MULTIDIMENSIONAL SOCIAL COMPETENCE IN RESEARCH ON BULLYING INVOLVEMENT: A CROSS-CULTURAL STUDY

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Abstract

This study tested the cross-cultural robustness of the Adolescent Multidimensional Social Competence Questionnaire (AMSC-Q) and examined the relationship between social competence (SC) and bullying involvement. The sample was composed of 4207 secondary school students from Spain, Colombia and Ireland. The analyses revealed that the AMSC-Q showed five factors (social and normative adjustment, prosocial behaviour, social efficacy and cognitive reappraisal) which were invariant across participants in the three countries. SEM revealed an inverse relationship between normative and social adjustment and a direct relationship of social efficacy with bullying aggression. Victimization was explained by the direct influence of prosocial behaviours and social efficacy and the inverse influence of social and normative adjustment. Although the models were homogeneous between countries, the relationships between SC dimensions and bullying aggression and victimization were stronger in Colombia.
KEY WORDS: *social development, validation, measurement invariance, aggression, victimization.*

Resumen

En este estudio se analizó la robustez transcultural del "Cuestionario multidimensional de competencia social para adolescentes" (AMSC-Q) y se examinó la relación entre la competencia social (CS) y la implicación en el acoso escolar. La muestra estuvo compuesta por 4207 estudiantes de educación secundaria de España, Colombia e Irlanda. Los análisis revelaron que el AMSC-Q se compone de cinco factores (ajuste social y normativo, conducta prosocial, eficacia social y reevaluación cognitiva) que se mostraron invariantes entre los participantes de todos los países. Un modelo de ecuaciones estructurales (SEM) indicó una relación inversa entre el ajuste social y normativo y la agresión, y una relación directa entre la agresión y la eficacia social. La victimización fue explicada por la influencia directa del comportamiento prosocial y la eficacia social, y la influencia inversa del ajuste social y normativo. Aunque los modelos fueron

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homogéneos entre países, las relaciones entre las dimensiones de la CS y la agresión y victimización en el acoso escolar fueron más fuertes en Colombia.
Palabras clave: *desarrollo social, validación, medida de la invarianza, agresión, victimización.*

Introduction

The definition of social competence (SC) has evolved from one-dimensional perspectives, which assume that social skillfulness is an individual ability and identify SC with social skills -paying attention only to behavioural components and ignoring cognitive or affective ones-, to more complex multi-dimensional approaches (Dirks, Treat, & Weersing, 2007). From this last perspective, SC is defined as the effectiveness in social interaction, which emerges from the use of skills to achieve personal goals over time and across different situations. It entails having social and emotional skills and complying the rules, conventions and values of the environment. Both aspects will lead to achieve acceptance and social inclusion and hence, to the perception of efficacy in social interaction (Rose-Krasnor, 1997). This perspective highlights social and emotional skills, but also contemplates the individual adjustment within a social and normative context which determine the perception about the own effectiveness. The adolescence is a sensitive period in the development of SC, showing the evidence that typical transitions of this stage, such as pubertal maturation or school changes, stress individual differences, benefiting more competent youth, while less competent peers find more difficult to interact in a competent way (Monahan & Steinberg, 2011). In this sense, it would be pertinent to provide an instrument to assess the teenagers´ SC and to study how it affects to their involvement in interpersonal violent dynamics which are maintained by the interactions developed in the peer group, such as bullying (Salmivalli, 2010), examining the possible cultural differences. This knowledge would let to know if SC is a key factor in the development of a universal phenomenon as it is bullying, and hence, its global importance to prevent it regardless of the culture.

Although there are numerous instruments to evaluate SC, few have focused on the adolescent period, and from those which have, the majority are focused on the assessment of social skills (Anderson-Butcher et al., 2014; Blumberg, Carle, O'Connor, Anderson Moore, & Lippman, 2008; Harter, 2012) or other specific elements like social self-efficacy (Connolly, 1989). One recently-developed instrument, the *Adolescent Multidimensional Social Competence Questionnaire* (AMSC-Q; Gómez-Ortiz, Romera, & Ortega-Ruiz, 2017), assesses five essential SC dimensions capturing the multidimensional nature of this complex construct (Dirks et al., 2007; Rose-Krasnor, 1997): cognitive reappraisal (an effective emotional regulation strategy), social adjustment (degree to which a person engages in socially competent behaviours which let to achieve social acceptance), prosocial behaviour (it implies the offering of help or comfort to other people), social efficacy (individual perception of efficacy in social interaction) and normative adjustment (adherence to social rules in the context of education). This scale has

shown adequate psychometric properties for use with adolescents in Spain (see the description of the AMSC-Q in the methodology section) and Colombia (Romera, Herrera-López, Casas, Ortega-Ruiz, & Gómez-Ortiz, 2017). However, it has not been validated for use with young people from other European countries and in other languages, as this is the case with the majority of SC instruments, being this a necessary purpose, especially considering that SC is a construct very related to cultural convention and norms (Roskam, Hoang, & Schelstraete, 2017). Taking this into account, one of the aims of this study has been to test the cross-cultural robustness of AMSC-Q for its use with teenagers from three countries: Spain, Colombia and Ireland. To provide a valid and reliable cross-cultural instrument to evaluate SC, which is a key aspect to achieve an optimal psychosocial adjustment (Bornstein, Hahn, & Haynes, 2010), will be useful for researchers but also for clinicians.

