Psicothema

Psicothema 2017, Vol. 29, No. 3, 335-340
doi: 10.7334/psicothema2016.258

ISSN 0214 - 9915 CODEN PSOTEG

www.psicothema.com

# Stress, competence, and parental educational styles in victims and aggressors of bullying and cyberbullying

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## Abstract

**Background:** The family can be a protective/risk factor for violence. The study analyzes differences in family variables (parental stress, parental competence and parenting styles) among severe student victims, aggressors, cybervictims, and cyberaggressors (who have very frequently suffered or carried out bullying/cyberbullying behaviors in the past year) and those who have neither suffered nor carried out any aggressive behavior or only occasionally. **Method:** Participants were 1,993 students in the 5th-6th grade (9-13 years old). **Results:** Victims and aggressors of bullying had parents with higher levels of parental stress, who used more authoritarian educational styles (low affection, coercive discipline, high control), and more permissive practices (high affection/overprotection, low demand/control); parents of aggressors also had a lower level of parental competence. Cybervictims had parents with higher parental stress who used more permissive educational styles. Cyberaggressors had parents with a low level of parental competence. **Conclusions:** The family context is relevant for bullying/cyberbullying, but family variables have more influence on bullying than on cyberbullying.

***Keywords:*** bullying, cyberbullying, parental stress, parental competence, parenting styles.

## Resumen

***Estrés, competencia y prácticas educativas parentales en víctimas y agresores de bullying y cyberbullying.*** **Antecedentes:** la familia puede ser un factor de protección o de riesgo de la violencia. El estudio analiza diferencias en variables familiares (estrés, competencia y prácticas educativas) entre estudiantes víctimas, agresores, cibervíctimas y ciberagresores severos (han sufrido y realizado muy frecuentemente conductas de bullying/cyberbullying en el último año) y aquellos que no han sufrido ni realizado ninguna conducta agresiva o esta ha sido ocasional. **Método:** participaron 1.993 estudiantes de 5º-6º curso (9-13 años). **Resultados:** las víctimas y agresores de bullying tenían padres con mayores niveles de estrés parental, utilizaban más prácticas educativas autoritarias (bajo afecto, disciplina coercitiva, alto control) y más prácticas permisivas (alto afecto/sobreprotección, baja exigencia/control); además los padres de los agresores tenían menor nivel de competencia parental. Las cibervíctimas tenían padres con mayor nivel de estrés parental y usaban más prácticas educativas permisivas. Los ciberagresores tenían padres con bajo nivel de competencia parental. **Conclusiones:** el contexto familiar es relevante para el bullying/cyberbullying, pero las variables familiares tienen mayor influencia en bullying que en cyberbullying.

***Palabras clave:*** bullying, cyberbullying, estrés parental, competencia parental, estilos educativos parentales.

The importance of the family as the child's socializing agent is indisputable. It is their first socialization environment, in which behavioral rules for living together are acquired, and it is essential for their personal, social, and school adaptation. Therefore, determining the family variables (parental stress, parental competence, and parenting style) of children who are victims and aggressors of bullying/cyberbullying will allow us to study in greater depth the influence of family context on peer victimization/aggression.

In a bullying situation, one or more aggressors intentionally cause pain, harass, and repeatedly subject a helpless classmate through aggressive face-to-face behaviors (physical, verbal, social, and psychological), and it is a relation of dominance-submission and power inequality that takes place over time. Cyberbullying is a form of bullying in which the harassment is performed through information and communication technologies, mainly the Internet and mobile phones.

Few studies have analyzed the relation between bullying/cyberbullying and parental stress. Maternal stress correlated significantly with externalizing behaviors (Buodo, Moscardino, Scrimin, Altoè, & Palomba, 2013), and stress resulting from the parental role produced by child-rearing was related to behavioral problems and peer aggression (Dodge, Coie, & Lynam, 2006; Liu & Wang, 2015). However, no studies have been conducted that analyze stress parental and victimization.

