

Predictive Indicators of Victimization and Aggression in Cyber Contexts

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Abstract

Many researchers agree that exist a high level of agreement between the behaviour that adolescents manifest in their off-line and on-line lives. This study's objective was to determine whether the gender of those involved, as well as the forms of aggression experienced both in presential and virtual scenarios, are predictive indicators of the violent behaviour of aggressive-victims. The participant sample was 1648 spanish adolescents of 12-16 years in age (48.9% girls). The instrument used was a questionnaire designed to identify and define the profile of the aggressive-victim. The results show the existence of four categories of aggressive-victims. Three predictive indicators of the abusive behaviour of the aggressive-victims were identified: continuity between contexts, type of abuse suffered, and the gender of those involved. These indicators allow to extract profiles of the different types of aggressive-victims which facilitate the design of anti-bullying specific programs.

Keywords: Cyberbullying, Traditional bullying, Aggressive-victim, Cybervictim, Mimicry, Co-ocurrence

1. Introduction

Cyberbullying is a concept that is still under construction and that is arousing increasing interest and is the subject of continuous debate among researchers (Dooley, Pyzalski, & Cross, 2009; Law, Shapka, Domene, & Gagné, 2012). While some authors consider cyberbullying to be an indirect form of bullying which needs technological resources for its execution(Li, 2007; Slonje & Smith, 2008), others argue that bullying and cyberbullying are two quite different concepts that have their own characteristics that define and differentiate them(Casas, Del Rey, & Ortega, 2013).

The co-existence of presential and virtual contexts in today's society of readily available information and knowledge has led to many studies being conducted on adolescents' ability to adapt to these new situations, integrating the two types of scenario and interacting with them practically simultaneously(Mishna, Saini, & Solomon, 2009; Valkenburg, Sumter, & Peter, 2011). In this line, some researchers detected a high level of agreement between the behaviour that adolescents manifest in their off-line and on-line lives (Subrahmanyam, Smahel, & Greenfield, 2006). Some studies have shown that many of the cyberbullies previously played the role of aggressor in traditional bullying (Gradinger, Strohmeier, & Spiel, 2012; Katzer, Fetchenhauer, & Belschak, 2009; Wang, Iannotti, & Luk, 2012), and that many cyberbullying victims have been bullied before(Raskauskas & Stoltz, 2007; Sontag, Clemans, Graber, & Lyndon, 2011; Wang, Iannotti, Luk, & Nansel, 2010). This co-occurrence of roles has served as a guide for some cyberbullying prevention measures by considering the role played previously in bullying situations as a predictive factor (Fung, 2012). The relationship between these two phenomena has also been studied in the reverse sense, with some authors noting a low likelihood of first experiencing episodes of cyberbullying and subsequently being involved in bullying situations (Chang et al., 2013; Del Rey, Elipe, & Ortega-Ruiz, 2012; Hemphill et al., 2012).

But the study of the co-occurrence of bullying and cyberbullying has yielded new data which require variations in the definition of other roles such as that of the aggressive-victim. For instance, some authors argue that the victims of bullying can take on a different role in cyberspace and become cyberbullies (Smith et al., 2008; Ybarra & Mitchell, 2004). Those authors understand that since these children can not retaliate presentially in the classroom, they use technological means by way of compensation. Other researchers reinforce this association of roles in showing that victimization in presential contexts can help to predict cyber abuse (Del Rey et al., 2012). However, there are studies suggest that the role of cyberaggressive-victims can only be understood as something temporary and that cyberaggressive behaviour can not be predicted from the experiences of victimization in traditional bullying (Hemphill et al., 2012). These authors argue rather for the establishment of a new category of cyber aggressive-victim and note that the victims in cyberbullying episodes show, at least in part, a tendency to manifest cyberaggressive behaviour.

In connection with the transfer of the role of the aggressive-victim of bullying to cyber scenarios, Smith et al. (2008) note that there the observations have not been of any stability of roles between the two contexts, but rather of a shift towards the figure of the cyberbully.

