al., 2013; Ybarra & Mitchell, 2007). The Pew Internet Project revealed that 15% of adolescents, aged 12-17, received an improper sexual image, 19% were cyber-bullied and 4% were aggressive with someone online (Lenhart, 2007; Lenhart et al., 2010; Lenhart, Madden, Smith, Purcell, & Rainie, 2011). Up to 15% have received peer-to-peer sexual messages or images, 12% of 11–16 year olds were bothered or upset with something online, and 3% have sent or posted such messages (Livingstone et al., 2011). For example, Zweig, Dank, Yahner, and Lachman (2013) found that 26% of adolescents from 7th-12th grades had experienced cyber-dating abuse. Invading online privacy, harassing sexually, monitoring and controlling were the most common and accepted behaviors reported by adolescents (Draucker & Martsolf, 2010; Zweig et al., 2013). As such, this kind of cyber-harassment often overlaps with more serious forms of cyber-stalking and cyber-obsessional relational (ORI)¹ (Cupach & Spitzberg, 1998, 2000; Spitzberg & Cupach, 2014; Spitzberg & Hoobler, 2002). Research on harassment and stalking among intimate partners have been associated with victimization and a greater probability of being targeted for the longest periods (McEwan, Mullen, & MacKenzie, 2009; Pereira & Matos. 2015b).

Most research to date has focused on victims of cyberharassment. There is increasing recognition, however, that victims are sometimes also aggressors of online and real space bullying and harassment (i.e., double involvement or overlapping; e.g., Jennings, Piquero, & Reingle, 2012; Law, Shapka, Domene, & Gagné, 2012; Matos, Simões, et al., 2012; Posick, 2013). Contextual variables may be linked to the double involvement in cyberharassment, such as reactionary online negative reciprocity after experiencing negative emotional strains (i.e., Coie & Dodge, 1998; Crick & Dodge, 1996), with the aim of revenge or to retrieve the dominant position of the cycle of violence (Law & Fung, 2013; Mishna, Khoury-Kassabri, Gadalla, & Daciuk, 2012; Sontag, Clemans, Graber, & Lyndon, 2011). In fact, evidence-based studies have found a clear link between being reactively aggressive and experiencing a higher level of victimization (Crick & Dodge, 1996), corroborating the idea that higher exposure to violence causes more violence (Baldry, 2003; Bandura, 1973; Coie & Dodge, 1998; Diaz-Aguado & Arias, 1995). In other cases, cyber-aggression may reflect a defense mechanism or coping strategy, especially if more discursive skills or means are deficient (Roberto, Eden, Savage, Ramos-Salazar, & Deiss, 2014). There is little research on victims' and aggressors' meanings that they attribute to such phenomena. Quantitative studies are also sparse concerning both the breadth and seriousness of such phenomenon, and the research to date has mostly been restricted to the cyber-bullying dimension. Kowalski and Limber (2007) studied cyber-bullying among 3767 U.S. middle school students and found that 7% were cyber-bullies/cybervictims. Mishna et al. (2012) found that one quarter of adolescents aged 10–17 (N = 2186) were involved in cyber-bullying as both bully and victim. Previous data found that boys and older adolescents are those who more often reported double involvement (Aricak et al., 2008; Law et al., 2012; Matos, Simões, et al., 2012). Such findings suggest a significant role of normative beliefs about the justification of violence – that violence may be an acceptable form of conflict management (Calvete, Orue, Estevez, Villardón, & Padilla, 2010). Substantial proportions of adolescents may have difficulty recognizing the seriousness of cybervictimization consequences and in recognizing such behaviors as inappropriate and criminal. Compared to victims-only, cyber-aggressors may be more motivated to engage in aggressive behaviors across a variety of encounters and simultaneously increasing their own online risks and vulnerability. There are few investigations exploring fear, double involvement, and its distinctiveness compared to victims-only (Sampson & Laub, 1990).

In Portugal, knowledge about adolescent involvement on cyberharassment is still nascent. Even so, scholars concur that Portuguese adolescents face especially high risks for violence and victimization. Livingstone et al. (2011) found that 7% of Portuguese, aged 9–16, experienced one or more risks online, with higher rates among girls and older adolescents from low socio-economic families. Ferreira, Martins, and Abrunhosa (2011) found that the cyberstalking was the third most cited risk online faced by Portuguese adolescents (age 10-18) and as many as 16% of adolescents have been cyber-bullied (Matos, Vieira, Amado, & Pessoa, 2012). Recent data (Novo, Pereira, & Matos, 2014) indicated that 33.1% of Portuguese adolescents perpetrated broader cyber-harassment while 18.2% perpetrated typical behaviors of cyber-stalking (e.g., monitoring, sending exaggerated messages of affection and excessively 'needy', disclosive or demanding messages). The double involvement as aggressor-victims was of 93.3%.

The percentage of Portuguese adolescents bothered online appears to have increased from 7% in 2000 to 10% in 2014 (Simões et al., 2014). However, national awareness campaigns are rare, occasional (e.g., APAV, SaferInternetPT, Adventura Social, MiudosSegurosNa.Net) and national plans against specific forms of online victimization are currently non-existent. Given a dearth of research regarding cyber-harassment on adolescence and its behavioral heterogeneity (e.g., online sexual harassment, cyberbullying, cyber-stalking, cyber-ORI), this study seeks a deeper understanding of the general phenomenon of cyber-harassments, in national context.

The present work analyzes the prevalence of victimization by specific items related to cyber-bullying (e.g., receiving insulting messages) and cyber-stalking phenomena (e.g., monitoring behaviors), as well as broader cyber-risks (e.g., receiving sexual messages, exposure to pornographic images). The present research, however, adds the focus on items related to cyber-ORI victimization against adolescents (e.g. exaggerated messages of affection). Further, this study adds an in-depth and contextualized view of the double-involvement phenomenon and its relationship with online vulnerability. Finally, analyzing how fear and victim's help-seeking are related to cyber-aggressor profile and to double involvement will add to the limited international research base on such phenomena.