Parental competence is the parents' practical capacity to care for, protect, and educate their children, to appropriately cover their needs, ensuring their healthy development. A positive relationship with parents, based on affection (Estévez, Murgui, Musitu, & Moreno, 2008), communication (Samper-García, Mestre-Escrivá, Malonda, & Mesurado, 2015) and involvement in the children's

Received: August 23, 2016 • Accepted: April 20, 2017
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lives (Abdirahman, Fleming, & Jacobsen, 2013) are protector factors against victimization. Low parental support is related to being a bullying victim (Dehue, Bolman, Vollink, & Pouwelse, 2012; Fanti, Demetriou, & Hawa, 2012; Khamis, 2015; Low & Espelage, 2013; Wang, Iannotti, & Nansel, 2009), and the lack of affection, dedication, and low supervision plus a lack of clarity in setting limits/rules increases the risk of aggressive behaviors, whereas their opposite acts as a protective factor (Dehue et al., 2012). Parental involvement and family support are protective factors against cyberaggression and cybervictimization (Fanti et al., 2013; Khurana, Bleakley, Jordan, & Romer, 2015; Wang et al. 2009) whereas low affection and low involvement are related to being a cybervictim and a cyberaggressor (Kowalski, Giumetti, Schroeder, & Lattanner, 2014). Mothers' offensive communication is associated with severe cybervictimization (Larrañaga, Yubero, Ovejero, & Navarro, 2016) and high family conflict predicts cybervictimization (Ortega-Barón, Buelga, & Cava, 2016).

The research of parenting style and bullying shows that a warm, democratic, and comprehensive parental style that fosters independence is a protective factor against being a victim (Healy, Sanders, & Iyer, 2015), and warm, cohesive, homes with clear rules protect the child from becoming an aggressor (Morcillo et al., 2015). Parental styles characterized by coercive and punitive practices and low affection are related to violence (Torío, Peña, & Inda, 2008). Authoritarian styles are related to aggression, whereas balanced styles are a protective factor (Baldry & Farrington, 2005; Morcillo et al., 2015).

Studies of face-to-face bullying highlighted that the victims had authoritarian parents (Bibou-Nakou, Tsiantis, Assimopoulos, & Chatzilambou, 2013), and they found correlations between the authoritarian style and bullying victimization and perpetration (Georgiou, Fousiani, Michaelides, & Stavrinides, 2013). Children raised with authoritarian styles were more likely to be victims, and aggressors' parents had permissive and negligent styles (Dehue et al., 2012). The authoritarian style was identified as a risk factor for perpetrating bullying (Morcillo et al., 2015), and the permissive style was associated with aggression (Ehrenreich, Beron, Brinkley, & Underwood, 2014). Research on cyberbullying confirmed that permissive and negligent lifestyles increased the probability of becoming a cyberaggressor (Dehue et al., 2012), and the authoritarian style increased the probability of becoming a cybervictim (Dehue et al., 2012; Ybarra & Mitchell, 2004) and a cyberaggressor (Low & Espelage, 2013; Makri-Botsari & Karagianni, 2014).

In general, the studies suggest that both authoritarian and very permissive parenting styles are risk factors, whereas a democratic style based on affection is a protective factor against bullying/cyberbullying. However, in contrast to the investigations that emphasize the relevance of the family, Lee and Song (2012) concluded that the most reliable indicators to detect victimization are personal characteristics, and that negative experiences in the family have a low relation to bullying behaviors.

Epidemiological studies carried out with students of the last cycle of Primary Education have identified relevant prevalence rates of bullying in all its modalities (for a review, see Garaigordobil, 2013). Data from these studies suggest the importance of studying bullying/cyberbullying in preadolescence in more depth. Taking into account these results, the study analyzes differences in family variables (parental stress, parental competence, authoritarian-balanced-permissive parenting styles) between severe victims, aggressors, cybervictims and cyberaggressors (they suffered and carried out bullying/cyberbullying very frequently in the past year), comparing them with students who had not suffered or carried out any aggressive behavior, or only occasionally.