For decades, the skills which contribute to the development of appropriate social behaviours have concerned researchers who have worked on the premise that bullying involvement is related to a lack of certain social skills (such as assertiveness), which supposes to be a risk factor for victimization (Champion, Vernberg, & Shipman, 2003; Fox & Boulton, 2005). Despite this, victims reflect more prosocial capacity than others involved in the phenomenon (Gómez-Ortiz et al., 2017), although they appear to report lower levels of social acceptance in comparison with bullies and bystanders (Cerezo, Sánchez, Ruiz, & Arense, 2015; Orozco, 2018). In relation to bullies, recent studies have found that the majority of them are socially intelligent and do not usually present deficits in the cognitive processing of social information; this type of deficiency corresponds more to the reactive aggression of bully-victims (Arsenio & Lemerise, 2001; Sutton, Smith, & Swettenham, 1999). In fact, many bullies show sophisticated abilities they seem to use in order to achieve their objectives, such as popularity, being this the reason that could explain their behaviour (Olthof, Goossens, Vermande, Aleva, & van der Meulen, 2011). However, although their violent behaviour seems to help bullies to get popularity, they don´t seem to be socially accepted, being very disliked by the most of their peers (Reijntjes et al., 2013; Sentse, Kretschmer, & Salmivalli, 2015). These findings are coherent with those of studies which reported a poor perception of social efficacy in bullies (Gómez-Ortiz et al., 2017), who can also show a biased self-perception, showing an extremely low social domain, but also a very positive SC (McQuade, Achufusi, Shoulberg, & Murray Close, 2014). In any case, it is important to pay attention to all indicators of sociometric status, because popularity helps to configure the "salience norms" which determine the accepted and reinforced behaviours in the peer group (Cialdini, Kallgren, & Reno, 1991). In this sense, recent studies have shown that bullying conditions the salience norms of the group, and increases the tolerance to violent situations and the support and approval given to students who contribute to the development of this violent phenomenon (Salmivalli, Voeten, & Poskiparta, 2011).

On an emotional level, victims are described as having difficulties with emotional acknowledgment, expression and understanding, whereas bullies seem to experience problems linked to emotional regulation (Elipe, Ortega, Hunter, & Del Rey, 2012).

Therefore, the available evidence seems to point to the important role that SC plays in bullying involvement. However, most of these studies have been developed using samples from one country, especially from either Europe or the USA, and although research on bullying in Latin America has been increasing in the last decade, the most of the studies have focused on the prevalence, validation of instruments and assessment of interventions (Herrera-López, Romera, & Ortega-Ruiz, 2018) there having a notable empirical gap about the risk and protective factors related to bullying involvement in this part of the world. All of this underlines the importance of developing cross-cultural studies to corroborate the relationship between SC and bullying and to clarify if it could be homogenous between different cultures. For this reason, the second aim of this study has been to analyse the correspondence of this relationship with teenagers from Spain, Colombia and Ireland, which let to clarify the role of SC in bullying involvement, and its relevance as key to prevent this violent and damaging phenomenon.

These countries were chosen because they represent different kinds of cultures, being Colombia eminently collectivistic and Ireland and Spain two individualistic countries (Hofstede, 2011). In this sense, in Colombia, attitudes such as the respect to coexistence norms and solidarity are highly valued in adolescence (Lila, Musitu, & Buelga, 2000). However, Spanish and Irish teenagers reflect some increased individualist features such as the importance given to self-affirmation, popularity and social image (Pastor, 2016).

The aims of this study were twofold: a) to test the cross-cultural robustness of AMSC-Q for its use with teenagers from Spain, Colombia and Ireland; b) to analyse the relationship between bullying aggression and victimization and SC in the three countries to examine the possible cultural differences.

Our hypotheses were as follows: 1) the AMSC-Q will show the same factorial structure in all the samples, as it has been found in previous studies (Gómez-Ortiz et al., 2017; Romera et al., 2017), indicating cross-cultural robustness; 2) normative and social adjustment, and cognitive reappraisal will be inversely related to bullying aggression and victimization, as well as prosocial behaviour with aggression. This last variable will be positively related to victimization (Cerezo et al., 2015; Gómez-Ortiz et al., 2017; Sentse et al., 2015). Findings about perceived social efficacy and bullying involvement are very opposite (Gómez-Ortiz et al., 2017; McQuade et al., 2014), so nothing is hypothesized regarding this dimension; and 3) similar relationships between SC dimension and aggression and victimization will be observed in all the samples due to the universality of bullying, although specific differences in normative and social adjustment and social efficacy may also be found regarding each country's particular peer culture, and specific style of social convention and norms (Hofstede, 2011; Romera et al., 2017).

Method

Participants

The total sample was made up of 4207 high school students (50.8% female and 49.2% male) with a mixed socio-economic status (SES) (most of them showed

medium SES, but a little part of students came from families with low and high SES). The students were aged between 11 and 19 years (*M*= 14.94, *SD*= 1.73); and 48.9% of them were Spanish (*n*= 2060), 42.8% Colombian (*n*= 1800), 8.3% Irish (*n*= 347). The Spanish sample was representative of the population of Andalusian students of compulsory education (located in the South of Spain). A random, stratified, cluster-based, probabilistic, monoetapic sampling with proportional allocation was performed. The strata were identified as geographical area (eastern or western part of Andalusia), titularity of school (public or private) and municipal population (less than 10,000 inhabitants, between 10,001 and 100,000 inhabitants and more than 100,000 inhabitants). The sample was composed by 52.1% of boys and 47.9% of girls whose age was between 12 and 19 years (*M*= 14.34, *SD*= 1.34). They attended to public (63.9%) and private schools (36.1%). Regarding Colombian sample, although it was incidental, students who composed it, were selected from schools located in the South of the country, according to criteria of titularity and geographical area (rural and urban). They were homogeneously distributed according to sex (46% were boys and 54% were girls) and their age ranged between 11 and 19 years (*M*= 14.25, *SD*= 1.89). Of these, 66.7% attended public schools and 33.3% attended private schools. The Irish sample was also incidental and balanced taking into account gender (49% of pupils were boys and 51% were girls). Their age was between 12 and 15 years (*M*= 13.15, *SD*=.73) and they came from a public rural school which was located very close to North of Dublin.

