School Victimization Among Adolescents. An Analysis from an Ecological Perspective*

Victimización Escolar en Adolescentes. Un Análisis desde la Perspectiva Ecológica

Belén Martínez Ferrer¹, David Moreno Ruiz¹, Luis V. Amador¹, and Jim Orford²

¹ Universidad Pablo de Olavide de Sevilla. Spain

² University of Birmingham, UK

Abstract. The present study has two objectives. The first is to analyze the relationships between community (integration in the community), family (perception of family climate), school (perception of school climate) and individual (social reputation and satisfaction with life) and school victimization among adolescents, from an ecological perspective. Secondly, this study aims to examine the differences in these relationships between boys and girls. The sample is composed of 1795 adolescents of both sexes (52% boys and 48% girls) whose ages range from 11 to 18 years old (M = 14.2, SD = 1.68) and who are all from the Spanish Autonomous Community of Andalucia. A model of structural equations was calculated using the EQS program. The results indicated that school climate and satisfaction with life are positively associated with victimization. In addition, community integration and family climate are related to victimization through life satisfaction. The multigroup analysis by sex indicated that the relationship between school climate and social reputation, as well as between implication in the community and social reputation were only statistically significant in the case of boys. Finally, the results obtained and their potential implications are discussed from an ecological point of view.

Keywords: community integration, family climate, ideal non-conforming social reputation, satisfaction with life, school climate, victimization.

Resumen. El presente estudio tiene dos objetivos. El primer objetivo es analizar las relaciones entre los ámbitos comunitario (integración en la comunidad), familiar (percepción del clima familiar), escolar (percepción del clima escolar) e individual (reputación social y satisfacción con la vida) y la victimización escolar en adolescentes, desde una perspectiva ecológica. En segundo lugar, examinar las diferencias entre chicos y chicas en estas relaciones. La muestra está compuesta por 1795 adolescentes de ambos sexos (52% chicos y 48% chicas) con edades comprendidas entre los 11 y 18 años (M = 14.2, DT = 1.68) procedentes de la Comunidad Autónoma de Andalucía. Se calculó un modelo de ecuaciones estructurales con el programa EQS. Los resultados indicaron que el clima escolar y la satisfacción con la vida se asocian de manera positiva con la victimización. Además, la integración comunitaria y el clima familiar se relacionan con la victimización entre el clima escolar y la reputación social, así como entre implicación comunitaria y reputación social resultó significativa únicamente para los chicos. Finalmente, se discuten los resultados obtenidos y sus posibles implicaciones desde un enfoque ecológico.

Palabras clave: clima escolar, clima familiar, integración comunitaria, reputación social ideal no conformista, satisfacción con la vida, victimización.

Being victim of school violence is defined as suffering physical, verbal, and psychological violence, perpetrated by school peers, particularly in places with little adult supervision (Graham, 2006; Hawker and Boulton, 2000). From a psychosocial perspective, the definition of violence and victimization at school also takes into account the interaction between perpetrator and victim (Olweus, 1993) and the impact of this interaction style on the psychosocial adjustment of aggressor and victim (Guterman, Hahn, and Cameron, 2002).

One of the theoretical frameworks of research and intervention in school violence is the ecological model (Espelage and Swearer, 2004, 2010). According to this approach, violent behavior is the result of the interaction between individual characteristics and the psychosocial development contexts of aggressors and victims (Barboza et al., 2009; Benbenishty and Astor, 2005; Bronfenbrenner, 1979; Swearer, Espelage, Vaillancourt, and Hymel, 2010). The study of violence and victimization from an ecological perspective therefore places special emphasis on the connection

Correspondence: Belén Martínez Ferrer. Universidad Pablo de Olavide de Sevilla. Departamento de Ciencias Sociales. Ed. 11, Ctra. de Utrera, Km. 1- 41013 Sevilla. E-mail: *bmarfer2@upo.es*

^{*} Versión en castellano disponible en [Spanish version available at]: www.psychosocial-intervention.org

between individual characteristics and the family, school and community domains (Barboza et al., 2009; Bronfenbrenner and Morris 1998; Limber, 2006).

It has been found that the family, school and community domains are related with school violence (Martínez, Murgui, Musitu, and Monreal, 2008; Overstreet and Mazza 2003). However, studies of school victimization from an ecological perspective are scant (Swearer et al., 2010). As a result, the general aim of this study is to analyze school victimization in adolescents using an ecological approach, that is, examining the connections between the individual, family, school, and community subsystems.

The community context

Numerous authors maintain that community integration, defined as involvement, participation and sense of support in the community, is positively related with psychosocial adjustment and well-being (Albanesi, Cicognani, and Zani, 2006; Cicognani et al., 2008; Copello, Orford, Hodgson, Tober, and Barret, 2004; Parry, Laburn-Peart, Orford, and Dalton, 2004; Vieno, Nation, Perkins, and Santinello, 2007). Within the community, social relationships and friendships are created and maintained which make up the individuals social capital, along with resources and opportunities which are transferable to other contexts (Cotterell, 1996; Gracia, Herrero, and Musitu, 2002; Herrero and Gracia, 2004; Kosterman, Mason, Haggerty, Hawkins, Spoth, and Redmond, 2011). So, a community-individual interaction exists than reinforces the personal sense of failure or success (Parry et al., 2004).

Adolescents, through social relationships with their peers and with significant adults in the community, have the chance to learn and internalize social norms, expectations and the roles which society demands of them (Sampson, Raudenbush, and Earls, 1997). Previous studies have also pointed out that the cohesion and interaction between young people and significant adults who reinforce prosocial behavior can inhibit violent behaviour (Resnick, 2004; Stoddard, Henly, Sieving, and Bolland, 2011). In the case of victimization, community integration would seem to encourage social adjustment, life satisfaction and selfesteem, and, in this way, reduce the possibility of being victimized (Jiménez, Musitu, Ramos, and Murgui, 2009; Martínez, Amador, Moreno, and Musitu, 2011).