In relation to the analysis of gender differences, the influence of this variable on the adoption of roles, as well as on the manifestation of different types of aggressive behaviour, have been extensively studied in bullying situations (Smith, Cowie, Olafson, & Liefoghe, 2002). For the case of aggressive-victims of bullying, Cuadrado and Fernández (2009) confirm a trend towards the predominance of the prevalence of boys over girls, although they state that when the frequency of the aggression is 'sometimes', the trend inverts, and more girl aggressive-victims are detected than boys. The opposite is the case when the frequency increases to 'always'. Moreover, those authors note that the modality of bullying suffered changes the ratio between boys and girls who play that role, with there being detected more girls when the aggression is related to indirect verbal abuse (spreading false rumours) and more boys when there is direct physical aggression, threats, verbal abuse, or social isolation.

However, the results of studies on the influence of the gender variable on the roles involved in cyberbullying have often been contradictory. While some studies conclude that there are no significant gender differences in the roles taken (aggressor or victim) in cyberbullying among adolescents (Livingstone, Haddon, Görzig, & Ólafsson, 2011; Ybarra & Mitchell, 2004), others do find such gender differences, although they recognize that these differences are complex (Tokunaga, 2010).

All these discrepancies reported in the literature, and the unexplored relationships concerning the co-existence of the phenomena of bullying and cyberbullying in other roles such as the aggressive-victim, point to the need for new studies aimed at achieving a more comprehensive view of the reality of teenagers' lives that will contribute to enhancing the effectiveness of prevention and intervention measures. The objective of the present study was to determine whether the gender of those involved, as well as the modes of aggression experienced in both presential and virtual scenarios, are predictive indicators of the violent behaviour of aggressive-victims.

2. Methods

2.1. Participants

The sample consisted of 1648 adolescents (48.9 % girls; $SD = .5$) of ages from 12 to 16 years ($M = 14.1$, $SD = 1.3$) enrolled in compulsory secondary education (abbreviation ESO in Spain) in state secondary schools in the province of Badajoz (Spain).

Selection was by roughly proportional, stratified, multi-stage sampling by cluster, with a random selection of groups of pupils in the participating schools. The strata considered were the geographical zone and the population size of the towns included in each zone. The aim thereby was to incorporate adolescents from both rural and urban environments. The clusters were the schools. In each of these, the groups of participating pupils were selected by a random process of taking one of the classes of each year of ESO (ages 12-16 years).

2.2. Instrument

The instrument used for data acquisition was a revised version of the questionnaire applied by Cuadrado and Fernández (2009) to identify and define the profile of the aggressive-victim of bullying. The modifications made to this questionnaire consisted of the insertion of two new categories that corresponded to the phenomenon of cyberbullying: cybervictimization and cyberbullying itself. Thus, the final version of the questionnaire consisted of four categories: victimization, bullying, cybervictimization, and cyberbullying.

The first two (corresponding to traditional bullying) comprised 26 items concerning behaviour related to six modes of aggression: exclusion, verbal aggression, direct physical aggression, indirect physical aggression, threats, and sexual harassment. The last two (corresponding to cyberbullying) comprised 22 items concerning behaviour related to four modes of cyberaggression (Nocentini et al., 2010): written-verbal aggression, visual aggression, impersonation, and exclusion. The response options to all the items were presented on a 4-point Likert scale indicating the frequency of the attack suffered or perpetrated in the preceding two months: 1 – never; 2 – once or twice; 3 – once a week; and 4 – various times a week.

An internal consistency analysis of each of these dimensions showed a high level of reliability, with the following values being reached: bullying, $\alpha = .88$; victimization, $\alpha = .91$; cyberbullying, $\alpha = .83$; cybervictimization, $\alpha = .84$.

2.3. Data Analysis

The data were analysed using the SPSS 19.0 statistics software package. Descriptive statistics were used to determine the prevalence of the aggressive-victim in the various modes of aggression. To study the potential relationship between the mode and the frequency of the bullying suffered and perpetrated, a correlation analysis was performed for each of the aggressive-victim categories identified.

3. Results

3.1. Classification of Aggressive-Victims

Depending on the type of bullying suffered and the means used for its perpetration, the role of victim acquires a twofold dimension: victim (when the abuse corresponds to traditional modes of bullying and is manifested in presential, classroom contexts), and cybervictims (when the abuse is experienced through the Internet, or by electronic or telephony devices). Similarly, the role of aggressor also has this twofold dimensionality: bullies (in traditional bullying) and cyberbullies (when ICTs are used to perpetrate the abuse). The combination of these dimensions yields four profiles of adolescents who are themselves bullied and then turn to bullying others of their peers: aggressive-victims (.485**) (166 boys and 123 girls), cyberaggressive-victims (.502**) (93 boys and 53 girls), aggressive-cybervictims (.280*) (37 boys and 30 girls), and cyberaggressive-cybervictims (.637**) (30 boys and 23 girls).

