

A psychosocial analysis of relational aggression in Mexican adolescents based on sex and age

Ana Romero-Abrio¹, Belén Martínez-Ferrer¹, Juan Carlos Sánchez-Sosa², and Gonzalo Musitu¹

¹ Universidad Pablo de Olavide and ² Universidad Autónoma de Nuevo León

Abstract

Background: This paper aims to identify predictive variables of relational aggression related to the individual, family and school environment in Mexican adolescents according to sex and age. Method: A total of 8,115 Mexican adolescents (51.5% boys), aged 11 to 16 years old (M=13.34 years, SD=1.040), selected by proportional stratified sampling. Results: From a stepwise regression analysis it was observed that the main predictors of relational aggression were non-conformist self-perception of social reputation, psychological distress, attitude toward institutional authority and offensive communication with the mother. Conclusions: Relational aggression underlies important explanatory dimensions for the prevention of school aggression, such as social reputation and psychological distress, which have been little explored in this field of study.

Keywords: Relational aggression, family communication, psychological distress, social reputation and attitude toward authority.

Resumen

Un análisis psicosocial de la violencia relacional en adolescentes mexicanos en función del sexo y la edad. Antecedentes: este estudio tiene como objetivo identificar las variables predictoras de la violencia relacional relacionadas con el ámbito individual, familiar y escolar en adolescentes mexicanos, en función del sexo y la edad. Método: participaron 8.115 adolescentes mexicanos (51,5% chicos), de 11 a 16 años (M= 13.34 años; DT= 1.040), seleccionados a partir de un muestreo estratificado proporcional. Resultados: a partir de un análisis de regresión múltiple por pasos se observó que los principales predictores de la violencia relacional fueron la autopercepción no-conformista de la reputación y el malestar psicológico, la actitud hacia la autoridad institucional y la comunicación ofensiva con la madre. Conclusiones: en la violencia relacional subyacen dimensiones explicativas relevantes para la prevención de la violencia escolar como son la reputación social y el malestar psicológico que, sin embargo, han sido poco exploradas en este ámbito de estudio.

Palabras clave: violencia relacional, comunicación familiar, malestar psicológico, reputación social y actitud hacia autoridad.

School peer aggression has serious consequences for the psychological adjustment of adolescents. The importance of distinguishing different expressions of this behaviour have been highlighted to explain the different causes and associated correlatives (Dodge & Crick, 1990). A double distinction of peer aggression is made by Little, Brauner, Jones, Nock, & Hawley (2003), which alludes to both its form (overt vs. relational), and its function (reactive vs. instrumental). Overt aggression (OA) refers to behaviour that involves direct confrontation with peers, while relational aggression (RA) is defined as behaviour or actions aimed at damaging the social reputation or the social status of the victims and isolating them from their group of friends, even by using their peers (Juvonen & Graham, 2014).

Most studies have focused on analysing OA (Crespo-Ramos, Romero-Abrio, Martínez-Ferrer, & Musitu, 2017). However, RA is still poorly researched despite its negative effects on adolescents

Received: May 21, 2018 • Accepted: October 9, 2018
Corresponding author: Ana Romero-Abrio
Facultad de Ciencias Sociales
Universidad Pablo de Olavide
41013 Sevilla (Spain)
e-mail: aromabr@upo.es

(Voulgaridou & Kokkinos, 2015), probably because it is more subtle and difficult to detect. Previous studies have found that RA is linked to adjustment problems in the aggressor such as greater loneliness, lower self-esteem and life satisfaction (Moreno, Estévez, Murgui, & Musitu, 2009) and lower moral development (Gini, 2006). Likewise, the adolescents most involved in RA perceive a poorer family and school climate as well as poorer relationships with their teachers than non-involved adolescents (Aron, Milicic, & Armijo, 2012), and RA is also associated with lower popularity and more social integration problems in the classroom (Gangel, Keane, Calkins, Shanahan, & O'Brien, 2017).

