A SOCIO-ECOLOGICAL PERSPECTIVE ON BULLYING
A New Synthesis

UNA PERSPECTIVA SOCIO-ECOLÓGICA SOBRE EL ACOSO ESCOLAR
Una nueva síntesis

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ABSTRACT
In recent years, we have seen an abundance of studies on the subject of bullying with an emphasis on its prevalence and its characteristics. However, there has been little progress at regards the explanation of the aetiology of the phenomenon itself. Using external ecological variables which affect adolescent development and possible violent behaviour at school, the discriminating technique is applied to a sample group of young people in Obligatory Secondary School education. The results show social class/socio-economic status to be a robust independent variable capable of discriminating, to a greater extent than the others, the individual and collective violent from the non-violent group. These findings provide empirical evidence of the importance of what Wilson called “neighbourhood pressure” and Sampson denominated “collective efficacy”.

ADDITIONAL KEYWORDS
Collective Bullying, Individual bullying, Neighbourhood, School Climate, Socialization.

RESUMEN
En los últimos años han proliferado los estudios sobre el acoso escolar, destacando la prevalencia o las características de éste. Sin embargo, se ha avanzado poco en la explicación de la etiología del fenómeno en sí. Utilizando variables ecológicas externas que influyen a priori en las posibles conductas violentas en el colegio, se aplica la técnica discriminante en una muestra de jóvenes que cursan algún nivel de Estudios de Secundaria Obligatoria. Los resultados muestran a la clase social/ estatus socioeconómico como una robusta variable independiente capaz de clasificar en mayor medida que las demás al grupo de los violentos tanto individuales como colectivos frente a los no violentos en el ámbito escolar. Este hallazgo incorpora evidencia empírica sobre la importancia de lo que Wilson denominó como “presión del vecindario” o lo que Sampson acuñó como “eficacia colectiva”.

PALABRAS CLAVE ADICIONALES
Acoso escolar individual, Acoso escolar grupal, Clima escolar, Distrito municipal, Socialización.
INTRODUCCIÓN

Bullying has become an issue of primary importance in the national education systems of the main OECD countries. This is probably due to a growing awareness among the general public of its pernicious long-term effects, pressure from the mass media and the interest taken in the subject by university researchers. It is defined as a form of low-intensity violence which occurs in schools and which may be labelled as a subtype of the aggression aimed at proving that the victim is psychologically weaker than the aggressor; the act of transgression is intentional and takes place at regular intervals over time (Dempsey et al., 2006). The added importance of this phenomenon, detected in the 60s in Sweden, is that it may give rise to low self-esteem, anomie, depression, isolation, psychosomatic symptoms, failure at school and, in extreme cases, suicide, in cases of the severest harassment at the workplace and within the home (Nicholson, 2008).

Consequently, many studies have done their utmost to detect the potential number of students affected by such violence, and likewise its principal characteristics. The reason for such efforts is that bullying is a complex phenomenon, in which researchers are able to identify not only the risk factors which, if present, may increase the possibilities of becoming a harasser or a victim, but also the protective factors which may exist. The latter can mitigate the negative effects of the former and, consequently, reduce the opportunities for violence to occur (Baldry and Farrington, 2005). However, such research has focused on the personal characteristics of the violent person or of the victim, or on the norms governing group relationships, or even peer groups; there are notably fewer studies of the social/environmental circumstances which influence bullying.

The Spanish education system receives a poor rating both in the PISA report and in international mathematics testing. There may be a relation between both realities as one of the most notable effects of bullying victimization is school drop-out and constant disruption in the classroom making effective teaching impossible. Most of the existing research studies on bullying focuses on the prevalence of the phenomenon, but none of it have made an in-depth study of the socio-economic causes. To find the factors affecting the bullying aetiology, as an essential tool to determine the type of intervention. In this way, a double objective could be achieved: protection of adolescents in accordance with the international agreements which guarantee this; and control of the environmental factors which have a bearing on the effectiveness of the school system. This acquires added importance in the light of the relationship which has been established between a country’s education ratio and its level of economic productivity or between education and human development.

EFFECTS OF NEIGHBOURHOODS

While speculation has been widespread for many years concerning the influence of social class upon deviant behaviour and upon violence in general, no conclusive results
have been reached, since theory and empirical evidence differ somewhat. Nevertheless, it is evident that a clear differentiation exists between forms of socialization according to social class. Dowsett et al., (2008) found that social class affects children's behaviour from an early age, because upper-class children enjoy more sensitive care, greater cognitive stimulation and fewer negative interactions with adults than working-class children. The above-mentioned authors discovered a curvilinear association between structural features of development and family income. The debate concerning the relation between social class (as measured by geographical district) and violence is both longstanding and polemical (O’Brien et al., 2006). The existence of differences in violence levels among different neighbourhoods in every city in the world has led to delinquency theory establishing a rating of municipal districts i.e. the crime rates in each neighbourhood or district can be predicted by its ranking within the stratified city. This entails establishing a clear association between low social class or socioeconomic status and residential instability and violence in neighbourhoods at the bottom of the list. In such districts there exists what Sampson et al. (2001, 2002) call defective “collective efficacy”, defined as a difference in the ability to reach agreement on shared values in order to maintain effective social controls. Consequently, social and organisational characteristics explain inter-district variations in rates of violence; these cannot be solely attributed to the aggregated demographic characteristics of their inhabitants. “Collective efficacy” produces the type of formal social control which would ensure the possibility of living in safe and well ordered surrounding, free of interpersonal violence and of the presence of police. In addition, informal social control or the differential ability to obtain the allocation of public resources for the community should be emphasised; examples are rubbish collection, repairing façades, maintaining pavements, police controls, etc. The institutional abandonment of old buildings and abandoned dwellings is symptomatic of vandalism and delinquency. Three factors, namely the concentration of disadvantages, the concentration of immigration and residential instability explain 70% of the variation in “collective efficacy”.