Instruments

a) *Adolescent Multidimensional Social Competence Questionnaire* (AMSC-Q; Gómez-Ortiz et al., 2017). The AMSC-Q comprises 26 Likert-type items which are scored on a 7-point scale in which 1 means *completely false* and 7, *completely true*. Although it was originally validated for its use with Spanish teenagers (see Gómez-Ortiz et al., 2017 to know all the details about the design and validation of the AMSC-Q), it has also been validated in Colombian population showing also good psychometric properties (Romera et al., 2017). In both validations, five factors were established: prosocial behaviour, social adjustment, normative adjustment, perceived social efficacy and cognitive reappraisal. In Appendices can be found the full English and Spanish versions of the questionnaire. In previous validation studies, the internal consistency was adequate (a total McDonald omega of .90/.91 was achieved -in Spain and Colombia, respectively- and between .73 and .90 in the different subscales) as well as the test-retest reliability, assessed in the original validation study, which showed significant and positive values (.66 in prosocial behaviour, .51 in social efficacy, .35 in cognitive reappraisal, .69 in social adjustment, .74 in normative adjustment and .70 in total).

b) *European Bullying Intervention Project Questionnaire* (EBIPQ; Ortega-Ruiz, Del Rey, & Casas, 2016). The EBIPQ is a self-report questionnaire which comprises 14 Likert-type items, each one with five options of responses (*no; yes, once or twice; yes, once or twice a month; yes, about once a week; and yes, more*

than once a week). It has a two-dimensional structure, which is composed by two factors: victimization (e.g., "Someone has hit me, has kicked me or has pushed me") and aggression (e.g., "I have insulted and I have said bad words to someone"), related to direct and indirect verbal, physical, psychological and relational forms. This questionnaire has shown to be valid and reliable to assess a complex interpersonal violent dynamic as bullying involvement in different European countries and Colombia (Brigui et al., 2012; Herrera-López, Romera, & Ortega-Ruiz, 2017; Ortega-Ruiz et al., 2016) and it has been translated to a different languages (between them those spoken by the participants). The internal consistency indices of aggression (ω_h= .86) and victimization (ω_h= .86), and of the total questionnaire (ω_h= .89) were adequate in this study.

Procedure

All procedures performed in this study were in accordance with the ethical standards of the national research committee and with the 1964 Helsinki declaration. Ethics approval was obtained from the Research Ethics Committee of the Universities involved in the study. Prior to the data collection, informed consent was obtained from the parents to allow the children to participate in the study.

The first version of the AMSC-Q was designed in Spanish (some items were adjusted to be adapted to Colombian Spanish; Romera et al., 2017). After it was translated into English, and then subsequently retranslated into Spanish, following the back-translation procedure. Irish experts reviewed the items to ensure the understanding.

After obtaining authorization from the administrative bodies of the schools and the families, the schools were visited to administer the questionnaire. The students were informed of the aim of the study and told that participation would be anonymous, confidential, and voluntary. To categorize the bullying situations appropriately, this violent phenomenon was explained to the students, according to their defining characteristics (Olweus 1999). The average time required to complete the questionnaire was 30 min.

Data analysis

Initially, descriptive analyses were conducted using the complete sample. To establish the validity based on the internal structure of the questionnaire and to know if the original factorial structure could be replicated, a confirmatory factor analysis (CFA) was conducted using the "least squares" estimation method with robust correction (Bryant & Satorra, 2012). The model adjustment was evaluated taking into account the comparative fit index (CFI); non-normed fit index (NNFI) ($\geq$ .95); standardized root mean square residual (SRMR) and root mean square error of approximation (RMSEA) ($\leq$ .08) (Hu & Bentler, 1999).

To provide the generalisation of the model across the various subsamples established by the country of origin, a multiple-group analysis was conducted. This analysis compares a set of increasingly restrictive models. In this case, three models

were compared: model 1, in which the same factorial structure was applied to all the groups (configural invariance); model 2, in which the covariances were restricted to remain equal between the groups; and model 3, in which the factor loadings were restricted to remain equal between the groups (metric invariance; Byrne, Shavelson, & Muthén, 1989). The invariance was assessed taking into account the results of the chi-square differentiation test ($\Delta\chi^2$), being non-significant changes indicative of invariance between groups (Bollen, 1989). Furthermore, we assessed the differences between the other fit indices (NNFI, CFI, RMSEA and SRMR), where the changes $\leq$ .01 indicated the presence of invariance (Dimitrov, 2010). The analysis of the reliability was based on the McDonald Omega coefficient and Cronbach´s Alpha (ω_h and $\alpha >$ .70).

To analyse the relationship between SC and bullying aggression and victimization, a Spearman correlation analysis were carried out. We also developed a structural equation model (SEM) differentiating between teenagers from each country. To compare the SEM models, a configural invariance analysis was performed. SEM was performed under the same conditions of CFA.

Correlation analysis was carried out using SPSS 18.0 (IBM Corp. Released, 2011). The CFA, the multiple-group analysis and SEM were conducted through the EQS 6.2 programme (Bentler, 2006). McDonald's omega was performed using Factor 9.2 software (Lorenzo-Seva & Ferrando, 2013).