Previous studies have identified significant variables in the explanation of aggression, such as social reputation (Juvonen, Wang, & Espinoza, 2013), family functioning and communication (Estévez, Jiménez, & Cava, 2016; Withers, McWey, & Lucier-Greer, 2016), attitudes toward authority (Carrascosa, Cava, & Buelga, 2015), psychological distress (Fung, Gerstein, Chan, & Engebretson, 2015) and suicidal ideation (Espelage & Holt, 2013). However, there are few studies in which the role of these variables in the specific area of RA has been explored. Therefore, the following research question is proposed: do these dimensions acquire a similar importance in the prediction of RA?

In the context of social relationships, it has been observed that when the adolescent's motivation for social recognition involves the adoption of transgressive behaviours, which increases their risk factor of being involved in violent behaviour (Estévez, Emler, Cava, & Inglés, 2014). To this end, the use of RA can help the aggressor to maintain or improve their reputation in the peer group (Kawabata, Tseng, & Crick, 2014). Related to this dimension, the attitude toward institutional authority has been widely analysed in OA studies (Cava, Estévez, Buelga, & Musitu, 2013), but has not been taken into account in the studies focused on RA. Also, as far as family is concerned, a great convergence has been observed regarding the importance of functioning and family communication in aggression in general (Estévez et al., 2016). However, there are hardly any studies in which RA is specifically analysed.

The prevalence of RA based on sex is a controversial issue. In some studies it has been observed that RA is more common in girls (Ettekal & Ladd, 2015), while in others it has been pointed out that it is a more frequent behaviour in boys (Carrascosa et al., 2015), and some authors have found no differences between sexes (Putallaz et al., 2007). This controversy has also been observed based on age (Tseng, Banny, Kawabata, Crick, & Gau, 2013). In Mexico, secondary education begins at age 12, and involves a change of school. From a developmental perspective, this corresponds to early adolescence. Therefore, we believe it is important to consider sex and age in the present study. With this in mind, our research aims to analyse the contribution to RA of the following variables: social reputation, attitude toward institutional authority, family functioning and communication, psychological distress and suicidal ideation, depending on sex and age in schoolaged adolescents.

Method

Participants

A proportional stratified sampling was carried out according to urban and rural educational centres (universe of 984 centres), in the State of Nuevo León (Mexico) (confidence level 90%, alpha .05). 8,115 adolescents participated (51.5% boys), from 118 centres (62 urban), of which 62.3% studied in urban schools, and with ages ranging between 11-13 years old (54.0%) and 14-16 years old (46.0%). The data lost by scales or subscales, provided that they did not exceed 15%, were treated using the multiple linear regression imputation model (Cuesta, Fonseca-Pedrero, Vallejo, & Muñiz, 2013). The univariate atypical data was detected by the exploration of standardised scores (Hair, Anderson, Tatham, & Black, 1999).

Instruments

Relational Aggressive Behaviour Scale (Little, Henrich, Jones, & Hawley, 2003). The RA subscale, designed in the Likert style, was used. It consists of 12 items with four options for responses (1 = never, 4 = always). Cronbach's alpha was .76. The confirmatory factor analysis (CFA) showed the data was an acceptable fit [SB χ 2 = 191.8766, gl = 24, p <.001, CFI = .956, RMSEA = .029 (.026, .033)].

Social Reputation Scale (Carroll, Baglioni, Houghton, & Bramston, 1999). It consists of 15 questions with four options for

responses (1 = never, 4 = always), which measure the following dimensions: non-conformist self-perception, conformist self-perception, self-perception of reputation, non-conformist idea of public self, conformist idea of public self and reputational idea of public self. Cronbach's alpha was .85, .75 and .76, .78, .72 and .71, respectively. The CFA showed a good fit of the model to the data [SB χ 2 = 979.6105, gl = 53, p < .001, CFI = .935, RMSEA = .046 (.044, .049)] for real reputation, and [SB χ 2 = 702.055, gl = 55, p < .001, CFI = .950, RMSEA = .038 (.036, .041)] for ideal reputation.

Family Functioning Scale (APGAR) (Smilkstein, Ashworth, & Montano, 1982). It evaluates the cohesion and adaptability of family functioning. It consists of five items with three options for responses (0 = almost never, 1 = sometimes and 2 = almost always). Cronbach's alpha was .80. The CFA showed a good fit of the model to the data [SB χ 2 = 40.41, gl = 4, p <.001, CFI = .996, RMSEA = .033 (.025, .043)].