The pernicious effects of degraded municipal districts or of belonging to an underclass are broad and varied. For example, interesting literature exists which links such effects to elementary questions, like physical or mental health (Bosma et al., 2001), risk of myocardial attacks (Chaix et al., 2008) or inadequate diet (Sharkey and Horel, 2008). As a result of these studies, health policy administrators of different public bodies take into account the geographical area where people live as a variable, complemented by individual risk factors. It is more than possible that this discovery was inspired by the harmful effects that neighbourhood life has on the social life of local residents in general and, more specifically upon youths, as Wilson (1993) states. This should also be taken into account by local authorities, following the violent and racist explosions in the poor and marginal neighbourhoods of Paris. Wilson argues that neighbourhood is crucial in determining both the day to day life of adults and the future of its youths. The lifestyle models presented to young deprived people are homogeneous as regards the most important exclusion variables: high rates of unemployment, crime and violence and dependence.
on the state i.e. a socially unbearable process which generates generalised anomie. The working class must affront numerous problems of inadequate health and income, and therefore lack the means and interest to involve themselves in solving the problems common to their neighbourhoods. They do not feel identified with either town planning or street safety, as they are indifferent to the potential market value of their dwellings. The absence of middle-class or lower middle-class residents is determinat: if these socioeconomic groups formed part of the neighbourhood their presence and everyday behaviour would restrain the deterioration of neighbourly relations caused by the most disadvantaged. In the absence of social classes concerned about the maintenance of the zone they live in, the pernicious effects multiply, producing increases in all the classic features of social marginalisation, such as drugs, excessively early first marriages, unwanted first-born children, lone mothers, divorcees, abandonment of children and failure at school.

Studies which underline the importance of neighbourhood have recently proliferated, the result of the situation starting to intensify worryingly (Caughy and O’Campo, 2006, Aisenberg and Herrenkohl, 2008, Burchfield and Mingus, 2008). In a study of the effects of neighbourhood environment upon the educational aspirations of Afro-Americans, Stewart et al., (2007) found that factors related to the influence of surroundings (i.e. concentrated disadvantages) strongly influence their young inhabitants’ aspirations to achieve good academic results this influence is more collective than individual. Davis et al., (2008) recount mothers’ complaints about their children’s safety and the negative influence of neighbourhoods with low socioeconomic status compared to the middle or upper class areas. The former present barriers to the integration of youths with their possible groups of friends (both inside and outside the neighbourhood), due to problems of safety, the impossibility of playing in public parks, social exclusion and poor transport facilities; all of these disadvantages make gathering with friends outside school difficult and, furthermore, when this occurs it often takes place in the midst of drug addicts and delinquents who frequent the area. A set of problems stem from the deficiencies in the municipal districts, which O’Brien et al., (2006) term “social processes”. These are characterised by a negative social atmosphere (the perception of environmental disorder, fear of establishing social relations, fear of victimisation), the absence of social capital based on collective efficacy or the union of mutual interests (e.g. shared neighbourhood watch schemes, ready and able to intervene at a given time for the common good of the community), and comprising a high degree of social cohesion in the sense of belonging to a collectivity. Nor does there exist sufficient informal social control or vigilance to intervene in community problems (e.g. adult vigilance to intervene in acts of delinquency, supervision to intervene in cases of youth hooliganism), to assist people with problems and promote a high level of social interaction in the community. The severe economic disadvantages of deprived municipal districts and the low level of social cohesion therein are associated with lower cognitive and behavioural abilities of youths who live there, independently of their family characteristics or their personality. The positive association between the lack of control and problems of anti-social behavioural problems significantly increases in those municipal districts with limited social capital (Stewart and Stewart, 2007).
However, the fact that some adolescents not only survive a markedly hostile environment, but indeed are even capable of leading ordered lives and achieving high educational qualifications and good jobs, led Sharkey (2007) to coin the term “street efficacy”. This is defined as the ability of certain youths to avoid violent confrontations, creating a space or niche in which they feel safe, because they activate mechanisms of protection or rejection of violence. The determination of the neighbourhood in which youths live, but who consider it as an “imposed environment” can be perceived by those same youths as a “chosen environment”, if they manage to avoid pernicious risks through performing alternative activities which avoid daily interaction with their surroundings. Examples are sporting activities/events or cultural pursuits in scenarios removed from their neighbourhood. This contributes to youths’ finding individual and independent environments which keep them away from potential violent confrontations. Consequently, they can not only avoid the pernicious structural effects of the neighbourhood (poverty, drugs, weapons, crime etc.) but also the institutional effects. Among these are the resources available for youths, quality schooling, social policies, health systems, leisure activity programmes and informal public spaces for residents. “Street efficacy” depends on the cognition a youth has of his or her neighbourhood. Among the variables which affect a positive perception are personal characteristics, such as sufficient self-confidence to avoid fights, and family characteristics (e.g. not witnessing violent acts within the home/household and not having any violent relatives), or being well supervised by their parents. Neighbourhood structural characteristics are another variable. High levels of violence usually produce low levels of collective efficacy, and so collective efficacy (Simon et al., 2005) is complemented by street efficacy. The latter is more likely to avoid violent confrontations, reduce the possibilities of having delinquent friends and cause less time to be spent on non-structured activities.

**Effects of Socialization**

As the number and seriousness of incidents increases, many parents worry that the problem is spiralling out of control. They are demanding that schools and policymakers do something — and in response, governments and educational authorities are devising new ways to tackle the problem: giving children strategies to avoid being picked on, and giving teachers more training to deal with the perpetrators. To make a difference, though, authorities must first understand why bullying is burgeoning now. That’s not easy, since its worst forms happen at around seventeen years, just when most youths stop talking to their elders. It is part of their struggle to construct their own identity. The trend toward smaller families may play a role, because many children have no siblings and thus don’t know how to interact and coexist with their peers in school.