1.2. How is cyber-harassment affecting adolescents' daily life?

Previous studies (e.g., Livingstone & Haddon, 2009; Mitchell, Ybarra, Jones, & Espelage, 2015) have documented that cyberharassment is associated with serious public health problems. Consequences of cyber-harassment include significant psychological and emotional problems for victims, including fear, discomfort, threat, anger and sadness (e.g., Fenaughty & Harré, 2013; Livingstone et al., 2011). These symptoms tend to be worse for

¹ Both constructs are defined as a process of unwanted pursuit of intimacy, caused by incompatible relationship goals and definitions between victim and stalker (Spitzberg & Cupach, 2014). Compared to ORI, stalking implies a greater sense of fear or threat (Cupach & Spitzberg, 1998; Spitzberg & Hoobler, 2002). Stalking may also be motivated by the end of relationship (including the victim death), whereas ORI is expressly motivated by the pursuer intent to achieve a greater level of (typically romantic) intimacy (Cupach & Spitzberg, 1998).

girls and younger victims than for boys and older adolescents (Henson, Reyns, & Fisher, 2013; Ybarra, Mitchell, Wolak, & Finkelhor, 2006), even when experiencing similar amounts or types of victimization (Livingstone & Haddon, 2009). An increasing number of aggravating features (i.e., multiple aggressors, persistence, repetition, covert and anonymous harassment) also increase the likelihood of adolescent distress (Fenaughty & Harré, 2013; Mitchell et al., 2015).

In particular, fear as an emotional response that results from the personal and social perceptions of risk combined with the seriousness of the criminal offence observed by an individual (Ferraro, 1995; Garofalo, 1981; Pereira & Matos, 2015b), has been the target of special attention in the harassment literature, given its potential adverse effects on heath and quality of life of the adolescents (Matos, Simões, et al., 2012; Pereira & Matos, 2015b; Vanderveen, 2006). For instance, based on ECHO Pilot Survey data (Maple, Short, & Brown, 2011), 80.9% of respondents (aged 14-74) who experienced some form of cyber-harassment felt fear. Females were the most fearful victims (82.7% feeling fearful compared to 76.8%). Previous studies also found that being cyber-victimized by males and older individuals reported increased fear (Henson et al. 2013; Pereira & Matos, 2015b; Ybarra et al., 2006). Fear can impair the victim's ability to concentrate and succeed academically, as well as harm the shared sense of trust, cohesion and social control within a community, thereby impairing academic and psychological coping (Wynne, 2008; Ybarra & Mitchell, 2004). Moreover, there is empirical evidence linking the sense of fear of crime and the likelihood of further victimization (e.g., Randa, 2013; Wynne, 2008; Yu, 2014). Such experiences reinforce the cycle of violence and contribute to the incidence of crime/victimization (Ferraro, 1995; Jackson, 2006). Researchers, however, have found that not all victimization is disturbing to the adolescent (e.g., d'Haenens, Vandoninck, & Donoso, 2013; Wolak, Mitchell, & Finkelhor, 2006). Protective factors (e.g., high self-esteem, social support, digital skills) and barriers related to stigma and cultural gender-role norms may help to understand these findings (Connell & Messerschmidt, 2005; Haddon & Livingstone, 2012). Further investigations of the role of fear and trauma in adolescent experience of cyber-aggression will need to further elaborate the nature of such relationships.

1.3. Is help-seeking a common behavior among adolescent cyberharassed?

Help-seeking has been considered as one of the most commoncoping strategies among cyber-victims (d'Haenens et al., 2013; Hasebrink, Görzig, Haddon, Kalmus, & Livingstone, 2011; Machackova, Cerna, Sevcikova, Dedkova, & Daneback, 2013; Priebe, Mitchell, & Finkelhor, 2013). In this context it is defined as an Internet-coping strategy that marshals emotional support from other people in reaction to a negative experience on the internet. However, the help-seeking literature suggests that cyber-victims are less likely to seek help than victims in real space (e.g., Dooley, Gradinger, Strohmeier, Cross, & Spiel, 2010), although most of them have perceived it as a helpful strategy in moderating impact and/or stopping online victimization (Aricak et al., 2008; Livingstone et al., 2011; Machackova et al., 2013).

Girls and younger children from lower income families are more likely to employ the communicative strategy of help-seeking when facing cyber-victimization incident (d'Haenens et al., 2013; Hasebrink et al., 2011; Mascheroni & Ólafsson, 2014; Staksrud & Livingstone, 2009). Also, victims who perceived more serious victimization (e.g., reported more fear) are more likely to tell someone about cyber-harassment and seek help (Livingstone et al., 2011; Mishna, Saini, & Solomon, 2009; Optem, 2007; Priebe et al., 2013). Perceiving appropriate family guidance (i.e., family involvement/commitment, positive caregiver-child relationship), having a proactive school culture (e.g., anti-bullying programs, peer support systems, availability of school counseling) and recognizing a helpful and trustworthy community service infrastructure are other factors that have been globally demonstrated to improve victim help-seeking behavior (Aricak et al., 2008; Barker, 2007; Hunter, Boyle, & Warden, 2004; Livingstone et al., 2011; Slonje, Smith, & Frisén, 2012). In contrast, an exaggerated sense of coping ability and involvement with anti-social behaviors seem to suppress this response (Pasupathi, McLean, & Weeks, 2009; Priebe et al., 2013).

When adolescents do seek help, they tend to prefer informal (e.g., parents, friends) more than formal (e.g., police, mental health professionals) support (Mascheroni & Ólafsson, 2014). Less is known about which factors increase an adolescent's willingness to seek formal or/and informal support. Information is also lacking about the helpfulness and effectiveness of different support activations, and which contextual factors may moderate it. To our knowledge, no study has yet investigated the specific interrelationship of these factors in a sample of both adolescent victims and victim-aggressors of cyber-harassment.