Parent-Child Communication Scale (PACS) (Barnes & Olson, 1982). This Likert scale consists of two subscales of 20 items, communication with the mother and communication with the father, with five options for responses (1 = never, 5 = always). Each subscale consists of two dimensions: open communication and offensive communication. Cronbach's alpha was .89 (father) and .88 (mother) in open communication; and .64 (father) and .69 (mother) in offensive communication. The CFA showed a good fit of the model to the data [SB χ 2 = 2602.98, gl = 128, p <.001, CFI = .953, RMSEA = .049 (.047, .050)].

Attitudes towards the Institutional Authority in Adolescents Scale (AAI-A) (Cava et al., 2013). It consists of 10 items, with four options for responses (1 = no agreement, 4 = total agreement) that measure two factors: positive attitude towards authority and positive attitude towards transgression of norms. Cronbach's alpha was .90 and .92, respectively. The CFA showed a good fit to the data [SB χ 22 = 318.42, gl = 23, p <.001, CFI = .976, RMSEA = .040 (.036, .044)].

Psychological Distress Scale (K10) (Kessler & Mroczek, 1994). It consists of 10 Likert-type items with five options for responses (1 = never, 5 = always) that assess depressive and anxiety symptoms. Cronbach's alpha was .90. The CFA showed a good fit to the data [SBχ2 = 512.36, gl = 29, p <.001, CFI = .981, RMSEA = .045 (.042, .049)].

Suicidal Ideation Scale (Roberts, 1980), adapted by Mariño, Chaparro, & González (1993). It evaluates the frequency of suicidal thoughts in the last week, and consists of four Likert-type questions with four response options (1 = 0 days, 4 = 5-7 days). Cronbach's alpha was .84. The CFA presented a good fit to the data [SB χ 2 = 1.643, gl = 1, p = .199, CFI = .991, RMSEA = .009 (.000, .032)].

Procedure

The planning and research were carried out by the Universidad Autónoma de Nuevo León in collaboration with the Universidad Pablo de Olavide. After obtaining the permits and the active consent of the students, teachers and parents, the instruments were administered in the selected centres under the supervision of research personnel. Participation was voluntary and anonymous, with a rejection rate of .21%. The ethical values proposed in the Declaration of Helsinki were respected (World Medical Association, 2013).

Data analysis

Firstly, a two-stage cluster analysis was performed for RA, obtaining three groups (low, moderate and high RA). Secondly, a discriminant analysis was carried out with the variables under study in order to determine those that best discriminated between the high and low RA clusters. Only the dimensions that showed a saturation of > .30 were included in the subsequent analysis. Next, a correlation analysis and a Student's t-test were carried out, in order to know the differences according to the sex of the selected variables. Finally, a multiple linear stepwise regression was calculated with the global sample. In addition, two multiple regressions were carried out in order to explore gender differences: one for boys and one for girls. The software SPSS edition 24 was used.

Results

As shown in Table 1, significant correlations were obtained among the variables under study. Regarding the t-test, significant differences were observed between boys and girls in all the variables except in RA. The girls showed higher scores than the boys in suicidal ideation, psychological distress, positive attitude towards the institutional authority and offensive communication (mother and father), and lower scores in family functioning, positive attitude towards the transgression of norms and nonconformist ideal public self.

The regression analysis (see Table 2) indicated that the dimension that best predicts RA is non-conformist self-perception (β = .15; p <.001), which explains 9.6% of the variance (R^2 = .096), followed by psychological distress (R^2 = .122; β = .14; p <.001) which increases the percentage of variance explained by 2.6%. The positive attitude towards institutional authority decreases the probability of involvement in RA (R^2 = .135; β = -.12; p <.001) and increases the explained variance by 1.3%, while the positive attitude toward the transgression of norms is associated with a greater participation in RA (R^2 = .147; β = .10; p <.001) and increases the variance explained by 1.2%. Next, the mother's offensive communication (R^2 = .153; β = .08; p <.001), the non-

conformist ideal public self (R^2 = .155; β = .05; p <.001), and age (11-12 years old) (R^2 = .157; β = .05; p <.001) increased the probability of involvement in RA. The percentage of explained variance also increased by 10%.