The socialization establishes what conduct is socially reprehensible; it innately regulates basic behaviour with regard to life and to others. Also is crucial in order to understand the paths youths tread throughout the course of their lives, how effectively in
fact they adopt to extra-family surroundings and how they deal with the most important transitions in their lives, a challenge which requires a certain age (or maturity) to perform successfully (Crosnoe and Trinitapoli, 2008). Especially important factors which may lead to unleashing interpersonal aggressiveness through bullying during adolescence are the parents, siblings, relatives and the family’s income level (Williams et al., 2007). The family climate in which children grow up is, therefore, a basic element in the etiology of behaviour at school; youths learn to observe adult behaviour and how parents use physical and psychological punishment as a way of dominating and controlling their children. Once this method has been interiorised, they will employ it in relations with their schoolmates (Nicholson, 2008).

The influence of family style of socialisation upon children’s violence has attracted great interest in recent years. Ahmed and Braithwaite (2004) have shown how the variables which most affect the violent behaviour of children stem from a poor relationship with parents. In other words, some parents do not support their children; there may be an over-rigorous degree of authoritarianism, erratic discipline, strong inconsistency between the instructions of the parents (which implies their relationship is not harmonious), a rejection of affective relations and, in general, low emotional implication with their children. Furthermore, when children are frequently given physical punishment for no apparent reason, they grow up less able to protect themselves from violence in general. They have low self-esteem, feel insecure in the face of adversity and have little confidence that their problems will be resolved in a reasonable fashion. Thus, it is easy for them to reproduce violence against their peers or be ignorant of how to react to it, thereby becoming both harassers and victims. Baldry and Farrington (2005) argue that the protection or risk factors produced by the family may be determinant. All these are related to the model of intra-family authority youths observe at home; for example, the lack of communication between parents and children appears to affect the violent behaviour of the latter. Likewise, this occur when the family members have a lack of spare time activities in common, a shortage of intimate communication, an absence of emotional identification with the parents and a lack of affection and paternal warmth. As a result, many youths reject the family climate and take refuge in gangs of friends.

Intra-family relations may be highly varied, as they depend on family structure, whether nuclear, numerous, monoparental, symmetrical, single mother, homosexual, etc. Within the most common variety, the nuclear family, the same occurs with factors such as the number of siblings, the family position they occupy, whether they are brothers or sisters, whether their siblings are older or younger than them, how great the difference in age is and available household income, if there is only one breadwinner or if the mother works outside the home. This multiplicity of factors makes it extremely difficult to establish the influence of the family in the causation of violent behaviour by their childrens, this is because when the factors change, family relations change also. For example, when the number of children expands, this automatically means a transformation of behaviour control and the method used to implant rules and emotional behaviour; thus, family size may be positively correlated with a greater tendency to deviant conduct. Furthermore,
the distancing between siblings involves differences in family behaviour: a greater gap between births produces a better climate for the set of its members, since with the possibility of dedicating more attention to each child, less dependence exists, and thus the style of discipline can be more relaxed. There may also be increased collaboration between siblings, since moments of tension caused by competing for the same resources do not exist. When the family children are all males, the possibilities of bullying in the home and outside the home increase, in comparison to cases in which only one girl or more girls form the family nucleus; whatever the case, the presence of females among siblings causes conflicts and aggressions to reduce. (Williams et al., 2007).

Just as important as family structure is the qualitative aspect of the family, based on what has been called socialisation style or family climate. Within its interactional effects, the following must be emphasised: the affective climate, communication with the mother, the parents' behaviour, educational practices, supervision, the parents' attitude to their children, contact and discipline. Longitudinal studies have demonstrated that interactional variables directly affect antisocial conduct, while "structural" variables have somewhat more indirect effects, through other variables such as intra-family communication (Stevens et al., 2002). If one member displays aggressive behaviour towards the rest of the family, this may indicate that the family is giving differential treatment to each of its children, according to their family position or structure or to their individual characteristics. Favouritism (i.e. parents' preference for one son or daughter), which is explicit in the case of rewarding the smallest child or children compared to their elder siblings, or even the predilection for one child compared to the rest, has been one of the most commonly analysed motives for deviant conduct. Lack of parental control, overly severe or erratic discipline, affective rejection of the children, low implication in their rearing and poor marital relations are especially harmful.

Affective relations between the parents are especially intense. Pre- and post-divorce or separation situations have strong repercussions on children at all levels: emotional, economic, personality, status, etc. Within the extensive literature (Hawkins et al., 2007), those sources of the harm caused to children, up to 11 years before the separation actually takes place, are especially revealing (Shaw, 1999). As Olweus (1993) argues, the frequency of conflicts, of disagreements or continual arguments between parents, whether leading to divorce or not, generates feelings of insecurity in children. Consequently, parents must refrain from recruiting their children as allies in the problems which arise in the heart of the family, since there are fewer negative effects if parents hold their arguments in private instead of in front of the children. According to Popenoe (1996), a strong relationship exists between the way problems are resolved within the family and children's behaviour, for example. A traumatic separation of the parents or living through a pre-divorce situation may affect children's level of violence, as a result of the degree of frustration they are subjected to.