2. Research problem and hypotheses

Three central research questions guide this project: First, what are the patterns of cyber-harassment among adolescents (i.e., prevalence, persistence, victim-aggressor relationship, and doubleinvolvement as both aggressor and victim)? Second, to what extent does cyber-harassment victimization evoke fear among adolescents? Third, how do adolescent victims of cyber-harassment attempt help-seeking? These last two questions were chosen because fear has been one of the most internationally recognized victim reactions, especially in reference to cyber-stalking (e.g., Pereira & Matos, 2015a,b; Purcell, Pathé, & Mullen, 2004; Spitzberg & Cupach, 2014). It is even suggested by some countries' legislation (e.g., Italy, Romania, some States of U.S.) as a key criterion defining online victimization and problematized as a boundary between victims and non-victims. In turn, help-seeking has been indicated in previous literature (e.g., Livingstone et al., 2011; Mascheroni & Ólafsson, 2014) as one of the most common reactions to victimization among adolescents, reflecting a helpful coping strategy in ameliorating their emotional trauma and re-victimization.

Based on previous theoretical and empirical background, we hypothesize: First, cyber-harassment is a common victimization experience among adolescents. Second, a nontrivial proportion of adolescents will report double involvement as a class of victimaggressors. Third, we hypothesize that victims' fear and helpseeking behavior are not ubiquitous, but that greater fear will increase help-seeking behavior.

Portugal recently has approved the National Strategy for Cyberspace Security and has ratified the Convention of Istanbul, a pan-European legal framework against all forms of violence, which includes online (e.g., cyber-stalking) forms. Such institutional and international recognition highlights the importance of conducting research on such forms of aggression, as there is not yet a thorough and well-grounded conceptual understanding of the multiple facets of victimization by cyber-harassment among adolescents. A deeper understanding allows innovation in terms of professional (e.g., web design) and social (e.g., psychoeducational campaigns) practices and interventions to reduce victimization. Results will also inform promotion of adolescent communication and selfmanagement skills to protect adolescents from harmful online experiences. At present there is a gap between evidence of victimization and evidence-based specialized and focused (inter) national programs to sensitize and train parents, teachers and formal sources in preventing victimization and providing support to victims (e.g., *Cyberbullying* COST IS0801; *CyberTraining* Project; *Education for New Technologies* Course; *SMART* Program).

3. Methods

3.1. Procedure and participants

The Portuguese National Commission for Data Protection (CNPD), an independent agency, the General Directorate of Education and all Directors of schools that participated in the present study, reviewed and approved this study. To ensure an inclusive representation of the student population from the northern region of Portugal's mainland and the autonomous region of the Azores, the survey used a stratified, clustered random sampling design in which private (n = 9) and public schools (n = 11) were the sampling units. Schools were selected according a stratified sampling, based on a schools list provided by Portuguese General Directorate of Education (N = 487). Explicit and informed consent was requested of 1340 randomly selected students, and of respective parents once they were underage (i.e., under 18-years-old). Eligible respondents were adolescents, ages 12–16, who were ICTs users for more than 6 months in any location. No financial assistance, compensation or incentives were provided to participants. Nevertheless, at the end of the project, the participants benefitted from an awareness session about the risks of cyber-activities and on cyber-aggression.

A total of 645 students (48.13%) completed the online survey (via ESurvey Creator Sofware) between March and June 2013, in the classroom context and in the presence of the lead researcher. All procedures were scrutinized by a group of (cyber-)stalking researchers,² and piloted with 70 adolescents, prior to survey implementation. After pilot testing, the language of some questions was simplified and some items of cyber-harassment scale were deleted. These changes allowed optimizing the final version of the measures. At the end, participants received an informative flyer that included the researcher's contacts in order to support participants to clarify some doubts and/or to support in case of cybervictimization and/or cyber-perpetration.

After data entry, all research data were screened. Eighteen participants were excluded from the analyses due to the missing data, leaving a sample of 627 adolescents (age M = 13.98; SD = 1.35; 54.9% females). The average age of first access to the Internet was 9.04 years old (Min = 1, Max = 14, SD = 2.41). To date, adolescents from public school have used on average four ICT devices (Min = 0, Max = 7; SD = 1.33), while adolescents from private school have used an average of five ICT devices (Min = 2, Max = 7; SD = 1.29). Adolescents from private schools tended to self-perceive a greater digital ability than other adolescents, although this did not achieve statistical significance (Ms = 2.95 for adolescents from state schools versus 3.08 for adolescents from private schools, SDs = 0.83 and 0.81, respectively, p = 0.074).

3.2. Measures

Cyber-harassment Assessment Scale. A 5-point Likert-type scale, constituted by 18 items, aimed to assess the prevalence of cyber-harassment perpetration or victimization among adolescents. These items were adapted mostly from a previous measure developed by Spitzberg and Hoobler (2002) in their study of cyber-

stalking. Some items were deleted that had been written specifically for adult samples, and another three items were written that were more relevant to an adolescent sample.³ For each aggression item, adolescents were asked both if: "Someone already did it against me" (victimization) and "I already did it against someone" (perpetration). Adolescents identified how many times (from 0 = never to $5 = five \ or more \ times$) they experienced and/or they perpetrated each behavior in the past. Cronbach's alpha was 0.90 for both the cyber-victimization and cyber-perpetration scales. For this report, those adolescents who only perpetrated cyber-acts were not analyzed (for further information about cyberperpetration data, see Novo et al. (2014)).

For each behavior experienced, adolescents were asked about sex and age of cyber-aggressor, if it was known. For adolescents who had experienced one or more cyber-harassment behaviors in the past, other filter questions were asked, including: cyberaggressor relationship (i.e., friends, intimate partners, known [e.g., relatives, neighbors] and unknown people), persistence of victimization (based on a 6-point Likert-scale; 0 = less than 2 weeks; 5 = 2or more years), fear impact (response options were Not frightened, A little frightened and Very frightened), and help-seeking. In case of experiencing more than one episode of victimization, adolescents were instructed to take into account only the most significant cyber-incident of their lives. Participants could choose one or more response options about their cyber-aggressor, depending on whether the most significant incident was perpetrated by one or by multiple cyber-aggressors with different characteristics (e.g., different relationships).