Taking as reference the review of previous studies, the investigation proposes five hypotheses: H1: Parents of severe victims, aggressors, cybervictims, and cyberaggressors will have higher levels of parental stress; H2: Parents of severe aggressors and cyberaggressors will have lower levels of parental competence; H3: Parents of severe victims, aggressors, cybervictims and cyberaggressors will use more authoritarian parenting styles; H4: Parents of students who have not suffered or carried out any aggressive behaviors in the past year will use more balanced parenting styles; and H5: Parents of severe aggressors and cyberaggressors will be more permissive.

## Method

### *Participants*

The sample was made up of 1,993 students (50.2% boys, 49.8% girls) of 5th (51.5%) and 6th grade (48.5%) of Primary Education, aged 9-13 years ($M$ = 10.68, $SD$ = 0.71), enrolled in 25 schools (51% public, 49% private/subsidized). To select the representative sample of these school courses of the Basque Country, proportionate stratified random sampling was used, taking into account the population in these courses from the survey of the Basque Institute of Statistics (38,593 students), the population in each type of school (public-private/subsidized), and of each province of the Basque Country. In addition, 1,670 (83.8%) parents of the students also participated.

### *Instruments*

To measure the variables, four assessment instruments with adequate psychometric guarantees of reliability and validity were used.

*Cyberbullying: Screening of Peer Harassment* (Garaigordobil, 2013). This scale evaluates face-to-face bullying and cyberbullying. The Bullying Scale (physical, verbal, social, psychological) contains 12 items, and the Cyberbullying Scale explores 15 behaviors (e.g., sending offensive-insulting messages, disseminating compromising photos/videos, making anonymous and frightening calls, stealing someone's password, isolating someone on social networks, slandering someone to discredit them…). On the two scales, participants report the frequency with which they have suffered the behaviors, whether they have performed them, and whether they have seen others performing them during the past year (Likert scale: 0 = *never*, 1 = *sometimes*, 2 = *quite a few times*, 3 = *always*). The test provides a global level of victimization and aggression on the two scales. Psychometric studies confirm adequate internal consistency both for the Bullying ($\alpha$ = .81) and Cyberbullying ($\alpha$ = .91) Scales. These results are similar to those obtained with the sample of this study, both in the Bullying Scale (global scale $\alpha$= .84, Victimization $\alpha$ = .80, Aggression $\alpha$ = .69, Observation $\alpha$ = .84), and in the Cyberbullying Scale (global scale $\alpha$ = .91, Cybervictimization $\alpha$ = .83, Cyberaggression $\alpha$ = .91, Cyberobservation $\alpha$ = .89).

*Parental Stress Scale* (*PSS;* Berry & Jones, 1995; adaptation by Oronoz, Alonso-Arbiol, & Balluerka, 2007). This measures

the level of stress that parents undergo as a result of parenting, related to: (1) rewards (satisfaction obtained through their parenting role); and (2) stressors (stress as a consequence of the parental role). It is made up of 12 items rated on a 5-point Likert scale (1 = *strongly disagree*,…, 5 = *strongly agree*). These items describe the parent-child relationship and the way the parents feel (e.g., "I feel happy in my role as parent" and "My child's behavior is often uncomfortable or stressful"). The reliability of the scale was adequate (α = .76), as also in the study sample (α = .72).

*Escala de Competencia Parental Percibida (versión padres/madres)* (*ECPP-p;* Perceived Parental Competence Scale-parents' versión; Bayot & Hernández, 2008). This measures the degree of parents' involvement in school tasks, dedication, shared leisure, advice/orientation, and their assumption of the parental role with their children. These five aspects provide information about the parents' self-perceived competence in the task of educating their children satisfactorily and efficaciously. It has 22 items, rated on a Likert response scale (*never, sometimes, almost always, always*). The scale presented a Cronbach's alpha of .86, indicating adequate internal consistency, similar to that obtained in this study (α = .83).

