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Adopted adolescents at school: social support and adjustment

Carmen Paniagua\*, Irene García-Moya\*, & Carmen Moreno\*

\*Departamento de Psicología Evolutiva y de la Educación, Universidad de Sevilla, Seville

(Spain).

**Correspondence:** 

Carmen Paniagua

Departamento de Psicología Evolutiva y de la Educación. Universidad de Sevilla

Calle Camilo José Cela s/n

41018 Sevilla (Spain)

E-mail: cpaniagua@us.es

+34 676221338

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ADOPTED ADOLESCENTS AT SCHOOL: SOCIAL SUPPORT AND ADJUSTMENT

Abstract

There is a need of additional research into the social aspects of adoptees' school

experiences. For that purpose, the present study used a sample of adopted (n=541) and

non-adopted (n= 582) adolescents from the Health Behaviour in School-aged Children

(HBSC) study in Spain. Specifically, we analysed social support at school (from classmates

and teachers), explored adjustment differences between domestic adoptees, intercountry

adoptees and non-adopted adolescents, and examined whether adoption status and

adjustment problems explain potential differences in support from teachers and from

classmates. Results showed more difficulties in domestic adoptees than in the other two

groups. Furthermore, differences were found in the role of adoption status and adjustment

problems in classmate and teacher support: once conduct problems were taken into

account, the association between adoption status and classmate support became non-

significant. In contrast, both conduct problems and adoption status were significant factors

associated with lower teacher support.

**Keywords:** education, health, peers, families, discrimination.

### Introduction

Adopted adolescents often face challenges in the school context. Such challenges can be explained by adoptees' potential difficulties in two essential aspects: academic learning and socialization (Palacios, Sánchez-Sandoval, & León, 2004). Early adoption studies about school experiences tended to focus on academic learning, with a main interest in academic achievement and special education needs among an important number of adoptees (Brodzinsky & Steiger, 1991; Rushton, 2003; van IJzendoorn, Juffer, & Klein Poelhuis, 2005). Despite academic learning still being a current area of research (e.g., Brown, Waters, & Shelton, 2017; Dalen & Theie, 2020), there is a growing research interest in socialization and socioemotional adjustment processes at school (Tan, Liu, & Smith, 2020).

Recent studies have started to address the research gap on adoptees' social experiences at school from different perspectives: sociometric status, aggressive behaviour, peers' preference, bullying, etc. (Brown et al., 2017; Cáceres et al., 2020; Caprin et al., 2017; Elovainio et al., 2018; Palacios et al., 2013; Paniagua et al., 2019; Roy et al., 2000; Soares et al., 2017). Overall, the aforementioned recent studies have found that adoptees have socialization difficulties at school. The present study is aimed at providing additional empirical evidence to continue addressing the gap in our understanding of adoptees' social experiences at school, by focusing on adjustment and social support.

Previous research has shown that adoptees' difficulties in social relationships at their classroom may be explained to some extent by their adjustment difficulties. Specifically, meta-analyses in this research area (Askeland et al., 2017; Bimmel, Juffer, van IJzendoorn, & Bakermans-Kranenburg, 2003) concluded that overall adoptees are more likely to experience mental health problems than the non-adopted, especially during adolescence

and youth. Nevertheless, while statistically significant differences have been found between these groups, the effect size of those differences is small and mainly refer to hyperactivity, inattention, and behavioral problems that disturb others (Askeland et al., 2017). In the classroom, the aforementioned adjustment problems lead to greater difficulties in maintaining attention and concentrating, emotional control and regulation problems, increased impulsivity, disruptive and defiant behaviour, etc. (Brown et al., 2017; Elovainio, Hakulinen, Pulkki-Råback, Raaska, & Lapinleimu, 2018; Roy, Rutter, & Pickles, 2000). On the relationship between adjustment problems and school experiences among adopted adolescents, Biehal, Ellison, Baker and Sinclair (2010) concluded that the main predictor of a variety of school problems in foster care and adopted students (below average functioning as assessed by carers, truancy, having been excluded from school, low school enjoyment...) was a high score in the emotional and conduct problems subscales from the SDQ questionnaire.