Help-seeking questions first asked if help was sought (0 = no and 1 = yes). Victims who responded positively were asked "who have you talked to?" Multiple responses were possible and the answers were grouped as informal (i.e., *relatives, friends, school people, acquaintances*) or formal (i.e., *mental health professionals, police, justice, legal advice* and *social or victim support services*) sources of support. Those who reported using a particular resource were further asked about its helpfulness (response options were 0 = Not important, 1 = A little important and 2 = Very important).

4. Results

4.1. Cyber-harassment victimization and double involvement

As displayed in Table 1, although 30.1% of adolescents reported never having been victims of cyber-harassment, 69.9% of adolescents reported some level of victimization in the past. This supports the first hypothesis, which expected that cyber-harassment victimization would be a common experience among adolescents. Of these, 60.8% were victims of repeated acts of cyber-harassment (i.e., a victim of any online behavior more than once or any two or more different online behaviors at least once). About 33.9% of those repeated victims were victims only. In contrast, 66.1% of those repeated victims admitted having already perpetrated cyberharassment, at least once in the past (see Table 1), confirming the second hypothesis concerning the existence of a nontrivial proportion of double involvement cases among adolescents. Boys reported being victim-aggressors more often than girls (p = 0.001), and older adolescents reported having been victim and victimaggressor more often than younger adolescents (p = 0.005; see Table 1). In order to define cyber-harassment victimization based on more rigorous criteria, all subsequent analyses related to patterns and reactions to victimization are focused on repeat victims

² Research Group on Stalking in Portugal (GISP) at Psychology Research Centre (UID/PSI/01662/2013), University of Minho. Email address for contact: mmatos@psi. uminho.pt.

³ Complete copies of the measures are available upon request of the first author.

140	

Table	: 1					
Frequ	ency of c	yber-hara	ssment for	r the	entire sample.	
			0	11	D .	

	Overall	Portuguese nationality	Sex		χ2	Age	r_{pb}	Cyber-harassment behaviors		
	$ \begin{array}{cccc} N = 627 & \% & & & & \\ n (\%) & & & n = 283 & n = 344 \\ \% & & \% & & \end{array} $	p value	M (SD)	p value	M (SD)					
Non-victim	189(30.1)	30.8	33.6	27.3		13.65(1.34)		_		
Victims at least once	438(69.9)	69.2	66.4	72.7	0.090	14.12(1.33)	0.000	2.63(3.23)		
Repeated victims	381(60.8)	60.2	57.6	63.4	0.141	14.20(1.30)	0.001	4.17(3.31)		
Victims only	129(20.6)	34.2	24.5	40.8	0.001	13.94(1.31)		2.73(2.03)		
Victim-aggressors	252(40.2)	65.8	75.5	59.2	0.001	14.33(1.28)	0.005	4.91(3.59)		

only (i.e., in repeated cyber-harassment experiences), whether they were also victim-aggressors or not.

The patterns and characteristics of repeat cyber-harassment victims are detailed in Tables 1 and 2. On average, adolescent victims were targets of four different behaviors, with the subgroup of victim-aggressors reporting victimization from a higher diversity of behaviors than victims-only (M = 4.91 vs. 2.73, respectively).

Regarding persistence, 75.9% of victims experienced cyberharassment for less than 2 weeks (a meaningful threshold; see Purcell et al., 2004), 11.5% reported being victim between 2 weeks and 1 month, 6.6% were victims for more than 1 year, 3.7% were victims between 1 and 6 months, and 2.4% between 6 and 12 months. Adolescents from private schools were targeted by cyberharassment for longer duration than victims from public schools

Table 2

Prevalence rates, nature and characteristics of cyber-harassment and adolescent's responses after victimization (n = 381).