As far as gender regressions are concerned, it can be seen in Table 2 that suicidal ideation differs between boys and girls, in the sense that it is a significant predictor of RA in boys ($R^2 = .151$, $\beta = .05$; p < .001) but not in girls ($\beta = -.026$; p < .721).

Discussion

The aim of this study was to analyse the contribution of psychosocial variables in RA, according to sex and age, in Mexican adolescents attending school.

Firstly, it is observed that non-conformist self-perception has a higher predictive capacity of RA. This finding is consistent with the work of Buelga, Musitu, Murgui, & Pons (2008), in which it is pointed out that the reputation and the desire to project a social image in the peer group are important aspects in the explanation of aggression in adolescence. Considering that the reputation is a continuous process of perception-assessment of the peer group on the individual (Moreno, Neves, Murgui, & Martínez, 2012), and that the RA involves behaviours such as manipulation of friendship and exclusion, it is plausible that adolescents better valued by their peers may find themselves in a better social position to use RA to gain status than those who are rejected (Ettekal & Ladd, 2015).

Additionally, our results indicate that psychological distress is an important predictor of RA. We consider this result relevant as it shows that psychological distress is a risk factor underlying the expression of RA. In previous studies, relationships between RA, anxiety and depression have been observed (Voulgaridou & Kokkinos, 2015) and the importance of the social context in which the adolescent develops as a mediating variable between RA and depression is also underlined (Kushner, Herzhoff, Vrshek-Schallhorn, & Tackett, 2017). In future research, it would be interesting to explore the mediating effect of loneliness and depressive symptomatology in the relationship between psychological distress and RA.

Table I Correlations, means, standard deviations, and t-test												
Variables	1	2	3	4	5	6	7	8	9	10		
1. RA	-											
2. FF	12**	-										
3. SI	.18**	26**	_									
4. PD	.24**	14**	.49**	-								
5. ATIA	20**	.31**	13**	09**	-							
6. ATTSN	.23**	13**	.16**	.13**	11**	-						
7. NCSP	.31**	16**	.24**	.26**	25**	.42**	-					
8. NCIPS	.23**	16**	.18**	.12**	20**	.35**	.55**	-				
9. OCM	.20**	09**	.26**	.34**	09**	.18**	.25**	.16**	-			
10. OCF	.14**	02	.16**	.25**	05**	.14**	.19**	.13**	.69**	_		
M/SD boys	1.3/.3	2.5/.6	1.4/.6	1.8/.7	2.8/.8	1.6/.7	1.4/.5	1.3/.5	1.9/.8	1.9/.8		
M/SD girls	1.3/.3	2.4/.5	1.6/.7	2.3/.9	2.9/.7	1.5/.6	1.4/.5	1.2/.4	2.1/.8	2.0/.8		
t	-1.80	1.95	-13.95***	-23.78***	-2.67**	9.36***	7,12***	10,59***	-8,39***	-5,01***		

Notes: **p < .01 (bilateral); ***p < .001 (bilateral); RA:Relational aggression; FF:Family functioning; SI:Suicidal ideation; PD:Psychological distress; ATIA:Attitude towards institutional authority; ATTSN:Attitude towards transgression of social norms; NCSP:Non-conformist self-perception; NCPIS:Non-conformist ideal public-self; OCM:Offensive communication mother; OCF:Offensive communication father