3.2. Experience of Victimization as a Conditioner of the Type of Abuse Carried Out

Aggressive-victims. The results show that, regardless of the type of abuse suffered and the gender of the aggressive-victims, the type of aggression they usually perpetrate against their peers is that of a verbal character, followed by indirect physical (hiding, breaking, or stealing personal items). They also show that sexual harassment is just a residual behaviour among the totality of manifestations of violence (Table 1). However, some differences were found between boys and girls in the aggressive behaviours that they manifest depending on the abuse they have suffered. Boys who have been verbally and physically abused show a mimetic behaviour when they attack their peers. In girls, however, this mimicry is only found in the case of direct physical abuse (Table 1).

Table 1: Correlations between Abuses Suffered and Perpetrated in Aggressive-Victim

<i>Bullying perpetrated</i>	Exclusion		Verbal		Indirect physical		Direct physical		Threats		Sexual harassment	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
<i>Bullying suffered</i>												
Exclusion	.288	-.162	.587**	.570**	.329	.815**	.244	.529*	.146	.116	.071	.019
Verbal	-.130	.578**	.495**	-.321	.490*	.446*	.257	-.164	.381	-.212	.103	-.071
Indirect physical	.311	-.160	.490*	.741**	.583**	.497*	.475*	.720**	.454*	.903**	.055	.
Direct physical	.539**	-.468	.674**	.755**	.379*	-.184	.819**	.904**	.411*	.883**	.097	.113
Threats	.285	-.381	.691**	.645**	.593**	.362	.300	.220	.232	.712**	-.064	.009
Sexual harassment	.157	.111	.436*	.671*	.257	.265	-.217	-.184	.638*	.840**	.184	.145

* $p < .05$ ** $p < .01$

Other gender differences indicate that boys who have been victims of direct physical aggressions diversify their own violent behaviour, resorting to exclusion (.539**), threats (.411**), verbal (.674**), and physical (direct and indirect, .819** and .379*) aggression. In contrast, girls tend to abuse their peers through verbal (.755**), direct physical (.904**), and threat (.883**) aggression. When the aggression suffered corresponds to patterns of social exclusion, boys tend to resort to verbal abuse, whereas girls also incorporate into their behaviour direct and indirect physical abuse (Table 1).

Finally, when the adolescents suffer threats, boys abuse their peers verbally (.691**) and with indirect physical aggression (.593**), and girls use verbal abuse (.645**) but not threats (-.712**).

Cyberaggressive-victims. The cyber abuse that the cyberaggressive-victims mostly commit are verbal (spoken or written) and visual, independently of the aggression suffered (Table 2). The results also show that supplanted identity is a behaviour that is often used by those who suffer intimidating threats from their peers. Similarly, exclusion from forums and virtual spaces tends to be behaviour adopted by those who have suffered isolation in presentational contexts.

Table 2: Correlations between Modes of Abuse Suffered and Perpetrated in Cyber Aggressive-Victims

<i>Cyberbullying perpetrated</i> <i>Bullying suffered</i>	Written-Verbal		Visual		Impersonation		Exclusion	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Exclusion	.451*	.508	.616**	.406	.376	.234	.511*	.739**
Verbal	.197	.649**	.193	.545**	.171	.551**	.093	.315
Indirect physical	.371	.711**	.316	.912**	-.250	.217	.261	.488*
Direct physical	.356	.701*	.132	.870**	-.151	.447	-.145	.006
Threats	.645**	.304	.600**	.845**	.441*	.624*	.197	.327
Sexual harassment	.022	.926**	.423	.686*	.412	.603	.334	.420

* p<.05 ** p<.01

With regard to differences in gender, it appears that there is a stronger correlation between the modes of abuse suffered and perpetrated in the case of girls. Boys do not have a well-defined mode of cyberaggressive behaviour, except for the cases in which they are victims of exclusion or threats (Table 2).