The school context

'School climate' refers to the subjective perceptions about the school and classroom characteristics, as well as the student-teacher relationships and relationships between classmates, all of which is related with school integration and a sense of belonging in this particular setting (Cook, Murphy, and Hunt, 2000; Cunningham, 2002; Yoneyama and Rigby, 2006).

Victims of violence inform of a negative perception of school climate and feel less connected with school, an institution which they perceive as insecure because it does not punish aggressors (Goldstein, Young, and Boyd, 2008; Natving, Albrektsen, and Qvarnstrom, 2001: O'Brennan, Bradshaw, and Sawyer, 2009: Yoneyama and Rigby, 2006). On the other hand, a positive valuation of school climate seems to attenuate the potential impact of risk factors such as a lack of parental involvement or associating with deviant peers, and thus reduces the probability of becoming implicated in violence, either as victim or perpetrator (Swearer, et al., 2010). In addition, adolescents who value the school climate positively are found to be more closely attached to the school and teachers, and, as a consequence, show a positive attitude towards authority and greater disposition to respect the norms of collective and community life (Catalano, Hagerty, Oesterle, Fleming, and Hawkins, 2004; Gottfredson, Gottfredson, Payne, and Gottfredson, 2005). In this way, an atmosphere is created in which victims of violence can report their situation and overcome it (Guerra, Williams, and Sadek, 2011).

The family context

Recent studies underline the link between perception of the family climate and involvement in violent acts, be it as the victim or the perpetrator (see Matjasko, Needham, Grunden, and Feldman, 2010). A family climate which encourages cohesion, support, confidence and intimacy between members of the family and which allows open and empathetic family communication dynamics, encourages the psychosocial adjustment of adolescents (Lila and Buelga, 2003; Musitu and García, 2004). Family climate, in addition, influences the configuration of attitudes in adolescents with regard to norms, social behavior and to perception of school climate, thus relating it with involvement in the community and school violence (Moreno, Estévez, Murgui, and Musitu, 2009). Adolescents who perceive a positive family climate are also more sensitive to the expectations and desires of their parents, boosting the indirect social control of the family over transgression of norms, and, consequently, over the involvement of the children in violent or criminal activity (Pettit, Bates, and Dodge, 1997).

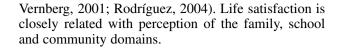
The perception of a negative family climate, however, where there are communication problems, frequent conflicts and low levels of involvement, constitutes an important risk in terms of school victimization (Jiménez et al., 2009; Lucia and Breslau, 2006). A lack of confidence and close relationships, both associated with family climate, seem to isolate adolescents from the positive influences of the family and promote situations of vulnerability to violence, such as associations with negative influences or solitude (Matjasko et al., 2010).

The individual context

A negative perception of school climate seems to be related with the search for a social identity and reputation in the reference group, probably with the objective of feeling integrated and supported (Moreno et al., 2009). Recent studies have linked school violence with the construction of a social identity founded on acceptance of the trangressive group and which bases status and social recognition on confrontation with a system believed to be unjust and on the expression of violent behavior, even if this causes them to be rejected by the rest of their classmates (Carroll, Green, Houghton, and Wood, 2003; Jones, Haslam, York, and Ryan, 2008). It therefore seems that school violence can be an effective way of achieving social acceptance and achieving a strong position in the group (Guerra et al., 2011).

As a consequence, the development of a non-conforming social reputation can offer the adolescent, particularly if they have been victimized at school, the social recognition they desire from their peers (Moreno et al., 2009). In this way, the adolescent may avoid the danger of becoming a victim, or even escape victimization that has already begun, even if in dong so it is necessary to become, on occasions, the aggressor. A second question related to school victimization in adolescents is satisfaction with life, in that victims feel less satisfied in comparison with their peers who have not suffered victimization (Prinstein, Boergers, and

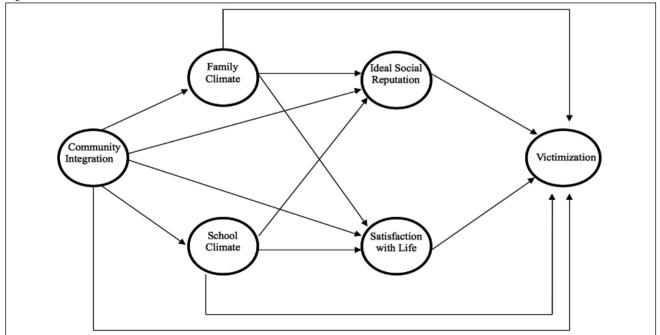
Figure 1. Theoretical Model



Objectives

The empirical evidence currently available suggests that integration in the community, school and family climate and individual variables, such as social reputation and life satisfaction, are related with involvement in violent behavior at school, be it as victim or aggressor. However, few investigations have analyzed from an ecological perspective the connections between the community, school, family and individual domains when looking at the problem of school victimization in adolescents. For this reason, the first objective of the present study is to analyze the relationships between the community (integration in the community), school (school climate), family (family climate) and individual (social reputation and life satisfaction) contexts in the study of victimization among adolescents. A second objective of this investigation is to explore the potential differences between boys and girls with regard to these interrelationships, given that recent studies suggest that the influence of these settings (family, school, and community) on adolescents psychosocial adjustment and well-being of adolescents varies between boys and girls (Bearman, Wheldall, and Kemp, 2006; Estévez, Murgui, Musitu, and Moreno, 2008a; Hilt and Nolen-Hoeksema, 2009; Povedano, Hendry, Ramos, and Varela, 2011).

In Figure 1, the theoretical model on which the hypotheses of this investigation are based is set out.



These hypotheses are: (1) school and family climate are directly and inversely related with school violence, while integration in the community does not have a direct relationship with victimization; (2) social reputation and life satisfaction have a negative relationship with school victimization; (3) integration in the community, school climate and family climate have an indirect relationship with victimization, through individual variables such as social reputation and life satisfaction; and (4) boys and girls differ with regard to these relationships (integration in the community and victimization through school and family climate, social reputation and life satisfaction).