	Repeated	Persistence		χ2	Fear		χ2	Help-seeking		χ2	
	victims	<2	≥2	p value	No	Yes	p value	No	Yes	p value	
	II (%)	weeks	weeks	vuiue	n = 239	n=142	vuiue	n = 206	n = 175	vuiue	
		n = 289	n = 92		%	%		%	%		
		%	%								
Adolescent victim's characteristics											
Female	218(57.2)	54.7	65.2	0.075	49	71.1	0.000	52.4	62.9	0.040	
Age (M)	14.20	14.17	14.28	0.483	14.26	14.10	0.244	14.35	14.02	0.012	
Public school	287(73.3)	77.9	67.4	0.043	71.5	81.7	0.026	70.9	80.6	0.029	
Cyber-harassment behaviors											
Receiving calls without any apparent justification	317(83.2)	84.8	78.3	0.145	85.4	79.6	0.145	86.9	78.9	0.037	
Receiving exaggerated messages of affection	165(43.3)	40.5	52.2	0.049	36	55.6	0.000	39.8	47.4	0.135	
Monitoring or receiving gifts via ICTs	150(39.4)	39.1	40.2	0.849	36	45.1	0.079	40.8	37.7	0.542	
Receiving insulting messages	147(38.6)	34.3	52.2	0.049	31	51.4	0.000	35.4	42.3	0.171	
Pretending to be me	133(34.9)	31.8	44.6	0.026	26.4	49.3	0.000	30.1	40.6	0.033	
Receiving excessively 'needy', disclosive or demand messages	109(28.6)	26	37	0.042	24.3	35.9	0.015	28.2	29.1	0.832	
Sabotaging my private reputation ('good name') in school/group/society	96(25.2)	18.3	46.7	0.000	16.3	40.1	0.000	19.4	32	0.005	
Obtaining my private information without permission	85(22.3)	20.8	27.2	0.198	19.2	27.5	0.062	21.4	23.4	0.629	
Receiving pornographic or obscene pictures or messages	77(20.2)	18.7	25	0.189	18.4	23.2	0.256	22.8	17.1	0.169	
Receiving threatening written messages, photos or images	56(14.7)	11.1	26.1	0.000	9.6	23.3	0.000	13.1	16.6	0.341	
Attempting to disable my mobile phone, computer or other electronic device	50(13.1)	11.1	19.6	0.036	10	18.3	0.021	11.2	15.4	0.219	
Receiving sexually harassing messages	48(12.6)	9.7	21.7	0.002	10.9	15.5	0.189	13.6	11.4	0.526	
Exposing my private information to others	47(12.3)	9	22.8	0.000	9.2	17.6	0.016	9.2	16	0.045	
Altering and/or taking over my electronic identity	39(10.2)	7.3	19.6	0.001	7.1	15.5	0.009	7.3	13.7	0.039	
Using my computer to get information on others	23(6)	4.2	12	0.006	4.6	8.5	0.127	5.3	6.9	0.535	
Assuming risk behavior on my behalf	19(5)	2.4	13	0.000	4.2	6.3	0.350	4.9	5.1	0.897	
Meeting first personally and then harassing me through the internet or	14(3.7)	1	12	0.000	2.1	6.3	0.033	2.4	5.1	0.160	
mobile phone	. ,										
Meeting first online and then pursuing, threatening or hurting me personally	14(3.7)	1.7	9.8	0.000	2.1	6.3	0.033	3.4	4	0.756	
Cyber-aggressor characteristics											
Sex ^a : Male	218(57.2)	54.3	66.3	0.043	49	71.1	0.000	53.4	61.7	0.102	
Female	189(49.6)	49.8	48.9	0.879	50.6	47.9	0.605	47.1	52.6	0.286	
Unknown	220(57.7)	56.1	63	0.237	56.1	60.6	0.390	56.3	59.4	0.539	
Both sex	111(29.1)	25.6	40.2	0.007	27.6	31.7	0.397	27.2	31.4	0.364	
Age ^a : Older	134(35.2)	23.2	44.6	0.030	26.8	49.3	0.000	31.1	40	0.069	
Younger	53(13.9)	11.8	20.7	0.032	14.2	13.4	0.818	13.6	14.3	0.845	
Same age	234(61.4)	60.6	64.1	0.539	60.3	63.4	0.544	60.7	62.3	0.748	
Unknown	233(61.2)	59.5	66.3	0.245	57.3	67.6	0.046	60.2	62.3	0.676	
Different ages	107(28.1)	24.6	39.1	0.007	25.5	32.4	0.149	25.7	30.9	0.267	
Relationship: Friends	163(42.8)	46	32.6		47.3	35.2		41.3	44.6	0.359	
Intimate partner	11(2.9)	2.1	5.4		3.8	1.4		4.4	1.1		
Known people (e.g., relatives, neighbors)	8(2.1)	0.7	6.5		2.5	1.4		2.4	1.7		
Unknown people	149(39.1)	39.1	39.1		34.7	46.5		38.3	40		
Multiple aggressors with different relationship with the victim	50(13.1)	12.1	16.3	0.001	11.7	15.5	0.048	13.6	12.6		
Cyber-harassment perpetration	252(66.1)	65.4	68.5	0.587	68.2	62.7	0.271	71.8	59.4	.011	

Note. All prevalence rates presented about persistence, fear and help-seeking columns evidence how each independent variable is (or is not) statistically influencing the probability of reporting persistence, fear and seeking help behavior, at the 0.05 level.

^a Multiple choices possible for each behavior experienced by adolescent victims.

(p = 0.043; cf. Table 2). About 39.1% of victims reported being targeted by an unknown aggressor (see Table 2). Among those who could identify their cyber-aggressor's characteristics, the majority of adolescents reported having been targeted by males (57.2%) and by individuals who were the same age as the victim (61.4%). Concerning the victim-aggressor relationship, 42.3% were targeted by friends and 2.9% by intimate partners. According to victims, intimate partners were more persistent than friends as cyber-aggressors (Z = -2.35, p = 0.019). Acquaintance cyber-aggressors (Z = -3.24, p = 0.001).

4.2. Fear, help-seeking and perceived helpfulness of support resources

Descriptive statistics (see Table 2) found that fear was reported by 37.3% of repeat victims: 28.6% of them reported little fear and 8.7% greater fear. This confirms hypothesis 3, which anticipated that fear reactions to cyber-harassment victimization would not be univocal. Girls were the most fearful victims (p = 0.000). Adolescents from public schools were also more afraid (p = 0.026) than those from private schools. Table 2 shows the percentage of fear reported for each of the behaviors. The most fear evoking behavior was receiving exaggerated messages of affection (55.6%). Additional analysis found that adolescents reported more fear when cyberharassment was more persistent (Z = -5.59, p = 0.000) and when they were victimized by males (p = 0.000) and by older cyber-aggressors (p = 0.000). Victims of unknown cyber-aggressors were also more afraid than those victimized by friends (Z = -2.60, p = 0.009).

Hypothesis 3 also expected that not all victims would seek help, but fear would increase help-seeking behavior. Results found that 45.9% of the victims sought help (see Table 2). Most of them were girls (p = 0.040) and youngers adolescents (p = 0.012) who were attending public schools (p = 0.029; see Table 2). A test of differences concluded that fear from experiencing cyber-victimization is associated with greater likelihood of reported help-seeking $(\chi^2 = 67.97, p = 0.000; \phi = 0.388)$. Therefore, hypothesis 3 received strong support. However, as Table 2 shows, only four cyber-harassment behaviors were significantly associated with help-seeking, which were not necessarily linked to the most persistent and/or fear-arousing behaviors (e.g., receiving calls without any apparent justification). This seems to qualify hypothesis 3, indicating that persistence and severity of behavior are not necessarily the bases for victim fear, or that help-seeking is not necessarily predicated on victim fear.