Table 2 Stepwise regression analysis for the global and sex sample										
	R²	В	Standart error	Constant	Beta	T	P			
Predictive variables global sa	mple									
NSCSP	.096	.10	.009	.98	.15	11.290	.000			
PD	.122	.05	.004	.89	.14	12.933	.000 .000 .000 .000 .000			
ATIA	.135	05	.005	1.07	12	-11.163				
ATTSN	.147	.05	.005	1.03	.10	9.142				
OCM	.153	.03	.005	.99	.08	6.868				
NCIPS	.155	.04	.009	.97	.06	4.777				
Age ¹	.157	.04	.008	.96	.05	4.646				
Boys predictive variables										
NCSP	.085	.08	.012	.99	.13	7.055	.000 .000 .000 .000 .000 .001			
PD	.115	.06	.007	.89	.14	8.900				
ATIA	.129	05	.006	1.06	12	-7.811				
ATTSN	.141	.05	.007	1.02	.10	6.399				
OCM	.146	.03	.006	.99	.07	4.619				
NCIPS	.149	.04	.011	.97	.06	3.359				
SI	.151	.03	.009	.95	.05	3.187				
Age ¹	.152	.03	.011	.94	.04	2.483	.015			
Girls predictive variables										
NCSP	.111	.12	.014	.96	.17	8.713	.000 .000 .000 .000 .000			
PD	.130	.04	.006	.88	.11	6.792				
ATIA	.144	05	.007	1.08	12	-7.705				
ATTSN	.156	.05	.008	1.03	.10	6.332				
OCM	.162	.04	.007	1.00	.08	4.970				
Age ¹	.165	.04	.011	.98	.05	3.597				
NCIPS	.167	.05	.014	.95	.06	3.423	.001			

Notes: p < .001; Variable criteria:RA; NCSP:Non-conformist self-perception; PD:Psychological distress; ATIA:Attitude towards institutional authority; ATTSN:Attitude towards transgression of social norms; OCM:Offensive communication mother; NCPIS:Non-conformist ideal public self; Age!: [11-12]; SI:Suicidal ideation

Closely related to social reputation, the attitude toward institutional authority is also a determinant of RA. This result is, in our view, highly relevant insofar as the attitude towards institutional authority is acquired through socialisation and contributes to respect versus transgression of school norms and of the authority figures in the school. A positive attitude toward transgression seems to legitimise the use of RA, insofar as these adolescents consider school norms and authority figures to be unfair. In line with our results, Estévez et al. (2016) observed that the transgressive attitude toward authority figures, as well as the search for social recognition, predicts antisocial activities and violent behaviours. In this sense, Gini (2006), affirmed that the connection between the reputation and the attitude towards authority is based on the idea that for some adolescents, the reputation is constructed through the positive attitude towards the transgression of norms which, in turn, is reinforced in terms of achievement of social status. We consider that this aspect deserves further exploration due to its implications in RA and its relationships with adolescent identity.

Regarding the family environment, it has been found that offensive communication with the mother also predicts RA, unlike other studies, such as Carrascosa et al. (2015)'s, in which problematic communication with the father is pointed out. A possible explanation for this discrepancy could be attributed

to the intercultural differences, in the sense that the mother in Mexico, more than in Spain, continues to be the main asset in family functioning and the figure around which the construction of the identity of the children revolves (Jiménez & Estévez, 2017). Previous studies have shown that communication problems between parents and children can be a determining factor at the beginning of violent behaviour by adolescents (Varela-Garay, Ávila, & Martínez- Ferrer, 2013). Therefore, communication characterised by offences, lack of respect and poor empathy between mother and children could also be related to the psychological distress of adolescents, which, in turn, would increase the risk that they will use RA. This result is interesting as it points to the fact that there are cultural differences regarding the role played by fathers and mothers in the education of their children and, of course, in RA.

With respect to gender differences, no differences have been observed between boys and girls in RA, this result being convergent with that obtained by Tseng et al. (2013). Analysis of factors associated with RA by sex shows that boys and girls only differ in predictive ability of suicidal ideation, so this variable increases the risk of RA only in boys. These results are relevant, because they show the relationship between suicidal ideation and aggressor behaviour in boys and not in girls, a result that had not been found in previous studies, although it has been observed in relation to relational victimization (Barzilay et al., 2017) and the victimised

aggressor (Liang, Flisher, & Lombard, 2007). In some similar studies, in which suicidal ideation is related to victimization and cyberbullying, no differences have been observed between boys and girls (Van Geel, Vedder, & Tanilon, 2014). Thus, it is found that boys who engage suicidal ideation, a variable that is closely related to another predictor variable such as psychological distress (Espelage & Holt, 2013), are more likely to use RA than girls. We consider that it would be important to conduct more gender-sensitive analyses in future research. In relation to age, it has been found that RA has a higher incidence in early adolescence (11-12 years), a result similar to that obtained by Cillessen, Mayeux, Ha, de Bruyn, & Lafontana (2014). The beginning of adolescence is an evolutionary period in which cognitive and emotional skills are acquired, which supposedly potentiates the more sophisticated and strategic use of RA (Ettekal & Ladd, 2015). It is likely that a greater use of RA in early adolescence is associated with the desire for acceptance and inclusion in the peer group that in this period has special significance, which coincides with the foundation of the construction of social identity that is so important and necessary in this developmental period.