Great attention has been paid to a variable representing the effect upon families of prolonged and unforeseen economic difficulties, caused by a conjunctural crisis which affects a country's economy, a region or a locality. Two examples are the influence on
the family of industrial reconversion or a fall in agricultural prices; these are known as the
“family tension model” (Conger and Conger, 2002). When the family has to face problems
of low salaries, loss of employment or economic ruin, an unpleasant domestic atmosphere
is consequently produced. This may manifest itself in children’s behaviour, since they are
subjected to unfamiliar and stressful situations. In the face of such adversities, the family
may find itself unable to take responsibility for basic shopping, adequate food or the
health care one or more of them requires. Economic pressures increase emotional stress
between spouses over time, which in turn causes a substantial increase in matrimonial
conflict, often followed by a proposal for separation or divorce. Within the family context
there exist two primary types of positive adaptation to adversity: the first is based on
the quality of intra-family relationships while the second is the result of the instrumental,
social, emotional and cognitive functioning of individual members (Conger et al., 2000).
Moreover, the repercussions of family tension upon children may decline significantly
if parents manage to avoid emotional exhaustion, do not get involved in serious levels
of interparental contact, maintain marital support and do not neglect their obligations
as parents and remain faithful to their styles of child-rearing (Conger et al., 1999). The
position of elder siblings may also be an influence and even determinant, since if warmth
and support are present in inter-sibling relations, economic difficulties do not inevitably
lead to antisocial conduct. Adolescents may find an additional umbrella for shelter there, but
if the reaction of the elder siblings is negative, due to alcohol or drug abuse, the influence
on the adolescent in question will be sharper (Crosnoe and Elder, 2004).

EFFECTS OF SCHOLAR CLIMATE

School is an essential institution for the determination of the intensity and extension of
bullying and victimisation since, together with the family, it socialises youths. Schools
teach them to exteriorise their violent impulses and observe the norms of respect for
others. In the majority of Western countries schooling is compulsory for youths up to a
certain age. Living with other family members is therefore essential until youths have
fulfilled the objectives which society has designed, via its laws. National educational
systems regulate general socialising and living together and establish different rights
and obligations for students: This allows schools, within certain limits, to design the
disciplinary codes known as the school regulations. A school which functions well and a
predisposition towards learning and standing out among others have been factors which
discourage violence. In contrast, academic failure, idleness and the imposition of rules
have been explanatory factors of aggressivity. Benbenishty and Astor (2005) found that
school climate factors explain a significant proportion of the variance in academic level
at secondary school; this ranges between 14% and 32%. Schools which have dedicated
teachers who use consistent rules for the avoidance of violence and active participation in
these rules (in the form of decision-making) and a positive relationship between teachers
and pupils nevertheless displayed significant ratios of bullying. Akiba et al. (2002), in an
international study undertaken in 37 nations, concluded that violence at school should be considered independently from the general violence in a country. Although pupils may live in violent families, municipal districts or even nations, this may be negatively correlated with the violence which takes place specifically at school, since external factors may not, in the last analysis, be as influential as previously thought. Wolker et al. (2001) reach the conclusion that the education system is fundamental, compared to socioeconomic variables (for example), status or ethnicity in the explanation of this type of violence. Thus, English schools, despite being smaller and having larger average class sizes than their German counterparts, display a prevalence of bullying of 24% compared to 8%. Nevertheless, less German pupils partook in bullying every week; this may be explained by differences in the two education systems. German children suffer more aggressions on the way to school or when leaving it, due to the differences in proximity between their home and school.

School climate may affect the levels of violence within schools, because both the formal and informal atmosphere (the so-called “hidden curriculum”) perceived by adolescents in their schools fundamentally influences their behaviour (Stephenson and Smith, 1992). Contentment with school is one of the principal aspects of pupils’ quality of life; it affects their psychological wellbeing, and similarly involvement at school, truancy rates, premature school leaving and behavioural problems (Verkuyten M. and Thijs, 2002). School violence affects a high percentage of the visible and invisible norms of the groups which exist inside the school. Any youth who departs from the formal or formal generalised consensus will be rejected; thus, the groups’ behaviour patterns/rites are fundamental for the young member and constitute a basic protective umbrella to ensure his or her physical and psychological safety. However, as secondary school coincides with a period of far-reaching physiological-hormonal changes, various transitions take place which shatter the existing climate of group norms. Firstly, group leadership and the status of domination- this must be restated or reoriented (Pellegrini et al., 1999), depending on pupils’ age. Secondly, secondary school is a transition period which is opposed to stable norms; this stage of life generates tension and frustration which may lead to an increase in rebellious attitudes. Sentse et al., (2007) note that similarities in behaviour produces social acceptance; dissimilarities in the didactic processes lead to rejection. Youths form groups on the basis of a similar cognition of which acts are acceptable and which are not; thus, those who deviate from this uniformity will be rejected by the other group members, who find such behaviour irritable or unacceptable.

School climate depends on typology because may have an important influence on student behaviour and affect the overall indices of behavioural disturbance. Although young people vary greatly, depending on their cognitive and behavioural characteristics, in some schools there is a general tendency in the pupils as a whole to behave either appropriately or disturbingly. The factors which affect school climate include the geographical or residential zone of the school, (polluted, noisy or marginal atmospheres), the architecture of the building (zones with no or minimum vigilance) different ownership types (private, state, grant-aided/independent/semi-private). Other factors are the
different types of orientation (agnostic, religious), the criteria for discipline (classroom supervision in the classroom, the playground and the dining rooms), the selection entrance criteria for pupils (with the possibility of entry quotas), the types of management (the involvement of parents in School Councils and the daily activity of the school) and the institution’s age. One influence is that of environment, as shown above, since school factors affect pupils' behaviour much more strongly than more violent activities out-of-school. Normally, the type of admission procedure (open or selective) has been used as a powerful predictor, as some schools admit a higher proportion of children with behavioural problems. Consequently, inter-school differences in violence or antisocial behaviour indices are simply a result of differences in admission policies. Virtanem et al. (2007) found that the working conditions in Finnish schools located in the lowest socioeconomic neighbourhoods, compared to schools located in high-status areas, affected the physical and mental health of teachers (reflected in alcohol abuse, strong possibilities of mental disorders, less implication in school activities and lower efficiency in their teaching tasks). Rutter and Giller (2000) discovered significant differences in the indices of both deviant behaviour and truancy and likewise in disruptive and violent behaviour in class, depending on the concurrence of the above-mentioned variables.

