

## **BULLYING, CYBERBULLYING AND ADOPTION: WHAT IS THE ROLE OF STUDENT-TEACHER CONNECTEDNESS?**

### **Abstract**

Bullying and cyberbullying have rarely been studied among the adoptive population, although the few studies available show adopted students frequently experience these phenomena. To address this research gap, this paper examined potential differences in bullying and cyberbullying between domestic adoptees, intercountry adoptees and non-adopted students, paying separate attention to frequent and occasional victimisation and perpetration experiences. In addition, the aims of the paper include analysing student-teacher connectedness in these groups and exploring its potential protective role for the aforementioned bullying and cyberbullying experiences. The sample consists of 541 adopted adolescents (67.1% intercountry adoptees and 32.9% domestic adoptees) and 582 non-adopted adolescents aged 11 to 18 years who had participated in the 17/18 edition of the *Health Behaviour in School-aged Children* (HBSC) study in Spain. Results show that the likelihood of involvement in bullying and cyberbullying (either victimisation or perpetration) was lower for the non-adopted group, whereas domestic adoptees were significantly more likely to report these experiences. Furthermore, student-teacher connectedness was lower among domestic adoptees compared to their non-adopted peers. Finally, teacher connectedness was consistently associated with a lower likelihood of frequent bullying and cyberbullying victimisation, and of both occasional and frequent cyberbullying perpetration. Overall, our findings are consistent with an increased risk of bullying and cyberbullying among domestic adoptees and a predominantly consistent protective role of student-teacher connectedness, although differences depending on the specific kind of experience deserve further examination in future research.

**Keywords:** *bullying, cyberbullying, teacher connectedness, adoption.*

Paniagua, C., García-Moya, I., Sánchez-Queija, I., & Moreno, C. (2022). Bullying, cyberbullying, and adoption: What is the role of student-teacher connectedness?. *School psychology, 37*(5), 367–377. <https://doi.org/10.1037/spq0000508>

### **Impact and Implications Statements**

Student-teacher connectedness showed a protective role against both bullying and cyberbullying, even in domestic adoptees. Promoting student-teacher connectedness may be a promising avenue for future prevention programmes in this area. In addition, particular attention should be paid to meeting the needs of those at increased risk of disconnection, with this study pointing to domestic adoptees as a group that requires specific support.

**Funding:** Andalusian Government, European Social Fund, Ministry of Science, Innovation and Universities and Spanish Ministry of Health.

According to Palacios and Brodzinsky (2010), early efforts in the field of adoption research focused on analysing differences in mental health problems and psychopathology between adopted and non-adopted populations. Those studies concluded that the psychological adjustment of most adoptees was good (see e.g. Askeland et al., 2017), so the main focus in adoption research is now diversifying. Specifically, recent research has started to pay attention to a relatively forgotten aspect in classic studies: adoptees' relationships with peers (e.g., Brown et al., 2017; Cáceres, et al., 2021).

Schools are ideal environments to examine adoptees' adjustment and social adaptation, which has made them the focus of many studies in this area (e.g., Cáceres et al., 2021; Holmgren et al., 2019). Several studies have recently examined diverse aspects of adoptees' relationships with their classmates, such as social support (Paniagua, García-Moya, et al., 2020), social competence (Palacios et al., 2013) and problems in peer relationships (Brown et al., 2017; Paniagua, Moreno, Román, et al., 2020). Overall, these studies have shown that adopted adolescents have more difficulties in their social relationships with classmates than their non-adopted peers.

Social difficulties in adoptees' relationships with classmates point to the relevance of examining bullying among these students. However, research on adoption and bullying still is scarce, which may have to do with the interest in adoptees' relationships with peers being relatively recent.

The few already available studies on bullying among adopted adolescents have been conducted in Finland (Holmgren et al., 2019; Raaska et al., 2012) and Spain (e.g., Paniagua, Moreno, Sánchez-Queija, et al., 2020) and consistently find that bullying is more frequent among adopted adolescents than in their non-adopted peers. For instance, using the 2014 HBSC Spanish dataset, Paniagua, Moreno, Sánchez-Queija, et al. (2020) found that 21.3% domestic adolescents and 5.1% intercountry adoptees had been targets of bullying, while the prevalence was 4.8% in the non-adopted comparison group. In their study of intercountry adoptees in Finland, Raaska et al. (2012) reported that 19.8% had suffered bullying victimisation, while 8% reported having bullied others.

Regarding cyberbullying, to our knowledge, only two previous works have studied this phenomenon in adopted adolescents. Paniagua, Moreno, Sánchez-Queija et al. (2020), using the 2014 HBSC Spanish dataset, found that domestic adoptees (18.1%) were significantly more likely to have suffered cyberbullying victimisation than intercountry adoptees (7.0%) or non-adoptees (3.9%). Román et al. (2021), in an oral presentation about Eastern European adoptees in Spain specifically, concluded that cyberbullying was one of the less frequent forms of victimisation, and reported a prevalence of 2% in this group of adopted students.

The limited amount of research on bullying in adopted populations notably contrasts with the breadth of evidence and constant developments in the study of bullying during adolescence in the general population. Nowadays, there is consensus that analysis of bullying must pay attention to both victimisation and perpetration, and research has identified some risk and protective factors connected to these processes (Menesini & Salmivalli, 2017). In addition, guided by the assumption that consequences of bullying and the likelihood of disclosure to adults may be associated with frequency, recent studies (e.g. Bjereld, et al., 2017) have also compared frequent and occasional victimisation.

Research on similarities and differences between bullying and cyberbullying and on the prevalence of this latter phenomenon has also grown in the last decades (for a review, see Kowalski et al., 2019). First, cyberbullying has been found to be less prevalent than face-to-face bullying (Zych, et al., 2015). In addition, although some authors have mentioned that cyberbullying may represent an extension of traditional bullying in some cases (Modecki et al., 2014), recent research has underlined distinct features of cyberbullying: the potential of a single incident to result in continued victimisation, the potential for aggressions to reach a wider audience and to take place out of school hours, the aggressor's greater anonymity due to the online environment, etc. (Kowalski et al., 2019; Peter & Petermann, 2018).

With most research on bullying having moved from studying the consequences of bullying involvement to an interest in identifying protective factors (Zych et al., 2019), the role of relationships with teachers as key adults in the school environment is an area of current interest in bullying research (Huang et al. 2018; Yeung & Leadbeater, 2010). Positive student-teacher relationships have been associated with reduced

bullying victimisation during adolescence (Di Stasio, et al., 2016) and teacher support has been hypothesized to buffer the negative effects of bullying experiences (Huang et al., 2018; Yeung & Leadbeater, 2010). At the same time, concern has been expressed that children involved in bullying may feel less supported by their teachers (Bjereld et al., 2017; Huang et al., 2018).

Assessments of teacher support usually provide an indication of the general climate of relationships with teachers. However, especially during adolescence, when students spend time with different teachers, it has been increasingly emphasized that the quality of relationships can vary depending on the teacher (García-Moya, 2020; Martin & Collie, 2019). In fact, even in the context of generally negative relationships with teachers, adolescents tend to experience connectedness with specific teachers (e.g., García-Moya et al., 2020). In addition, a positive relationship with a teacher may be of greater importance for vulnerable students, with benefits such as reducing student aggression or contributing to a more positive climate of relationships with peers (McGrath & Van Bergen, 2015). Consequently, the availability of at least one meaningful connection with a teacher becomes an important aspect to take into consideration in the study of bullying among potentially vulnerable students, particularly during adolescence.