Results

Descriptive analyses

Table 1 shows the means, typical deviations, and indices of skewness and kurtosis for each item of AMSC-Q. The highest mean was 6.07 ("I feel like I have friends") and the lowest one was 4,54 ("I control my emotions by changing how I think about the situation I find myself in"). Regarding EBIPQ, descriptive analyses was also carried out, finding the following results for victimization and aggression scales, respectively (*M*= .61/.33, *SD*= .61/.4, Skewness= 1.91/2.41, Kurtosis= 4.71/8.8).

Table 1
Descriptive univariate analysis of AMSC-Q

Item	*M*	*SD*	Skewness	Kurtosis
1. When faced with a stressful situation, I try to think about it in a way that helps me to keep calm	5.08	1.59	-.76	.15
2. When I want to increase my positive emotions, I change how I think about the situation	4.67	1.69	-.52	-.36
3. I control my emotions by changing how I think about the situation I find myself in	4.54	1.63	-.42	-.33
4. When I want to reduce my negative emotions, I change how I think about the situation	4.80	1.68	-.56	-.32
5. My classmates and friends come to me when they have a problem	5.06	1.60	-.80	.22

Item	M	SD	Skewness	Kurtosis
6. My classmates and friends help me when I need it	5.50	1.47	-1.06	.84
7. My classmates care about me	5.05	1.56	-.76	.17
8. My classmates feel comfortable working with me	5.46	1.30	-.91	1.01
9. My classmates and friends know they can count on me when they have to organise some kind of activity	5.59	1.45	-1.14	1.03
10. I join in with the activities that others take part in	5.46	1.43	-1.03	.86
11. My classmates like me	5.61	1.28	-.99	1.08
12. I feel like I have friends	6.07	1.37	-1.80	3.10
13. If a classmate is really overwhelmed and doesn't have time to finish his/her work, I lend a helping hand	5.30	1.54	-.95	.55
14. I react to defend a classmate who gets made fun of or picked on	5.46	1.47	-.92	.52
15. When a classmate or friend is sad, I console him/her to make them feel better	5.91	1.31	-1.43	2.14
16. When I see that a classmate feels left out and alone, I help him/her fit in to my group of friends	5.32	1.46	-.82	.35
17. I help those classmates who have some kind of physical problem (leg in a cast, in a wheelchair, etc.) in their day-to-day lives	5.42	1.48	-.89	.45
18. In relationships with friends and classmates, I feel that I do things well (I feel effective)	5.40	1.31	-.91	1.08
19. In relationships with my teachers, I feel that I do things well (I feel effective)	5.15	1.44	-.74	.39
20. In relationships with my family, I feel that I do things well (I feel effective)	5.66	1.42	-1.16	1.10
21. In relationships with other adult figures and the elderly, I feel that I do things well (I feel effective)	5.51	1.32	-.97	.97
22. I let others get on with work without bothering them	5.52	1.44	-.97	.61
23. I ask permission to speak and I wait my turn to talk	5.29	1.63	-.85	.09
24. I follow the rules	5.54	1.44	-.99	.63
25. I respect other people's opinions even if I don't share them	5.79	1.35	-1.32	1.77
26. I treat the school's equipment and facilities with respect	6.04	1.24	-1.57	2.70

*Multiple-group and confirmatory factorial analyses*

The model we used (model 1) adjusted well to the data (see Table 2). All the factor loadings were significant and elevated ($.58 \leq \lambda s \leq .76$) (see Figure 1).

Table 2

Total CFA and multiple-group analysis of AMSC-Q: metric and configural invariance

Models	χ^2S-B	df	χ^2S-B/df	p	NNFI	CFI	RMSEA	SRMR	$\Delta\chi^2$S-B	p	Δdf	ΔNNFI	ΔCFI	ΔRMSEA	ΔSRMR
Model 1	1443.28	867	1.66	.00	.97	.97	.	.05	--	--	--	--	--	--	--
Model 2	1914.59	877	2.18	.00	.96	.	.05	.06	471.31	.94		.01	.01	.01	.01
Model 3	2146.87	888	2.41	.00	.97	.	.05	.05	703.59	.97		.00	.00	.01	.00

Note: Model 1= without constraints; Model 2= constrained covariances; Model 3= constrained factor loadings.

Figure 1

CFA model of the Adolescent Multidimensional Social Competence Questionnaire
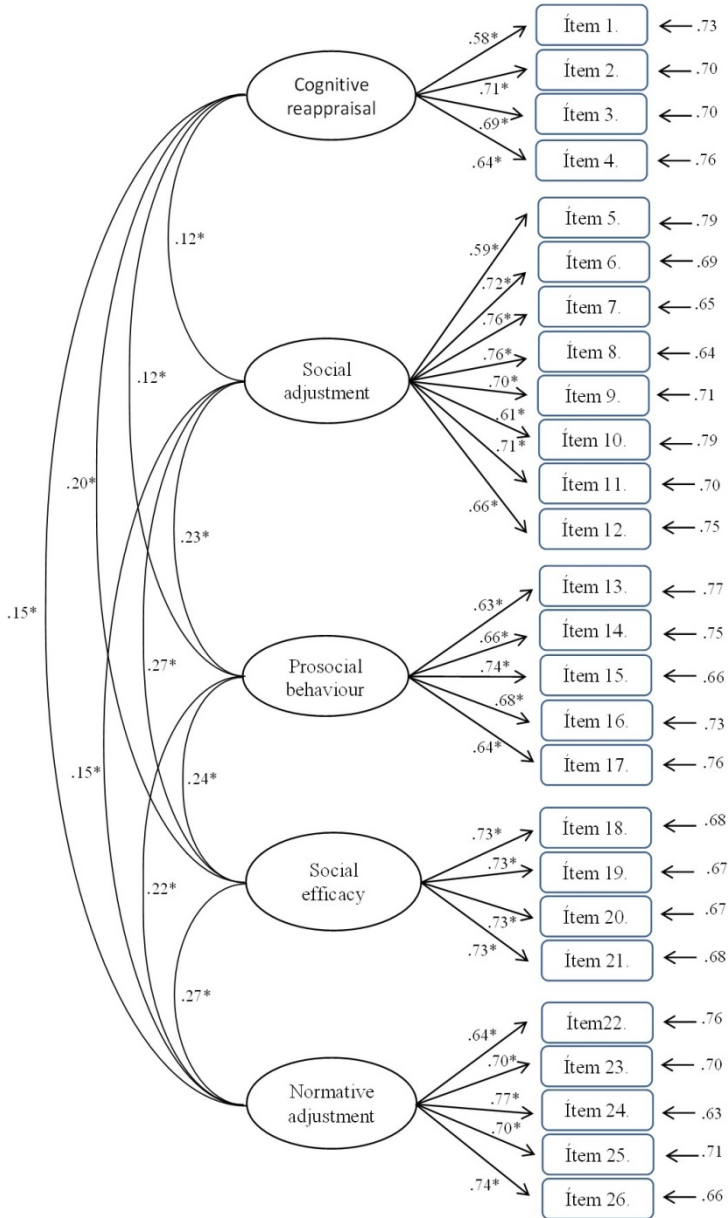
In the multiple-group analysis, three progressively more restricted models were compared. The chi-square differences were not significant either between model 1 and 2 (471.3, $p> .05$) or between model 1 and 3 (703.59, $p> .05$). In