Table 3 displays all informal and formal sources of support used by adolescents and how each source was rated concerning helpfulness. The findings indicated that adolescents sought help mainly from informal support sources (93.7%), specifically from relatives and friends, assessing this coping strategy as helpful (see Table 3). The remaining 6.3% of the victims who activated formal sources, also sought from informal sources (i.e., no one sought help only from formal support sources). As indicated in Table 4, adolescents who were targeted for longer (i.e., more persistence) sought help from formal support sources more often (p = 0.032), whereas the adolescents who felt more afraid after victimization were those who perceived a greater level of helpfulness from their support sources (p = 0.006).

5. Discussion

The present study pioneered several insights about cyberharassment among adolescents, particularly in the Portuguese context. It provided an in-depth view of its prevalence, patterns, characteristics (e.g., the extent to which aggression and victimization overlap) and victim reactions concerning fear and helpseeking.

The majority of Portuguese adolescents (60.8%) surveyed reported that they have been victims of repeated cyber-harassment. Most victims also reported a double involvement in cyberharassment, both as aggressor and as victim. Further, these findings indicate that doubly involved adolescents were targeted by a higher number of cyber-harassment behaviors. Older adolescents were more likely to be victims (cf., Wolak et al., 2006), whereas older boys were more often victim-aggressors (Aricak et al., 2008; Law et al., 2012; Matos, Simões, et al., 2012). This actually puts the group of older adolescents at greater risk than the youngsters, who are less experienced and engage in less complex and interactive Internet use (Livingstone, 2006; Wolak, Finkelhor, Mitchell, & Ybarra, 2008). The higher cyber-harassment victimization among adolescents from private schools may be explained by the fact that they reported higher access to different ICTs and would, therefore, present a denser online network and be more exposed online, reinforcing their opportunity for relational frictions and to be victimized online. The tendency of adolescents from private schools (vs. state schools) self-perceiving a higher level of digital competence may also help to explain why victims from public schools were more afraid and sought help more often. However, these conjectures are speculative and clearly require further investigation.

These results about victimization and double involvement corroborate the first and second hypotheses of the current study. They also are consistent with some previous studies of aggression (e.g., Jennings et al., 2012; Livingstone & Haddon, 2009; Matos, Simões, et al., 2012; Sampson & Lauritsen, 1990), although the research on online double involvement is sparse (e.g., Law et al., 2012). This may suggest a different interpretation: previous

Table 3				
Help-seeking	among	victims	(n =	175).

	% Who said the resource was a lot/very helpful					
Informal ^a ($n = 164$)						
Relatives	75.3	97.7				
Friends	74.1	96.9				
School people	25.3	95.5				
Other people you know	17.8	93.5				
$Formal^a$ $(n = 11)$						
Health professionals	4	85.7				
Police	1.7	66.7				
Justice	0.6	0				
Legal advice	0.6	0				
Social or victim support services	0.6	0				

^a Multiple choices possible.

Table 4

Help sources and perception about their helpfulness for victims, by cyber-harassment's characteristics and cyber-aggressor's relationship (n = 175).

	Help sources	χ^2	Effectiveness		χ^2	
	Informal only Formal and informa		p value	No	Yes	p value
Cyber-harassment characteristics						
Victim for 2 weeks or longer	25	54.5	0.032	0	27.6	0.169
Being afraid	58.5	72.7	0.353	0	61.2	0.006
Cyber-aggressor's relationship						
Friends	43.9	54.5		80	43.5	
Romantic partner	0.6	9.1		0	1.2	
Known people	1.8	0		0	1.8	
Unknown people	40.2	36.4		20	40.6	
Multiple aggressors with different relationship with the victim	13.4	0	0.233	0	12.9	0.599

experiences of online victimization may promote reactive aggression (Crick & Dodge, 1996; Pereira et al., 2014), which would imply a role inversion. On the other hand, the perpetration of cyberharassment may increase the risk of the cyber-aggressor becoming a cyber-victim as well (Law et al., 2012; Novo et al., 2014).

Findings related to double involvement as victim-aggressor suggest a change in the victimology paradigm. The traditional paradigm of victimology centers on the dichotomization of victimaggressor roles. The double involvement evidence, in contrast, assumes that victims and aggressors in the online context are, in fact, more alike than they are different (Jennings et al., 2012; Posick, 2013). Future studies will need to reexamine their measurement and design considerations and explore these possibilities in more detail. Including qualitative methods (e.g., focus groups) may provide a useful approach related to understanding cyber-harassment among adolescents and the possible timing and directionality in the "evolution" of cyber-victim and cyber-aggressor roles.

The prevalence of cyber-victimization and double involvement in the present study were higher than reported in previous findings (cyber-victimization: e.g., Jones et al., 2013; Livingstone et al., 2011; Mitchell, Finkelhor, Wolak, Ybarra, & Turner, 2011; double involvement: e.g., Jennings et al., 2012; Sampson & Lauritsen, 1990). Several methodological differences (e.g., different sampling, range of behaviors assessed and temporal reference) and the broader definition of ICT-based harassment compared to other studies limited only to Internet (e.g., Mitchell et al., 2011) could account for these discrepancies. Our study also focused on assessment of double involvement only among the subsample of repeated victims rather than among the larger sample. This enabled us to collect a larger range of cyber-harassment incidents and may account for the high double involvement rates (Finkelhor, Ormrod, & Turner, 2007). Future meta-analyses will begin to identify the specific effects of such measurement and design differences among studies.

Independent of such discrepancies, the present data have important implications for both practice and theory. Specifically, this study establishes some norms for online violence in adolescence and a comparison level for violent behaviors experienced and perpetrated in the key developmental period of adolescence (Law et al., 2012; Machado, Caridade, & Martins, 2010). One explanation for the high prevalence found in this study is the ease and anonymity of experiencing and committing aggressive behaviors and immediate retaliation that ICTs offer (i.e., a situational explanation; Werner, Bumpus, & Rock, 2010; Ybarra & Mitchell, 2004). Another explanation may lie in the incipient development (e.g., immaturity, regarding the relationship initiation and negotiation processes; Subrahmanyam, Greenfield, & Tynes, 2004) of adolescents and their relative inability to discern the legal, moral, and social consequences of perpetrating aggressive acts online (i.e., a maturation explanation; Pettalia, Levin, & Dickinson, 2013). Similar findings by Grangeia (2012) on unwanted relational pursuit among Portuguese college students found that almost 60% of victims had also perpetrated aggression. Furthermore, in Grangeia (2012), 72.2% of Portuguese college victims of unwanted relational pursuit perceived their experiences as "something normal." This may suggest that patterns of aggressive behavior are learned and modeled at early ages (Bandura, 1973, 1977), highlighting the need for early violence prevention programming addressed to both potential victims as well as cyber-aggressors.