Student-teacher connectedness has been defined as “a humanizing kind of personalized teacher–student interaction, including the student’s perception that teachers notice and respect them as an individual, are sympathetic and can see things from the student’s perspective, and act as supportive figures responsive to the student’s needs” (García-Moya et al., 2020, p. 17). Some studies have suggested that student-teacher connectedness may have a powerful influence on students at risk of school disconnection (e.g., Reed & Wexler, 2014; Thompson & Bell, 2005). However, we know little about the potentially protective role of student-teacher connectedness in bullying and to our knowledge no previous study has examined this topic in adopted populations. Previous research shows that some adoptees report having been discriminated by their teachers due to their adoption status (McGinnis et al., 2019) and that specific groups of adoptees report lower teacher support (Paniagua, Garcia-Moya et al., 2020). It has also been suggested that adopted adolescents, specifically those adopted following institutionalisation, feel more disconnected from the school (Lutes et

al., 2016). Given those difficulties, focusing on student-teacher connectedness may be particularly relevant in this population.

### **Characteristics of Adoption in Spain**

For years, Spain has been one of the countries leading intercountry adoptions worldwide (Selman, 2010). In addition, to understand the welfare protection system in Spain, it must be noted that a large number of domestic adoptees have been in child protection centres before. Specifically, if we look at the latest public data (Observatorio de la Infancia, 2020), in 2019 there were 23,209 children in child protection centres, and 19,320 in foster care (48% of them in kinship care). Regarding adoptions, there were 626 domestic adoptions and 370 intercountry adoptions during the same year.

In Spain, all domestic adoptees come from the welfare protection system, as opposed to other countries. Therefore, all domestic adoptees in Spain have suffered some type of adversity, maltreatment, or abuse. In addition, most of them were not adopted when they were babies, so they both have been exposed to family adversity for years and lived in child protection centres prior to adoption. According to Observatorio de la Infancia (2020), 45.2% domestic adoptions involved children aged 4 years or older.

The former does not apply to the same extent to intercountry adoptions in Spain, for which Asia remains the main area of origin (Observatorio de la Infancia, 2020). Specifically, whereas in some birth areas, such as the Russian Federation (The St. Petersburg-USA Orphanage Research Team, 2005) prolonged institutionalisation also occurs, in countries such as China institutionalisation is less prolonged, and it is common that adoption takes place at earlier ages (e.g., Selman, 2009). Bearing this in mind, there are several researchers who have pointed out the existing diversity in adoption and recommended not treating adoptees as a homogeneous group (e.g., Paniagua, Moreno, Román, et al., 2020).

### **Study Aims**

Based on the state of the art described in previous paragraphs, this study has three aims. First, we wanted to examine potential differences in bullying and cyberbullying (both victimisation and perpetration) among adopted adolescents and their non-adopted peers. Beyond differences between adoptees and non-adoptees,

previous research has shown differences in bullying between domestic and intercountry adoptees (Paniagua, Moreno, Sánchez-Queija, et al. 2020), so potential differences between domestic adoptees, intercountry adoptees, and non-adopted adolescents were examined. Second, we analysed differences between these three groups in student-teacher connectedness. Finally, in order to explore the potential role of student-teacher connectedness as a protective factor, we analysed the associations between teacher connectedness and bullying and cyberbullying (victimisation and perpetration), while considering the potentially moderating role of adoption status. In both cases, we made a distinction between frequent and occasional bullying victimisation/perpetration to contribute additional evidence on the role of frequency in bullying experiences.

## Method

### Participants

Participants come from a representative sample of adolescents aged 11 to 18 years who had participated in the 2017/2018 edition of the WHO-collaborative survey *Health Behaviour in School-aged Children* (HBSC) in Spain. A multi-stage stratified cluster sampling was used to ensure the representativeness of the sample. The stratification strategy took into consideration students' age group (11-12 years, 13-14 years, 15-16 years or 17-18 years), geographic area (differentiating the 17 autonomous regions in Spain), type of school (state or private schools) and school location (rural or urban).

The group of adoptees consists of 541 adolescents (40.1% girls, 59.9% boys). 67.1% are intercountry adoptees (45.9% from Asia, 32.5% from Eastern Europe, 13.8% from Latin America and 7.8% from Africa) and 32.9% are domestic adoptees. Mean age at the time of survey was 14.28 (SD = 0.09); 14.83 (SD = 0.11) for intercountry adoptees and 14.25 (SD = 0.17) for domestic adoptees. Mean age at placement was 2.49 years (SD = 2.76); 2.26 years old (SD = 2.48) for intercountry adoptees and 2.90 years (SD = 3.27) for domestic adoptees.

A group of non-adopted adolescents was used as a comparison group. This group included 582 adolescents (50.2% girls, 49.8% boys). Their mean age at the time of survey was 14.28 years old (SD = 0.09). This reference group consists of a random subsample of the total non-adopted sample who answered the same set of questions as

the adoptees. Due to the characteristics of the data collection methodology of the HBSC study, age group at the time of the study was the only key variable for which matching between the adopted and non-adopted groups was possible. In the non-adopted group, adolescents from the child welfare system were excluded, such as those living in kinship families, in foster families or in institutionalised centres. Adopted adolescents who may be under other protection measures at the time of the study (e.g. because of an adoption breakdown) were included in the adopted group. In this respect, the adopted group includes seven adopted adolescents (1.3% of the adopted sample in this study) who reported that they lived at a child protection centre at the time of the study.

## Measures

In line with the aims of this paper, adoption status (domestic adoptees, intercountry adoptees and non-adopted reference group), sex, age and the following measures from the HBSC questionnaire were used:

*-Bullying victimisation and perpetration.* The Revised Bully/Victim Questionnaire (Olweus, 1996), which includes global measures of bullying victimisation and bullying perpetration was used. Both questions were answered separately on a 5-point Likert scale with the following answer options. For the purpose of this study, frequency of victimisation/perpetration were defined as follows, in line with previous research (e.g., Bjereld et al., 2017;): no involvement (answer 1); occasional victimisation/perpetration (answer 2); frequent victimisation/perpetration (answers 3, 4 and 5). The Revised Bully/Victim Questionnaire is one of the most widely used instruments to assess bullying prevalence and has shown good psychometric properties (for a summary, see e.g. Olweus, 2013).

*-Cyberbullying victimisation and perpetration.* An adaptation of The Revised Bully/Victim Questionnaire (Olweus, 1996) was also used to assess cyberbullying. Specifically, the same questions were used, but replacing ‘bullied’ and ‘bullying’ with the terms ‘cyberbullied’ and ‘cyberbullying’. In addition, the questions included some examples of cyberbullying victimisation and cyberbullying perpetration to help students to identify cyberbullying episodes and distinguish them from other types of violence or online conflicts. Students’ answers were categorized based on frequency as described above for bullying, i.e. making a distinction between no involvement, occasional victimisation/perpetration, and frequent victimisation/perpetration. The adaptation of the Revised Bullying/Victim Questionnaire has been considered a useful measure to



assess cyberbullying (for information on psychometric properties, see e.g. Olweus, 2013).