In addition to the difficulties associated with their adjustment problems, adoptees have to face the stigma that surrounds adoption (Baden, 2016; Steinberg & Hall, 2000), and can be discriminated because of their adoption status. Such stigma, along with the aforementioned inattention and behavioral problems in adoptees, may be an underlying factor in rejection from classmates, which has been shown to increase with the onset of adolescence (Soares, Barbosa-Ducharne, Palacios, & Fonseca, 2017; Soares et al., 2019). In this vein, several works have shown that classmates' rejection has a significant impact on adoptees' psychological adjustment (Meese, 2012) as well as on their feelings about adoption and acceptance of their adoption status (Soares et al., 2017).

Schools have been considered to be important settings in the provision of a healing social ethos where adoptees can recover from their emotional injuries and other consequences from their adversity experiences; specifically, the extent to which the relational context in schools fosters a perception of unconditional acceptance for the adoptee has been considered to be especially important (Múgica, 2008). Fishman (2020), as part of an effort to apply the theoretical notions of inclusive education and respect for diversity in the classrooms to the adoption field, has underlined the need to adopt a student-centered approach, in which teachers and administrators acquire a deeper understanding of adoption and how it affects students' outcomes to create a more sensitive environment for them.

On the other hand, rejection from classmates and distant relationships with teachers can worsen the emotional injuries adoptees may have as a consequence from early adversity experiences. Both the quality of relationships with classmates and with teachers are essential elements in creating a positive classroom climate that fosters connectedness and school adjustment. However, in the study by Lutes, Johnson and Gunnar (2016), some adopted adolescents, specifically those who had been adopted following institutionalization, reported lower levels of school membership than their non-adopted peers. The measure of school membership in this study, the Psychological Sense of School Membership (PSSM) scale, provides a total score based on feelings towards the school as a whole and those experienced in the context of caring relationships at school; however, separate attention to relationships with teachers and with classmates has been recommended for a better understanding of school connectedness and social support at school (García-Moya, Bunn, Jiménez-Iglesias, Paniagua & Brooks, 2019; Wentzel, Battle, Russell, & Looney, 2010).

Specially, in the longitudinal study of primary school students conducted by Dalen and colleagues (Dalen, Theie & Rygvold, 2020), adoptees' motivation in the classroom declined in third grade compared to first grade, with such decrease not being found in their non-adopted classmates.

Not only are supportive relationships with teachers considered to be an important dimension in the relational or community domain of school climate, but teachers can also significantly contribute to respect for diversity, i.e. cultivating sensitive classrooms in which all students can feel accepted and valued (Wang & Degol, 2016). However, it has been argued that teachers do not always have positive attitudes towards diversity, especially when students show behavioral problems that disrupt the classroom dynamic (MacFarlane & Woolfson, 2013; Monsen, Ewing, & Kwoka, 2014). Previous research has also suggested that teachers react more negatively to students' externalizing problems associated with problematic interpersonal interactions or disruptive behaviour than to internalizing problems, such as withdrawal or depression (Liljequist & Renk, 2012).

Moving to adoption research, Howard, Smith and Ryan (2004) found that teachers reported higher levels of behavioral problems in domestic adoptees than in their non-adopted or intercountry adopted classmates. In the study by McGinnis, Livingston, Ryan, and Howard (2009) about domestic and intercountry adoption in the US, 13% of adult intercountry adoptees (specifically from South Korea) and 21% of adult domestic adoptees reported that they had experienced discrimination on the part of their teachers because of being adopted. In the student general population, increased impulsivity, restlessness, and distractibility are significantly associated with adolescent students' lower levels of perceived support from teachers (Demaray & Elliot, 2001; Webster-Stratton & Reid, 2004), which

makes investigation on the links between different kind of adjustment problems and teacher support a relevant area of interest in adoption research.

Relationships with classmates are also considered to be an essential aspect of social life at school, with a significant impact on students' school adjustment. Relationships with peers are also fundamental for the development of social skills and become an important source of support in adolescence (Brown & Larson, 2009). Research on adoptees' relationships with their classmates is scarce, but some studies have suggested that some adoptees experience difficulties in their relationships with peers during childhood and adolescence (Biehal et al., 2010), including lower classmate support, more difficulties in social competence and more behavioural problems such as aggressive behavior (Brown et al., 2017; Cáceres, Román, Moreno, Bukowski, & Palacios, 2020; Caprin, Benedan, Ballarin, & Gallace, 2017; Palacios, Moreno, & Román, 2013; Paniagua, Moreno, Rivera, & Ramos, 2019; Soares et al., 2017). For instance, in one of the most recent studies (Cáceres et al., 2020), an examination of sociometric position showed that 45.8% of adoptees were rejected by their classmates, while the percentage of rejected students in the community group was 15.2%. In addition, their classmates perceive adoptees as significantly more aggressive and less prosocial than their peers from the community group.

