

THE RELATIONSHIP BETWEEN INMATES' AGGRESSION AND THEIR SOCIOECONOMIC AND FAMILY CHARACTERISTICS

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In a sample of inmates in correctional facilities, the relationship between aggression components and different socioeconomic and family variables were examined. The independent variables were divided into two domains: the characteristics of the participant family of origin and the characteristics of the participant. In each domain there were three variables. The family of origin variables were socioeconomic background, social pathology, and physical violence; the participant variables included schooling, social pathology, and family. There were also three dependent variables: physical aggression, anger, and hostility. The results show that the family of origin variables and the participant variables had approximately the same predictive power. After compensating for the family of origin variables, the participant variables, especially schooling (i.e., school failure), still c

INTRODUCTION

Numerous scientific and professional papers have been published on aggression. The causes of aggression and the development of aggressive behavior in the life cycle have received the most attention from investigations. So far, the great majority of studies on aggression have referred to children and adolescents, while very few studies have dealt with the aggression of adults. Below we have provided a brief review of results attained in this research domain.

In many studies, investigators have reached the conclusion that there is a consistent relationship between low socioeconomic family status and the aggressive behavior of children (Dodge et al., 1990; Haapasalo and Tremblay, 1994; Dodge et al., 1994; Deater-Deckard et al., 1998). Farrington (1978, 1989, 1991) found a relationship between low socioeconomic family status and aggressive behavior of children and also aggressive behavior and violent offences in adolescence and adulthood.

Low family socioeconomic status imposes many restrictions and deprivations that causes

frustration in family members and stimulate aggressive behavior. It is presumed that in a disadvantaged social environment there are two general processes encouraging the aggressive behavior of children: first, frustration or negative affect (Berkowitz, 1993), and second, learning by modeling.

Dodge et al. (1994) found that socializing or care-giving practices are mediator variables in the relationship between family socioeconomic status and externalizing behavior disorders in children. According to Cohen and Brook (1998), socioeconomic status (SES) slightly influences the punishment of children, that is, mothers at or below median SES tend to punish their children more frequently than mothers with higher SES. The hierarchical regression analysis showed that family socioeconomic status variables and socializing variables had about equal predictive value.

Many studies pointed out the relationship between diverse forms of family social patho-

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logy and aggressive behavior in children, adolescents, and adults: Parental conflicts (McCord et al., 1961; Farrington, 1978, 1989, 1991; Loeber and Dishion, 1984; O'Keefe, 1994; Deater-Deckard et al., 1998), family aggression (Mac Ewan, 1994), deviant father (McCord et al., 1961; McCord et al., 1963), family criminality (Keenan and Shaw, 1994), and diverse forms of family social pathology (Mejovšek et al., 1997).

Physical punishment of children was stressed by many authors as a potential cause of the following types of aggressive behavior both in childhood and later in life: aggression in childhood (McCord et al., 1961; Dodge et al., 1990; Dodge et al., 1994; Deater-Deckard et al., 1998) aggression in childhood adolescence and adulthood (McCord et al., 1963, Straus, 1991); and violent offences in adulthood (Widom, 1989). The key question is whether physical punishment by parents in childhood and adolescence (in particular, punishment that is harsh and erratic) has long-term effects on later aggression and adult crime. Laub and Sampson (1998) found that family punitive discipline in childhood and adolescence correlates strongly with arrests at ages 17 to 45. However, when examined within delinquent and control groups separately, these relationships are not so strong, implying that the association between family punitive discipline and adult crime is mediated by adolescent delinquency. This is partly consistent with the explanations of authors who have argued that factors that are predictive of persistence in crime are not the strongest predictors of participation (Farrington and Hawkins, 1991).

Therefore, there is a great body of research pointing out that aggressive behavior appears in childhood and then continues into adolescence and adulthood (McCord, 1998). From all these studies emerges a strong belief that the roots of aggressive behavior lay in the family of origin, which was operationalized as an intergeneration transmission of violence hypothesis. Stattin and al. (1998) intended to test through a longitudinal investigation whether patterns of punishment and rela-

tionships between parents and children have had intergenerational continuity. They established that there was a correlation between parents' histories of being punished and whether they punish their own children, although this association was not high. Regression analysis showed that the parents' own histories of being punished and their disciplinary attitudes accounted for about 25% of the variance. However, when the children's conduct problems entered the analysis, the ability to predict increased.