*-Teacher connectedness.* For the assessment of student-teacher connectedness, we used a scale developed as part of the *Teacher Connectedness Project*. It consists of 12 items (e.g., I have at least one teacher that is willing to listen to my problems) answered in a 4-point likert-type scale ranging from *strongly disagree* to *strongly agree*. A sum score, in which higher scores represent higher levels of student-teacher connectedness, was calculated. For further information on the scale development process and its psychometric properties, see García-Moya et al. (2021). The reliability of this scale in the present study was high (Cronbach's alpha = .95). Since several authors have warned about the limitations of alpha (e.g., Dunn et al., 2014; McNeish, 2018), omega was also calculated, with the result supporting a similar conclusion (McDonald's omega = 0.953).

## **Procedure**

The HBSC study procedure is conducted in accordance with a set of international network guidelines that each member country must abide by. Specifically, data collection must comply with the following requirements (Roberts et al., 2009): the questionnaire must be voluntarily answered by the adolescents themselves, the anonymity and the confidentiality of the participants' answers must be ensured, and the questionnaires must be completed at the educational centre and during school hours. The HBSC procedure also includes a specific procedure to ensure that no bias is introduced as a result of translating the measures into national languages. Specifically, the International Coordinating Centre centralises a process in which translation and backtranslation are conducted by independent translators in each country, and an external reviewer is appointed by the coordinating centre to ensure the correspondence between the backtranslation outcome and the original measure.

Students completed the HBSC survey online by means of a computer-assisted web interviewing system. Ethical approval was obtained from the Comité Coordinador de Ética de la Investigación Biomédica de Andalucía (PEIBA: 0746-N-17).

## **Data analysis**

Analyses were conducted using IBM SPSS 25, and an analytical strategy in line with the study aims was followed. First, in line with study aim 1, bivariate analyses were conducted to examine potential differences associated to adoption status in

bullying (victimisation and perpetration) and cyberbullying (victimisation and perpetration). Second, we examined the associations between adoption status and student-teacher connectedness (study aim 2). For aims 1 and 2, we used chi-square analyses and ANOVA, respectively. Adjusted standardised residuals and Bonferroni test were calculated for multiple comparisons, and Crammer's V (for chi-square analyses) and Cohen's d (for ANOVA) were also calculated to get an indication of the effect size where significant differences were found. Finally, to explore the potentially protective role of student-teacher connectedness for occasional and frequent bullying/cyberbullying victimisation and perpetration (study aim 3), we used multinomial logistic regression. No involvement was set as the reference category and sex and age were included as control variables in all multinomial logistic regression analyses. Since we wanted to examine whether adoption status may moderate the impact of student-teacher connectedness on the likelihood of occasional and frequent bullying/cyberbullying experiences, the interaction between adoption status and student-teacher connectedness was also tested as part of these analyses. ORs and 95% CIs are reported for all the examined variables.

## Results

Results are presented in three different subsections that correspond with the three aims of the study. Regarding missing data, the percentage of respondents with complete data in bullying and cyberbullying variables was very high (98.6% for bullying victimisation, and 98.3% for bullying perpetration, cyberbullying victimisation and cyberbullying perpetration). A lower percentage of full response was found for teacher connectedness (85.4%). However, our analyses of non-response show that participants who had missing values in teacher connectedness were comparable to those without missing in the study dependent variables: bullying victimisation ( $X^2 = 1.92, p = .383$ ), bullying perpetration ( $X^2 = 1.72, p = .424$ ), cyberbullying victimisation ( $X^2 = 0.52, p = .773$ ), and cyberbullying perpetration ( $X^2 = 0.22, p = .898$ ). Missingness in teacher connectedness was also unrelated to adoption status ( $X^2 = 0.67, p = .715$ ).

### **Bullying and Cyberbullying (both Victimisation and Perpetration) among Domestic Adoptees, Intercountry Adoptees and Non-Adopted Adolescents (Aim 1)**

Among those involved in bullying or cyberbullying (either victimisation or perpetration), most adolescents reported an occasional frequency of these experiences (see Table 1). However, some adolescents reported frequent victimisation, with prevalence in the examined groups ranging from 3.7% to 10.3% for bullying and from 0.9% to 5.2% for cyberbullying. Percentages for frequent perpetration experiences were also higher for bullying perpetration (2.8% to 10.5%) than for cyberbullying perpetration (0.7% to 6.6%).

Table 1. *Bullying and cyberbullying (victimisation and perpetration) by adoption status.*

		Non adopted f (%)	Domestic f (%)	Intercountry f (%)
Bullying victimisation	Not involved	513 (89.4%)	117 (75.5%)	257 (81.6%)
	Occasional	40 (7%)	22 (14.2%)	36 (11.4%)
	Frequent	21 (3.7%)	16 (10.3%)	22(7.0%)
Bullying perpetration	Not involved	506 (88.2%)	116 (75.8%)	270 (86.0%)
	Occasional	52 (9.1%)	21 (13.7%)	27 (8.6%)
	Frequent	16 (2.8%)	16 (10.5%)	17 (5.4%)
Cyberbullying victimisation	Not involved	548 (96.0%)	133 (86.4%)	291 (92.1%)
	Occasional	18 (3.2%)	13 (8.4%)	14 (4.4%)
	Frequent	5 (.9%)	8 (5.2%)	11 (3.5%)
Cyberbullying perpretation	Not involved	562 (97.7%)	138 (90.8%)	301 (95.9%)
	Occasional	9 (1.6%)	4 (2.6%)	6 (1.9%)
	Frequent	4 (.7%)	10 (6.6%)	7 (2.2%)

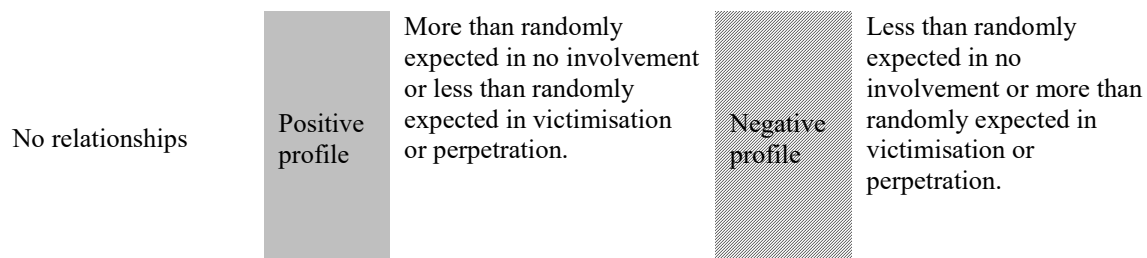
Chi-square was used to examine whether significant differences existed depending on adoption status. To assist with interpretation, a visual summary of these results has been provided in Figure 1.