As for the potential discrimination associated with being adopted, in the mentioned retrospective study of adult adoptees by McGinnis and colleagues (McGinnis et al., 2009), 25% of intercountry adoptees (originally from South Korea) and 9% of domestic adoptees (born in the US) reported that they had been discriminated by their classmates. As with teacher support, increasing scientific knowledge on adolescent adoptees' relationships with

classmates and exploring the potential role of adjustment difficulties in such relationships are areas in need of further research.

Finally, as apparent in some of the studies mentioned above (Lutes et al., 2016), it is worth noting that differences in school adaptation have been found when distinguishing between different groups of adoptees. This has been attributed to the wide diversity of adoption profiles, usually affected by the exposure to early adversity (Dalen & Theie 2020; Haugaard, 1998; Palacios, 2017). In addition, focusing on adoptions managed by the welfare protection system, previous research has usually found that overall domestic adoptees are more likely to show adjustment problems than intercountry adoptees (Juffer & Van IJzendoorn, 2005; Paniagua et al., 2019). A frequent explanation is the circumstances prior to adoption, since in many cases age at placement is higher in domestic adoption than in intercountry adoption, which previous research in Spain has associated with a more prolonged exposure to risk situations (e.g., Barcons-Castel, Fornieles-Deu & Costas-Moragas, 2011; Palacios, Román & Camacho, 2011).

Characteristics of adoption in Spain

For several years, Spain has been one of the countries leading intercountry adoptions worldwide (Selman, 2010). This makes it an ideal context for research on adoption, with conclusions from research conducted in Spain being of interest for the international scientific community. The large number of intercountry adoptions that took place in Spain are known as the intercountry adoption *boom*. Since the ratification of the Hague Convention by Spain in 1996, the number of intercountry adoptions increased exponentially

(Juffer et al., 2011): Intercountry adoptions increased by 273 per cent, with 51,129 intercountry adoptees arriving in Spain between 1998 and 2013 (Selman, 2010).

However, as in other countries were intercountry adoption increased during that period, the situation has changed in the last years. Increased standards for ethical adoptions, stricter guidelines for preventing child trafficking, and shifts in the social, economic, and political concerns of some of the largest sending countries have been associated to the aforementioned change (Baden, 2019; Selman, 2020). As a result, the number of international adoptions in Spain has decreased and figures are now comparable or even lower than for domestic adoptions. Specifically, according to the most recent official data available, 639 domestic adoptions and 444 intercountry adoptions took place in Spain in 2018 (Observatorio de la Infancia, 2020), which reflects similar levels of domestic and intercountry adoptions.

Regarding the adoption process and characteristics of adoptive families in Spain, it is worth noting that, unlike in other countries such as United States, both domestic and intercountry adoptions in Spain come from the welfare protection system (Palacios & Amorós, 2006). In other words, there are no private adoption agencies. Therefore, all adoptive families in either domestic or intercountry adoptions, go through similar training and suitability assessment processes. In addition, domestic adoptees have suffered some type of negligence, maltreatment or abuse.

It is also worth noting that, due a combination of factors, such as the existence of family-preservation programmes, the adoption of healthy Spanish babies has now become the exception, while the adoption of children with special needs has become much more common (Palacios & Amorós, 2006). In addition, despite child protection centers being

considered by law as the last option, reality is different and large number of domestic adoptees have been in child protection centers (Observatorio de la Infancia, 2020). For that reason, in addition to early family adversity, these children also suffer the consequences of institutionalization: higher levels of developmental delay in their psychoslogical, social and cognitive development and behavior problems (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2008; Juffer &van IJzendoorn, 2005; Rutter et al., 2009; Zeanah, Smyke, Koga, & Carlson, 2005).

## Study aims

The present study has been conducted in a large sample of adopted and non-adopted adolescents to address three aims. First, we analysed whether adoptees have more negative socialization experiences at school than non-adopted adolescents, examining both support from classmates and teachers (aim 1). Second, we used SDQ to explore adjustment differences between adopted and non-adopted adolescents (aim 2). Finally, we examined whether adoption status and adjustment problems explain potential differences in support from teachers and from classmates (aim 3). Based on the differences between domestic and intercountry adoption reported by previous research (e.g. Paniagua et al., 2019), all our analyses make a distinction between these two distinct types of adoption, since they include comparisons between three groups of adolescent students: non-adopted, domestic adoptees and intercountry adoptees.