Aggressive-cybervictims. The analysis of the bullying behaviour perpetrated by aggressive-cybervictims showed only three adolescents who turned to sexual abuse to hurt their peers, and that this manifestation was unrelated to any particular mode of cyberaggression suffered (Table 3).

Table 3: Correlations between Modes of Abuse Suffered and Perpetrated in Aggressive-Cybervictim

<i>Bullying perpetrated</i> <i>Cyberbullying suffered</i>	Exclusion		Verbal		Indirect physical		Direct physical		Threats		Sexual harassment	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Written-Verbal	.337	.125	.604*	-.558	.759**	-.778	.831**	.857*	.590*	.765	.112	.
Visual	.635**	.807*	.790**	.463	.546*	-.271	.700**	.807*	.342	.919**	.097	-.103
Impersonation	.554*	-.226	.524	-.513	.308	.716*	.502	.560*	.287	.586*	.016	.238
Exclusion	.270	.578	.794**	.625	.574*	.802*	.629*	.590	.735*	.829*	-.119	-.308

* p<.05 ** p<.01

The results also showed significant gender differences in the synergistic relationship between the modes of abuse suffered and perpetrated. Overall, boys present more diversified aggressive behaviours than girls, except in the cases in which they are victims of supplanted identity (Table 3). In those situations, girls resort to threats (.586*) and indirect (.716*) and direct (.560*) physical aggression, while boys are inclined to abuse others mainly through social isolation (.554*).

A final result that stands out refers to the verbal abuse perpetrated by aggressive-cybervictims. In the case of boys, this behaviour manifests itself when they are victims of verbal (.604*), visual (.790**), or exclusion (.794**) cyberaggression, whereas in girls this behaviour is uncorrelated with any of the modes of cyber abuse suffered (Table 3).

Cyberaggressive-cybervictims. With respect to the cyberaggressive-cybervictim group, there was a certain mimicry between the types of bullying suffered and perpetrated except in the case of those who had suffered supplanted identity who responded with other modes of aggression such as sending messages or making anonymous calls, exclusion, or dissemination of visual material that threatens the integrity of their victim. Regardless of the mode of bullying suffered, this group of teenagers used many modes of bullying to attack their peers. This was especially so of those who had been the object of intimidating or harassing messages or telephone calls (Table 4).

Table 4: Correlations between Modes of Abuse Suffered and Perpetrated in Cyber Aggressive-Cyber Victims

<i>Cyberbullying perpetrated</i> <i>Cyberbullying suffered</i>	Written-Verbal		Visual		Impersonation		Exclusion	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Written-Verbal	.615*	.867**	.520*	.917**	.850**	.748*	.749**	.517
Visual	.332	.463	.727*	.713*	.526	-.316	.302	.420
Impersonation	.504	.954**	.135	.764**	.071	-.460	.394	.818**
Exclusion	.540*	.298	.155	.677*	.192	-.214	.720**	.819**

* $p < .05$ ** $p < .01$

The analysis of gender differences showed that, when this group of adolescents suffers supplanted identity, while boys present no well-defined pattern of cyberaggression (Table 4), girls are strongly inclined to commit verbal (.954**), visual (.764**), or exclusion (.818**) modes of cyber abuse. Also, when the aggression suffered is related to cyber-exclusion, as well as the mimetic behaviour presented by these cyberaggressive-cyber-victims, boys also tend to commit verbal abuse (.540*), whereas girls opt for visual abuse (.677*).

4. Discussion

The present results make it possible to improve and adjust predictions of adolescents' bullying behaviours from knowledge of the specific aggressive behaviour that each of the categories of aggressive-victims manifest depending on the type of abuse they themselves have suffered. In particular, one can extract a set of predictive indicators from the results which will help orient prevention and intervention measures to combat violence among adolescents (Fung, 2012).

A first indicator corresponds to the high degree of continuity in the use of the same type of scenario or context. In this sense, the results show, as do those reported by Hemphill et al. (2012), that victims of aggression in presential or virtual environments tend to use the same resources to in turn abuse their peers. In the case of aggressive-victims, this continuity is stronger in boys than in girls. In the case of cyberaggressive-cyber-victims, the gender differences is reversed, with a stronger correlation in girls than in boys. In line with the work of Del Rey et al. (2012), there is also strong continuity in the cyberaggressive-victim case, especially in girls. In this sense, other studies argue that this is largely due to the anonymity made possible by technological and virtual resources (Varjas, Talley, Meyers, Parris, & Cutts, 2010; Ybarra & Mitchell, 2004). By hiding their identity, victims no longer perceive the power imbalance that prevails in presential settings, and choose to retaliate by way of compensation for the hurt they have been caused. What those authors do not reveal, however, is whether these cyberaggressive-victims are targeting their own aggressor or other peers whom they perceive as weaker or as having certain characteristics.