*Figure 1.* Visual summary of differences in bullying and cyberbullying (victimisation and perpetration) among non-adopted adolescents, domestic adoptees and international adoptees

		Non adopted	Domestic adoptees	International adoptees
Bullying victimisation	Not involved	↑	↓	↓
	Occasional	↓	↑	
	Frequent	↓	↑	
Bullying perpetration	Not involved	↑	↓	
	Occasional			
	Frequent	↓	↑	
Cyberbullying victimisation	Not involved	↑	↓	
	Occasional	↓	↑	
	Frequent	↓	↑	
Cyberbullying perpetration	Not involved	↑	↓	
	Occasional			
	Frequent	↓	↑	

↑ = More than randomly expected ( $z_{res} \geq 1.96$ )

↓ = Less than randomly expected ( $z_{res} < 1.96$ )



Regarding bullying victimisation, there were significant differences among the examined groups ( $\chi^2 = 23.17, p < .001, Cramer's V = .10$ ). According to adjusted standardised residuals, no involvement was more prevalent than randomly expected among non-adopted adolescents and less prevalent than randomly expected among intercountry and domestic adoptees. In addition, domestic adoptees reported more occasional and frequent victimisation than expected, while non-adopted adolescents report less victimisation than randomly expected. Significant differences were also found in bullying perpetration ( $\chi^2 = 20.94, p < .001, Cramer's V = .10$ ). The inspection of adjusted standardised residuals showed that no involvement was more prevalent than randomly expected among non-adopted adolescents and more prevalent than randomly expected among domestic adoptees, with the opposite pattern being found for frequent

bullying perpetration. In contrast, prevalence was similar to randomly expected among intercountry adoptees. Finally, no significant differences among the examined groups were found in occasional bullying perpetration.

Moving to cyberbullying, significant differences among the examined groups were found in cyberbullying victimisation ( $\chi^2 = 21.67, p < .001, Cramer's V = .10$ ). Adjusted standardised residuals indicated no significant differences involving intercountry adoptees. In contrast, domestic adoptees experienced more occasional and frequent cyberbullying than was randomly expected, whereas the opposite pattern was found in non-adopted adolescents. Significant differences were also found in cyberbullying perpetration ( $\chi^2 = 22.10, p < .001, Cramer's V = .10$ ). The inspection of standardised residuals suggested no significant differences among the examined groups in occasional cyberbullying perpetration. Nevertheless, domestic adoptees involved in more frequent cyberbullying than was randomly expected, whereas the opposite pattern was found in non-adopted adolescents.

### **Student-Teacher Connectedness among Domestic Adoptees, Intercountry Adoptees and Non-Adopted Adolescents (Aim 2)**

As shown in Table 2, the highest mean of student-teacher connectedness was found in non-adopted adolescents. Connectedness with teachers in intercountry adoptees was lower than in the non-adopted group, but higher than among domestic adoptees.

Table 2. *Descriptive analysis of student-teacher connectedness by adoption status*

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Cohen's d</i>	
Non adopted (NA)	493	36.48	9.63	NA vs DA	0.24
				NA vs IA	0.09
Domestic adoptees (DA)	137	34.10	11.29	DA vs NA	- 0.24
				DA vs IA	- 0.14
Intercountry adoptees (IA)	274	35.57	9.85	IA vs NA	- 0.09
				IA vs DA	0.14
Total	904	35.84	9.99		

ANOVA results showed that there were significant differences in student-teacher connectedness depending on adoption status ( $F = 3.19, p = .041$ ). Bonferroni test for multiple comparisons indicated that no significant differences existed between international adoptees and non-adopted adolescents ( $p = .676$ ). In contrast, differences were statistically significant between domestic and non-adopted adolescents ( $p < .001$ ). Specifically, connectedness with teachers was lower in domestic adoptees than in their non-adopted peers, with the effect size of that difference being small ( $d = 0.24$ ).

**Associations between Teacher Connectedness and Bullying and Cyberbullying (Victimisation and Perpetration) Experiences among Domestic Adoptees, Intercountry Adoptees and Non-Adopted Adolescents (Aim 3)**

Separate multinomial logistic regression models were calculated for bullying victimisation, bullying perpetration, cyberbullying victimisation and cyberbullying perpetration. In each model, ORs were calculated for the likelihood of occasional and frequent experiences compared to not involvement, which was the reference category for each dependent variable. Sex and age were included in these models as control variables. In addition, potential moderation effects of adoption on the relationships between teacher connectedness and the dependent variable were explored.

Table 3

*Logistic regression analysis on bullying victimisation and perpetration*

	BULLYING VICTIMISATION						BULLYING PERPETRATION					
	Occasional			Frequent			Occasional			Frequent		
	<i>B</i>	<i>p</i>	OR (95% CI)	<i>B</i>	<i>p</i>	OR (95% CI)	<i>B</i>	<i>p</i>	OR (95% CI)	<i>B</i>	<i>p</i>	OR (95% CI)
Intercept	-.559	.581		-.050	.969		-3.536	.000		-4.239	.004	
Age	-.130	.022	.878 (.785,.981)	-.127	.096	.881 (.759,1.023)	.087	.110	1.091 (.980,1.214)	.109	.185	1.115 (.949,1.310)
Sex <sup>a</sup>	-.058	.805	.943 (.593,1.500)	-.052	.867	.949 (.516,1.747)	.281	.230	1.324 (.837,2.094)	.131	.700	1.140 (.586,2.218)
Teacher connectedness	-.002	.873	.998 (.975,1.022)	-.038	.008	.963 (.937,.990)	-.006	.621	.994 (.972,1.017)	-.026	.097	.974 (.945,1.005)
Intercountry adoption <sup>b</sup>	.625	.018	1.869 (1.115,3.133)	.532	.149	1.702 (.826,3.507)	.053	.848	1.054 (.616,1.804)	.625	.120	1.869 (.850,4.109)
Domestic adoption <sup>b</sup>	.658	.037	1.930 (1.040,3.583)	1.071	.004	2.917 (1.394,6.104)	.628	.036	1.874 (1.042,3.369)	1.295	.002	3.651 (1.605,8.304)

<sup>a</sup> reference category: girl; <sup>b</sup> reference category: non adopted

**Bullying victimisation.** Both domestic and intercountry adoptees had a higher likelihood of occasional bullying victimisation (OR = 1.93 and 1.87, respectively). In addition, domestic adoptees (but not international adoptees) had increased odds of suffering frequent victimisation (OR = 2.92). Teacher connectedness showed no significant protective effect for occasional victimisation ( $p = .873$ ) but did significantly decrease the likelihood of frequent victimisation ( $p < .01$ , OR = .96). Adoption status did not moderate the effect of teacher connectedness on the likelihood of occasional ( $p = .188$  for the interaction term teacher connectedness x intercountry adoption;  $p = .389$  for the interaction term teacher connectedness x domestic adoption) or frequent bullying victimisation ( $p = .621$  for the interaction term teacher connectedness x intercountry adoption;  $p = .781$  for the interaction term teacher connectedness x domestic adoption).

**Bullying perpetration.** Domestic adoptees had increased odds of both occasional and frequent bullying perpetration (OR = 1.87 and OR = 3.65 respectively). In contrast, no significant differences between intercountry adoptees and non-adopted adolescents were found in the likelihood of bullying perpetration ( $p = .848$  and  $.120$  for occasional and frequent perpetration respectively). Teacher connectedness showed no significant protective effect for occasional or frequent bullying perpetration ( $p = .621$  and  $.097$  respectively). Adoption status did not moderate the effect of teacher connectedness on the likelihood of occasional bullying perpetration ( $p = .838$  for the interaction term teacher connectedness x intercountry adoption;  $p = .815$  for the interaction term teacher connectedness x domestic adoption). In contrast, the interaction term teacher connectedness x intercountry adoption was significant in frequent bullying perpetration ( $p < .01$ ). To understand this moderation effect, we estimated the association between teacher connectedness and frequent bullying perpetration separately for each group. Results showed a significant protective effect of teacher connectedness for intercountry adoptees ( $p < .01$ , OR = .915), which was not found among the non-adopted ( $p = .128$ ) or the domestic adoption ( $p = .404$ ) groups.