Again, it should be pointed out that the majority of research in this domain was carried out on samples of children and adolescents. These samples often consisted of children and adolescents exercising mainly trivial delinquency and child misbehavior, which has been criticized. This study seeks to fill the gap by carrying out research on a sample of adults representing serious offenders. Therefore, the aim of this study was to examine the relationships between the socioeconomic and family variables and the current aggression of inmates in correctional facilities.

METHODS

Data were collected on 256 adult male inmates in correctional facilities (mean age 35.21, standard deviation 8.56). The participants were convicted for different crimes and were serving sentences in correctional facilities of different levels of security. In the sample 26.0% were recidivists.

The data referring to the family origin, as other data too, were collected by means of a self-report technique. Of course, this could influence the truth and exactness of the data. It is possible, for the example, that the socioeconomic and family variables were saturated with memory errors or misrepresentations and thus subject to a certain amount of self-presentation bias.

Aggression was measured by means of Buss and Perry's Aggression Questionnaire (1992). This instrument measures four aggression components: physical aggression, verbal aggression, anger, and hostility.

Socioeconomic and family variables were divided in six groups: three groups measured family of origin characteristics and the other three, participant characteristics. The groups were listed in chronological order as follows (the number of variables is in parentheses):

Family of origin:

1. Socioeconomic background (6)
2. Social pathology (7)
3. Physical violence (6)

Participant:

4. Schooling (5)
5. Social pathology (3)
6. Family (5)

The internal consistency of the aggression components were evaluated by Cronbach alpha coefficient. The following coefficients were obtained: physical aggression .81, verbal aggression .59, anger .75, hostility .74. Because it had a very low coefficient of internal consistency, verbal aggression was excluded from further analysis.

RESULTS

In comparison with the results of Buss and Perry (1992) for students, and Archer et al. (1995 a, b) for students and unemployed young men, the physical aggression and anger of the inmates in the current study is low, in some cases under the level of students' physical aggression and anger (Table 1.) However, the hostility of inmates is very high, especially when compared with that of the students. This is also evident when looking at the means and the number of items in Table 1. What are the possible causes of low physical aggression and anger and high hostility) High hostility is probably caused by dissatisfaction with the inmate's current status, with the sentence, being excluded from the society, by threats of other inmates, overcrowding, etc. Overcrowding is one of the main problems of today's prisons throughout the world and probably one of the causes of violence in prisons. It is more difficult, however, to find out reasons

for low physical aggression and anger. One possible reason may be the fear of disciplinary sanctions and therefore a higher level of self-control. As the aggression components were assessed by the method of self-report, it might be that inmates dissimulated their physical aggression and anger.

Table 1. Means and standard deviations of aggression components

	Mean	Stand. deviation	Number of items
Ph. Aggression	22.7	8.5	9
Anger	16.7	6.5	7
Hostility	24.0	7.4	8

The correlations between physical aggression, anger, and hostility are higher than the correlations obtained by Archer et al. (1995a) in the sample of undergraduate male students but lower than those obtained in the sample of young unemployed men in the same study (Table 2). In another sample of undergraduate male students (Archer et al., 1995b) correlations were similar, again lower than in the current study. The correlations are substantially higher than in a sample of undergraduate female students (Archer et al., 1995b) and than in a mixed sample of both undergraduate male and female students (Buss and Perry, 1992). The reason for greater correlations lay in the greater variance in all three aggression components in the current study.

Table 2. Correlations between aggression components

	Anger	Hostility
Ph. Aggression	.58	.43
Anger		.61

In most cases correlations between aggression components and socioeconomic and family variables are significant and positive; that means higher aggression and less favorable scores on the socioeconomic and family variables (Table 3). The highest correlations with aggression components are found among the variables describing participant's schooling.