Parent involvement in the educational centre may be determinant in controlling violence. They may participate in various activities; membership of the school association (e.g. the School Council) and voting in the election of their representatives, the most important collective action. Logically, as in neighbourhoods, parent participation in school life helps the institution to function better. The educational level of the parents affects the academic success of their children; at both primary and secondary school, a higher parental educational level entails a larger percentage of pupils whose parents are members of the school association. The figure for pupils whose parents are university graduates and also participate in school associations is 21 percentage points higher than for the children of parents with only primary or no education and 8 points higher than for the children of parents with secondary education or vocational training. Parent participation is also influenced by children’s age. Parents of the same educational level participate more in primary than secondary school. The ownership type of the school is also important- participation is greater in private schools than their state counterparts; finally, smaller schools achieve greater participation.

**Effects of life span**

If there is one undisputed fact in current criminological research it is that crime depends on gender and age. Men commit more crimes than women and their rise and fall coincide with the life cycle (Hagestad and Call, 2007, Witkowska and Kjelberg, 2005). As in the case of bullying, it has been shown that boys are more violent than girls and that this difference reaches a point of inflection at approximately 14. Subsequently, violence descends progressively (Glover et al., 2000). Gender differences with regard to the use
of violence have been explained by both physiological-hormonal characteristics and cultural questions. The most important cultural behaviour in the socialization of youths is termed hegemonic machismo. In other words, the atavistic, traditional and patriarchal belief in masculine supremacy, based on traditional gender roles and the opinion that male force is an acceptable way of imposing oneself on the rest. This includes the right to view the control of women as a legitimate act and the subtlety with which boys reaffirm their status of male power, when this is under some type of threat, through abuse of power. By contrast, feminine roles have been characterised by a less physical, active, violent and confrontational attitude; instead, they are more calculated, more cerebral and more affectionate (Cecil, 2003, Kyvdgaard, 2003, Moffit et al., 2001). A culture reflects the dominant view of men with which the mass media constantly bombard us i.e. they are shown as tough, strong, aggressive, independent, brave, sexually active, relational and intelligent. Connell (1995) argues that a nexus exists between hegemonic sexist ideology and the use of violence, manifested in the types of masculinity based on social, cultural and institutional models of power. These are forms of domination which attempt to achieve the highest status and exercise of influence and authority on the basis of patriarchy, through numerous cultural and institutional practices which involve the mass media.

A further difference between the two genders is that while boys develop physical and personal aggression from their first years at school, girls tend to express their antisocial behaviour later on, and especially during adolescence (Zoccolillo, 1993, Loeb and Stouthamer-Loeber, 1998). The observation of playground, and even classroom, interactions itself clearly shows the territorial domination which boys exercise in comparison to girls. Since all available spaces are dominated by boys' leisure activities, especially football, girls' activities are reduced to a token “ghetto” area. Playing football is generalised in Western schools and 75% of the playground, and even more if we take into account the risk of being hit by a ball run by those next to the game. The lesser evil of this imposition is that it has allowed girls to develop more substantial activities. These require creativity, imagination and socialisation; because they stimulate the development of a certain cooperative character of the recreational activity i.e. a range of games which includes songs, rhymes, clapping and dynamic games. By contrast, the predominant characteristic of boys' games is rivalry and a tendency towards conflict which may easily turn into a fight. Thus, boys' games lack this sociability so apparent in girls' games. Male violence compared to female violence is determined by the different types of interaction and friendship within the two genders. For Maccoby (1999), differences exist in the nature and quality of friendship; girls are usually more intimate and intense than boys, for whom friendship is more closely related to shared activities. In the opinion of Kenway and Fitzclarence (1997), the literature is full of case studies which illustrate tribal rivalries among boys at school, who develop a distinctive style of masculinity in their battles. In such wars relations of domination and subordination are established by the use of legitimate physical violence, via sport, or illegitimate violence, via harassment or bullying. Such harassment is a product of the importance attached to aggressive and violent acts performed to maintain status, reputation and resources, since bullying is a form of self-
protection of masculine identity within the group. The root of the problem is that violence has a great symbolic value in the acquisition of positions of power and privilege. Given that the positions reached are usually unstable, their maintenance requires a high degree of insistence, which obliges greater attention to be paid to boys than girls. Moreover, many indices support the thesis that violence is a daily phenomenon at school and that the majorities of violent acts are performed by boys and may be categorised as the violent expression of certain types of masculinity. Consequently, schools can play an important role in violence prevention, although few advances have been made in this field. The fragility of masculinity, especially hegemonic masculinity, is repeatedly emphasised in analyses of the male gender; this is understandable in the light of the conception of violence, competition and triumph as the basis for the affirmation of masculine identity.