Table 4. *Logistic regression on cyberbullying victimisation and perpetration*

	CYBERBULLYING VICTIMISATION						CYBERBULLYING PERPETRATION					
	Occasional			Frequent			Occasional			Frequent		
	<i>B</i>	<i>p</i>	OR (95% CI)	<i>B</i>	<i>p</i>	OR (95% CI)	<i>B</i>	<i>p</i>	OR (95% CI)	<i>B</i>	<i>p</i>	OR (95% CI)
Intercept	-1.528	.302		-.312	.873		.528	.794		-4.704	.032	
Age	-.110	.185	.896 (.761,1.054)	-.188	.107	.829 (.659,1.041)	-.149	.229	.861 (.676,1.098)	.068	.587	1.070 (.838,1.365)
Sex <sup>a</sup>	-.708	.057	.493 (.238,1.021)	-.501	.299	.606 (.235,1.562)	-.561	.285	.571 (.204,1.595)	.441	.377	1.554 (.584,4.139)
Teacher connectedness	.002	.926	1.002 (.967,1.037)	-.046	.026	.955 (.917,.995)	-.064	.004	.938 (.897,.980)	.047	.034	.955 (.914,.997)
Intercountry adoption <sup>b</sup>	.058	.888	1.060 (.469,2.395)	1.572	.010	4.814 (1.455,15.924)	-.224	.719	.799 (.236,2.702)	1.444	.041	4.236 (1.062,16.897)
Domestic adoption <sup>b</sup>	.857	.039	2.357 (1.044,5.323)	1.824	.004	6.197 (1.765,21.757)	.382	.536	1.466 (.436,4.924)	2.195	.002	8.976 (2.315,34.792)

<sup>a</sup> reference category: girl; <sup>b</sup> reference category: non adopted

**Cyberbullying victimisation.** Domestic adoptees had a higher likelihood of occasional cyberbullying victimisation than non-adopted adolescents ( $p < .05$ , OR = 2.36). In addition, we found increased odds of frequent cyberbullying victimisation both for domestic adoptees ( $p < .01$ , OR = 6.19) and intercountry adoptees ( $p < .05$ , OR = 4.81) in comparison with the non-adopted group. In this regard though, it must be noted that 95% CIs for the aforementioned ORs were wide. Teacher connectedness showed no significant effect in occasional cyberbullying victimisation ( $p = .962$ ) but was associated with a significant decrease in the likelihood of frequent victimisation ( $p < .05$ , OR = .96). Adoption status did not moderate the effect of teacher connectedness on the likelihood of occasional ( $p = .986$  for the interaction term teacher connectedness x intercountry adoption;  $p = .875$  for the interaction term teacher connectedness x domestic adoption) or frequent cyberbullying victimisation ( $p = .166$  for the interaction term teacher connectedness x intercountry adoption;  $p = .726$  for the interaction term teacher connectedness x domestic adoption).

**Cyberbullying perpetration.** There were no significant differences in the likelihood of occasional cyberbullying perpetration between domestic adoptees and non-adopted adolescents ( $p = .536$ ) or between intercountry adoptees and non-adopted adolescents ( $p = .719$ ). In contrast, we found increased odds of frequent cyberbullying perpetration both among domestic adoptees ( $p < .01$ , OR = 8.98) and intercountry adoptees ( $p < .05$ , OR = 4.24) in comparison with the non-adopted group. Nevertheless, as with cyberbullying victimisation, it must be noted that 95% CIs for the aforementioned ORs were very wide. Teacher connectedness significantly decreased the likelihood of both occasional (OR = .94) and frequent (OR = .96) cyberbullying perpetration. Adoption status did not moderate the effect of teacher connectedness on the likelihood of occasional ( $p = .997$  for the interaction term teacher connectedness x intercountry adoption;  $p = .160$  for the interaction term teacher connectedness x domestic adoption) or frequent cyberbullying perpetration ( $p = .358$  for the interaction term teacher connectedness x intercountry adoption;  $p = .724$  for the interaction term teacher connectedness x domestic adoption).

## Discussion

In this study, we examined differences among domestic adoptees, intercountry adoptees and non-adopted adolescents in bullying and cyberbullying (both victimisation

and perpetration) as well as in student-teacher connectedness (aims 1 and 2). In addition, we explored the role of student-teacher connectedness as a protective factor for bullying and cyberbullying (victimisation and perpetration), while considering the potentially moderating role of adoption status (aim 3). In both cases, we made a distinction between frequent and occasional victimisation and perpetration experiences.

### **Bullying, Cyberbullying, and Student-teacher Connectedness in Adopted Students**

Our results support the limited available evidence about bullying experiences in adopted adolescents (e.g., Holmgren et al., 2019; Paniagua, Moreno, Sánchez-Queija et al., 2020;), and contribute to expanding it. Domestic adoptees were more likely to experience occasional and frequent bullying and cyberbullying victimisation, as well as frequent bullying and cyberbullying perpetration than their non-adopted peers. There were fewer differences between intercountry adoptees and non-adopted adolescents; nevertheless, intercountry adoptees showed a lower likelihood of not having suffered bullying victimisation than non-adopted adolescents.

In addition, our work examined differences in student-teacher connectedness. Again, we found less favourable outcomes among domestic adoptees, whose levels of connectedness with teachers were significantly lower than those of non-adopted adolescents. In contrast, we found no significant differences between intercountry adoptees and non-adopted adolescents. Unfortunately, our findings support previous evidence that pointed to difficulties in relationships with teachers among adopted students (Lutes et al., 2016; McGinnis et al., 2019) and they are in line with the lower levels of teacher support perceived by domestic adoptees in a previous study (Paniagua, García-Moya, et al., 2020).

Taking into consideration the context of adoption in Spain summarised in the introduction is important to understand these findings. For intercountry adoptees, the main area of origin both in Spain and in the present study is Asia, and prolonged institutionalisation is less frequent in Asian countries, and specifically China, than in Eastern Europe countries. In contrast, domestic adoptees in Spain come from the welfare protection system, which involves both previous experiences of maltreatment and longer exposure to institutionalisation (Observatorio de la Infancia, 2020). In addition, domestic adoptees accumulate risk factors in their trajectory. Jiménez-Morago et al. (2015) found that this is a common fact in the Spanish welfare system, where

35.5% of children have suffered several types of simultaneous abuse and maltreatment. Furthermore, as stated in the Introduction section, it has been pointed out that adoptees tend to have more difficulties in their relationships with peers. For instance, research conducted in Spain that compared peer relationships in domestic and intercountry adoptees concluded that domestic adoptees had more difficulties in their relationships with peers than in intercountry adoptees (e.g., Paniagua, Moreno, Román et al. 2020). Therefore, it is expected to find a better adjustment among intercountry adoptees than among domestic adoptees in Spain.

Obtained findings allow for two important considerations. First, in line with the previous paragraphs, differences found between domestic adoptees and intercountry adoptees underline the wide diversity coexisting within adoption (e.g., Paniagua, Moreno, Román, et al., 2020). Second, it seems that, beyond the fact of being adopted, early exposure to adversity is a main risk factor for increased bullying/cyberbullying victimisation and perpetration, as previously noted by Raaska et al. (2012). In fact, previous research about bullying has showed that antecedents and risk factors for bullying are not limited to personal factors, but also include adverse experiences in the family context, such as insensitive parenting, family dysfunction, conflictual family dynamics and child maltreatment (Rodkin et al., 2015, Zych et al., 2015).