*Escala de identificación de Prácticas Educativas Familiares (versión para hijos)* (*PEF-H2*. Family Educational Practices Identification Scales-children' version; Alonso & Román, 2003). This evaluates children's perception of their parents' most frequent educational practices or parenting styles. It contains 27 items that group the adults into 3 parenting styles: (1) *Authoritarian style* (exerting power with coercive discipline techniques, imposes control, prioritizes rule-following, low expression of affection and communication and high demand of control); (2) *Balanced style* (high level of affection and interest, clear and stable rules, use of inductive discipline, and sensitivity to the children's needs); and (3) *Permissive style* (high affection/overprotection, low levels of demand/control). A series of situations are presented to the children and they are asked to imagine what their parents would do in those situations. For example: "Imagine that you are going to eat out and, for the first time, you are going to eat something that is very difficult to pick up with the cutlery; as you like this food very much, you decide to eat it with your fingers." What do you think your parents would do?: (a) They would make you eat properly from the beginning; (b) That day, they would feed you; (c) They would teach you and help you. The Cronbach alpha of the reduced scale (α = .77) was slightly lower than that of the total scale and, in the study sample, internal consistency was acceptable (α = .68).

*Procedure*

First, an e-mail was sent to the randomly selected schools, explaining the investigation. The project was explained in detail to the headmasters who agreed for their school to participate, and informed consents were delivered to parents and participants. Later, the members of the research team visited the schools and administered two assessment instruments to the participants (Cyberbullying, PEF-H2) in a 45-minute assessment session. In addition, each participant received an envelope with 2 instruments (PSS, ECPP-p) to be filled in by their parents. The study was rated favorably by the Ethics Commission of the University of the Basque Country (CEISH/229/2013).

*Data analysis*

First, the children were classified in three categories: (1) Uninvolved (raw score 0; has not suffered or carried out any aggressive behavior in the past year); (2) Occasional (raw scores corresponding to percentiles ≥ 89; has suffered or carried out occasional aggressive behavior); and (3) Severe (raw scores corresponding to percentiles ≤ 90; has suffered and carried out many bullying/cyberbullying behaviors). Subsequently, to analyze possible differences between the three groups in family variables (stress, competence, and parenting style), descriptive analyses (means, standard deviations), inferential analyses (MANOVA, ANOVA), analysis of the effect size ($\eta^2$) and *post hoc* group comparisons (Bonferroni) were conducted. The $\eta^2$ was interpreted according to Cohen's (1988) norms: from 0.01 to 0.04, small; from 0.04 to 0.14, moderate; and higher than 0.14, large. We used the IBM SPSS 24 statistical analysis program.

## Results

*Stress, parental competence and parenting styles in parents of victims and cybervictims*

The results of the MANOVA carried out on all the family variables in the three groups (non-victims, occasional victims, and severe victims) showed significant differences, Wilks' Lambda, $\Lambda = .965$, $F(5, 1544) = 5.47$ $p \leq .001$, with a small effect size ($\eta^2 = .017$, $r = .13$). The MANOVA in cybervictimization obtained similar results, Wilks' Lambda, $\Lambda = .980$, $F(5, 1544) = 3.10$, $p \leq .001$ ($\eta^2 = .010$, $r = .10$). The results of the analyses (descriptive statistics, inferential analysis, effect size, post hoc comparisons) in stress, competence, and parenting style as a function of victimization and cybervictimization are presented in Table 1.

The results (see Table 1) confirm that parents of severe victims of bullying had significantly more parental stress than parents of non-victims; and these parents used more authoritarian and permissive parental styles than the parents of non-victims and occasional victims. No differences were found in parental competence or in the use of a balanced parenting style. Moreover, the results also confirmed that parents of severe cybervictims had significantly more parental stress and they used more permissive parenting styles than those of non-victims. No differences were found in parental competence or in the use of authoritative and balanced parenting styles. The effect size was small for all the variables.