Finally, this study has some limitations. Firstly, this is a crosssectional study, and so causal relationships cannot be established. Secondly, the use of self-reports, in the sense that there may be a bias in the responses and it is the subjects themselves who report on their behaviours and attitudes. In future work it would be convenient to have different informants, and to have the perception of parents and teachers regarding the aggressive behaviour of adolescents, as well as a more comprehensive analysis of other important variables for the intervention, such as the school climate. Despite this, some practical implications are derived from this work, especially relevant in the area of intervention and family education, in the sense that no specific intervention programs for RA are known, and this behaviour has the particularity of not being easily detectable by the family and the educational personnel.

Acknowledgements

This study was funded by the project "El acoso escolar en la adolescencia: variables individuales y familiares", and subsidised by the Programa de Apoyo a la Investigación Científica y Tecnológica (PAYCIT) de la Universidad Autónoma de Nuevo León (UANL) (México).

References

- Aron, A. M., Milicic, N., & Armijo, I. (2012). Clima social escolar: una escala de evaluación -escala de clima social escolar, ECLIS [School social climate: An evaluation scale school social climate scale]. Universitas Psychologica, 11(3), 803-813.
- Barnes, H., & Olson, D. (1982). Parent adolescent communication scale. In D.H. Olson (Ed.), Family Inventories (pp. 145-182). SSt. Paul: Family Social Sciences, University of Minnesota.
- Barzilay, S., Brunstein Klomek, A., Apter, A., Carli, V., Wasserman, C., Hadlaczky, G., ... Wasserman, D. (2017). Bullying victimization and suicide ideation and behavior among adolescents in Europe: A 10-country study. *Journal of Adolescent Health*, 61(2), 179-186. https://doi.org/10.1016/j.jadohealth.2017.02.002
- Buelga, S., Musitu, G., Murgui, S., & Pons, J. (2008). Reputation, loneliness, satisfaction with life and aggressive behavior in adolescence. *The Spanish Journal of Psychology*, *11*(1), 192-200. https://doi.org/10.1017/S1138741600004236
- Carrascosa, L., Cava, M. J., & Buelga, S. (2015). Actitudes hacia la autoridad y violencia entre adolescentes: diferencias en función del sexo [Attitudes towards authority and violence among adolescents: Differences according to sex]. Suma Psicológica, 22(2), 102-109. https://doi.org/10.1016/j.sumpsi.2015.08.003
- Carroll, A., Baglioni, A. J., Houghton, S., & Bramston, P. (1999). At-risk and not at-risk primary school children: An examination of goal orientations and social reputations. *The British Journal of Educational Psychology*, 69(3), 377-392. https://doi.org/Doi 10.1348/000709999157789
- Cava, M. J., Estévez, E., Buelga, S., & Musitu, G. (2013). Propiedades psicométricas de la escala de actitudes hacia la autoridad institucional en adolescentes (AAI-A) [Psychometric properties of the scale of attitudes toward institutional authority in adolescents (AAI-A)]. Anales de Psicología, 29(2), 540-548. https://doi.org/10.6018/analesps.29.2.138031
- Cillessen, A. H. N., Mayeux, L., Ha, T., de Bruyn, E. H., & Lafontana, K. M. (2014). Aggressive effects of prioritizing popularity in early adolescence. Aggressive Behavior, 40(3), 204-213. https://doi. org/10.1002/ab.21518
- Crespo-Ramos, S., Romero-Abrio, A., Martínez-Ferrer, B., & Musitu, G. (2017). Variables psicosociales y violencia escolar en la adolescencia [Psychosocial variables and school violence in adolescence]. *Psychosocial Intervention*, 26(2), 125-130. https://doi.org/10.1016/j. psi.2017.05.002