### Method

### **Participants**

Participants come from a representative sample of Spanish adolescents aged 11 to 18 years who had participated in the 2018 edition of the WHO-collaborative survey *Health Behaviour in School-aged Children* (HBSC) in Spain. For that purpose, we used multi-stage stratified cluster sampling, with schools acting as the primary sampling units from which students were selected. To ensure the representativeness of the sample, our 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). This type of sampling ensures that participants come from randomly selected schools belonging to each relevant stratum.

The group of adopted adolescents 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. For the adoptees, mean age at the time of survey was 14.28 (SD = 0.09); 14.25 (SD = 0.17) for domestic adoptees and 14.83 (SD = 0.11) for intercountry adoptees. Mean age at placement for adoptees was 2.49 years (SD = 2.76); 2.90 years (SD = 3.27) for domestic adoptees and 2.26 years old (SD = 2.48) for intercountry adoptees.

The group of non-adopted adolescents was used as a comparison group. This comparison group consists of a random subsample of the total non-adopted sample that answered the same set of questions as the adopted group. A similar sample size to that of the adopted adolescents group was sought and participants in the child welfare system, such as those living in kinship families and in foster care centers were excluded from this group. This reference 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).

Measures

Measures were selected from the 2018 Spanish HBSC questionnaire. Specifically, the following variables were selected based on the aims of the present study:

-Classmate support. This scale consists of the following three items, which are answered on a 5-point likert scale from 1- strongly disagree to 5- strongly agree: 'The students in my class enjoy being together'; 'Most of the students in my class are kind and helpful'; and 'Other students accept me as I am'. The original version of this scale was developed and validated within the international HBSC network (Torsheim, Wold & Samdal, 2000). Average scores with higher scores being indicative of greater support were calculated for the present study. The Cronbach alpha for this scale was .82.

-Teacher support. This variable was measured by means of the following three items, which are answered on a 5-point likert scale from 1- strongly disagree to 5- strongly agree: 'I feel that my teachers accept me as I am', 'I feel that my teachers care about me as a person', and 'I feel a lot of trust in my teacher'. Items in this scale were developed within the international HBSC network (Torsheim et al., 2000) and have been subjected to validation and subsequent refinement within network (Freeman et al., 2017). Average scores with higher scores being indicative of greater support were calculated for the present study. The Cronbach alpha for this scale was .85.

-Psychological adjustment. Three subscales of the self-completed Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997; Goodman, Meltzer, & Bailey, 1998) were used to assess emotional problems, conduct problems and hyperactivity/inattention. Each subscale consists of five items and higher scores indicate a higher presence of the evaluated content. The SDQ has been validated in a number of studies and it is considered to have satisfactory psychometric properties (Goodman et al., 1998; Goodman, Ford, Simmons,

Getward, & Meltzer, 2000). In the present study, Cronbach alpha for the subscales were: .74 for emotional problems, .53 for conduct problems, and .57 for hyperactivity-inattention.

Procedure

The HBSC study procedure is governed by international network guidelines that each member country must abide by. Data collection complied with the requirements dictated by the HBSC international protocol (Roberts et al., 2009): the questionnaire was voluntarily answered by the adolescents themselves, the anonymity and the confidentiality of the participants' answers was ensured and scrupulously respected, and the questionnaires were completed at the educational center and during school hours. Ethical approval was obtained from the relevant body, specifically the Comité Coordinador de Ética de la Investigación Biomédica de Andalucía (PEIBA: 0746-N-17).

# Data analysis

Using IBM SPSS 25, factorial ANOVAs were conducted for the each of the study aims, with adoption status as the main independent variable. For aim 1, the dependent variables were classmate support and teacher support, whereas the analyses of aim 2 included emotional problems, conduct problems and hyperactivity-inattention as dependent variables. Because we had found significant differences in sex and age between the adopted and non-adopted groups, these variables were also included in the models along with our main independent variable. In contrast, SES was not included as a control variable in the models because there were not significant differences in SES between the aforementioned groups. Finally, for aim 3, dependent variables were classmate support and teacher support and independent variables included sex, age and the adjustment variables for which significant differences had been found between adopted and non-adopted adolescents. Cohen's d was used to assess the effect size of the differences between non adopted, domestic adoptees and

intercountry adoptees. Using the recommended criteria for social sciences (Cohen, 1977) the magnitude of differences between mean pairs can be interpreted as negligible (lower than 0.20), small (from 0.20 to 0.49), medium (from 0.50 to 0.79) and large (0.80 or higher).