*Stress, parental competence and parenting styles in parents of aggressors and cyberaggressors*

The results of the MANOVA carried out on all the family variables in the three bullying groups (non-aggressors, occasional, and severe aggressors) showed significant differences, Wilks' Lambda, $\Lambda = .975$, $F(5, 1544) = 3.99$ $p \leq .001$, with a small effect size ($\eta^2 = .013$ $r = .11$). The MANOVA in cyberaggression obtained similar results, Wilks' Lambda, $\Lambda = .983$, $F(5, 1543) = 2.61$, $p \leq .01$ ($\eta^2 = .008$, $r = .08$). The results of the analyses (descriptive statistics, inferential, effect size, post hoc comparisons) in stress, competence, and parenting style as a function of aggression and cyberaggression are presented in Table 2.

*Table 1*
Means, standard deviations, analysis of variance, effect size ($\eta^2$) and post hoc tests (Bonferroni) in family variables in non-victims/non-cybervictims, occasional victims/cybervictims and severe victims/cybervictims

| | Non-victim (n = 1,113) | Occasional Victim (n = 639) | Severe Victim (n = 241) | F (2,1547) | p | $\eta^2$ | Post hoc |
|---|---|---|---|---|---|---|---|
| **Bullying / Victimization** | **M(SD)** | **M(SD)** | **M(SD)** | | | | |
| PSS. Total Stress | 8.10 (5.92) | 8.76 (6.41) | 9.85 (6.76) | 6.54 | .001 | .008 | 3>1 |
| ECCP. Parental competence | 53.14 (6.86) | 52.75 (7.18) | 52.32 (7.49) | 1.22 | .294 | .002 | ns |
| PEF. Authoritarian parenting style | 16.33 (7.73) | 17.26 (8.16) | 19.11 (8.85) | 9.47 | .001 | .012 | 3>1,2 |
| PEF. Balanced parenting style | 26.56 (7.67) | 25.70 (7.93) | 26.41 (8.11) | 1.93 | .145 | .002 | ns |
| PEF. Permissive parenting style | 13.36 (6.18) | 13.76 (6.61) | 15.58 (7.69) | 8.59 | .001 | .011 | 3>1,2 |
| | **Non-cybervictim (n = 1,292)** | **Occasional Cybervictim (n = 109)** | **Severe Cybervictim (n = 149)** | | | | |
| **Cybervictimization** | **M(SD)** | **M(SD)** | **M(SD)** | | | | |
| PSS. Total Stress | 8.29 (6.05) | 8.70 (6.68) | 10.25 (6.89) | 6.74 | .001 | .009 | 3>1 |
| ECCP. Parental competence | 53.08 (6.95) | 52.75 (7.36) | 51.72 (7.28) | 2.49 | .083 | .003 | ns |
| PEF. Authoritarian parenting style | 16.73 (7.90) | 18.33 (8.15) | 17.71 (9.01) | 2.75 | .064 | .004 | ns |
| PEF. Balanced parenting style | 26.34 (7.75) | 25.59 (7.91) | 26.18 (8.22) | 0,47 | .625 | .001 | ns |
| PEF. Permissive parenting style | 13.54 (6.43) | 14.20 (6.62) | 15.11 (7.23) | 4.15 | .016 | .005 | 3>1 |

Note: non-victim/non-cybervictim = raw score 0; Occasional victim/cybervictim = percentile scores ≤ 89; Severe victim/cybervictim = percentile scores ≥ 90. ns = nonsignificant

*Table 2*
Means, standard deviations, analysis of variance, effect size ($\eta^2$) and post hoc tests (Bonferroni) in family variables in non-aggressor/non-cyberaggressor, occasional aggressors/cyberaggressors and severe aggressors/cyberaggressors