addition, the changes in CFI, NNFI, RMSEA and SRMR were minimal in all the comparisons (see Table 2).

The results of the internal consistency in each of the subscales of the instrument showed values between .70 and .90 (see Table 3).

Table 3
Internal consistency analysis of the AMSC-Q different subscales
(McDonald's Omega/Cronbach´s alpha)

Group	Cognitive reappraisal	Social adjustment	Prosocial behaviour	Social efficacy	Normative adjustment	Total
Total	.72/.71	.88/.85	.81/.77	.82/.77	.84/.80	.89/.88
Spain	.79/.70	.83/.88	.77/.77	.82/.76	.80/.82	.90/.88
Colombia	.72/.72	.83/.82	.78/.77	.83/.79	.83/.77	.90/.89
Ireland	.78/.77	.83/.80	.78/.72	.82/.78	.81/.74	.88/.87

Relationship between social competence and bullying involvement

The analysis of correlations showed a positive and significant relationship among all the dimensions of SC. The relationship between victimization and bullying was also positive and significant in the three countries. Nevertheless, the relationship between the dimensions of SC and bullying and victimization was always negative, except between prosocial behaviour and victimization, which was not significant in Ireland and Spain and negative in Colombia although the coefficient was very low (see Table 4).

Table 4
Spearman´s bivariate correlation between SC and bullying dimensions in total sample (and in Spain, Colombia and Ireland respectively)

	1. CR	2. SA	3. PB	4. SE	5. NA	6. VIC	7. AG
1	1						
2	.25** (.24**, .26**, .28**)	1					
3	.23** (.21**, .25**, .26**)	.46** (.45**, .50**, .37**)	1				
4	.33** (.28**, .38**, .38**)	.48** (.49**, .47**, .53**)	.38** (.34**, .44**, .34**)	1			
5	.30** (.26**, .35**, .24**)	.31** (.24**, .35**, .46**)	.41** (.37**, .44**, .44**)	.46** (.39**, .54**, .45**)	1		
6	-.07** (-.02, -.12**, -.11*)	-.22** (-.22**, -19**, -.18**)	-.02 (.01, -.06**, .00)	-.15** (-.11**, -.21**, -.07)	-.14** (-.09**, -.20**, -.09)	1	
7	-.12** (-.06**, -.20**, -.03)	-.11** (-.10**, -.15**, -.17**)	-.19** (-.19**, -23**, -.23**)	-.18** (-.16**, -.23**, -.13*)	-.37** (-.37**, -.40**, -.33**)	.47** (.50**, .47**, .47**)	1

Notes: CR= cognitive reappraisal; SA= social adjustment; PB= prosocial behaviour; SE= social efficacy; NA= normative adjustment; VIC= victimisation; AG= aggression. **$p<$ .01; *$p<$ .05.

Taking into account previous theoretical approaches, a hypothetical SEM in which all the social competence dimensions influenced the dimensions of

victimization and aggression was proposed. The fits were adequate with significant effects observed between the variables in all the countries (see table 5) showing configural invariance and, hence, equivalence between samples. However, the differences between the fit indexes of each country and the different coefficients reflected suggested the existence of cultural differences that will be analysed in discussion.

Table 5
Fit indexes of SEM in Spain, Colombia and Ireland

Models	χ^2S-B	df	p	NNFI	CFI	RMSEA	SRMR
Spain	5236.63	720	.00	.97	.97	.03	.06
Colombia	4772.63	720	.00	.96	.96	.03	.04
Ireland	1249.06	720	.00	.98	.98	.02	.07