Method

Sample

1795 Spanish youngsters of both sexes (52% male and 48% female) participated in the study. They were aged between 11 and 18 years old (M = 13.2, SD =1.68), and came from 9 different Spanish educational centers (state and private schools receiving public funds) in the Autonomous Community of Andalucia, in both rural and urban settings. At the time of the investigation, these adolescents were either studying compulsory secondary education (1st year to 4th year), or post-compulsory secondary education (1st and 2nd years). The sample is representative of the educational community in Andalucia, with a population universe of 501899 students at both levels. A sample error of \pm 2.3% was deemed acceptable, with a confidence level of 95% and a population variance of .50. The size of the sample required was 1718 students. A stratified sampling design by conglomerates was carried out (Santos, Muñoz, Juez, and Cortiñas, 2003), with the sampling units being the educational centers (state and state-funded, in rural and urban settings in Andalucía). For this, the list of all high schools in Andalucia was used. The strata were established according to year group (1st, 2nd, 3rd and 4th year of compulsory secondary education and 1st and 2nd year of post-compulsory secondary education).

Procedure

Firstly, a letter was sent out to the educational centers explaining the research project. Later, telephone contact was made with school management and an appointment was made in which the project was explained in detail, and consent papers were submitted for distribution to students and parents, along with a letter explaining the research. When permission had been obtained, an information seminar was arranged with the teaching staff of each center, in which the objectives and range of the study were explained.

The application of the instruments was carried out by a trained group of expert researchers. The battery was given to the adolescents in their normal classrooms during regular class hours and the teacher-tutor was always present. The order of instruments was counterbalanced between different classes and schools. This phase of the research began in January 209 and ended in March 2009. The adolescents were informed at all times that their participation in the investigation was voluntary and anonymous. Finally, the teachertutors also completed a scale with information about each of the members of their class. This study fulfilled the ethical values required of all research carried out with human beings, and respected the fundamental principals of the Helsinki Declaration, its updates and its current requirements (informed consent and right to information, protection of personal data and guarantees of confidentiality, non-discrimination, free participation and the right to leave the study at any stage).

Instruments

Integration in the Community. Perceived Community Support Ouestionnaire (PCSO, Gracia, Herrero, and Musitu, 2002). Two subscales were selected for this study, making up the first factor, factor integration in the community. These were: int in the community (understood as the sense of belonging to and identifying with the community. For example, "I feel happy in my neighborhood") and community participation (extent to which the adolescent is involved in social activities in the community. For example, "I collaborate (alone, with my family, with friends etc.) in associations or activities with are organized in my neighborhood". Cronbach's alpha coefficient for these dimensions is .73 and .67 respectively. In previous research, it has been observed that the PCSQ evaluates adequately the community experience in adults and adolescents (Herrero and Gracia, 2004, 2007).

Family Climate. Family Environment Scale (FES, Moos, Moos, and Trickett, 1984; Spanish adaptation by Fernández-Ballesteros and Sierra, 1989). The Interpersonal Relationships subscale, made up of 30 binary items (true or false) was used to measure three dimensions: (1) cohesion (degree of commitment and family support perceived by the children, for example "In my family, we really help and support each other"). (2) expressiveness (degree to which emotions are expressed within the family, for example, "In my family we talk about our personal problems"). (3) conflict (amount of openly expressed anger and conflict between family members, for example, "In my family we often criticize each other"). Cronbach's alpha for these dimensions is .76, .52 and .58, respectively.

School Climate. Classroom Environment Scale (CES, Moos et al., 1984; Spanish adaptation by Fernández-Ballesteros and Sierra, 1989). The Interpersonal Relationships subscale was used, made up of 30 items which inform about relationships between students and between students and teachers, the degree to which students feel they are integrated in the class, supporting and helping each other, and helped by the teacher. This subscale is made up of three dimensions: Involvement (for example, "The students pay attention to what the teacher says"), Teacher Support (for example, "The teacher shows interest in the students") and Friendship (for example, "Many people become friends in this class"). The reliability of the subscales, according to Cronbach's alpha is .63, .63 and .68, respectively.

Non-conforming ideal social reputation. Social Reputation Scale (Carroll, Houghton, Hattie, and Durkin; 1999; bi-directional English-Spanish translation). The Non-conforming Ideal Social Reputation subscale was selected, which has a four-point scale of alternative answers, from 1 –never– to 4 –always– (for example, "I would like others to think that I am tough"). Cronbach's alpha for this dimension was .78.

Satisfaction with Life. Satisfaction with Life Scale (Diener, Emmons, Larsen, and Griffin; 1985; Spanish adaptation by Atienza, Pons, Balaguer, and García-Merita, 2000). This scale offers a general index of satisfaction with life, understood as a general, subjective construct of well-being. This instrument is made up of 5 items with a scale of answers from 1-strongly disagreeto 4 –strongly agree (for example, "Most aspects of my life are as I would like them to be"). The internal consistency as measured by Cronbach's alpha was .74.

Victimization. Peer Victimization Scale (Mynard and Joseph, 2000). The instrument is composed of 20 items which describe situations of direct and indirect peer victimization (10 items correspond to direct victimization and 10 to indirect), with a Likert-type scale of answers arranged along four points (1 = never, 4 =many times). In a previous study (Cava, Musitu, and Murgui, 2007) a factor analysis with Oblimin rotation indicated a three-factor structure, explaining 62% of variance: Physical Victimization (for example, "I've been hit by a classmate who really wanted to hurt me"); Verbal Victimization (for example, "I've been insulted by a classmate") and Relationship Victimization (for example, "I've had rumors started about me and been criticized by a classmate behind my back"). This factor structure was replicated in the current sample through a confirmatory factor analysis using the program AMOS (version 6.0, Arbuckle, 2005) with good fit (GFI = .93, RMSEA = .062). Cronbach's alpha for the sample was .87, .67 and .89, respectively.