| | Non-Aggressor (n = 1,104) | Occasional Aggressor (n = 360) | Severe Aggressor (n = 86) | F (2,1547) | p | $\eta^2$ | Post hoc |
|---|---|---|---|---|---|---|---|
| **Bullying aggression** | **M(SD)** | **M(SD)** | **M(SD)** | | | | |
| PSS. Total Stress | 8.17 (5.95) | 9.16 (6.62) | 10.07 (7.10) | 6.35 | .002 | .008 | 3,2>1 |
| ECCP. Parental competence | 53.15 (6.91) | 52.62 (7.06) | 51.29 (8.23) | 3.22 | .040 | .004 | 3<1 |
| PEF. Authoritarian parenting style | 16.51 (7.98) | 17.74 (7.98) | 19.01 (8.62) | 6.22 | .002 | .008 | 3,2>1 |
| PEF. Balanced parenting style | 26.52 (7.72) | 25.57 (7.93) | 26.01 (8.34) | 2.04 | .130 | .003 | ns |
| PEF. Permissive parenting style | 13.60 (6.33) | 13.74 (6.68) | 15.52 (8.22) | 3.45 | .032 | .004 | 3>1 |
| | **Non-Cyberaggressor (n = 1,495)** | **Occasional Cyberaggressor (n = 28)** | **Severe Cyberaggressor (n = 26)** | | | | |
| **Cyberaggression** | **M(SD)** | **M(SD)** | **M(SD)** | | | | |
| PSS. Total Stress | 8.47 (6.17) | 9.86 (7.63) | 9.54 (6.55) | 1.04 | .351 | .001 | ns |
| ECCP. Parental competence | 53.02 (6.97) | 52.75 (6.74) | 47.46 (9.11) | 8.03 | .001 | .010 | 3<1,2 |
| PEF. Authoritarian parenting style | 16.88 (8.00) | 17.07 (7.30) | 20.31 (10.24) | 2.32 | .098 | .003 | ns |
| PEF. Balanced parenting style | 26.27 (7.80) | 25.29 (8.76) | 27.31 (7.55) | 0.45 | .637 | .001 | ns |
| PEF. Permissive parenting style | 13.72 (6.55) | 12.68 (5.17) | 16.00 (7.29) | 1.97 | .146 | .002 | ns |

Note: non-aggressor/non-cyberaggressor = raw score 0; Occasional aggressor/cyberaggressor = percentile scores ≤ 89; Severe aggressor/cyberaggressor = percentile scores ≥ 90. ns = nonsignificant

Parents of severe aggressors of face-to-face bullying (see Table 2) had significantly more parental stress, less parental competence, and their parenting styles were more authoritarian and permissive than those of parents of children who had not carried out any aggressive behavior. Parents of occasional aggressors had significantly more stress and were more authoritarian than parents of non-aggressors. No differences were found in the use of balanced parenting. Parents of severe cyberaggressors had less parental competence than parents of children who had not carried out cyberaggressive behaviors or who had only performed them occasionally. No differences were found in parental stress or parenting style (authoritarian, permissive, balanced). The effect size was small for all the variables.

A synthesis of the results obtained in the four roles (victims, aggressors, cybervictims, cyberaggressors) by comparing the uninvolved with occasional and severe (see Table 3) shows that the parents of uninvolved and occasional are similar. Only the occasional aggressors have parents with more stress and authoritarian parenting styles.

## Discussion

The study analyzes differences in family variables among student severe victims, aggressors, cybervictims, and cyberaggressors (had very frequently suffered and performed bullying/cyberbullying in the past year), comparing them with students who had not suffered or carried out any aggressive behavior, or only occasionally.

Firstly, the results show that parents of severe victims, cybervictims and aggressors had significantly more parental stress. These data confirm Hypothesis 1 almost entirely, as parents of cyberaggressors scored higher in parental stress, although the differences were nonsignificant. These findings confirm studies that have identified parental stress in parents of aggressors (Dodge et al., 2006; Liu & Wang, 2015).

Secondly, the results show that parents of severe aggressors and cyberaggressors had significantly less parental competence (involvement in their children's school tasks, shared leisure, parental support…). The data confirm Hypothesis 2 and ratify other studies that have concluded that parental involvement is a protector factor against victimization (Abdirahman et al., 2013) and cybervictimization (Khurana et al., 2015), that a lack of affection, dedication, and supervision increase the risk of aggressive behaviors (Dehue et al., 2012), that little affection and low involvement are related to cyberaggression (Kowalski et al., 2014), and that parental support is a protector factor against cyberaggression (Fanti et al., 2013; Wang et al., 2009).