Age is a sociodemographic variable which produces differences in the intensity and gravity of violence. The explanation of juvenile delinquency on the basis of children’s age (or, more specifically the stages of life) is a constant which reaches back to and has. In effect, theories of the life course or, more specifically, the stages of life have been a constant in this field, and reach back to concepts such as adaptation and transformation; their arguments have been widely used as an argument in sociological theory. In accordance with the theory of informal social control graded by age proposed by Laub and Sampson (2004), deviation from the norms is more likely to occur when the ties of the individual to society are weak or broken. Furthermore, it must be remembered that connection with society varies over time, as informal social controls (schools and the family) change. The interpersonal relations established with these institutions between parents and children, teachers and pupils and employers and employees act as social investments or social capital throughout the course of life. In other words, adequate social capital will depend on strong social ties which provide psychological and social resources which individuals can manage when they undergo the various stages of life. As a result, the looser these ties are the greater is the danger of committing delinquent acts. Delinquency during adolescence usually stems firstly from poor family ties, due to defective direct controls, tracking and punishment, and thus the laxer these links the greater is the danger of delinquent behaviour. Secondly, it is the result of defective ties to the school, reflected in both interpersonal relationships with schoolmates and teachers and in academic marks. Normally, this deficiency is structural and depends on family factors, such as unemployment, poor intra-marital relations, arguments, residential mobility or socioeconomic status (Laub and Sampson, 2004). Broadly speaking, the exercise of violence usually loses intensity as the life cycle advances; it becomes more common to make use of reasoning to solve conflicts, as violent attitudes have been controlled by socialisation. Nevertheless, upon entering secondary school, an academic stage which coincides with a number of often traumatic situations caused by rapid and complex changes to which pupils must adjust (Noack, 2000). Typical features of such changes are radical physical transformation which involves greater physical development and also a substantial change in networks of friends, in scenarios and norms, etc., and a new and serious competition for status and
dominance is produced. Consequently, although violence episodes usually become more sporadic, they also become more serious (Maccoby, 1999). The patterns of living together at primary stage compared to secondary with regard to sociability have been characterised by Eslea et al. (2003). Employing a model very similar to that of gender differences, the results obtained were that at primary school level children have many more friends and enjoy collective games much more, while at secondary level pupils have fewer friends and spend more time alone.

In the theory established by Hagen et al., (1985, 1987), termed “control-power”, the explanatory principle is that women are over-socialised and closely supervised in comparison with men in society. The opportunities to commit violent acts are subordinated by a macrostructural factor (power) and a microstructural one (control). Power depends on social class and the family situation in the labour market. Control is affected by relations of understanding which take place between partners and which determine patriarchal, egalitarian or mixed family models; these affect the relations of supervision of the family’s children. The interaction between these two variables is influenced by another control variable which may affect deviant behaviour i.e. “the love of risk-taking” and the “perception of escaping punishment for the criminal act”. All this may explain why men, compared to women, transgress norms more often- they feel free to deviate, due to the presence of power and the absence of control. The domination relations developed within the family mean that mothers rather than fathers constitute the instrument of control and that daughters rather than sons are the recipients or objects of family control. The instrumental role exercised by mothers with regard to their daughters is, in summary, a key factor of the explanation of female deviance compared to males. However, the egalitarian treatment common in symmetrical families, as the result of women’s (re-) entry into the labour market, could mean lesser control of daughters and an increase in deviant acts.

**Effects of Screen Exposure**

Programmes containing violent scenes may influence the aggressiveness of youths and above all, of smaller children and of those whose development has been seriously retarded by the absence of a normalised socialisation process. Television violence could have a greater impact on individuals who were already clearly aggressive. Their behaviour patterns were circumscribed at the same time by exposure to high levels of violence for long periods of time (Stein and Friedrich, 1975). A substantial change has occurred in the education of adolescents i.e. children in the past were traditionally educated via fairy tales, popular traditions and children’s books, and likewise via institutions such as the family, school and the Church. Today, media culture has replaced traditional institutions as important instruments for socialisation. Youths often receive role models and the materials to form their identity from media conglomerates. This has meant a dramatic eruption of commercial rather than traditional elements i.e. a new culture founded on
media such as pop music, television, the cinema, video and computer games, which create new devices, idols and aspirations which strongly influence the thought and conduct of contemporary youth (Kellner, 1995). The sharing of family activities such as watching television at home, playing sport, attending cultural events and participating in educational activities are excellent predictors of success at school. They involve ties, direct instructions and learning and exposure to new stimuli; there comes a time, however, when the increasingly complex education system limits the potential impact of parents (Crosnoe and Trinitapoli, 2008).

Although it is impossible to establish statistically valid causal connections between violence in the mass media and the violent behaviour of children, from a more qualitative perspective, an aggressive juvenile culture increasingly favours violence as the most effective method to resolve children’s everyday problems. This trend tends to worsen, since competitive pressure encourages children’s television sponsors and the producers of children’s films to make more violent films in the search for greater profits. The study of the cognitive framework shows that prolonged exposure to violent films leads to hostile behaviour in unprovoked participants (Zillmann and Weaver, 1999). The same may be said of videogames, which have produced an increase in violence since they were first placed on the market until the mid-1990s. In such games the participant must enter a virtual cosmos, constantly fight for survival and learn how to mutilate and kill all rivals. Consequently a mental predisposition towards violence develops, becoming a natural amphetamine and a legitimate right to kill in order to reach the top and thereby combat the deadly boredom of post-modern childhood. The relation between watching television during childhood and adolescence and aggressive and violent behaviour during “maturity” has been established in cross-section studies (Johnson et al., 2002, Huesmann et al., 2003) and in meta-analysis type experimental studies (Comstock and Scharrer, 2003, Paik and Comstock, 1994). Such research reveals a strong and significant association between exposure to television and aggressive and antisocial behaviour in children and adolescents.

The results of a study undertaken in eight countries to investigate the relationship between watching television and different forms of bullying discovered that although all varieties of bullying were associated with watching TV, in divariate analysis only verbal forms (“unpleasant nicknames” and “spreading rumours”) remained significant in the multiple regression model. This relation was observed consistently in the eight participating countries. However, the association between watching TV and physical forms of bullying, such as kicking and shoving, varied among countries. In the majority of cultures which devote weekends to watching television, frequent viewers are more likely to hit or push other pupils in addition to bullying them verbally. These results demonstrated the importance of limiting the unsupervised time that youths spend staring at the television, and the need to motivate adolescents to participate in activities together with the family or in organised activities out of school (Kuntsche et al., 2006). Another type of exposure to violence which may influence violent behaviour is when it is commonly experienced in everyday life. Direct exposure to violence is indicative
largely of a specific lifestyle, and thus when exposure to violence is more common within that lifestyle there are more possibilities of the youth in question becoming involved in violent activities.