Results

Structural equation modeling was carried out using the EQS 6.0 software program (Bentler, 1995; Bentler and Wu, 2002), in order to analyze the influence on victimization of the community, school, family and individual factors (social reputation and satisfaction with life). Previously, Pearson correlations were calculated between all variables studied and analyses of variance by gender were carried out (MANOVA). These data are shown in Table 1, along with the averages and standard deviations by gender. The results show significant correlations, in the direction predicted, so all variables were included in the structural equation modeling calculations.

With regard to the analyses of variance, boys obtained higher scores than girls: involvement in the classroom (classroom climate), participation (involvement in the community), ideal non-conforming social reputation, verbally manifested victimization, relationship victimization (school victimization). Girls showed higher scores in expressiveness (family climate), when compared with boys.

Following the previous analysis, structural equation modeling was carried out, using all variables, with the program EQS 6.0 (Bentler, 1995). The latent variables included in the model were as follows: Involvement in the Community (indicators: integration in the community and participation in the community); Family Climate (indicators: cohesion, expressiveness and conflict); School Climate (indicators: involvement, help from teacher and friendships); Satisfaction with Life (consisting of one single indicator), Non-Conforming Reputation (Ideal) (consisting of one single indicator) and Victimization (indicators: physical verbal and relationship victimization).

In Table 2, we present the latent variables included in the model, their respective indicators, the standard errors and the probability attached to each indicator in the corresponding latent variable. Given that the life satisfaction and non-conforming idea reputation factors are constructed from one single indicator, they give a factor weighting of 1 and error of 0.

The normalized Mardia coefficient indicates that the model does not follow the normal distribution (Normalized Mardia Coefficient = 31.05), and for this reason robust estimators were used. The calculated model shows a good fit to the data: CFI = .97, IFI = .97, NNFI = .95 and RMSEA = .042 (90% confidence interval: .036 - .048). For the CFI, IFI and NNFI indexes, values above .95 were considered acceptable, and for the RMSEA values below .05 (Batista and Coenders, 2000). This model explains 11% of the variance for school victimization. Figure 2 shows a graphic representation of the final structural model, including the standardized coefficients and the probabilities associated with them.

A significant correlation was found between perceptions of school and family climate (r = .50, p < .001). The total effects (the sum of the direct and indirect effects) on victimization of the variables of the model are as follows: involvement in the community ($\beta = -.16$, p < .01), family climate ($\beta = -.10$, p < .01) and

	1	2	С	4	5	9	Ζ	8	6	10	11	12	13
Integration / Involvement in the Community	-												
Integration /Participation in the Community	.314(**) .378(**)	1 1											
School Climate/Involvement	.057 .172(**)	.038 .163(**)	$\frac{1}{I}$										
School Climate/Friendships	.115(**) .216(**)	.012 .078(*)	.401(**) .419(**)	$\frac{1}{I}$									
School Climate/Teacher Support	.105(**) .075(*)	.084(*) .167(**)	.349(**) .335(**)	.333(**) .311(**)	1 1								
School Climate Cohesion	.228(**) 173(**)	.117(**) .134(**)	.096(**) .064	.299(**) .297(**)	.212(**) .227(**)	$\frac{1}{I}$							
Family Climate/Expressiveness	.131(**) .112(**)	.039 .142(**)	.067(*) .064	.160(**) .227(**)	.131(**) .147(**)	.417(**) .512(**)	$\frac{1}{I}$						
Family Climate/Lack of Conflict	.189(**) .089(*)	.087(**) .081(**)	.077(*) .040	.209(**) .202(**)	.161(**) .158(**)	.522(**) 509(**)	.127(**) .131(**)	$\frac{1}{I}$					
Idea Social Reputation	174(**) .034	078(*) 065	132(**) .012	109(**) 0.032	161(**) 016	182(**) 091(**)	0.007 -0.046	160(**) 138(**)	$\frac{1}{I}$				
Satisfaction with Life	.224(**) .287(**)	.137(**) .172(**)	.178(**) .211(**)	.209(**) .251(**)	.209(**) .197(**)	.268(**) .366(**)	.215(**) .205(**)	.206(**) .282(**)	148(**) 090(**)	$\frac{1}{I}$			
Verbally Manifested Victimization	183(**) 100(**)	.054 0.033	099(**) 097(**)	199(**) 181(**)	036 -0.051	167(**) 167(**)	075(*) 126(**)	183(**) 155(**)	.000. .000	208(**) 286(**)	$\frac{1}{I}$		
Physically Manifested Victimization	155(**) -0.058	.077(*) .095(**)	055 094(**)	172(**) 149(**)	062 0.010	215(**) 124(**)	063 108(**)	220(**) 081(*)	.085(*) .000	208(**) 221(**)	.688(**) .662(**)	$\frac{1}{I}$	
Relationship Violence	199(**) 100(**)	064 .015	0.062 128(**)	183(**) 171(**)	028 -0.014	179(**) 154(**)	060 096(**)	201(**) 119(**)	.066 -0.018	250(**) 300(**)	.818(**) .836(**)	.657(**) .640(**)	$\frac{1}{I}$
Mean for boys Mean for girls F(1,1715)	15.60 15.74 .85 n.s.	14.47 14.03 5.27*	14.03 <i>13.79</i> 5.20 *	16.27 16.21 .39 n.s.	15.21 15.24 .06 n.s.	15.70 15.72 .03 n.s.	13.99 14.23 6.90 **	11.84 11.91 .48 n.s.	10.19 9.35 25.61***	14.87 14.76 .50 n.s.	11.76 11.32 4.30*	5.84 5.10 59.17***	17.00 16.95 .023 n.s.
Standard Deviation for boys Standard Deviation for girls	3.12 3.21	3.78 4.12	2.22 2.21	2.17 2.30	2.75 2.80	2.38 2.50	1.85 1.97	1.96 2.06	3.80 3.01	3.13 3.26	4.29 4.543	2.20 1.74	6.33 6.77

Table 1. Pearson Correlations between the variables observed in the model, Mean and Variance Analysis.