- Cuesta, M., Fonseca-Pedrero, E., Vallejo, G., & Muñiz, J. (2013). Datos perdidos y propiedades psicométricas en los tests de personalidad [Lost data and psychometric properties in personality test]. Anales de Psicología, 29(1), 285-292. https://doi.org/10.6018/analesps.29.1.137901
- Dodge, K. A., & Crick, N. R. (1990). Social information-processing bases of aggressive behavior in children. *Personality and Social Psychology Bulletin*, 16(1), 8-22. https://doi.org/10.1177/0146167290161002
- Espelage, D. L., & Holt, M. K. (2013). Suicidal ideation and school bullying experiences after controlling for depression and delinquency. *Journal of Adolescent Health*, 53(1), S27-S31. https://doi.org/10.1016/j. jadohealth.2012.09.017
- Estévez, E., Emler, N. P., Cava, M. J., & Inglés, C. J. (2014). Psychosocial adjustment in aggressive popular and aggressive rejected adolescents at school. *Psychosocial Intervention*, 23(1), 57-67. https://doi.org/10.5093/in2014a6
- Estévez, E., Jiménez, T. I., & Cava, M. J. (2016). A cross-cultural study in Spain and Mexico on school aggression in adolescence: Examining the role of individual, family, and school variables. Cross-Cultural Research, 50(2), 123-153. https://doi.org/10.1177/1069397115625637
- Ettekal, I., & Ladd, G. W. (2015). Costs and benefits of children's physical and relational aggression trajectories on peer rejection, acceptance, and friendships: Variations by aggression subtypes, gender, and age. Developmental Psychology, 51(12), 1756-1770. https://doi.org/10.1037/dev0000057
- Fung, A. L. C., Gerstein, L. H., Chan, Y., & Engebretson, J. (2015). Relationship of aggression to anxiety, depression, anger, and empathy in Hong Kong. *Journal of Child and Family Studies*, 24(3), 821-831. https://doi.org/10.1007/s10826-013-9892-1
- Gangel, M. J., Keane, S. P., Calkins, S. D., Shanahan, L., & O'Brien, M. (2017). The association between relational aggression and perceived popularity in early adolescence: A test of competing hypotheses. The Journal of Early Adolescence, 37(8), 1078-1092. https://doi.org/10.1177/0272431616642327
- Gini, G. (2006). Bullying as a social process: The role of group membership in students' perception of inter-group aggression at school. *Journal of School Psychology*, 44(1), 51-65. https://doi.org/10.1016/j. jsp.2005.12.002
- Hair, J., Anderson, R., Tatham, R., & Black, W. (1999). *Análisis multivariante* [Multivariate analysis] (4ª edición). España: Prentice Hall.

- Jiménez, T. I., & Estévez, E. (2017). School aggression in adolescence: Examining the role of individual, family and school variables. *International Journal of Clinical and Health Psychology*, 17(3), 251-260. https://doi.org/10.1016/j.ijchp.2017.07.002
- Juvonen, J., & Graham, S. (2014). Bullying in schools: The power of bullies and the plight of victims. *Annual Review of Psychology*, 65(1), 159-185. https://doi.org/10.1146/annurev-psych-010213-115030
- Juvonen, J., Wang, Y., & Espinoza, G. (2013). Physical aggression, spreading of rumors, and social prominence in early adolescence: Reciprocal effects supporting gender similarities? *Journal of Youth and Adolescence*, 42(12), 1801-1810. https://doi.org/10.1007/s10964-012-9894-0
- Kawabata, Y., Tseng, W. L., & Crick, N. R. (2014). Adaptive, maladaptive, mediational, and bidirectional processes of relational and physical aggression, relational and physical victimization, and peer liking. Aggressive Behavior, 40(3), 273-287. https://doi.org/10.1002/ab.21517
- Kessler, R., & Mroczek, D. (1994). Final version of our non-specific psychological distress scale. Memo Dated March, 10.
- Kushner, S. C., Herzhoff, K., Vrshek-Schallhorn, S., & Tackett, J. L. (2017). Depression in early adolescence: Contributions from relational aggression and variation in the oxytocin receptor gene. Aggressive Behavior, 44(1), 60-68. https://doi.org/10.1002/ab.21724
- Liang, H., Flisher, A. J., & Lombard, C. J. (2007). Bullying, violence, and risk behavior in South African school students. *Child Abuse & Neglect*, 31(2), 161-171. https://doi.org/10.1016/j.chiabu.2006.08.007
- Little, T., Brauner, J., Jones, S. M., Nock, M. K., & Hawley, P. H. (2003). Rethinking aggression: A typological examination of the functions of aggression. *Merrill-Palmer Quarterly*, 49(3), 343-369. https://doi. org/10.1353/mpq.2003.0014
- Little, T. D., Henrich, C. C., Jones, S. M., & Hawley, P. H. (2003). Disentangling the "whys" from the "whats" of aggressive behaviour. *International Journal of Behavioral Development*, 27(2), 122-133. https://doi.org/10.1080/01650250244000128
- Mariño, M. C., Chaparro, J. J., & González, C. (1993). Confiabilidad y estructura factorial del CES-D en adolescentes mexicanos [Reliability and factor structure of the CES-D in Mexican adolescents]. Revista Mexicana de Psicología, 10, 141-145.
- Moreno, D., Estévez, E., Murgui, S., & Musitu, G. (2009). Reputación social y violencia relacional en adolescentes: el rol de la soledad, la autoestima y la satisfacción vital [Social reputation and relational aggression in adolescence: The role of loneliness, self-esteem and life satisfaction]. *Psicothema*, 21(4), 537-542. https://doi.org/A Web of science