Table 3. Correlations between aggression components and socioeconomic and family variables

FAMILY OF ORIGIN	Ph. A.	A	H
1. Socioeconomic background			
1. Education of father	.23***	.14*	.16*
2. Education of mother	.13*	.15*	.16*
3. Housing	.18**	.20***	.25***
4. Income	.13*	.09	.16*
5. Subject lived with	.11	.13*	.14*
6. Changes of residence	.00	.08	.07
2. Social pathology			
1. Drifting	.19**	.07	.18**
2. Alcoholism	.24***	.19**	.31***
3. Idleness	.21***	.06	.25***
4. Criminality	.09	.07	.12
5. Family relationships	.16*	.20***	.22***
6. Relationship with father	.12	.15*	.16*
7. Relationship with mother	.06	.15*	.10
3. Physical violence			
1. Physical punishment by father	.17**	.13*	.20**
2. Physical punishment by mother	.04	.21***	.15*
3. Physical punishment by others	.01	.11	.21***
4. Running away from home	.25***	.31***	.28***
5. Physically aggressive toward parents	.42***	.26***	.22***
6. Physical punishment without reason	.26***	.15*	.24***
PARTICIPANT			
4. Schooling			
1. Level of education	.24***	.18**	.30***
2. Expelled from school	.33***	.23***	.25***
3. Repeated a year in school	.35***	.26***	.33***
4. Truancy	.48***	.30***	.29***
5. Physically aggressive toward teachers	.25***	.23***	.14*
5. Social pathology			
1. Drifting	.35***	.25***	.22***
2. Begging	.16*	.05	.11
3. Gambling	.39***	.18**	.18**
6. Family			
1. Children	.09	-.06	-.04
2. Lives with	.09	-.05	.02
3. Relationships	.14*	.21***	.14*
4. Income	.20***	.15*	.19**
5. Housing	.15*	.15*	.27***

* $p < .05$; ** $< .01$; *** $< .001$

There are great differences between groups of predictors in the amount of predictive variance (Table 4). Comparing groups of prediction belonging to the family of origin, the best in the third group, physical violence. Among participant groups, the best is the first group, schooling (school failure). When the

family of origin groups are compared with the participant groups, the predictive power seems approximately equal.

The most accurate of all groups of predictors is the schooling group. The participant social pathology variables, only three in number, have as a group very big amount

of common variance with physical aggression.

There are differences between the aggression components. Physical aggression can be predicted with the most accuracy. Physical aggression is predicted most accurately by schooling, the participants' social pathology and physical violence; anger, by physical violence and schooling; hostility, by schooling and family of origin, social pathology, and physical violence.

After controlling for all family of origin variables, there is still a significant amount of common variance between all aggression components and schooling variables as well as between physical aggression and the variables of the participants' social pathology (Table 5).

As a group, the predictors of physical violence in the family of origin share a significant proportion of variance with all three aggression components after controlling for socioeconomic background and social pathology of the family of origin.

Two groups of predictors, social pathology and family of participants, do not contribute

a significant amount to the predictive variance, after controlling for the effects of the four preceding groups of predictors, except the group of social pathology variables, which is a significant predictor of physical aggression. All of the independent variables explained from 31% of the variance in hostility to 42% of the variance in physical aggression. This indicates that there are other important predictors of aggression in the domains of biological and psychological factors. Taking into account the possibility of including other socioeconomic and family variables that were omitted from this study, it is estimated that the aggression variance explained by those variables could reach about 50%.

The most accurate predictors (taking into account β and β^2) for physical aggression are the following: father's education, physical aggression toward parents, truancy, and gambling; for anger: physical punishment by mother, running away from home (because of fear of physical punishment), and relationships in the subject's own family; for hostility: physical punishment by mother and participant's level of education.

Table 4. Regression analyses for each group of predictors - R square

FAMILY OF ORIGIN	R ²		
	Ph. A.	A	H
1. Socioeconomic background	.08**	.08**	.11***
2. Social pathology	.09**	.08**	.14***
3. Physical violence	.19***	.16***	.14***
PARTICIPANT			
4. Schooling	.28***	.14***	.17***
5. Social pathology	.22***	.09***	.08***
6. Family	.06**	.07**	.09***

* $p < .05$; ** $< .01$; *** $< .001$

Table 5. Hijerarhijska regresijska analiza

FAMILY OF ORIGIN	Ph. A.		A		H	
	R ²	ΔR^2	R ²	ΔR^2	R ²	ΔR^2
1. Socioeconomic background	.08**		.08**		.11***	
2. Social pathology	.12*	.05	.14**	.06*	.18***	.07***
3. Physical violence	.25***	.13***	.23**	.09***	.23**	.05*
PARTICIPANT						
4. Schooling	.39***	.13***	.30***	.07**	.30***	.06**
5. Social pathology	.42***	.03*	.31**	.01	.30**	.01
6. Family	.42***	.01	.33**	.02	.31**	.01