The model showed that the variables exerting a direct influence on aggression were social efficacy ($\beta_{Spanish}$= .13, $p<$ .05; $\beta_{Colombian}$= .75, $p<$ .05; β_{Irish}= .59, $p<$ .05), prosocial behaviour ($\beta_{Spanish}$= .10, $p>$ .05; $\beta_{Colombian}$= .78, $p<$ .05; β_{Irish}= .06, $p>$ .05) although the relationship between this last variable and aggression was not significant in Spanish sample. Cognitive reappraisal showed a direct relationship with aggression in Spain and Colombia ($\beta_{Spanish}$= .04, $p>$ .05; $\beta_{Colombian}$= .09, $p>$ .05) and inverse in Ireland (β_{Irish}= -.01, $p>$ .05), being not statistically significant all of these relationships. Normative adjustment ($\beta_{Spanish}$= −.61, $p<$ .05; $\beta_{Colombian}$= −1.49; $p<$ .05; β_{Irish}= −.71, $p<$ .05) and social adjustment ($\beta_{Spanish}$= -.16, $p<$ .05; $\beta_{Colombian}$= −.68; $p<$ .05; β_{Irish}= -.47, $p<$ .05) were inversely related with aggression. As regards victimization, the model showed an inverse effect of social adjustment ($\beta_{Spanish}$= −.48, $p<$ .05; $\beta_{Colombian}$= −.86; $p<$ .05; β_{Irish}= −.53, $p<$ .05) and normative adjustment ($\beta_{Spanish}$= −.20; $p<$ .05; $\beta_{Colombian}$= −.95; $p<$ .05; β_{Irish}= −.26; $p<$ .05). In contrast, a direct influence was observed for prosocial behaviour ($\beta_{Spanish}$= .30, $p<$ .05; $\beta_{Colombian}$= .90; $p<$ .05; β_{Irish}= .27, $p<$ .05), social efficacy ($\beta_{Spanish}$= .06, $p>$ .05; $\beta_{Colombian}$= .46; $p<$ .05; β_{Irish}= .39, $p<$ .05) although this last relationship was not significant in Spanish sample. The relationship between cognitive reappraisal and victimization was not significant in any sample ($\beta_{Spanish}$= .04, $p>$ .05; $\beta_{Colombian}$= .07; $p>$ .05; β_{Irish}= -.15, $p>$ .05). In Spanish sample, these effects explained 18.1% and 29.6% of the variance in victimization and aggression, respectively. In the Colombian Sample, the model explained 19% of the variance in victimization and 71.3% of the variance in aggression. In the Irish sample, the model explained 24.1% and 52.4% of the variance in victimization and aggression, respectively (see Figure 2).

Figure 2
SEM model about the relationship between SC dimensions and bullying aggression and victimization
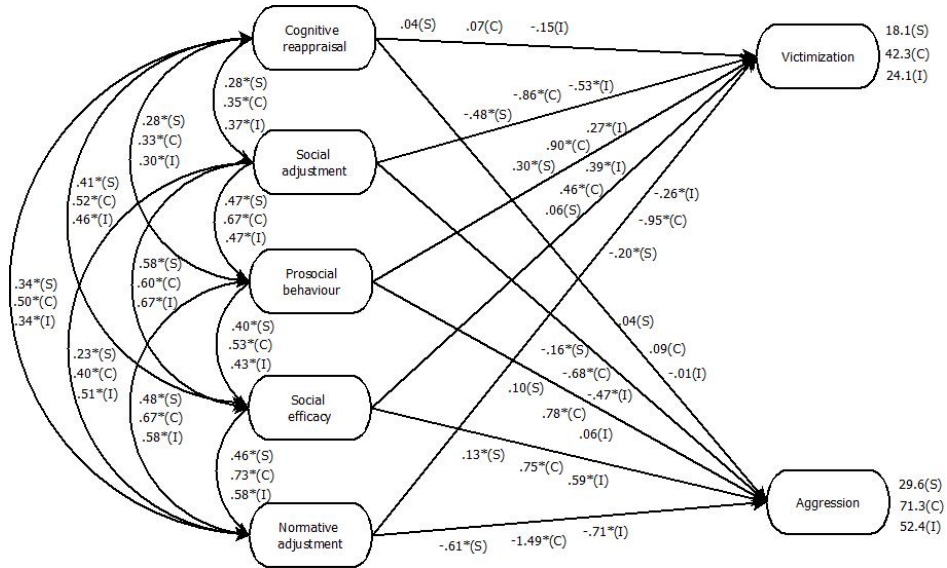
Discussion

The objectives of this study were to establish the cross-cultural robustness of the AMSC-Q and to examine the relationship between SC and bullying involvement among young people from Spain, Colombia and Ireland.

The results of the CFA corroborated the original factorial structure of the questionnaire. The results of the multiple-group analysis indicated evidence of invariance across the cultural groups, showing non significant changes in chi-square differentiation test (Bollen, 1989) and minimal differences between the other fit indices (Dimitrov, 2010) when testing configural and metric invariance. The instrument also showed an appropriate internal consistency in total and in all the subscales (the values ranged between .70 and .90 in the different subscales and countries), providing these results in the general sample and in each of the subsamples of each specific country. The results corroborate the cross-cultural robustness of the instrument, validating its use with adolescents from Spain, Colombia and Ireland, as it was stated in the first hypothesis.

Regarding the relationship between SC and bullying assessed through a SEM, the optimal fit indices obtained and the similarity of the relationships observed between the models with adolescents from the three countries confirmed the third hypothesis, revealing that it SC is an important factor for understanding involvement in bullying, as previous evidence suggested (Gómez-Ortiz et al., 2017). However, this is the first time that the relationship of influence between SC

and bullying is examined from a multidimensional perspective of SC and testing cross-cultural differences in these relationships.

The SEM showed a direct relationship between aggression and victimization and social efficacy and prosocial behaviour, although this last variable explained better victimization, whereas social efficacy showed a stronger relationship with aggression. However, cognitive reappraisal was not significant related to aggression neither victimization.