A second research goal consisted of exploring the nature and patterns of victimization. Although the majority of adolescent victims experienced relatively routine behaviors (e.g., calls) with low levels of offence and intrusiveness, some of the adolescents reported more serious behaviors related to hyper-intimacy (e.g., excessive, disclosure and redundant messages of affection; pretending; sexually explicit messages), intrusion (e.g., monitoring acts), and threat behaviors (e.g., sabotaging; spreading rumors; threatening messages) (cf. Spitzberg & Hoobler, 2002's labelling). In general, these varied behaviors seem to overlap what normally are considered common scenarios of cyber-stalking, cyber-ORI and unwanted relational pursuit (Cupach & Spitzberg, 1998; Grangeia, 2012; Pereira & Matos, 2015a,b; Spitzberg & Hoobler, 2002). The fact that there were significant associations between most of the reported behaviors by adolescents and greater persistence of cyberharassment indicates that cyber-harassment tends to be prolonged and persistent over time (e.g., Spitzberg & Hoobler, 2002). Like cyber-stalking, for example, the present data suggest a strategic and dynamic progression of cyber-harassment pattern over different stages, where the failure of previous tactics, and related coping tactics, may lead to new strategies over time (Cupach & Spitzberg, 2004; Grangeia, 2012; Spitzberg & Cupach, 2014). It may also reflect the perceptions held by adolescents about cyber-harassment, and unilateral intentions of courtship and approach behaviors, specifically, as mainly a non-intrusive, "normal" or expected behavior among young ages. Romantic lyrics and popular Portuguese sayings (e.g., If at first you don't succeed, try, try again; Anything is possible if you try hard enough; Persistence pays) may help to legitimize these dynamics as well as the progression and maintenance of persistent patterns of unwanted cyber-harassment.

Consistent with the literature (e.g., Wolak et al., 2006), the majority of victimization occurred mostly within close and frequently encountered relationships, including friends. Compared to anonymous or stranger harassment, relationship familiarity may actually exacerbate cyber-victimization hazards, as these relationships are more trusted, thereby leading victims to be less inclined to acknowledge their victimization, less likely to seek third-party intervention, and perhaps experience greater trauma due to the sense of betrayal involved. Supplementary analyses yielded additional findings and implications. For example, victims of acquaintances were targeted for longer periods of time than those victimized by unknown contacts. Victims of friends also experienced a less persistent cyber-harassment campaign than victims of intimate partners. These results are consistent with literature on harassment in general (e.g., Björklund, Häkkänen-Nyholm, Roberts, & Sheridan, 2010; McEwan et al., 2009; Pereira & Matos, 2015b), which indicate that prior relationship may be a useful means of determining potential intrusiveness and duration.

This study also addressed adolescent responses to victimization. As found in previous studies (e.g., d'Haenens et al., 2013), most adolescents were not afraid, as expected by the third hypothesis. High levels of cyber-harassment experience and the frequent practice of mediatisation of crime and other social deviations by the Portuguese media (e.g., Pinto, Pereira, Pereira, & Ferreira, 2011) may have led to its normalization and cultural acceptance of such acts, thereby decreasing fear and formal reporting among victims. However, as expected, we found that victimization persistence increased fear. This same factor appears to moderate the trauma of victimization in previous studies (Fenaughty & Harré, 2013; Grangeia, 2012; Mitchell et al., 2015; Sheridan, Blaauw, & Davies, 2003). One possible explanation is that adolescents become afraid when behaviors they consider normal (e.g., unwanted text messages or images related with affective and intimate topics, insults and threats) are used in abnormal ways (i.e., excessively, or in excessively exploitative or intrusive ways). In accordance with the literature (e.g., Hawker & Boulton, 2000), it is also possible that the always-available nature of mobile ICTs (e.g., smartphone, tablet) and the more direct and covert nature of these acts, may have led the victims to perceive such incidents as more personal and serious. resulting in greater fear. In contrast, theft of one's electronic identity, having personal information disclosed electronically and being harassed online by offline contacts, and vice versa, could have been perceived as less threatening by adolescents because they occurred less often in the sample and, likewise, may have seemed like an anomaly - just a passing, odd occurrence. Although these forms can increase fear by increasing harassment exposure, they have been associated with less enduring trauma for adolescents (e.g., Hawker & Boulton, 2000).

Among adolescent victims, girls were more likely to be afraid as compared to boys (e.g., Fenaughty & Harré, 2013; Spitzberg, Cupach, & Ciceraro, 2010; Ybarra et al., 2006). Furthermore, although the most persistent cyber-aggressor was an acquaintance, most adolescents were more afraid facing cyber-aggressors who were unknown, male and older than adolescents (Henson et al. 2013; Pereira & Matos, 2015b; Ybarra et al., 2006). These findings may reflect the conventional idea that adults and males have more power, and more power implies greater potential threat or harm (Connell & Messerschmidt, 2005). In addition it reflects feelings of powerlessness and an inability of victims to take action against an unknown cyber-aggressor (Ybarra et al., 2006).