### Results

Classmate and teacher support in adopted and non-adopted adolescents (aim 1)

Descriptives of classmate and teacher support and results from the factorial ANOVA analyses are presented in Table 1.

[Insert Table 1]

Results from the factorial ANOVAs (see Table 1) showed significant effects of sex (p = 0.039) and age (p = 0.002) in classmate support, as well as a significant effect of age (p < 0.001) in teacher support. Specifically, boys reported higher classmate support and older adolescents reported lower levels of both classmate and teacher support. In addition, we found a significant effect of adoption status both for classmate support (p < 0.05) and teacher support (p < 0.01). Based on the inspection of means and Cohen's d values, which are presented in Table 1, domestic adoptees showed significantly lower levels of classmate support than their non-adopted peers, with the magnitude of this difference being small. Similarly, significant differences with a small effect size were found in teacher support between domestic adoptees and intercountry adoptees, with domestic adoptees reporting lower levels of teacher support. Domestic adoptees' teacher support means were also lower than those of the non-adopted group, although Cohen's d in this case was 0.18.

Adjustment problems in adopted and non-adopted adolescents (aim 2)

Descriptives of emotional problems, conduct problems and hyperactivity-inattention and results from the corresponding factorial ANOVA analyses are presented in Table 2.

[Insert Table 2]

Results from factorial ANOVAs (see Table 2) showed a significant effect of our demographic control variables in some adjustments problems. Specifically, the analysis showed significant effects of sex (p < .001) and age (p < .001) in emotional problems (girls and older adolescents reported higher levels of emotional problems), and well as a significant effect of age (p = .001) in hyperactivity-inattention problems (older adolescents reported higher levels of hyperactivity-inattention problems). Regarding our main variable of interest, adoption status was significantly associated with conduct problems (p < .001) and hyperactivity-inattention (p < .01). In contrast, there was not a significant association between adoption status and emotional problems (p = .183). Table 2 shows that domestic adoptees had significantly higher scores in conduct problems and hyperactivity-inattention than both non-adopted and intercountry adoptees. In general, the magnitude of those differences was small, but tended to be greater in conduct problems than in hyperactivity-inattention. Cohen's d for the difference in conduct problems between domestic adoptees and non-adopted (0.49) was close to the medium effect size range.

Associations between adjustment problems and support from classmates and teachers (aim 3)

As a final step in the analytical strategy, we tested whether differences in conduct problems and hyperactivity inattention explained to some extent the differences found in classmate support and teacher support depending on adoption status. For these analyses, recommended cut-off points for the SDQ scale were used to focus on the role of a high or

very high presence of these adjustment problems. Nevertheless, it must be noted that analyses using SDQ quantitative scores support similar conclusions.

Results of the factorial ANOVAs for these analyses (see Table 3) showed that the presence of conduct problems was significantly associated with classmate and teacher support, but hyperactivity inattention did not significantly contribute to the explanation of these variables. In addition, once the presence of conduct problems was included, adoption status was no longer a significant factor (p = .182) for classmate support. In contrast, both adoption status (p < .01) and conduct problems (p < .001) made significant contributions to the explanation of teacher support.

[Insert Table 3]

### Discussion

The aim of this study was to expand our understanding of adopted adolescents' relationships with their classmates and teachers by paying attention to perceived levels of support, as well as to explore the potential role of adoptees' adjustment difficulties in their relationships at school. That way, this study contributes to addressing the research gap mentioned in the introduction, by offering scientific evidence that increase our current understanding of adoptees' needs and the social challenges they encounter at school. In addition, the work is motivated by theoretical developments in the field of psychology that show that, despite recovery processes following adoption, some adoptees keep showing adjustment difficulties and developmental delays. Such delays are especially persistent in social and emotional areas, where they have been found to persist for years after adoption (Askeland et al., 2017; Bakermans-Kranenburg et al., 2008; Bimmel et al., 2003; Brown et al.,

2017; Cáceres et al., 2020; Caprin et al., 2017; Dalen et al., 2020; Elovainio et al., 2018, Juffer et al., 2011; Palacios et al., 2011; Rutter et al., 2009; Zeanah et al 2005).