These results, partly coherent with the second hypothesis, are consistent with the previous literature which described victims as prosocial although with difficulty to domain other social skills (Fox & Boulton, 2005), being this a limitation, which probably makes them feel not so effective as the results suggest. Bullies, however, seem to stand out more in reflecting a positive social efficacy, in spite of behaving in a so incompetent way. Biased self-perceptions of SC have been linked to peer aggression, especially when they appeared in students with low peer status (McQuade et al., 2014). In any case, results indicated that peer aggression can also be related to positive behaviours such as prosociality, being this a surprising finding contrary to our expectations. It supports the vision of Sutton et al., (1999) which describes bullies as a socially intelligent students that can be skilfulness and use their violent behaviour to obtain social domain (Olthof et al., 2011). Probably for this reason our results did not show a clear relationship between cognitive reappraisal and aggression, corresponding more the deficits in emotion regulation with other mixed roles such as bully-victims (Arsenio & Lemerise, 2001).

SEM also indicated that normative and social adjustment were inversely related with both dimensions of bullying, being aggression more explained by normative adjustment and victimization more by social adjustment, what is in line with second hypothesis. This result contributes to the debate about the social status of bullies. In this sense, as Sentse et al. (2015) showed that, although bullies can be popular, they are not really liked or accepted by their peers, and they seem to notice it as our results suggest. Regarding normative adjustment, our results are in line with previous findings about aggression (Gómez-Ortiz et al., 2017; Romera et al., 2017) but make an interesting contribution in relation to victimization, indicating that victims seem also not to be very adjusted to norms, seeking to improve their socio-metric status, probably. A result which is favoured, from the perspective of students, by breaking the classroom or institutional norms (García-Fernández, Romera, & Ortega-Ruiz, 2015; Herrera-López, Romera, Ortega-Ruiz, & Gómez-Ortiz, 2016).

Certain nuances were found in the relationship between SC and bullying according to the analysed cultural subsample, as it was stated in the third hypothesis. Specifically, in Spain, the inverse relationship between aggression and social adjustment was not so high as in other countries. Moreover, while in Ireland and Colombia social efficacy was positively linked to aggression and victimization, in Spain, this relationship was not significant in relation to victimization. These findings seem to indicate that in this last country, bullies are not so disliked by their peers, and victims reflect a poorer perception of social domain. This may be due to the importance of the salience norms (Cialdini et al., 1991), which seems to be higher in a country whose adolescents value social recognition in a high way

(Pastor, 2016). In this sense, Spanish students seem to better accept the moral criteria and behaviours of bullies, which use to be popular and domineering, allowing their immoral and violent acts and punishing victims with exclusion or social rejection, which contribute of their perception of inefficacy (Salmivalli et al., 2011). Maybe this tendency has only been founded in Spanish students, because of the culture, which conditions our values and finally our behaviour. In this sense, Spain shares some features with Colombia and Ireland (it is as individualistic as Ireland, but it also reflects collectivistic characteristics such as the people's susceptibility to social influence), conferring this mixture of features a particular culture and normative frame (Hofstede, 2011). However, it is necessary to further analyse these results, because the design of the study hinders the establishment of casual relationships or theoretical explanations.

Moreover, all the relationships were stronger in Colombian sample, indicating probably that SC is a more relevant variable to explain bullying involvement in this country than in Spain or Ireland. The violence and insecurity experienced by Colombian society during the last six decades (guerrilla, drug trafficking, urban violence, etc.) could have influenced family environments and socialization styles among peers, stressing the importance of social values which promote SC and, hence, welfare living together (Lila et al., 2000; Mesurado et al., 2014). In this sense, a SC little developed seems to be a so important risk factor of bullying involvement specially in this country in where society makes an extra effort to prevent violent and deviant behaviours developing positive social values.

In conclusion, the analysed results have shown that AMSC-Q is a brief, valid and reliable measurement in different cultures, which can be used to identify the different SC dimensions as a risks or protective factors of bullying involvement in two cultural contexts such as Latin America, represented by Colombia, and Europe, represented by a Southern and Northern countries such as Spain and Ireland. This evidence seems useful from a psycho-educational perspective, suggesting the importance of promoting educational processes which help students to manage their social interaction positively and effectively, and hence, to prevent their involvement in bullying (Avilés, Irurtia, García-López, & Caballo, 2011). Specifically, these initiatives should promote the learning of social and emotional skills and the adaptation of social and normative conventions and rules to get a high adjustment in both domains and, hence, a positive perception of social efficacy. Some key aspects of these interventions would be to enhance assertiveness, communication skills and others related to social domain such as saying and accepting compliments or offering help. Regarding emotional level, interventions should focus on teach the students to manage their emotions learning the use of effective strategies such as cognitive reappraisal. Finally, it would be necessary to stimulate moral domain and the respect to norms that guarantee coexistence and adherence to positive standards promoting adjusted behaviours. All these initiatives would contribute to get positive social results such as to have friends, to be accepted by peers or to get along with others, which in turns, would generate positive feelings and perceptions relative to social performance, which is also a relevant domain of social competence.

This work is limited by the assumption that the instrument is self-completing and that the responses could therefore be skewed towards social desirability. Nevertheless, the available evidence suggests that at this stage teenagers are fully capable of evaluating their own competencies (Connolly, 1989). A further limitation derives from the fact that the conducted analyses which were carried out to establish the profiles for bullying involvement in relation to SC are descriptive and they therefore do not allow the establishment of causal relationships between both phenomenon.

As a future line of investigation, we propose the establishment of causal relationships by carrying out a longitudinal study which can explain the causal relationship between SC and involvement in this violent phenomenon.