In support of the third hypothesis, and consistent with most prior research (e.g., Livingstone et al., 2011; Priebe et al., 2013), most adolescents did not seek help. Developmental reasons (e.g., developing their adult identity, affirming their autonomy from "old-fashioned" parents) and the possible trend of normalization of these acts may help explain this apparent adolescent reluctance to seek help (Boyd, 2014; Whitman, 2007; Wilson, Bushnell, & Caputi, 2011). However, when they did this, there was the group of girls and younger adolescents who reported seeking more help compared to older adolescents and boys (Pasupathi et al. 2009; Priebe et al., 2013). Traditional societal scripts on the gendered nature of fear (e.g., Harris & Miller, 2000; Spitzberg et al., 2010) may help to understand these sex discrepancies; whereas developmental and maturation aspects of adolescence may help to explain this difference based on the age (Erikson, 1963; Johnson et al., 2010; Subrahmanyam et al., 2004). In contrast, feelings related to shame,

guilt and responsibility about what happened may justify why victim-aggressors in the present study were less likely to seek help (Pasupathi et al., 2009; Priebe et al., 2013).

As expected, fear was positively associated with increased helpseeking. This finding is in line with studies that conceptualize helpseeking resulting from greater perceived seriousness of online experience (e.g., Mishna et al., 2009; Optem, 2007; Priebe et al., 2013). However, as found in Priebe et al. (2013), not all distressed adolescents sought help and not all adolescents who sought help were afraid. Help-seeking seems to be, therefore, influenced more by the nature of behavior (i.e., more abnormal, overt behaviors vs. covert harassment) rather than by the simple condition of fear (Priebe et al., 2013; Slonje & Smith, 2008; Spitzberg & Hoobler, 2002). This reinforces the importance in future studies of investigating the role of fear in eliciting coping strategies. In the EU Kids Online study, for example, only those who reported being bothered were analyzed (Livingstone et al., 2011).

When adolescents did seek help, they sought it from informal support sources more often than from formal sources of support and perceived it as helpful (Mascheroni & Ólafsson, 2014). However, previous findings claiming that adolescents prefer seeking help from friends rather than parents (Mishna et al., 2009) were not confirmed by this study. No one sought help only from formal support sources. One reason for this under-utilization of formal support sources may be related to the lack of national anti-cyberharassment policies, programs and institutions, as well as beliefs that frame professional support as unhelpful (e.g., Wilson et al., 2011), feelings of shame, and from fear of retaliation by the cyber-aggressor. Furthermore, formal sources may imply formal investigations, face threats to cyber-aggressors, and even potential for retaliatory activities in the school context, for instance. Nonetheless, longer victimization increased the adolescent's helpseeking from formal support sources, consistent with prior research (e.g., Reyns & Englebrecht, 2010). This suggests that informal sources of assistance have been exhausted without success. It may also imply that more persistent incidents are more complex and may need specialized intervention skills and procedures.

In line with findings of Machackova et al. (2013), the victims who reported being afraid perceived higher helpfulness from helpseeking, suggesting that it promoted victims' perception of control. It further suggests that the subjective experience of fear may be somewhat independent of duration and highlight the importance of taking into account both objective measures (duration) and subjective factors (fear) when determining the seriousness of cyber-harassment victimization, especially when considering the legal definition of cyber-stalking (Pereira & Matos, 2015b). These findings also indicate the importance of parent responsibility in supporting adolescents, since they were most likely to be the first adults to be informed of cyber-harassment victimization. Further, it emphasizes that the cessation of cyber-harassment is not only the victim's responsibility and does not depend only on the support and/or intervention that adolescents can receive. To stop victimization, intervention programs will need to directly address potential and actual cyber-aggressors in order to hold them responsible and deter them from aggressing, as well as seek approaches to protecting victims from further harassment. In fact, treatment outcome research indicates that a combination of interventions for victims and aggressors may be the most effective in stopping aggressive behaviors (Durfee, 2013). These results underscore the pressing need for the social and political recognition of a diversity of forms of relational pursuit that occur in online context and for the development of services specialized in adolescent cyberharassment victims in general (e.g., intervention programs for victims and aggressors, more help lines). Such institutional and programmatic public health campaigns may allow adolescents access to publicly available information and support, thereby facilitating disclosure.

5.1. Limitations

A few limitations of this study must be noted. First, adolescents were asked only if they had experienced and/or perpetrated cyberharassment. They were not asked if they perceived themselves as victims or aggressors (acknowledgment). This may have resulted in an over-reporting of both victimization and aggression. Second, the survey assessed the double involvement on cyber-harassment. without asking the chronological order of those in experiences. For example, we do not know whether adolescents are primary victims or primary aggressors, and whether one experience or the other is a risk factor for the other. Third, the survey did not assess other victimization consequences or responses beyond fear and help-seeking. Several reactions (e.g., isolation, depression, suicidality, self-efficacy) and coping strategies (e.g., confrontation, ignoring) can occur in combination. Offline experiences – another unassessed variable in the present study - may also have affected victims' responses (Hasebrink et al., 2011).

6. Conclusions

This study adds to the existing literature by providing evidence that most adolescents in Portugal are victims of several forms of cyber-harassment. Furthermore, one of the most relevant contributions of this study about the cyber-harassment process is that most adolescent victims are also cyber-harassment aggressors. Those who harass others seem to be caught in a self-reinforcing cycle of victimization by, and perpetration of, aggressive behaviors. Such findings suggest a new perspective of online harassment as a complex, often reciprocal dynamic process. Moreover, this study demonstrates that there are specific characteristics of victims, aggressors and cyber-harassment episodes associated with variations in victimization persistence, fear and help-seeking. These factors can be used to identify adolescents who are more vulnerable, aggressors who pose the greatest risk of serious cyberharassment, consequent damage to victims and to inform the importance of social support in the reestablishment of the victim's psycho-emotional well-being. Such a paradigm is needed to inform adolescents, parents, teachers, educators, social and victim support professionals and policy if the struggle against cyber-harassment is to be successful.

Taking into consideration the evidence-based support provided by this study, we suggest that future psychoeducational and intervention programs should emphasize: (1) media education directed toward prevention campaigns; (2) deconstruction of traditional normative beliefs about the use of violence; (3) promotion of healthy relationships; (4) awareness about nature, consequences and costs of cyber-harassment, (5) reduction of barriers that restrict the help-seeking behavior, and, finally (6) effective practices within helping (e.g., legal, educational, health) professions.

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