Table 2. Estimations for parameters, standard error and associated probability

Variables	Factor loading
Integration in the Community	
Involvement	1^a
Participation	.80***
•	(.10)
Family Climate	
Cohesion	1 ^a
Expressiveness	.38***
	(.02)
Lack of conflict	0.54***
	(.03)
School Climate	
Involvement	1 ^a
Teacher help	.94***
	(.08)
Friendships	.97***
	(.07)
Satisfaction with Life	1 ^a
Non-conforming reputation (ideal)	1 ^a
Victimization	
Verbal Victimization	1 ^a
Physical Victimization	.35***
-	(.02)

Robust statistics. Standard Error in brackets.

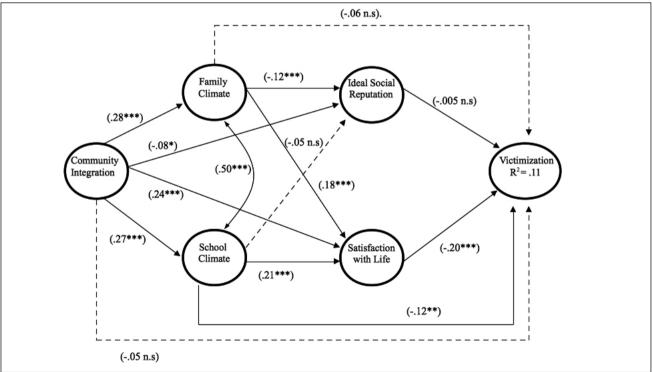
^a Set at 1.00 for the estimation

*** *p* < .001 (two-tailed)

school climate ($\beta = -.16$, p < .001). Furthermore, the direct effects observed show that the perception of school climate and satisfaction with life are negatively related with victimization ($\beta = -.12$, p < .01 y, = -.20, p < .001, respectively). In addition, involvement in the community is positively associated with family climate ($\beta = .28$, p < .001), school climate ($\beta = .27$, p < .001) and satisfaction with life ($\beta = .24$, p < .001) and negatively associated with ideal reputation ($\beta = -.08$, p < .05). Family climate is negatively related with ideal reputation ($\beta = -.12$, p < .001) and positively with life satisfaction ($\beta = -.18$, p < .001). Finally, school climate is positively associated with life satisfaction ($\beta = .21$, p < .001).

The final analyses were carried out in order to explore whether the relationships observed in the model vary depending on gender, and a multigroup analysis was therefore carried out. The restricted and non-restricted multigroup analysis models were shown to be statistically different for boys and for girls ($\Delta\chi^2$ (15, N = 1657) = 46.84, p < .001). Specifically, the relationship between school climate and social reputation was significant for boys ($\beta = -.13$, p < .01), but not for girls ($\beta = .06$, p > .05). This trend was also observed for the community involvement and social reputation path, which was significant in boys ($\beta = -.16$, p < .01) but not in girls ($\beta = .02$, p > .05). When both restrictions were lifted, the models became statistically equivalent ($\Delta\chi^2$ (13, N = 1657) = 19.19, p > .05).

Figure 2. Final Structural Model including relationship coefficients and statistical significance



Broken lines represent non-significant relationships. *p < .05; **p < .01; ***p < .001

Discussion

In this study, we carried out an analysis of the relationships between three significant contexts in adolescents' lives (community –integration in the community–, school –school climate– and family –family climate–) and individual variables (satisfaction with life and non-conforming ideal social reputation) and school victimization, guided by the principles of the ecological perspective.

With regard to the first of our hypotheses, this predicted that school and family climate would be directly related with each other, and negatively related with school victimization, results show that, in, fact, only school climate has a direct negative relationship with victimization. Family climate, on the other hand, and integration in the community are not significantly related with victimization. This means that the first hypothesis is confirmed only partially. It is surprising that family climate, a context supposedly closely linked with the development and adjustment of children, is not directly related with victimization, a relationship which had been shown by numerous studies (Lila and Buelga, 2003; Lucia and Breslau, 2006; Matjasko et al., 2010; Moreno et al., 2009a; Povedano et al., 2011). We believe that this result may be due to the method of measuring victimization, since when a more detailed analysis of results was done, it as seen that this global measure makes no distinction between reactive, and sometimes provocative, victimization, and submissive, non-reactive victimization (aggressive victims and pure victims). The small number of previous investigations that have looked into these divisions have shown that these two categories are different from one another, in that aggressive victims have a similar profile to aggressors, while the same is not true of pure victims, who usually report more positive family climates than aggressive victims and aggressors (Cava, Murgui, and Musitu, 2007; Estévez, Murgui, and Musitu, 2008b; Povedano et al., 2011; Schwartz, 2000). We therefore consider that future research should take into account these distinctions.

With regard to integration in the community and school climate, the results confirm our hypothesis. They show that integration in the community is related with victimization through paths, which will be described below in more detail, such as social reputation and satisfaction with life, which are both no considered to be of great importance in adolescents' quality of life (Cotterell, 1996; Gracia et al., 2002; Jiménez et al., 2009; Parry at al., 2004). It has also been confirmed in many studies that school climate has a direct influence on victimization, in that victims have a very negative perception of the school and classroom environment (Goldstein et al., 2008; Natving et al., 2001; O'Brennan et al., 2009; Yoneyama and Rigby, 2006). Adolescents spend a great deal of their time at school

and in interactions with peers, with whom they create and maintain relationships of differing proximity. When the climate is negative, it would seem that the vulnerability increases of those students who are least integrated of being subjected to behavior which breaks the normal rules of coexistence (Catalano et al., 2004; Goldstein et al., 2008; Gottfredson et al., 2005; O'Brennan et al., 2009; Yoneyama and Rigby, 2006)

In the second hypothesis, we predicted that reputation and satisfaction with life would be negatively associated with victimization. The data only permit us to confirm this hypothesis for satisfaction with life. The absence of the relation with social reputation can be explained if we take into account that the reputation assessed in this study was an ideal of non-conforming reputation, which refers to the desire to achieve a social image based on transgression of norms, thus avoiding mistreatment situations. Obviously, this sensation is not the same as that of the aggressors, whose non-conforming social reputation is greater than that of the non-violent adolescents in the class, and who, in addition, need the victims in order to maintain their own reputation (Carroll et al., 2003; Jones et al., 2008; Moreno et al., 2009).