A second indicator is the type of abuse suffered. In the four categories of aggressive-victims analysed, a certain mimicry was found between the modes of abuse suffered and perpetrated, especially when the aggression suffered corresponds to indirect or verbal aggression. This mimicry has been described in previous studies (Cuadrado & Fernández, 2009), and some authors explain it on the basis of the perceptions that these adolescents have of the potential that the type of abuse they have suffered has to cause pain to their peers (Hughes & Trafimow, 2012). The experience of the harm that a certain mode of abuse has caused them can give rise to false beliefs about the potential of that behaviour to hurt others, without their realizing that the others may not have the same vulnerabilities, and will not, therefore, necessarily suffer the same consequences. In the cases in which this mimicry does not occur, there is a synergistic relationship between exclusion suffered, in either presential or cyber contexts, and primarily verbal and indirect physical aggressive behaviour perpetrated. Some authors explain the tendency towards these modes of aggression by referring to the imbalance of power criterion (Schwarzwald, Koslowsky, & Brody-Shamir, 2006). The situations of victimization which they had suffered previously caused these adolescents to experience such a strong sense of inferiority that it is difficult for them to confront their peers directly. A third indicator is the gender variable. The relevance of this indicator lies not only in the detection and identification of aggressive-victims and their subsequent classification into the four resulting categories (aggressive-victim of traditional bullying, cyberaggressive-victim, aggressive-cyber-victim, and cyberaggressive-cyber-victim), but also in its mediating role in determining the abusive behaviour they demonstrate against their peers.

With respect to identification and classification, there is a stronger correlation in the case of girls towards performing the roles of cyberaggressive-victim and cyberaggressive-cybervictim. Girls give greater importance than boys to the imbalance of power criterion in situations of bullying and cyberbullying (Cuadrado, 2012), which may in part explain that their aggressive behaviour is preferentially committed in a cyber environment as a result of the anonymity that affords them when they are hurting their peers. In the same sense, the tendency of boys towards direct aggressive behaviours (Smith et al., 2002), more characteristic of presential than cyber scenarios (Erdur-Baker, 2010), could explain the strength of their correlations in the aggressive-victim and aggressive-cybervictim categories.

With regard to the mediating or predictive role of the gender variable in the relationship between the modes of abuse suffered and perpetrated, the present results allow a series of profiles to be drawn that can contribute to matching anti-bullying and anti-cyberbullying programs to the reality of the aggressive behaviour of boys and girls according to the abuse they have suffered previously.

The profiles corresponding to the aggressive-victim category are identified, on the one hand, with boys who tend to commit the same mode of abuse they suffered as victims, and, on the other, with girls who preferably resort to verbal aggression and who adopt an mimetic aggressive behaviour when the abuse they suffered is physical (direct or indirect).

Regarding the cyberaggressive-victim category, the profile of the boys is difficult to define because of the diversity of abuse suffered, the different combinations of aggressions they themselves commit, and the lack of any correlation between their experiences of victimization and their own abusive behaviour. For the girls, there are different profiles depending on the mode of abuse suffered. Those who have been victims of verbal, physical, or sexual aggression tend to cyber-abuse their peers through telephone calls or text messages, or by sending them compromising pictures or videos. The similarity of these behaviours to those present in traditional bullying situations such as insults, name-calling, or spreading lies, slander or rumours explains the predisposition of girls towards the above modes of cyber-abuse (Smith, 2012).

To the aggressive-cybervictim category there correspond two distinct profiles depending on the gender. In the case of boys, those who are cybervictims of verbal, visual, or exclusion abuse attack their peers primarily through verbal and physical abuse, although they sometimes also use exclusion and threats. Boys who have suffered supplanted identity on-line adopt social isolation of their peers as a mode of abuse. For girls, those who as cybervictims suffer exclusion, supplanted identity, or dissemination of compromising images or videos manifest a presential aggressive profile corresponding to physical abuse and threats. Girls who have suffered verbal cyber-abuse adopt direct physical aggression to hurt their peers.