* $p < .05$; ** $< .01$; *** $< .001$

Table 6. Physical aggression β - coefficients

VARIJABLE	β	β_2	β_3	β_4	β_5	β_6
Education of father	.21*	.22*	.21*	.18*	.17*	.19*
Education of mother	-.03	-.05	-.05	-.01	-.00	-.01
Housing	.10	.05	.10	.04	.02	.05
Income	-.03	-.08	-.06	-.02	-.03	-.03
Subject lived with	.07	.07	.11	.00	-.02	-.02
Changes of residence	.00	-.02	.02	.04	.06	.06
Drifting	.08	.06	.06	.07	.06	.04
Alcoholism	.13	.07	.04	.05	.03	.02
Idleness	.05	.08	.03	-.05	-.03	-.02
Criminality	.02	.03	-.02	-.02	.01	.00
Family relationships	.07	.12	.01	-.01	.01	-.01
Relationship, father	.02	-.08	-.18	-.14	-.15	-.16
Relationship, mother	.06	.04	-.02	.02	.02	.03
Physical pun., father	.11		.10	.05	.08	.08
Physical pun., mother	-.03		.00	-.01	.00	-.00
Physical pun., others	-.03		-.05	-.05	-.05	-.04
Running away from home	.04		.08	.06	.04	.04
Phys. aggr. toward parents	.38***		.37***	.27***	.22**	.22**
Phys. pun. without reason	.00		-.054	-.06	-.05	-.03
Level of education	.06			-.03	-.02	-.01
Expelled from school	.10			.13	.06	.05
Repeated a year in school	.10			.10	.12	.12
Truancy	.36***			.27***	.21**	.19**
Phys. aggr. toward teachers	.09			.07	.07	.06
Drifting	.25***				.10	.10
Begging	.01				-.05	-.03
Gambling	.31***				.19**	.19**
Children	.10					.02
Lives with	.02					-.03
Relationships	.07					.03
Income	.15					.09
Housing	.06					-.102

* $p < .05$; ** $< .01$; *** $< .001$

β are standardized regression coefficients in a separate regression analysis; $\beta_2 - \beta_6$ are standardized regression coefficients in a hierarchical stepwise regression analysis.

Table 7. Anger β coefficients

VARIJABLE	β	β_2	β_3	β_4	β_5	β_6
Education of father	.04	.03	.11	.08	.08	.10
Education of mother	.09	.12	.11	.13	.12	.08
Housing	.23**	.21*	.19*	.15	.15	.08
Income	-.12	-.23*	-.21*	-.18	-.18*	-.18*
Subject lived with	.09	-.04	-.00	-.09	-.10	-.08
Changes of residence	.065	.03	.03	.04	.05	.06
Drifting	.00	-.01	-.03	-.03	-.05	-.05
Alcoholism	.13	.05	.03	.02	.02	.01
Idleness	-.08	-.06	-.04	-.08	-.10	-.12
Criminality	.03	.01	-.03	-.02	-.00	-.03
Family relationships	.14	.19*	.13	.14	.14	.10
Relationship, father	.02	.03	.02	.06	.05	.05
Relationship, mother	.13	.13	-.02	.01	.01	-.02
Physical pun., father	-.01		-.08	-.11	-.10	-.09
Physical pun., mother	.16*		.18*	.17*	.17*	.19*
Physical pun., others	.05		-.01	-.02	-.02	-.01
Running away from home	.26**		.26**	.24**	.24**	.20*
Phys. aggr. toward parents	.20**		.21**	.13	.12	.13
Phys. pun. without reason	-.14		-.22*	-.22*	-.23*	-.19*
Level of education	.08			.06	.05	.06
Expelled from school	.05			.09	.06	.04
Repeated a year in school	.09			.04	.04	.05
Truancy	.19*			.144	.11	.11
Phys. aggr. toward teachers	.15*			.13*	.13*	.12
Drifting	.24***				.08	.08
Begging	-.03				.03	.04
Gambling	.11				.03	.04
Children	.00					.01
Lives with	-.13					-.16*
Relationships	.24**					.19**
Income	.06					.02
Housing	.04					.06