This question is extremely important and merits deeper analysis, since in this study we did not distinguish between aggressive victims and non-aggressors, as mentioned above. If we could distinguish these two categories within the group of victims, it would help situate those with these motivations with greater rigor with regards to the question of reputation. It would also allow us to distinguish, using the same dimensions, and in the same way, pure aggressors and aggressive victims, given that what distinguishes these groups is that the power imbalance is reduced through aggressive reactions. Recent research has shown that aggressive victims score lower on satisfaction with life and involvement in the community, while achieving higher scores, similar to aggressors, in non-conforming ideal reputation (Estévez et al., 2008b). Violent behavior in aggressive victims seems to respond to the desire to be a part of a group of friends, to be popular or appreciated, and, in this way, achieve social reputation, recognition, fame and status, and satisfy certain needs for social approval (Emler, 1990; Moreno et al., 2009; Rodríguez, 2004).

In the third of our hypotheses, we suggested that integration in the community and school and family climate would be indirectly related with victimization through individual variables such as social reputation, and satisfaction with life. In this study, we found that community integration has a direct relationship with family climate. The association between implication in the community and school climate was also demonstrated. The following paths referred to in our hypothesis, relating to the relationships between the family, school and community domains with victimization through social reputation and satisfaction with life, were partially confirmed, in that school climate was associated with satisfaction with life but not with nonconforming ideal social reputation.

These results demonstrate the great relevance of peer relationships and school as significant contexts in adolescence. We can say that part of the life satisfaction of students comes from their experience of the classroom and school atmospheres. However, school climate was not found to be related with non-conforming ideal social reputation, as the negative relationship was not found to be significant. We believe that this result reflects the contrast between school climate (assessed as acceptance, involvement, commitment, respect and help) and non-conforming ideal social reputation which relates to transgression of norms. This is a question which should continue to be explored, given that non-conforming social reputation seems to come mainly from the family environment rather than school.

With regard to the second of the contexts, that of family, we observed a close negative relationship between family climate and non-conforming ideal social reputation. This point has already been mentioned above, but it is worth underlining that "dreaming of a non-conforming social reputation", that is, idealizing trangression of norms, has a clear origin in the family context. In addition, it has found that the family plays an important role in satisfaction with life for adolescents, to which we could also add implication in the community.

This means that, while earlier we explained that school climate makes a significant contribution to satisfaction with life for adolescents, we now have to add family and community climate to this, giving us the three contexts which we have already noted as being closely related to each other and which have a clear and precise role in adolescents' satisfaction with life. Possibly the most interesting result thrown up by this study is the fact that satisfaction with life has a negative relationship with victimization, demonstrating that all the force held by the three contexts (family, school, community) is absorbed in a dimension which is more and more important in adolescents' adjustment and which has to do with life satisfaction. This result demonstrates that the community, family and school contexts are closely interconnected, and relate to victimization through the effect they have on more individual questions, such as satisfaction with life and reputation. This vindicates the validity of using an ecological approach to analyze these types of behavior.

With regard to the fourth, and last, hypothesis, in which we anticipated that we would find differences between boys and girls in the three contexts (family, school and community) and victimization through social reputation and satisfaction with life, it was found that boys and girls differ in two paths. Firstly, a significant negative associate was observed between integration in the community and social reputation in boys, while for the girls this relationship was not significant. This result confirms that a community context of commitment, of participation in networks and in solving the community's problems pushes boys away from attraction to transgressive behavior, possible because their social world is based on relations with prosocial peers and significant adults (Resnick et al., 2004; Stoddard and Bolland, 2001). It should also be noted that non-conforming ideal social reputation is greater in boys than in girls (Estévez et al., 2008b).

Secondly, the relationship between school climate and non-conforming ideal social reputation varies between boys and girls in the sense that, once again, in boys this relationship is negative, and significant, while in girls this association is not significant. This result is also very interesting and important, given that class atmosphere, when perceived positively -students feel integrated and participate in decision-making, feel valued by the teacher, etc.- promotes or encourages boys (but not girls) to express themselves according to the rules, while a negative perception of, or feelings toward, time spent in the classroom seems to imply behaviors based on the transgression of the rules. These results would seem to suggest that when school climate is negative, boys attempt to find an alternative means of achieving acceptance, outside of the school rules and more to do with power relationships in the peer group, while girls do not need to create a reputation on these terms, perhaps finding themselves better adjusted at school.

The present study also has some limitations that mean we must be cautious when interpreting the results, and continue research in this area. Firstly, the transversal nature of the study does not allow us to establish causal relationships. In addition, in this study we used a global measure of victimization which does not take account of the heterogeneity present in adolescents. However, we believe that the results do show the usefulness of an ecological approach in the analysis of problems related to the behavior of adolescents. School victimization must be considered as a complex social process which involves development context of adolescents. The individualization of violence and victimization may impeded the recognition and disclosure by targets who blamed themselves for the difficulties they experienced (Lewis and Orford, 2005).

This study, moreover, is an invitation to professionals working in social action in education who are concerned for the adjustment of adolescents to refocus their programs and social and educational policy. These should target not only the school, but also the family, neighborhoods and communities, which, after all, are spaces constructed by many families sharing values and beliefs, and where school collaborates, and can act as a catalyst for, indeed, as an amplifier of, those family ideals and worries.