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Appendix 1

Adolescent Multidimensional Social Competence Questionnaire

Below you will find different questions related to your way of being and the relationships you maintain with others. Please, answer all the questions taking into account that:

1	2	3	4	5	6		7	
Totally false	Fairly false	Something false	Neither false nor true	Something true	Pretty true		Totally true	

1. When faced with a stressful situation, I try to think about it in a way that helps me to keep calm	1	2	3	4	5	6	7
2. When I want to increase my positive emotions, I change how I think about the situation	1	2	3	4	5	6	7
3. I control my emotions by changing how I think about the situation I find myself in	1	2	3	4	5	6	7
4. When I want to reduce my negative emotions, I change how I think about the situation	1	2	3	4	5	6	7
5. My classmates and friends come to me when they have a problem	1	2	3	4	5	6	7
6. My classmates and friends help me when I need it	1	2	3	4	5	6	7
7. My classmates care about me	1	2	3	4	5	6	7
8. My classmates feel comfortable working with me	1	2	3	4	5	6	7
9. My classmates and friends know they can count on me when they have to organise some kind of activity	1	2	3	4	5	6	7
10. I join in with the activities that others take part in	1	2	3	4	5	6	7
11. My classmates like me	1	2	3	4	5	6	7
12. I feel like I have friends	1	2	3	4	5	6	7
13. If a classmate is really overwhelmed and doesn't have time to finish his/her work, I lend a helping hand	1	2	3	4	5	6	7
14. I react to defend a classmate who gets made fun of or picked on	1	2	3	4	5	6	7
15. When a classmate or friend is sad, I console him/her to make them feel better	1	2	3	4	5	6	7
16. When I see that a classmate feels left out and alone, I help him/her fit in to my group of friends	1	2	3	4	5	6	7
17. I help those classmates who have some kind of physical problem (leg in a cast, in a wheelchair, etc.) in their day-to-day lives	1	2	3	4	5	6	7

18. In relationships with friends and classmates, I feel that I do things well (I feel effective)	1	2	3	4	5	6	7
19. In relationships with my teachers, I feel that I do things well (I feel effective)	1	2	3	4	5	6	7
20. In relationships with my family, I feel that I do things well (I feel effective)	1	2	3	4	5	6	7
21. In relationships with other adult figures and the elderly, I feel that I do things well (I feel effective)	1	2	3	4	5	6	7
22. I let others get on with work without bothering them	1	2	3	4	5	6	7
23. I ask permission to speak and I wait my turn to talk	1	2	3	4	5	6	7
24. I follow the rules	1	2	3	4	5	6	7
25. I respect other people's opinions even if I don't share them	1	2	3	4	5	6	7
26. I treat the school's equipment and facilities with respect	1	2	3	4	5	6	7

Appendix 2

Cuestionario multidimensional de competencia social para adolescentes

A continuación, encontrarás una serie de preguntas relativas a tu forma de ser y a las relaciones que mantienes con los demás. Por favor, responde todas las preguntas teniendo en cuenta que:

1	2	3	4	5	6	7
Totalmente falso	Bastante falso	Algo falso	Ni falso ni verdadero	Algo verdadero	Bastante verdadero	Totalmente verdadero

1. Cuando me enfrento a una situación estresante, intento pensar en ella de un modo que me ayude a mantener la calma	1	2	3	4	5	6	7
2. Cuando quiero incrementar mis emociones positivas, cambio mi manera de pensar sobre la situación	1	2	3	4	5	6	7
3. Controlo mis emociones cambiando mi forma de pensar sobre la situación en la que me encuentro	1	2	3	4	5	6	7
4. Cuando quiero reducir mis emociones negativas, cambio mi manera de pensar sobre la situación	1	2	3	4	5	6	7
5. Mis compañeros o amigos acuden a mi cuando tienen algún problema	1	2	3	4	5	6	7
6. Mis compañeros o amigos me ayudan cuando los necesito	1	2	3	4	5	6	7
7. Mis compañeros se interesan por mí	1	2	3	4	5	6	7
8. Mis compañeros se sienten a gusto trabajando conmigo	1	2	3	4	5	6	7
9. Mis compañeros o amigos cuentan conmigo cuando hay que organizar alguna actividad	1	2	3	4	5	6	7
10. Me uno a las actividades que realizan los demás	1	2	3	4	5	6	7
11. Caigo bien entre mis compañeros	1	2	3	4	5	6	7
12. Siento que tengo amigos	1	2	3	4	5	6	7
13. Si un compañero está muy agobiado y no le da tiempo a terminar el trabajo, lo ayudo	1	2	3	4	5	6	7
14. Reacciono para defender a un compañero del que hacen bromas o se meten con él/ella	1	2	3	4	5	6	7
15. Cuando un compañero o amigo está triste, lo consuelo para que se sienta mejor	1	2	3	4	5	6	7
16. Si veo que un compañero se siente solo, lo ayudo a integrarse a mi grupo de amigos	1	2	3	4	5	6	7

17. Ayudo a los compañeros que tienen algún problema físico (pierna escayolada, silla de ruedas, etc.) en su día a día	1	2	3	4	5	6	7
18. En las relaciones con mis amigos y compañeros de clase, siento que hago las cosas bien (me siento eficaz)	1	2	3	4	5	6	7
19. En las relaciones con mis profesores, siento que hago las cosas bien (me siento eficaz)	1	2	3	4	5	6	7
20. En las relaciones con mis familiares, siento que hago las cosas bien (me siento eficaz)	1	2	3	4	5	6	7
21. En las relaciones con otros adultos o personas mayores, siento que hago las cosas bien (me siento eficaz)	1	2	3	4	5	6	7
22. Dejo trabajar a los demás sin molestarlos	1	2	3	4	5	6	7
23. Pido la palabra y espero turno para hablar	1	2	3	4	5	6	7
24. Cumplo las normas	1	2	3	4	5	6	7
25. Respeto la opinión de los demás aunque no la comparta	1	2	3	4	5	6	7
26. Cuido el material y las instalaciones del centro	1	2	3	4	5	6	7