### **Connectedness with Teachers and Bullying and Cyberbullying Experiences**

Regarding the aim of examining the links between connectedness with teachers and bullying and cyberbullying experiences, overall our results were consistent with the view that student-teacher relationships can be a protective factor against these experiences (e.g. Di Stasio et al. 2016; Holfeld & Leadbeater, 2017). Nevertheless, we were able to provide a more nuanced understanding by examining student-teacher connectedness associations with frequent and occasional victimisation and perpetration. In this regard, both for bullying and cyberbullying, student-teacher connectedness seemed to be a protective factor against frequent victimisation, but not against occasional victimisation. Hunter and Borg (2006) found that more frequently bullied students had a greater tendency to seek help from teachers, which may indicate that frequent incidents are more likely to be perceived as serious enough by students to take the step to report victimisation to teachers. However, it must be acknowledged that an important proportion of victims do not tell teachers, and that adolescent students may

see telling their teachers as a last resource (DeLara, 2008). Research has identified several barriers and hypothesized that victims' decisions to seek help from teachers are dependent on a cost-benefit assessment (Boulton et al., 2017); in that context, the relative benefit may be perceived as smaller when incidents are occasional. Finally, it is important to note that higher scores in student-teacher connectedness are indicative of the students' perception that at least a teacher cares about them, including the teacher's sensitivity to realise when the student feel upset or sad and their tendency to show an interest and offer support to the student (García-Moya et al., 2020). Therefore, even if students do not take a first step to tell their teachers, frequent incidents may facilitate awareness on the part of the teacher, which is considered an essential requisite for effective teacher intervention that can reduce these problems (Ettetal, et al., 2015).

As for perpetration, student-teacher connectedness seemed to be a protective factor against frequent bullying perpetration for intercountry adoptees only, and decreased the likelihood of both frequent and occasional cyberbullying perpetration for all students, regardless of adoption status. A recent review has emphasised that low teacher support can be a risk factor for cyberbullying perpetration and that students with low commitment with school are more likely to cyberbully (Kowalski et al. 2019). With that in mind, both direct pathways (links between connectedness with teachers and cyberbullying involvement) and indirect pathways (mediated by well-known positive effects of connectedness with teachers in school commitments) may explain why student-teacher connectedness was associated with decreased cyberbullying perpetration. As for the moderation of adoption status in the link between student-teacher connectedness and frequent bullying perpetration, the scarcity of research on adoption and bullying perpetration makes it difficult to interpret this finding, which requires further examination in future research.

Except for the moderation role of adoption status in the link between student-teacher connectedness and frequent bullying perpetration we just mentioned, one of the main findings of the present study is that connectedness with teachers showed a consistent protective role against bullying and cyberbullying for all students (domestic adoptees, intercountry adoptees and non-adopted). Strong bonds between students and teachers can facilitate teachers' awareness of bullying situations (either as a result of students' disclosure or following a teacher's concern for specific students' wellbeing),

therefore preventing that bullying experiences continue. Furthermore, positive student-teacher relationships are essential in fostering a positive school climate and feelings of safety in school, which have been described as protective factors in previous research (Zych et al. 2019; Kowalski et al. 2019). Finally, it is important that our findings on student-teacher connectedness also apply to cyberbullying, since countering assumptions that the fact that cyberbullying can occur 24 hours 7 days may render teachers' role unimportant has important implications for intervention efforts (Holfeld & Leadbeater, 2017).

Our findings suggest that promoting student-teacher connectedness may be a promising avenue, with the potential to offer a valuable resource for students otherwise at risk of school disconnection (McGrath & Van Bergen, 2015). Nevertheless, special attention is needed in the case of domestic adoptees, for which we found the lowest levels of teacher connectedness and the highest risk of bullying and cyberbullying victimisation and perpetration. In this regard, recommendations and interventions for teachers on how best support adopted students stress the need to be caring and make themselves approachable to promote adoptees' successful adaptation to the school environment (Jiménez-Morago, et al., 2019).

### **Limitations and Strengths**

This work has some limitations that must be taken into consideration for the interpretation of its findings. First, HBSC is a cross-sectional study and therefore does not allow for drawing conclusions on causal relationships. Therefore, further research is needed to understand the directionality of the associations between student-teacher connectedness and bullying/cyberbullying experiences described in this paper. Furthermore, the HBSC study has a specific international protocol, and its sampling strategy in Spain (see the method section for further detail about sampling) made it impossible to use some methodological strategies that would have contributed to improving this study further, such as matching additional student characteristics or accounting for potential nesting. Notwithstanding those limitations, population-based surveys using large and representative samples such as HBSC has their specific strengths, most notably reducing the selection bias that characterises studies using convenience samples or small clinical samples. Second, despite the large and representative sample in this study, analysing relatively low-prevalence phenomena

such as bullying and more notably cyberbullying in very specific populations (i.e. domestic and intercountry adoptees) necessarily leads to a limited number of cases in some categories. This was especially the case for frequent cyberbullying experiences among domestic and intercountry adoptees, and resulted in wider confidence intervals that are indicative of less precise estimates of ORs in these cases. For the same reason, we recommend that the moderation effect of adoption status in the association between student-teacher connectedness and frequent bullying perpetration (i.e. a protective effect among intercountry adoptees only) is interpreted with caution.

Finally, although apparent in our discussion of findings, it is worth reiterating the complexity that studying adoption brings with it, and how interpretations of any differences found between adopted and non-adopted adolescents (or between some groups of adoptees) need to take into consideration what is known about previous adversity in these adolescents, and the adoption policy context in which the study is conducted. In other words, as a natural experiment adoption brings with it confounding variables that are difficult to disentangle from the adoption itself, with those related to adversity being a notable example. Furthermore, findings in any adoption study are not independent of the adoption policies that exist in each country. Although our use of exclusion criteria in the definition of our groups of interest (see methods section) was made in an attempt to make the boundaries between the analysed groups clearer (see methods section), we recommend a careful interpretation of findings that is mindful of these aspects. In addition, given that adoption policies in other countries may include other types of adoption (e.g. adoption by private agencies) and/or differences in protective measures, complementing findings from the present study with future research in other countries would be beneficial for expanding the findings from the present study and getting a deeper and more global understanding of adopted students' school experiences.

Despite those limitations, the present study has several strengths that are worth noting too. First, this study contributes to increasing available evidence on adoptees' relationships with classmates and teachers, which is a current and high-interest topic in this area of research. Another strength of this study is that it makes a distinction between frequent and occasional victimisation/perpetration, a distinction which is receiving more attention in bullying research and that had not been included in previous

studies among adopted students. The analyses of cyberbullying experiences had also been limited among adopted students, with this study making a notable contribution by separately analysing occasional and frequent cyberbullying victimisation and perpetration experiences. In addition, the present study goes a step beyond describing differences associated to adoption status, since it also examined the role of student-teacher connectedness as a potential protective factor against bullying and cyberbullying. Reviews have pointed to a protective effect of school climate against bullying and cyberbullying (e.g. Zych et al., 2019), but specific examination of distinct elements within the multidimensional construct of school climate can facilitate bullying prevention efforts. While a few studies have started to pay attention to student-teacher relationships, the present study provides additional valuable insights by examining the role of student-teacher connectedness (i.e. the strength of a significant bond with at least one teacher), a fundamental factor for school wellbeing during adolescence (García-Moya, 2020). Our findings suggest the potential benefits of connectedness with teachers, while they underline that bullying difficulties may be increased for those who lack such meaningful relationship with their teachers.