* $p < .05$; ** $< .01$; *** $< .001$

Table 8. Hostility β coefficients

VARIJABLE	β	β_2	β_3	β_4	β_5	β_6
Education of father	.05	.06	.09	.05	.05	.05
Education of mother	.04	.03	-.01	-.04	-.04	-.07
Housing	.24**	.19*	.19*	.15	.14	.07
Income	-.03	-.10	-.10	-.10	-.11	-.13
Subject lived with	.09	.04	.03	-.03	-.04	-.03
Changes of residence	.10	.08	.07	.08	.09	.10
Drifting	.03	.01	.01	.01	-.01	.01
Alcoholism	.18*	.13	.12	.07	.07	.07
Idleness	.07	.08	.09	.08	.08	.06
Criminality	.05	.05	.01	.01	.02	.00
Family relationships	.12	.11	.04	.08	.09	.11
Relationship, father	.02	-.05	-.13	-.12	-.11	-.11
Relationship, mother	.10	.10	.01	.02	.03	.00
Physical pun., father	.08		.07	-.02	-.02	-.02
Physical pun., mother	.13*		.16*	.16*	.17*	.18*
Physical pun., others	.16**		.12	.13*	.13*	.12*
Running away from home	.07		.06	.06	.05	.04
Phys. aggr. toward parents	.12		.10	.04	.02	.03
Phys. pun. without reason	.06		-.02	-.01	-.01	-.01
Level of education	.20**			.20**	.21**	.20**
Expelled from school	.06			-.00	-.04	-.04
Repeated a year in school	.16*			.13	.14	.14
Truancy	.11			.06	.04	.05
Phys. aggr. toward teachers	.08			.08	.08	.08
Drifting	.18**				.00	-.00
Begging	.09				.03	.02
Gambling	.09				.09	.09
Children	.01					-.01
Lives with	-.03					-.04
Relationships	.09					.01
Income	.06					.03
Housing	.22**					.13

* $p < .05$; ** $< .01$; *** $< .001$

DISCUSSION

The data from the current study show that when the negative effects of the unfavorable environment of the family of origin are removed, schooling participants' social pathology still account for a significant proportion of the predictive variance. These results correspond with those of Mejovšek et al. (1997).

What are the possible explanations? Factors that share a common variance with school failure and aggression (when the variables of family of origin are controlled) are frustration and low self-esteem caused by school failure, and then socializing with asocial persons. Socializing with asocial persons when absent from school is a quite plausible explanation. Aggressive children tend to make friends with children who exhibit similar (aggressive) behavior patterns. In these groups, aggressive behavior is highly valued and reinforced; this, in turn, stimulates positive attitudes toward aggression and participation in antisocial and delinquent activities. In other words, the relationship networks in which aggressive peers (or other aggressive persons) participate promote aggression, norms, and values related to aggression (Boivin and Vitario, 1998).

On the other hand, problems in schooling and a low level of education attained may by themselves influence aggression, even if we exclude socializing with asocial persons. Schooling variables are a good proxy measure of intelligence, which has shown to predict delinquency in prospective longitudinal studies, and this is especially true for verbal abilities (eg. Moffitt et al., 1994). Education promotes not only cognitive development but also standards of socially proper conduct. In schools, children are introduced to the norms, values, and sanctions of a society. Also, schools exercise social control and help children to adopt other values and skills relevant to their future life. e.g. punctuality, discipline, work habits, respect for authority, the adjustment of one's own behavior to the rules of institutions, coping in complex bureaucratic organizations, and so on. Schools tend to impose the

same control we can find in other institutions of society. Moreover, through the function of maintaining social control, schools direct and limit individual aspirations in such a way that they put them in the context of social values. Numerous sociological studies have revealed that increased years of formal schooling are associated with openness to new ideas and more liberal social and political views. More highly educated persons tend to have greater access to factual information, a diversity of opinions, and a subtle analysis of reality. In general, a higher level of education gives an individual the opportunity for successful social promotion in adulthood. School failure (repeating a year, having a low level education) can cause less self esteem and an aversion to teachers in school institutions in general. The aforementioned aspects of education are associated with aggression in such a way that they could be the source of frustrations in the time of adolescence and/or adulthood, and frustrations result often in aggression.

Besides, when talking about the relationship between education and aggression, it is important to mention a quality that develops over time in school - the ability to get along with others. Schools support competition and the resolving of conflicts in a peaceful way (without using physical force). Dropping out early from school deprives individuals of the opportunity to get more adequately acquainted with models of behavior which are not based on coercion or violence. In schools, persons participate in patterns of non-violent interactions with different individuals, which is very important for how they will function later in family and public life.