Our findings show the importance of taking the existing diversity within adoption into consideration. In this vein, making a distinction between domestic and intercountry adoption, a source of heterogeneity already pointed out by some authors (Dalen et al., 2020; Haugaard, 1998; Palacios, 2017), was fundamental in the present study. Specifically, we found that domestic adoptees had both more social and adjustment difficulties than the non-adopted comparison group, but also than their intercountry adopted peers. These results add to previous studies that have also found differences between domestic and intercountry adoptees in aspects such as school satisfaction, classmate support (Paniagua et al., 2019) and externalizing and internalizing problems (Juffer & Van IJzendoorn, 2005). To interpret these findings, it is important to bear in mind that domestic adoptions in Spain always come from the welfare protection system, and institutionalization is a common measure prior to adoption (Observatorio de la Infancia, 2020; Palacios & Amorós, 2006). In addition, previous research had suggested that a higher age at placement among domestic adoptees may contribute to the increased prevalence of difficulties in this group (Barcons-Castel et al., 2011; Palacios et al., 2011), which may be the case in the present study too, since age at placement was significantly higher among domestic adoptees than among intercountry adoptees.

Regarding classmate and teacher support, our results show that domestic adoptees perceived lower support from both classmates and teachers than non-adopted adolescents. This finding contributes to expanding recent evidence on school adjustment and peer relationships in the field of adoption. In addition, these results are consistent with previous studies that have found that adoptees have socialization difficulties at school (Brown et al.,

2017; Cáceres et al., 2020; Caprin et al., 2017; Elovainio et al., 2018; Palacios et al., 2013; Paniagua et al., 2019; Roy et al., 2000; Soares et al., 2017).

Our study also confirms the existence of adjustment difficulties in some adopted adolescents. The fact that we found noticeable effect size differences in conduct problems and hyperactivity-inattention, but no differences in emotional problems is consistent with the conclusion from Askeland et al.'s (2017) meta-analysis: that differences between adopted and non-adopted groups are found mainly in the areas of hyperactivity, inattention and conduct problem that disturb others. In line with these and with the aforementioned differences between domestic and intercountry adoptees, we found no differences in emotional problems, but higher conduct problems and higher hyperactivity-inattention in domestic adoptees than in intercountry adoptees and non-adopted adolescents.

In addition to providing additional evidence on socialization and adjustment difficulties in adoption, this study went a step beyond by also analysing whether the lower levels of teacher and classmate support found among some adoptees may be explained (either completely or to some extent) by their increased conduct problems and hyperactivity-inattention difficulties. Our analyses in this regard showed differences between classmate support and teacher support, which we discuss next.

In the analyses on classmate support, when both adoption status and adjustment difficulties are taken into consideration, conduct problems were significantly associated with lower classmate support, and adoption status becomes not significant. Based on these findings, it seems that classmate support varies depending on behavioural aspects and so adopted adolescents with conduct problems perceive lower support from their classmates. These findings resonate with other works that suggest that behavioural problems that disturb

others may hinder adoptees' social relationships with their peers (Askeland et al., 2017; Bimmel et al., 2003). However, we did not find evidence that being adopted *per se* was associated with lower support from classmates.

In contrast, teacher support varied depending on both conduct problems and adoption status, implying that being adopted is associated with some extent with lower teacher support. The fact that conduct problems associated with lower support from teachers is not a surprise. Students' social skills, good behaviour and self-regulation are highly valued by teachers (e.g. Harkness et al., 2007) and may facilitate supportive studentteacher relationships. In addition, previous research has shown that teachers tend to react more negatively to externalizing behaviour, especially behavioural problems that disrupt the classroom dynamic (Liljequist & Renk, 2012; MacFarlane & Woolfson, 2013). However, our findings suggest that the lower teacher support in domestic adoptees is not only associated with a higher prevalence of conduct problems in this group. Preconceptions related to the stigma surrounding adoption or previous negative experiences with adopted students (Baden, 2016; Steinberg & Hall, 2000), might explain the significant association between adoption status and lower teacher support. In the study by McGinnis and cols. (2009), adult intercountry and domestic adoptees reported that they had experienced discrimination on the part of their teachers because of being adopted. Teachers' ideas about adoption may have to do with these findings too. The study by Novara, Serio, & Lavanco (2017) concluded that teachers' views show an ambivalent representation of the adoption. On the one hand, teachers have an idealized view of the protagonists of adoption, who they see as a heroic family; on the other hand, they show an excessive minimization of the differences between the adoptive families and the non-adoptive families, which results in little awareness of and

sensitivity towards adoptive families' specific needs and challenges. In addition, Goldberg (2014) concluded that one in five adoptive parents reported teachers' lack of sensitivity and experience with adoption.