- Moreno, D., Neves, S., Murgui, S., & Martínez, B. (2012). Un estudio longitudinal de la reputación social no conformista y la violencia en adolescentes desde la perspectiva de género [A longitudinal study of non conformist social reputation and violence in adolescents from the gender perspective]. Psychosocial Intervention, 21(1), 67-75. https://doi.org/10.5093/in2012v21n1a6
- Putallaz, M., Grimes, C. L., Foster, K. J., Kupersmidt, J. B., Coie, J. D., & Dearing, K. (2007). Overt and relational aggression and victimization: Multiple perspectives within the school setting. *Journal of School Psychology*, 45(5), 523-547. https://doi.org/10.1016/j.jsp.2007.05.003
- Roberts, R. E. (1980). Reliability of the CES-D scale in different ethnic contexts. *Psychiatry Research*, 2(2), 125-134. https://doi.org/10.1016/0165-1781(80)90069-4
- Smilkstein, G., Ashworth, C., & Montano, D. (1982). Validity and reliability of the family APGAR as a test of family function. *The Journal of Family Practice*, 15(2), 303-311.
- Tseng, W.-L., Banny, A. M., Kawabata, Y., Crick, N. R., & Gau, S. S.-F. (2013). A cross-lagged structural equation model of relational aggression, physical aggression, and peer status in a Chinese culture. Aggressive Behavior, 39(4), 301-315. https://doi.org/10.1002/ab.21480
- Van Geel, M., Vedder, P., & Tanilon, J. (2014). Relationship between peer victimization, cyberbullying, and suicide in children and adolescents ameta-analysis. *JAMA Pediatrics*, 168(5), 435-442. https://doi. org/10.1001/jamapediatrics.2013.4143
- Varela-Garay, R. M., Ávila, M. E., & Martínez-Ferrer, B. (2013). Violencia escolar: un análisis desde los diferentes contextos de interacción [School violence: An analysis from different interaction contexts]. *Psychosocial Intervention*, 22(1), 25-32. https://doi.org/10.5093/ in2013a4
- Voulgaridou, I., & Kokkinos, C. M. (2015). Relational aggression in adolescents: A review of theoretical and empirical research. Aggression and Violent Behavior, 23, 87-97. https://doi.org/10.1016/j. avb.2015.05.006
- Withers, M. C., McWey, L. M., & Lucier-Greer, M. (2016). Parent-adolescent relationship factors and adolescent outcomes among high-risk families. *Family Relations*, 65(5), 661-672. https://doi.org/10.1111/fare.12220
- World Medical Association (2013). Declaration of Helsinki World Medical Association Declaration of Helsinki Ethical Principles for Medical Research Involving Human Subjects. *The Journal of the American Medical Association*, 310(20), 2191-2194. https://doi.org/10.1001/jama.2013.281053