A possible causes of school failure and subsequent aggressive behavior is a cognitive deficit as well. There are also impairments such as attention deficit disorder, hyperactivity, and impulsiveness, that can contribute considerably to school failure and aggression. Aggression itself might be the cause of the school failure. Aggression develops early in life and is a stable personality trait (e.g. Huesmann et al., 1984; Pulkinnen and Pitkanen, 1993;

Viemero, 1996). Aggression in its extreme form was separated from the schooling variables, because in the third block (physical violence) one of the variables - physical aggressiveness toward parents - is a measure of the participant aggression at the time of schooling. However, the problem of aggression as the cause of school failure still remains.

The social pathology of the participant is predictive for physical aggression, even when the four preceding groups of predictors were controlled. In a separate regression analysis, only three variables of the participant social pathology explained about 22% of the variance of physical aggression. It is to be expected that social pathology shares a considerable part of common variance with physical aggression, because physical aggression is in many cases a constituent part of sociopathological behavior. That might be the reason why there still remained a significant proportion of predictive variance.

The major finding of this study is that the variables in all three groups belonging to the family of origin do not explain all predictive variance in predicting aggression. The aggression of inmates depend on other factors as well, particularly those connected with school failure and drop-out. Even when in an unfavorable position on the hierarchical regression analysis the variables of participant schooling still contain a substantial proportion of common variance with current aggression.

It is interesting to note that, among the most accurate predictors, physical punishment by mother appears twice (predicting anger and hostility). This finding is in line with the results of McCord et al. (1961), Olweus (1980), Bjorkqvist and Osterman (mother negative emotional relation and shouting, 1992) and Dodge et al. (single parenthood, 1994). Some investigations have found that mothers physically punish the child generally more often than fathers do (Bronson et al., 1959; Lefkowitz et al. 1978; Stattin et al. 1998), because mothers are together with the children for a much longer period in the day than fathers. Moreover, the mother's history of being punished is more significant to

physical punishment of the children than is the father's. Paternal punishment could be regarded as "an extension" or "support" of the mother's punishment. Often, the mother calls to or refers to the father in order to maintain discipline. The mother's history of being punished has even a stronger impact on the father's punishment of the children than his own history. Laub and Sampson (1998) attempted to establish the relationship between family discipline in childhood and/or adolescence and later crime. When analyzed within delinquent and non-delinquent groups separately, it turns out that only harsh and erratic punishment by the mother is correlated to criminality in some ages of adulthood (even though not in all periods from 17-45). Here, we hypothesize that physical punishment by the mother could have a different effect on children's aggression than physical punishment by the father. As respondents in our sample spent their childhood and adolescence on average in the late sixties and the early seventies, we assumed that many patterns of traditional gender roles persisted, and subsequently physical punishment was predominantly the father's job. In that sense, children also could accept physical punishment by the father as a constitutive element of upbringing practice, while more frequent physical punishment by the mother was perceived as a departure from common patterns of punishment within the community, which could arise anger and hostility on the part of the child. Kandel and Wu (1998) concluded that negative maternal parenting has had a somewhat greater impact in reinforcing negative behavior in the child than positive maternal parenting has in decreasing such behaviors. Because the relationship between the mother and the child is a reciprocal one, mothers react to negative behavior of the child through lowering positive reinforcement. Thus, over time aggressive children experience simultaneously harsher discipline administered by the mother and reduced closeness and decreased maternal supervision. In other words, this category of children over time has faced an increase in risk

factors and a decrease in protective factors in terms of quality parenting. In addition, Maughan et al. (1998) found that maternal hostility (as well as the existence of psychiatric disorders in the mother) was the most important factor in predicting the social malfunctioning of boys in adulthood (which includes more frequent aggressive and deviant behavior).

In the end, the limitation of this study is that some predictors are retrospective. In other words, there is a possibility that they are not measured exactly because of self presentation bias or failed recall. This inadequacy would be eliminated by future studies through prospective longitudinal research.

The findings in this study are consistent with those of other studies. It is true that social factors are of strong importance for the development of aggressive behavior, but they are not the exclusive cause of aggression. Additionally, this study offers a new look at the aggression of serious offenders, and therefore complements the literature. This study also emphasizes the influence of schooling on aggression. Schooling is not only related to social status, but also very strongly to the development of aggression. Therefore, we stress the school's role in the prevention of aggressive behavior.

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