### **Practical Implications**

Some practical implications can be discussed at the light of this study findings. First, guides on bullying prevention must reflect that bullying and cyberbullying are more frequent among adopted students than in non-adopted students. They should also encourage teachers and other school staff to pay particular attention to this subgroup of students to avoid that victimisation or perpetration situations go unnoticed. In addition, teacher training should underline the importance of student-teacher connectedness, which may act as a protective factor against bullying and cyberbullying experiences. At the same time, teachers must be made aware that some students are less likely to form that kind of supportive relationships with teachers, which may lead to the unfortunate paradox that those who are more likely to be involved in bullying and cyberbullying (i.e. domestic adoptees), are also the ones that report lower levels of connectedness with their teachers. Both training and specialised support at schools where needed would be beneficial to increase the chances that school is the safe and nurturing place that it should be for all the students, regardless of their adoption status.



## References

- Askeland, K. G., Hysing, M., La Greca, A. M., Aarø, L. E., Tell, G. S., & Sivertsen, B. (2017). Mental health in internationally adopted adolescents: A meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry, 56*(3), 203-213. <https://doi.org/10.1016/j.jaac.2016.12.009>
- Bjereld, Y., Daneback, K., & Petzold, M. (2017). Do bullied children have poor relationships with their parents and teachers? A cross-sectional study of Swedish children. *Children & Youth Services Review, 73*, 347-351. <https://doi.org/10.1016/j.chilyouth.2017.01.012>
- Boulton, M. J., Boulton, L., Down, J., Sanders, J., & Craddock, H. (2017). Perceived barriers that prevent high school students seeking help from teachers for bullying and their effects on disclosure intentions. *Journal of Adolescence, 56*, 40-51. <https://doi.org/10.1016/j.adolescence.2016.11.009>
- Brown, A., Waters, C. S., & Shelton, K. H. (2017). A systematic review of the school performance and behavioural and emotional adjustments of children adopted from care. *Adoption & Fostering, 41*(4), 346-368. <https://doi.org/10.1177/0308575917731064>
- Cáceres, I., Román, M., Moreno, C., Bukowski, W., & Palacios, J. (2021). Peer relationships during late childhood in internationally adopted and institutionalised children. *Social Development, 30*(1), 171-186 <https://doi.org/10.1111/sode.12467>
- DeLara, E. W. (2008). Developing a philosophy about bullying and sexual harassment: Cognitive coping strategies among high school students. *Journal of School Violence, 7*, 72-96. <https://doi.org/10.1080/15388220801973862>
- Di Stasio, M. R., Savage, R., & Burgos, G. (2016). Social comparison, competition and teacher–student relationships in junior high school classrooms predicts bullying and victimization. *Journal of Adolescence, 53*, 207-216. <https://doi.org/10.1016/j.adolescence.2016.10.002>
- Dunn, T. J., Baguley, T., & Brunsdon, V. (2014). From alpha to omega: A practical solution to the pervasive problem of internal consistency estimation. *British Journal of Psychology, 105*(3), 399-412. <https://doi.org/10.1111/bjop.12046>
- Ettetal, I., Kochenderfer-Ladd, B., & Ladd, G. W. (2015). A synthesis of person- and relational-level factors that influence bullying and bystanding behaviors: Toward

Paniagua, C., García-Moya, I., Sánchez-Queija, I., & Moreno, C. (2022). Bullying, cyberbullying, and adoption: What is the role of student-teacher connectedness?. *School psychology, 37*(5), 367–377. <https://doi.org/10.1037/spq0000508>

an integrative framework. *Aggression and Violent Behavior, 23*, 75-86.

<https://doi.org/10.1016/j.avb.2015.05.011>

García-Moya, I. (2020). *The importance of connectedness in student-teacher relationships. Insights from the Teacher Connectedness Project*. Palgrave McMillan.

García-Moya, I., Brooks, F. & Moreno, C. (2020). Humanizing and conducive to learning. An adolescent students' perspective on the central attributes of positive relationships with teachers. *European Journal of Psychology of Education, 35*, 1-20. <https://doi.org/10.1007/s10212-019-00413-z>

García-Moya, I., Brooks, F., & Moreno, C. (2021). A new measure for the assessment of student–teacher connectedness in adolescence. *European Journal of Psychological Assessment, 37*, 357-367. <http://dx.doi.org/10.1027/1015-5759/a000621>

Holfeld, B. & Loeadbeater, B. J. (2017). Concurrent and longitudinal associations between early adolescents' experiences of school climate and cyber victimization. *Computers in Human Behavior, 76*, 321-328.

<https://doi.org/10.1016/j.chb.2017.07.037>

Holmgren, E., Raaska, H., Lapinleimu, H., & Elovainio, M. (2019). Bullying among international adoptees: testing risks and protective factors. *Violence and Victims, 34*(6), 930-951. <https://doi.org/10.1891/0886-6708.VV-D-18-00157>

Huang, F. L., Lewis, C., Cohen, D. R., Prewett, S., & Herman, K. (2018). Bullying involvement, teacher-student relationships, and psychosocial outcomes. *School Psychology Quarterly, 33*, 223-234. <https://doi.org/10.1037/spq0000249>

Hunter, S. C., & Borg, M. G. (2006). The influence of emotional reaction on help seeking by victims of school bullying. *Educational Psychology, 26*, 813–826. <https://doi.org/10.1080/01443410600941946>

Jiménez-Morago, J. M., Carrera, P., & Cortada, N. (2019). *Children and adolescents in foster care and adoption: proposals for their educational attention in primary and high school centres*. Editions from the Universitat de Lleida.

Jiménez-Morago, J. M., León, E., & Román, M. (2015). Adversity and adjustment in children in institutions, family foster care, and adoption. *The Spanish Journal of Psychology, 18*, E45. <https://doi.org/10.1017/sjp.2015.49>

- Paniagua, C., García-Moya, I., Sánchez-Queija, I., & Moreno, C. (2022). Bullying, cyberbullying, and adoption: What is the role of student-teacher connectedness?. *School psychology, 37*(5), 367–377. <https://doi.org/10.1037/spq0000508>
- Kowalski, R. M., Limber, S. P., & McCord, A. (2019). A developmental approach to cyberbullying: Prevalence and protective factors. *Aggression and Violent Behavior, 45*, 20-32. <https://doi.org/10.1016/j.avb.2018.02.009>
- Lutes, S. R., Johnson, A. E., & Gunnar, M. R. (2016). Sense of school membership and associated academic and psychological outcomes in post-institutionalized adopted high school students. *Adoption Quarterly, 19*(2), 81-98. <https://doi.org/10.1080/10926755.2015.1088108>
- Martin, A. J., & Collie, R. J. (2019). Teacher-student relationships and students' engagement in high school: Does the number of negative and positive relationships with teachers matter? *Journal of Educational Psychology, 111*(5), 861-876. <https://doi.org/10.1037/edu0000317>
- McGinnis, H., Smith, S. L., Ryan, S. D., & Howard, J. A. (2009). *Beyond culture camp: Promoting healthy identity formation in adoption*. Evan B. Donaldson Adoption Institute.
- McGrath, K. F., & Van Bergen, P. (2015). Who, when, why and to what end? Students at risk of negative student–teacher relationships and their outcomes. *Educational Research Review, 14*, 1–17. <https://doi.org/10.1016/j.edurev.2014.12.001>
- McNeish, D. (2018). Thanks coefficient alpha, we'll take it from here. *Psychological Methods, 23*, 412-433. <https://doi.org/10.1037/met0000144>
- Menesini, E., & Salmivalli, C. (2017). Bullying in schools: the state of knowledge and effective interventions. *Psychology, Health & Medicine, 22*(sup1), 240-253. <https://doi.org/10.1080/13548506.2017.1279740>
- Modecki, K.L., Minchin, J., Harbaugh, A.G., Guerra, N.G., & Runions, K.C. (2014). Bullying prevalence across contexts: A meta-analysis measuring cyber and traditional bullying. *Journal of Adolescent Health, 55*, 602–611. <https://doi.org/10.1016/j.jadohealth.2014.06.007>
- Observatorio de la Infancia [Childhood Observatory] (2020). *Boletín de datos estadísticos de medidas de protección a la infancia. Boletín número 22. Datos 2018 [Child protection measures Statistic data bulletin. Number 2. Year 2018]*. Ministerio de Sanidad, Servicios Sociales e Igualdad. Retrieved from