Our study has some limitations that should be taken into consideration for the interpretation of its findings. First, although the present study takes into account one important aspect for understanding diversity within the adopted sample (by making a distinction between domestic and intercountry adoption), available information did not allow for incorporating other relevant aspects, such as early adversity previous to adoption (history of maltreatment or abuse, time in foster centers, foster families, etc.). Nevertheless, this type of limitations is not a shortcoming of the HBSC study, but a common feature of large scale surveys. As stated by Miller, Fan and Grotevant (2005) in relation to the Add Health study, this is a common characteristic shared by large studies who were not designed with the study of adoption as their main aim. On the other hand, this type of studies, thanks to their large samples, make it possible to collect data from difficult-to-access populations and to examine new and interesting topics, that cannot always be included in specific studies about adoption.

In addition, the cross-sectional design of the HBSC study does not allow for establishing causal links between the variables. Finally, the use of self-reports means that this study focuses on adopted adolescents' views of their relationships with classmates and teachers. Nevertheless, our findings provide a first level of useful empirical evidence that can be further expanded by future research by comparing adoptees' views with those of classmates and teachers and/or examining the associations of interest longitudinally.

Despite the aforementioned limitations, a main strength of this study is expanding existing knowledge about the gap related to the social relationships with classmates and teachers among the adopted population during adolescence. There has been comparatively little research about this topic and it is only recently that the study of peers, social support and social competence in adopted adolescents is gaining momentum (Brown et al., 2017; Caprin et al., 2017; Palacios et al.; Paniagua et al., 2019; Soares et al., 2017; Soares et al., 2019), so this study contributes to a current and important area of research.

Our findings also have important practical implications. They suggest the need to continue working to achieve the goal that the school environment and relationships with teachers become safe and even healing social contexts for adopted adolescents (Múgica, 2008). Specifically, our results point to the need to support adopted adolescents in social relationships in the classroom so that they feel integrated and supported, while working with teachers, who play a central role in fostering respect for diversity and creating safe and supportive classroom environments for all students (Wang & Degol, 2016). Our findings also suggest interesting directions for future research, such as analysing teachers' preconceptions and previous experiences with adopted adolescents and their effects on the likelihood of forging supportive relationships with adopted adolescents. Exploring the impact of the inequalities in teacher and classmate support we found on other aspects of adoptees' school experiences and on their wellbeing would also be beneficial.

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**Table 1.** Descriptives and results of factorial ANOVAs of adoption on classmate support and teacher support.

Descriptives of classmate and teacher support in non adopted, domestic adoptees and intercountry adoptees.

Classmate support	Ν	М	SD	d			
Non adopted	551	3.9903	0.90336	NA vs DA = 0.24			
Domestic adoptees	155	3.7720	0.96606	NA vs IA = 0.15			
Intercountry adoptees	312	3.8510	1.01373	DA vs IA = 0.08			
Total	1018	3.9144	0.95098				
Teacher support	N	М	SD	d			
Non adopted	552	3.6730	1.03328	NA vs DA = 0.18			
Domestic adoptees	154	3.4805	1.18511	NA vs IA = 0.03			
Intercountry adoptees	310	3.7000	1.04241	DA vs IA = 0.20			
Total	1016	3.6521	1.06184				
Results of factorial ANOVAs of adoption on classmate support and teacher support							

Classmate	SS	df	MS	F	р	partial
support						η²
Corrected model	20.210	4	5.052	5.690	.000	.022
Intersection	442.027	1	442.027	497.791	.000	.329
Adoption status	6.515	2	3.258	3.669	.026	.007
Sex	3.794	1	3.794	4.272	.039	.004
Age	8.560	1	8.560	9.639	.002	.009
Error	899.521	1013	.888			

Total	16517.861	1018				
Corrected total	919.731	1017				
Teacher support	SS	df	MS	F	р	partial
						$\eta^2$
Corrected model	96.480	4	24.120	23.270	.000	.084
Intersection	685.722	1	685.722	661.549	.000	.396
Adoption status	10.335	2	5.167	4.985	.007	.010
Sex	1.777	1	1.777	1.714	.191	.002
Age	88.510	1	88.510	85.389	.000	.078
Error	1047.942	1011	1.037			
Total	14695.417	1016				
Corrected total	1144.422	1015				

Note. NA= Non adopted, DA= Domestic adoptees; IA= Intercountry adoptees

**Table 2.** Descriptives and results of factorial ANOVAs of emotional problems, conduct problems and hyperactivity-inattention.