Finally, for the cyberaggressive-cybervictim category, there are no marked differences between boys and girls except when the abuse suffered is supplanted identity. In these cases, while boys show no particular aggressive pattern, girls commit verbal, visual, or exclusion cyber-abuse. In all the other situations of the cyberbullying they have experienced as victims, the profile presented by both boys and girls is that of adolescents who attack their peers by using the same kind of abuse they themselves suffered or are suffering. The belief in the potential of the type of abuse they have suffered to cause pain explains the permanence of this mimicry (Hughes & Trafimow, 2012).

4.1. Implications for Implementation of Antibullying Programs

The present work's definition and identification of the different categories of aggressive-victims facilitates the task of optimizing the choice of prevention and intervention programs dealing with violence among teenagers. It also assists with the adjustment of these programs to the characteristics that define and differentiate aggressive-victims from other teens involved in situations of bullying and cyberbullying.

Such adjustment needs to take two factors into account. The first is to address bullying by working with teens on their attributional styles and decision making, on developing their self-concept, self-esteem, and the management of their feelings, on their learning social skills and problem-solving strategies, and on their finding peer support networks that will enhance their feelings of belonging. The second is to address the aggressive responses that they manifest by distinguishing the type of abuse that they may have been subjected to. This requires helping them acquire prosocial attitudes and behaviours, with the development of their capacity for empathy, and dealing with possible distorted or misplaced interpretations of others' verbal and non-verbal behaviours (Cuadrado, 2012).

The present results suggest constructing an approach to the prevention of bullying in school that is built around four complementary axes.

The first is the application of a "targeting program" that allows the population of youngsters to be separated on the basis of previously established dimensions (Atkin, 2001). In the present study, two such dimensions were determined. One corresponds to the type of role played (aggressive-victim, aggressive-cybervictim, cyberaggressive-victim, and cyberaggressive-cybervictim). The other further specifies the first by establishing subgroups according to the young person's gender, so that, for example, one can consider a boy or a girl aggressive-victim. This thus facilitates the establishment of specific indicators for the attainment of coping skills that fit the characteristics of each subgroup (Carlyle & Steinman, 2007). The importance of such a fit is recommendable in the implementation of programs based on "message tailoring" (Bulger & Smith, 1999).

The second is that knowledge of how the type of abuse that the different aggressive-victims themselves commit depends on the type of aggression they themselves have suffered will help individualize, and hence increase the effectiveness of, intervention programs. Such specificity of prevention and intervention measures according to the type of abuse has been applied with very satisfactory results in other health areas (Roberto, Zimmerman, Carlyle, & Abner, 2007).

The third is that prevention and intervention should take a focus on peer support networking, as indeed has been argued by other authors (Patchin & Hinduja, 2010). Cyberbullying episodes are, in the vast majority of cases, a continuation of aggression experienced in the school context (Juvonen & Gross, 2008). They are usually committed against schoolmates, and, despite the potential of anonymity offered by technological resources, many victims know, or think they know, their attackers. The creation of peer support groups can promote the learning of how to resolve interpersonal conflicts, and the development of a capacity for empathy. The establishment and consolidation of a safety net in the form of presential teenager support groups in classroom contexts, so important at this stage of a person's development (Pokhrel, Sussman, Black, & Sun, 2010), can foster the acquisition of prosocial attitudes and behaviours, and reduce instances of cyberbullying as well as encourage the reporting of such instances.

And the fourth axis on which to support the prevention of bullying and cyberbullying behaviours is represented by the teachers themselves. These professionals are often reluctant to become involved in incidents that originate or occur outside the school setting, without being aware of the high degree of continuity between teenagers' off-line and on-line lives, or of the close relationship between classroom and cyber contexts (Bowllan, 2011). Many prevention and intervention programs that have been implemented in schools have focused on training teachers to identify just some of the roles in traditional bullying – aggressors, victims, and witnesses. However, there is a growing multiplicity of roles taken by teens in situations of bullying and cyberbullying, and teachers need new indicators with which to identify them so as to be able to implement effective countermeasures (Maring & Koblinsky, 2013).

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