Thirdly, the results highlight the fact that parents of severe victims and aggressors were more authoritarian (low affection, coercive discipline, high control). Therefore, Hypothesis 3 is partially confirmed. The findings confirm the studies that have reported that authoritarian parenting styles are more frequent in the parents of victims (Bibou-Nakou et al., 2013; Dehue et al., 2012) and aggressors (Baldry & Farrington, 2005; Morcillo et al., 2015), but they do not ratify the works that have found authoritarian parenting styles in the parents of cybervictims (Dehue et al., 2012; Ybarra & Mitchell, 2004) and cyberaggressors (Low & Espelage, 2013; Makri-Botsari & Karagianni, 2014). These discrepancies could be explained by the different ages of the samples of these studies.

Fourthly, the results do not reveal significant differences in the three groups (uninvolved, occasional, severe) in balanced parenting style (high affection, clear rules, inductive discipline...), so Hypothesis 4 is rejected. These results contradict those found in other studies that confirmed that a warm, democratic, and comprehensive style with clear rules etc. was a protector factor against becoming a victim (Healy et al., 2015) or an aggressor (Morcillo et al., 2015). The discrepancies could be explained by the different assessment instruments used to measure different behaviors associated with balanced parenting styles.

Lastly, the results show that parents of severe victims, aggressors, and cybervictims are more permissive (high affection/overprotection, low demand/control). These findings practically confirm Hypothesis 5 and also studies have found that children of permissive parents were more likely to be aggressors (Dehue et al., 2012; Ehrenreich et al., 2014) but, in this study, we did not find that they were cyberaggressors, in contrast to the findings of Dehue et al. (2012).

Among the more relevant original contributions provided by this study, we note that we found that parents of victims and cybervictims are permissive (high affection/overprotection, low demand/control) and have a high level of parental stress, aspects that had not been identified in previous studies. In addition, this work has revealed that, although the family context is relevant, family variables have more influence on bullying than on cyberbullying.

The study helps to identify family variables that influence bullying/cyberbullying and suggests the need to develop family educational programs to promote changes in the way of educating children. To conclude, we underline that decreasing parental stress resulting from parenting (increasing rewards and reducing stress due to the role), increasing parental competence (school involvement, personal dedication, shared leisure, advice, and assumption of the parental role), decreasing the use of authoritarian (coercive discipline techniques, imposing control, high rule-following, low expression of affection/communication, high control) and permissive parenting styles (overprotection, low demand/control) would have a positive effect on the reduction of bullying/cyberbullying.

The findings underline the relevance of the family, in contrast to the study of Lee and Song (2012), which concluded that negative experiences in the family are not related to bullying. Perhaps the discrepancies with this study can be explained by cultural differences with the country in which it was carried out (South Korea). As limitations of the study, we note: (1) its cross-sectional nature, which allows us to recommend future longitudinal studies; (2) having measured bullying/cyberbullying through self-reports, with the implied bias of social desirability. Although this test was administered anonymously, so it is expected that this bias will not be very relevant to the obtained results, future studies might use sociometric questionnaires to identify victims and aggressors;

*Table 3*
Significant family variables in the four roles (victims, aggressors, cybervictims, cyberaggressors) comparing uninvolved with occasional and severe

| | Victims | Cybervictims | Aggressors | Cyberaggressors |
|---|---|---|---|---|
| Occasional | | | + Stress<br>+ Authoritarian | |
| Severe | + Stress<br>+ Authoritarian<br>+ Permissive | + Stress<br>+ Permissive | + Stress<br>- Parental competence<br>+ Authoritarian<br>+ Permissive | - Parental competence |

(3) not having taken into account some variables (for example, students' degree of use of mobile phones, Internet, or social networks), or (4) not having obtained the fathers' and mothers' responses to the questionnaires of perceived parental stress and competence independently, aspects that should be taken into account in future studies.

Acknowledgements

The study was financed by the Spanish Ministry of Economics and Competitiveness (MINECO) (PSI2012-30956), by the Department of Education of the Basque Government (IT-638-13), and by the University of the Basque Country (PPG17/31).

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