Descriptives of emotional problems, conduct problems and hyperactivity-inattention in non adopted, domestic adoptees and intercountry adoptees.

Emotional problems	N	М	SD	d
Non adopted	538	2.9554	2.38279	NA vs DA = 0.01
Domestic adoptees	146	2.9932	2.77550	NA vs IA = 0.07
Intercountry adoptees	303	3.1386	2.49116	DA vs IA = 0.06
Total	987	3.0172	2.47640	
Conduct problems	Ν	М	SD	d
Non adopted	524	1.7233	1.62725	NA vs DA = 0.49
Domestic adoptees	140	2.5643	2.05048	NA vs IA = 0.11
Intercountry adoptees	299	1.8963	1.80769	DA vs IA = 0.35
Total	963	1.8993	1.77217	
Hyperactivity-	N	М	SD	d
inattention				
Non adopted	544	4.0184	2.17969	NA vs DA = 0.30
Domestic adoptees	144	4.6736	2.12158	NA vs IA = 0.07
Intercountry adoptees	444	4.1802	2.15095	DA vs IA = 0.23
Total	993	4.2095	2.26171	

Results of factorial ANOVAs of emotional problems, conduct problems and hyperactivity-inattention

Emotional	SS	df	MS	F	р	partial
problems						η²
Corrected model	949.479	4	237.370	45.730	.000	.157
Intersection	8.670	1	8.670	1.670	.197	.002
Adoption status	17.669	2	8.834	1.702	.183	.003
Sex	638.021	1	638.021	122.917	.000	.111
Age	282.413	1	282.413	54.408	.000	.052
Error	5097.228	982	5.191			
Total	15032.000	987				
Corrected total	6046.707	986				
Conduct problems	SS	df	MS	F	р	partial
						η²
Corrected model	88.609	4	22.152	7.236	.000	.029
Intersection	84.613	1	84.613	27.641	.000	.028
Adoption status	78.146	2	39.073	12.764	.000	.026
Sex	10.448	1	10.448	3.413	.065	.004
Age	.047	1	.047	.015	.901	.000
Error	2932.620	958	3.061			
Total	6495.000	963				
Corrected total	3021.229	962				
Hyperactivity-	SS	df	MS	F	р	partial
inattention						η²
Corrected model	108.782a	4	27.196	5.411	.000	.021

Intersection	165.585	1	165.585	32.946	.000	.032
Adoption status	50.679	2	25.339	5.042	.007	.010
Sex	.134	1	.134	.027	.870	.000
Age	53.110	1	53.110	10.567	.001	.011
Error	4965.649	988	5.026			
Total	22670.000	993				
Corrected total	5074.431	992				

Note. NA= Non adopted, DA= Domestic adoptees; IA= Intercountry adoptees

**Table 3.** Results of factorial ANOVAs of adoption and adjustment problems on classmate support and teacher support.

Classmate	SS	df	MS	F	р	partial
support						η²
Corrected model	30.712	6	5.119	5.942	.000	.037
Intersection	346.581	1	346.581	402.340	.000	.303
Adoption status	2.945	2	1.473	1.709	.182	.004
Sex	6.060	1	6.060	7.035	.008	.008
Age	6.875	1	6.875	7.981	.005	.009
Conduct	12.255	1	12.255	14.227	.000	.015
problems						
Hyperactivity	.998	1	.998	1.159	.282	.001
Error	796.807	925	.861			
Total	15146.861	932				
Corrected total	827.519	931				
Teacher support	SS	df	MS	F	р	partial
						η²
Corrected model	121.501	6	20.250	20.294	.000	.116
Intersection	501.120	1	501.120	502.199	.000	.352
Adoption status	9.557	2	4.778	4.789	.009	.010
Sex	3.626	1	3.626	3.634	.057	.004
Age	71.634	1	71.634	71.789	.000	.072

Conduct	33.516	1	33.516	33.588	.000	.035
problems						
Hyperactivity	.886	1	.886	.888	.346	.001
Error	923.012	925	.998			
Total	13495.417	932				
Corrected total	1044.513	931				