References

- Albanesi, C., Cicognani, E., and Zani, B. (2006). Sense of community, civic engagement and social well-being in Italian adolescents. *Journal of Community and Applied Psychology*, 17, 387-406.
- Atienza, F.L., Pons, D., Balaguer, I., and García-Merita, M. (2000). Propiedades psicométricas de la Escala de Satisfacción con la Vida en adolescentes. *Psicothema*, 12, 314-319.
- Bearman, R., Wheldall, K., and Kemp, C. (2006). Differential teacher attention to boys and girls in the classroom. *Educational Review*, 58, 339-366.
- Barboza, G. E., Schiamberg, L. B., Oehmke, J., Korzeniewski, S. J., Post, L. A., and Heraux, C.G. (2009). Individual Characteristics and the Multiple Contexts of Adolescent Bullying: An Ecological Perspective. *Journal* of Youth Adolescence, 38, 101-121.
- Benbenishty, R. and Astor, R. A. (2005). School violence in context: Culture, neighborhood, family, school, and gender. New York: Oxford University Press.
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. and Morris, P. (1998). The ecology of developmental process. *The Handbook of Child Psychology*, *1*, 993-1029.
- Carroll, A., Green, S., Houghton, S., and Wood, R. (2003). Reputation enhancement and involvement in delinquency among high school students. *International Journal of Disability, Development and Education*, 50, 253-273.
- Carroll, A., Houghton, S., Hattie, J., and Durkin, K. (1999). Adolescent reputation enhancement: differentiating delinquent, nondelinquent, and at-risk youths. *Journal of Child Psychology and Psychiatry*, 40, 593-606.
- Catalano, R. F., Hagerty, K. P., Oesterle, S., Fleming, C. B., and Hawkins, J. D. (2004). The importance of bonding to school for healthy development: Findings from the Social Development Research Group. *Journal of School Health*, 74, 252-262.
- Cava, M. J., Musitu, G., and Murgui, S. (2007). Individual and social risk factors related to overt victimization in a sample of Spanish adolescents. *Psychological Reports*, *101*, 275-290.
- Cicognani, E., Pirini, C., Keyes, C., Joshanloo, M., Rostami, R., and Nosratabadi, M. (2008). Social participation, sense of community and social well being. A study on American, Italian and Iranian university students. *Social Indicators Research*, *89*, 97-112.
- Cook, T., Murphy, R., and Hunt, H. (2000). Comer's School Development Program in Chicago: A Theory-Based Evaluation. American Educational Research Journal, 37, 535-597.
- Copello, A., Orford, J., Hodgson, R., Tober, G., and Barret, C. (2002). Social behavior and network therapy. Basic principles and early experiences. *Addictive Behaviors*, 27, 345-366.

- Cotterell, J. (1996). Social networks and social influences in adolescence. London: Routledge.
- Cunningham, E. G. (2002). Developing a measurement model for coping research in early adolescence. *Educational and Psychological Measurement*, 62, 147-163.
- Diener, E. D., Emmons, R. A., Larsen, R. J., and Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49, 71-75.
- Espelage, D. L. and Swearer, S. M. (2004). Bullying in American schools: A social-ecological perspective on prevention and intervention. Mahwah, NJ: Lawrence Erlbaum.
- Espelage, D. L. and Swearer, S. M. (2010). A social-ecological model for bullying prevention and intervention: Understanding the impact of adults in the social ecology of youngsters. In S. R. Jimerson, S. M. Swearer, and D. L. Espelage (Eds.), *Handbook of bullying in schools: An international perspective* (pp. 61-72). New York: Routledge.
- Estévez, E., Murgui, S., Musitu, G., and Moreno, D. (2008a). Adolescent aggression: effects of gender and family and school environments. *Journal of Adolescence*, *31*, 433-450.
- Estévez, E., Murgui, S., and Musitu, G. (2008b). Psychosocial adjustment in aggressors, pure victims and aggressive victims at school. *European Journal of Education and Psychology*, *1*, 33-44.
- Fernández-Ballesteros, R. and Sierra, B. (1989). *Escalas de Clima Social FES, WES, CIES and CES*. Madrid: TEA.
- Goldstein, S. E., Young, A., and Boyd, C. (2008). Relational aggression at school: associations with school safety and social climate. *Journal of Youth Adolescence*, *37*, 641-657.
- Gottfredson, G. D., Gottfredson, D. C., Payne, A. A., and Gottfredson, N. C. (2005). School climate predictors of school disorder: Results from a national study of delinquency prevention in schools. *Journal of Research in Crime & Delinquency*, 42, 412-444.
- Gracia, E., Herrero, J., and Musitu, G. (2002). *Evaluación de recursos y estresores psicosociales en la comunidad.* Madrid: Síntesis.
- Graham, S. (2006). Peer victimization in school. Exploring the ethnic context. *Current Directions in Psychological Science*, 15, 317-321.
- Guerra, N. G., Williams, K. R., and Sadek, S. (2011). Understanding bullying and victimization during childhood and adolescence: a mixed methods study. *Child Development*, 82, 295-310.
- Guterman, N. B., Hahn, H. C., and Cameron, M. (2002). Adolescent victimization and subsequent use of mental health counselling services. *Journal of Adolescent Health*, 30, 336-345.
- Hawker, D. S. J. and Boulton, M. J. (2000). Twenty years' research on peer victimization and psychosocial maladjustment: a meta-analytic review of cross-sectional studies. *Journal of Child Psychology and Psychiatry*, 41, 441-455.