Witnessing daily acts of violence may lead to the belief that violence is appropriate behaviour or, at least, an acceptable solution to conflicts. This means that youths are at much more risk of behaving violently if they have experienced some type of violence in their lives. Nofzinger and Kurtz, (2005) state that witnessing violence may lead to considering that violence is merely another type of behaviour, or at least is an acceptable solution to conflict. This may reach the point that when youths whose friends (peers) use violence, the youth’s vision of violence as an acceptable way of creating opportunities may strengthen. Moreover, victims of bullying are also at great risk of becoming violent, whether by responding in some way to such victimisation or by attempting to withdraw into the surroundings of their homes.

Data

Survey was based on a sample of 603 pupils in Obligatory Secondary Education. The final unit of the sample was a class chosen at random from among the schools selected. The questionnaire used was basically the Olweus (1993) model. The survey was performed in May, to be able to take into account the events of the school year. Both the research objectives and the adequate completion of the questionnaire were explained in detail by the research team. No school representative was allowed to be present in the classroom while the questionnaires were being completed, to ensure anonymity no personal identification whatsoever was required.

**Discriminant Technique**

Discriminant analysis is a statistical technique which allows the researcher to study the differences between two or more groups of objects with respect to several variables simultaneously. The data cases must be members of two or more mutually exclusive groups. Data cases are the basic units of analysis or the elemental things being studied. The groups must be defined so that each case belongs to one, and only one, group. But in some research setting, it possible to find some cases which are not identified as belonging to any of the groups under analysis. The characteristics used to distinguish among the groups are called “discriminating variables”. These variables must be measured at the interval or ratio level of measurement, so that means and variances can be calculated (Klecka, 1990). Linear discriminant analysis and the related Fisher’s linear discriminant are methods used in statistics to find the linear combination of features which best separate two or more classes of objects or events. The resulting combination may be used as a linear classifier, or, more commonly, for dimensionality reduction before later classification. Linear discriminant analysis is closely related to ANOVA (analysis of

variance) and regression analysis, which also attempt to express one dependent variable as a linear combination of other features or measurements. In the other two methods, however, the dependent variable is a numerical quantity, while for linear discriminant analysis it is a categorical variable. A statistical technique designed to predict the groups or categories into which individual cases will fall on the basis of a number of independent variables. Discriminant analysis attempts to identify which variables or combinations of variables accurately discriminate between groups or categories by means of a scatter diagram or classification table.

The nominal variables were transformed into dummy variables in the case of gender (1 for males and 0 for females), of school type (1 for state schools and 0 for private) and of exposure to violence i.e. “Do you remember witnessing a violent act on TV, in the press or at school?” (1 for yes and 0 for no). Social class was approximated by using various neighbourhood characteristics (households below the poverty line, unemployed persons and immigrants), as proposed by Sampson (1997, 1999). In addition, house prices were taken into account, and all the above were used to divide interviewees to form three social classes or economic status groups: low, middle and upper. Family and school climate were indicated using a classic four-point scale (1 = very good, 4 = very bad). The different measurements of bullying and TV watching frequency were also obtained using a 1-4 scale.

**RESULTS**

To understand which variables most affect the composition of those who indulge in individual and collective bullying, we used the multivariable discriminant analysis technique. The first variable used was derived from the answer to the question, “And you, do you bother or mistreat any of your schoolfellows?”, and dichotomised into two groups: those who bully (2 or 3 times almost every day) and those who do not (“never, occasionally”). Utilising the two-step procedure, of all the variables introduced only three (social class, relationship with friends and gender) did not fulfill/resisted the requirements for admission. The formula obtained (self-esteem = 0.23 $\chi^2 = 125.68, g. l. = 3, \rho < 0.000$) displayed discrimination coefficients of -0.679 for the classes, 0.704 for the answer to the question “How do you get on with your classmates?” (relations with schoolfellows) and 0.239 for gender. The second variable employed was taken from the question “Have you joined in any group to bully someone?”, and was also dichotomised into two groups: those who practice group bullying (once or twice and almost daily) and those who do not (“I don’t bother anybody” and “sometimes”). The formula obtained (self-esteem = 0.096, $\chi^2 = 54.33, g. l. = 3, \rho < 0.000$) displayed discrimination coefficients of 0.913 for classes, 0.287 for relations with schoolmates and 0.480 for the educational centre.
### Table 1.
*Discriminant statistic on individual bullying*<sup>a</sup>

<table>
<thead>
<tr>
<th>Function</th>
<th>Eigenvalue</th>
<th>% of Variance</th>
<th>% Cumulative</th>
<th>Canonical Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.235&lt;sup&gt;a&lt;/sup&gt;</td>
<td>100.0</td>
<td>100.0</td>
<td>.436</td>
</tr>
</tbody>
</table>

<sup>a</sup> First canonical discriminant functions were used in the analysis.

<table>
<thead>
<tr>
<th>Test of function</th>
<th>Wilks' Lambda</th>
<th>Chi-square</th>
<th>gl</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.810</td>
<td>125.682</td>
<td>3</td>
<td>.000</td>
</tr>
</tbody>
</table>

#### Standardized Canonical Discriminant Function Coefficients

<table>
<thead>
<tr>
<th>Function</th>
<th>Neighbourhood/class</th>
<th>How do you get with your classmates?</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-.679</td>
<td>.704</td>
<td>.239</td>
</tr>
</tbody>
</table>

### Table 2.
*Discriminant Statistic on collective bullying*

<table>
<thead>
<tr>
<th>Function</th>
<th>Eigenvalue</th>
<th>% of Variance</th>
<th>% Cumulative</th>
<th>Canonical Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.096&lt;sup&gt;a&lt;/sup&gt;</td>
<td>100.0</td>
<td>100.0</td>
<td>.295</td>
</tr>
</tbody>
</table>

<sup>a</sup> First canonical discriminant functions were used in the analysis.