Paniagua, C., García-Moya, I., Sánchez-Queija, I., & Moreno, C. (2022). Bullying, cyberbullying, and adoption: What is the role of student-teacher connectedness?. *School psychology, 37*(5), 367–377. <https://doi.org/10.1037/spq0000508>

[https://observatoriodelainfancia.vpsocial.gob.es/productos/pdf/BOLETIN\\_22\\_finale.pdf](https://observatoriodelainfancia.vpsocial.gob.es/productos/pdf/BOLETIN_22_finale.pdf)

Olweus, D. (1996). *The Revised Olweus Bully/Victim Questionnaire*. Mimeo, Research Center for Health Promotion (HEMIL Center), University of Bergen.

Olweus, D. (2013). School bullying: Development and some important challenges. *Annual Review of Clinical Psychology, 9*, 751-780.

<https://doi.org/10.1146/annurev-clinpsy-050212-185516>

Palacios, J., & Brodzinsky, D. (2010). Adoption research: Trends, topics, outcomes. *International Journal of Behavioral Development, 34*(3), 270-284.

<https://doi.org/10.1177/0165025410362837>

Palacios, J., Moreno, C., & Román, M. (2013). Social competence in internationally adopted and institutionalized children. *Early Childhood Research Quarterly, 28*(2), 357–365. <https://doi.org/10.1016/j.ecresq.2012.08.003>

Paniagua, C., García-Moya, I., & Moreno, C. (2020). Adopted Adolescents at School: Social Support and Adjustment. *Youth & Society*. Advance online publication.

<https://doi.org/10.1177/0044118X20977033>

Paniagua, C., Moreno, C., Román, M., Palacios, J., Grotevant, H. D., & Rivera, F. (2020). Under the same label: Adopted adolescents' heterogeneity in well-being and perception of social contexts. *Youth & Society, 52*(8), 1544-1568.

<https://doi.org/10.1177/0044118X19828081>

Paniagua, C., Moreno, C., Sánchez-Queija, I., & Rivera, F. J. (2020). Bullying and its Influence on Well-Being in Adopted Adolescents. *Journal of Child and Family Studies, 29*(9), 2463-2471. <https://doi.org/10.1007/s10826-020-01782-6>

Peter, I-K., & Petermann, F. (2018). Cyberbullying: A concept analysis of defining attributes and additional influencing factors. *Computers in Human Behavior, 86*, 350-366. <https://doi.org/10.1016/j.chb.2018.05.013>

Raaska, H., Lapinleimu, H., Sinkkonen, J., Salmivalli, C., Matomäki, J., Mäkipää, S., & Elovainio, M. (2012). Experiences of school bullying among internationally adopted children: results from the Finnish Adoption (FINADO) study. *Child Psychiatry & Human Development, 43*, 592-611. <https://doi.org/10.1007/s10578-012-0286-1>

Paniagua, C., García-Moya, I., Sánchez-Queija, I., & Moreno, C. (2022). Bullying, cyberbullying, and adoption: What is the role of student-teacher connectedness?. *School psychology, 37*(5), 367–377. <https://doi.org/10.1037/spq0000508>

Reed, D. K., & Wexler, J. (2014). “Our teachers...don’t give us no help, no nothin’”: Juvenile offenders perceptions of academic support. *Residential Treatment for Children & Youth, 31*(3), 188–218.

Roberts, C., Freeman, J., Samdal, O., Schnohr, C., de Looze, M. E., NicGabhainn, S., et al. (2009). The Health Behaviour in School-aged Children (HBSC) study: methodological developments and current tensions. *International Journal of Public Health, 54*(2), 140-150. <https://doi.org/10.1007/s00038-009-5405-9>

Rodkin, P. C., Espelage, D. L., & Hanish, L. D. (2015). A relational framework for understanding bullying: Developmental antecedents and outcomes. *American Psychologist, 70*(4), 311–321. <https://doi.org/10.1037/a0038658>

Román, M., Cáceres, I., Carrera, P., Fuentes, A., & Moreno, C. (2021) School victimization and psychosocial adjustment among Eastern European adopted adolescents. *International Conference on Adoption Research (ICAR7)*, 6th to 9th July, online.

Selman, P. (2009). From Bucharest to Beijing: Changes in countries sending children for international adoption 1990 to 2006. In G.M. Wrobel & E. Neil (Eds.), *International advances in adoption research for practice* (pp.41-69). John Wiley & Sons.

Selman, P. (2010). Intercountry adoption in Europe 1998–2008: Patterns, trends and issues. *Adoption & Fostering, 34*(1), 4–19. <https://doi.org/10.1177/030857591003400102>

The St. Petersburg-USA Orphanage Research Team (2005). Characteristics of children, caregivers, and orphanages for young children in St. Petersburg, Russian Federation. *Applied Developmental Psychology, 26*, 477-506. <https://doi.org/10.1016/j.appdev.2005.06.002>

Thompson, G., & Bell, J. (2005). School connectedness: Student voices examine power and subjectivity. *International Journal of School Disaffection, 3*(1), 13–22.

Yeung, R., & Leadbeater, B. (2010). Adults make a difference: The protective effects of parent and teacher emotional support on emotional and behavioral problems of peer-victimized adolescents. *Journal of Community Psychology, 38*(1), 80–98. <https://doi.org/10.1002/jcop.20353>

Paniagua, C., García-Moya, I., Sánchez-Queija, I., & Moreno, C. (2022). Bullying, cyberbullying, and adoption: What is the role of student-teacher connectedness?. *School psychology, 37*(5), 367–377. <https://doi.org/10.1037/spq0000508>

Zych, I., Farrington, D. P., & Ttofi, M. M. (2019). Protective factors against bullying and cyberbullying: A systematic review of meta-analyses. *Aggression and Violent Behaviour, 45*, 4-19. <https://doi.org/10.1016/j.avb.2018.06.008>

Zych, I., Ortega-Ruiz, R., & Del Rey, R. (2015). Systematic review of theoretical studies on bullying and cyberbullying: Facts, knowledge, prevention, and intervention. *Aggression and Violent Behavior, 23*, 1-21. <https://doi.org/10.1016/j.avb.2015.10.001>