- Herrero, J. and Gracia, E. (2004). Predicting social integration in the community among college students. *Journal of Community Psychology*, 32, 707-720.
- Hilt, L. and Nolen-Hoeksema, S. (2009). The emergence of gender differences in depression in adolescence. In S. Hoeksema (Ed.), *Handbook of depression in adolescents* (pp. 111-135). New York: Routledge.
- Jiménez, T. I., Musitu, G., Ramos, M. J., and Murgui, S. (2010). Community involvement and victimization at aschool: an analysis through family, personal, and social adjustment. *Journal of Community Psychology*, 37, 959-974.
- Jones, S. E., Haslam, S. A., York, L., and Ryan, M. K. (2008). Rotten apple or rotten barrel? Social identity and children's responses to bullying. *British Journal of Developmental Psychology*, 26, 117-132.
- Kosterman, R., Mason, W. A., Haggerty, K. P., Hawkins, J. D., Spoth, R., and Redmond, C. (2011). Positive child-hood experiences and positive adult functioning: prosocial continuity and the role of adolescent substance use. *Journal of Adolescent Health*.
- Lila, M. S. and Buelga, S. (2003). Familia y Adolescencia: el diseño de un programa para la prevención de conductas de riesgo. In L. Gómez Jacinto (coord.), *Encuentros en Psicología Social* (pp. 72-78). Malaga: Aljibe.
- Limber, S. P. (2006). Peer victimization: The nature and prevalence of bullying among children and youth. In N. E. Dowd, D. G. Singer, and R. F. Wilson (Eds.), *Handbook of children, culture and violence* (pp. 313-332). Thousand Oaks, CA: Sage Publications.
- Lewis, S. E. and Orford, J. (2005). Women's experiences of workplace bullying: changes in social relationships. *Journal of Community and Applied Social Psychology*, 15, 29-47.
- Lucia, V. C. and Breslau, N. (2006). Family cohesion and children's behavior problems: a longitudinal investigation. *Psychiatry Research*, *141*, 141-149.
- Martínez, B., Amador, L. V., Moreno, D., and Musitu, G. (2011). Implicación y participación comunitaria y ajuste psicosocial en adolescentes. *Psicología y Salud*, 21, 205-214
- Martínez, B., Murgui, S., Musitu, G., and Monreal, M. C. (2009). El rol del apoyo parental, las actitudes hacia la escuela y la autoestima en la violencia escolar en adolescentes. *International Journal of Clinical and Health Psychology*, 8, 679-692.
- Matjasko, J. L., Needham, B. L., Grunden, L. N., and Feldman, A. (2010). Violent victimization and perpetration during adolescence: developmental stage dependent ecological models. *Journal of Youth and Adolescence*, 39, 1053-1066.
- Moos, R. H. and Trickett, E. J. (1973). Classroom Environment Scale manual. Palo Alto, CA: Consulting Psychologist Press.
- Moreno, D., Estévez, E., Murgui, S., and Musitu, G. (2009). Reputación social y violencia relacional en adolescentes: el rol de la soledad, la autoestima y la satisfacción vital. *Psicothema*, 21, 537-542.

- Musitu, G. and García, J. (2004). Consecuencias de la socialización familiar en la cultura española. *Psicothema*, *16*, 288-293.
- Mynard, H. and Joseph, S. (1997). Bully/Victim problems and their association with Eysenck's personality dimensions in 8 to 13 year-olds. *British Journal of Educational Psychology*, 67, 51-54.
- Natving, G., Albrektsen, G., and Qvarnstrom, U. (2001). School related stress experience as a risk factor for bullying behavior. *Journal of Youth and Adolescence*, *30*, 561-575.
- O'Brennan, L., Bradshaw, C. P., and Sawyer, A. L. (2009). Examining developmental differences in the socioemotional problems among frequent bullies, victims, and bully/victims. *Psychology in the Schools*, 46, 100-115.
- Olweus, D. (1993). Bullies on the playground: The role of victimization. In C. H. Hart (Ed.), *Children on playgrounds: Research perspectives and applications* (pp. 85-128). Albany: State University of New York Press.
- Overstreet, S. and Mazza, J. (2003). An ecological-transactional understanding of community violence: Theoretical perspectives. *School Psychology Quarterly*, 18, 66-87.
- Parry, J., Laburn-Peart, K., Orford, J., and Dalton, S. (2004). Mechanisms by which area-based regeneration programmes might impact on community health: a case study of the new deal for communities initiative. *Public Health*, 118, 497-505.
- Pettit, G. S., Bates, J. E., and Dodge, K. A. (1997). Supportive parenting, ecological context, and children's adjustment: A seven-year longitudinal study. *Child Development*, 68, 908-923.
- Povedano, A., Hendry, L. B., Ramos, M. J., and Varela, R. (2011). Victimización escolar: clima familiar, autoestima y satisfacción con la vida desde una perspectiva de género. *Psychosocial Intervention*, 20, 5-12. doi: 10.5093/in 2011v20n1a1.
- Prinstein, M. J., Boergers, J., and Vernberg, E. M. (2001). Overt and relational aggression in adolescents: Socialpychological adjustment of aggressors and victims. *Journal of Clinical Child Psychology*, 30, 479-491.
- Resnick, M., Ireland, M., and Borowsky, I. (2004). Youth violence perpetration: What protects? What predicts? Finding from the National Longitudinal Study of Adolescent Health. *Journal of Adolescent Health*, *35*, 424.e1-424.e10.
- Rodríguez, N. (2004). *Guerra en las aulas*. Madrid: Temas de Hoy.
- Sampson, R. J., Raudenbush, S. W., and Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science*, 277, 918-924.
- Schwartz, D. (2000). Subtypes of victims and aggressors in children's peer groups. *Journal of Abnormal Child Psychology*, 28, 181-192.
- Swearer, S., Espelage, D. L., Vaillancourt, T., and Hymel, S. (2010). What can be done about school bullying? Linking research to educational practice. *Educational Researcher*, *39*, 38-47.

- Stoddard, S. A., Henly, S. J., Sieving, R. E., and Bolland, J. (2011). Social connections, trajectories of hopelessness, and serious violence in impoverished urban youth. *Journal of Youth and Adolescence*, 40, 278-295.
- Vieno, A., Nation, M., Perkins, D. D., and Santinello, M. (2007). Civic participation and the development of adolescent behavior problems. *Journal of Community Psychology*, 35, 761-777.
- Yoneyama, S. and Rigby, K. (2006). Bully/victim student and classroom climate. *Youth Studies Australia*, 25, 34-41.

Author's Note

This investigation was supported by the Spanish Ministry of Science and Innovation Grant PSI2008-01535/PSIC: "School Violence, Victimization, and Social Reputation in Adolescence", and cofinanced by the FEDER European fund.

> Manuscript received: 10/08/2010 Review received: 17/11/2010 Accepted: 20/02/2011