<table>
<thead>
<tr>
<th>Test of functions</th>
<th>Wilks' Lambda</th>
<th>Chi-cuadrado</th>
<th>gl</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.913</td>
<td>54.337</td>
<td>3</td>
<td>.000</td>
</tr>
</tbody>
</table>

#### Standardized Canonical Discriminant Function Coefficients

<table>
<thead>
<tr>
<th>Function</th>
<th>Neighbourhood/class</th>
<th>How do you get with your classmates?</th>
<th>School</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.910</td>
<td>.287</td>
<td>.480</td>
</tr>
</tbody>
</table>

---

The results for individual bullying show a certainly in the classification of the first group, those who do not participate in violent acts of 94% and a certainly in the classification for the second group of 56%. The results for collective bullying show a certainly in the classification of the first group, those who do not participate in violent acts of 69% and a certainly in the classification of in the classification for the second group of 78%.

Table 3.
Classification results for individual bullying

<table>
<thead>
<tr>
<th>Count</th>
<th>Predicted Group Membership</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bullying</td>
<td>Non-bullying</td>
</tr>
<tr>
<td>Bullying</td>
<td>542</td>
<td>36</td>
</tr>
<tr>
<td>Non-bullying</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bullying</td>
<td>93.8</td>
<td>6.2</td>
</tr>
<tr>
<td>Non-bullying</td>
<td>56.0</td>
<td>44.0</td>
</tr>
</tbody>
</table>

* 91.7% of original grouped cases correctly classified.

Table 4.
Classification results for collective bullying

<table>
<thead>
<tr>
<th>Count</th>
<th>Predicted Group Membership</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bullying</td>
<td>Non-bullying</td>
</tr>
<tr>
<td>Bullying</td>
<td>372</td>
<td>168</td>
</tr>
<tr>
<td>Non-bullying</td>
<td>14</td>
<td>49</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bullying</td>
<td>68.9</td>
<td>31.1</td>
</tr>
<tr>
<td>Non-bullying</td>
<td>22.2</td>
<td>77.8</td>
</tr>
</tbody>
</table>

* 69.8% of original grouped cases correctly classified.

Conclusions

Although the differentiation between individual and collective bullying is not apparent, there are important distances between them due to the independent variables evolved. According to the results of our study, individual bullying can be identified by classmate (.704), by neighbourhood (-.679) and by gender (.239), while collective bullying is determined by neighbourhood (.910), by the school atmosphere (.480) and by classmate.
Agree to this data two delinquency theories may be supporting for bullying: the first one, the theory of the effects of social classes/ neighbourhood of Merton, Wilson and Sampson, which has been the object of enormous interest in recent years and the second one, the differential association of Shurterland, transferred to the school situation. This theory propos that through interaction with others, individuals learn the values, attitudes, techniques, and motives for violent behavior, and focuses on how individuals learn how to become violent, but does not concern itself with why they become violent. They learn how to commit violent acts; they learn motives, drives, rationalizations, and attitudes. It grows socially easier for the individuals to commit a violent act. Their inspiration is the processes of cultural transmission and construction. Sutherland had developed the idea of the “self” as a social construct, like when a person’s self-image is continuously being reconstructed especially when interacting with other people.

The most important conclusion is the important given to two independent variables which are basic: neighbourhood and classmate. The fact that individual bullying is discriminated by the classmate variable demonstrate the popularity that those who bullying enjoy among their classmates, although it may also be due to the fear that the violent persons inspire. Whether as an active participant/instigator or victim, bullying could even be a good way of making new friends (Holt and Espelage, 2007). Only a small percentage of youths admit they are afraid of going to class, but principally because of the teachers, the tasks set and, to a lower degree, their classmates. However, the general atmosphere must have a markedly Latin character, because the PISA statistics for Spain show a relatively low level and the academic failure index is the highest in Europe. Furthermore, data from the international mathematics survey detected in Spain a high number of interruptions in maths classes compared to other countries.

Families' socialization does not affect bullying. Spain has one of the world’s highest rates with regard to the number of years children remain in the family home. This is the product of a certain “laissez-faire” or understanding between parents and children, and has been termed extended cohabitation. Moreover, social class does not affect family atmosphere. Very low-income households, if this income is regular, can contribute to an average or high degree of satisfaction and may even (by not pressuring their children to be academically successful) cause youths’ frustration with their school marks to fall, thereby contributing to their feeling comfortable in the family.

Biology clearly states that gender differences exist with regard to violence. It is the product of male and female hormones; sociological studies view sexist socialisation as an exclusively cultural variable which completes prior variables. Boys' bullying is different to that of girls, in both quantity and typology, although the two may be equally pernicious. Physical isomorphism means that the two categories of bullying explain their inter-relations and why the mixed variety is uncommon: as females always flee from collective harassment. It also explains the difference in the practice of bullying by boys and girls. As always, it is possible that the results are subordinated to the procedure used to measure them; thus, it may be useful to classify social class, family atmosphere, school atmosphere, TV viewing and exposure to violent acts by other methods. Future research
could complement the internationally recognised Olweus questionnaire by directly questioning adolescents about their parents’ social class. In addition, parents’ educational level could be included, to construct an index of socioeconomic status which would more clearly reflect youths’ social background. The same occurs with family atmosphere, which may be measured by a series of questions which capture not only household atmosphere but also the parents’ style of socialising and, likewise but beyond, exposure to the mass media, including the influence of computer games and handheld electronic devices. However, the case is not the same in the remaining variables, which admit minor variations.

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