Family Violence and Child Abuse in Latin America and the Caribbean

The Cases of Colombia and Mexico

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Foreword

Domestic or family violence is, unfortunately, a common form of violence affecting the lives of victims and the development prospects of countries. The recent development literature has attempted to measure the economic costs of different forms of violence, including that against women, and its prevalence. But family violence also affects children and the elderly, although less is known about the magnitude, forms and consequences of violence against them. The suspicion, however, is that violence against children is especially prevalent and has alarming productivity and intergenerational impacts. Abuse can affect children's performance in school and, therefore, their productivity as adults. Abused children also learn aggressive behaviors that they tend to model later in life, perpetuating violence from one generation to the next.

Available data, while inadequate, suggests that the region of Latin America and the Caribbean exhibits some of the highest rates of family violence in the world. It has been estimated that more than 6 million children suffer abuse and more than 80,000 die each year as result of it. This study supports this hypothesis with empirical evidence from large sample surveys in urban Colombia (1993) and Mexico City (1999). The authors find that over 2 million children and youth, and 23 percent of families, experience abuse in urban Colombia, and that 1 million children and 13 percent of households do so in Mexico City. Data on the intergenerational transmission of this type of violence are also included.

The report analyzes the impact of child abuse on children's educational outcomes and adult labor wages, using a human capital framework. It finds robust evidence of the impacts of child violence on school attendance and educational attainment in Colombia and on adult wages in Mexico City. The study also conveys the difficulty of studying the subject. Data limitations are probably behind the lack of significant findings for impacts on wages in Colombia and on education in Mexico City. Despite these difficulties, this report underscores the importance for economic and social development of better documenting family violence against children in the region.

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Introduction

Violence is a public health problem with extensive long- and short-term consequences for individuals, families and nations. Intra-family violence is one of the most common forms of violence, and children are particularly at risk. The physical and emotional effects of child abuse prevent many children from attaining their highest possible level of education and from performing well in school. Later in life, these same children may be less successful in the labor market. Children who suffer abuse are also more likely to be perpetrators and victims of violence later in life, contributing to an intergenerational cycle of abuse. The combination of reduced educational attainment and less success in the labor market implies lower levels of human capital, and hence, reduced income-generating capacity for individuals, households and nations. Thus, child abuse contributes to perpetuating the poverty cycle.

Violence is also a severe social and economic problem, particularly in Latin America where it is more than twice the world average. An estimated 22 homicides per 100,000 people occur each year in the region, and every minute 54 families suffer a robbery. Evidence suggests that a large proportion of children suffer from intra-family violence, and that most live in poor families. Estimates indicate that almost 6 million Latin American and Caribbean children suffer some form of severe violence and an estimated 80,000 children die each year as a result of intra-family violence (Buvinić, Morrison and Shifter, 1999). Violence has become a key impediment to development. The resulting lost income and destruction of property account for between 5 and 15 percent of the region's GDP. Further, lost human capital in terms of healthy life years lost due to premature death or disability associated with violence represents 1.9 percent of GDP, which is equivalent to the primary education budget for the region (Londoño and Guerrero, 1999).

Many studies of child abuse have relied on small-scale surveys or evidence from cases that have entered the legal or health systems (Herrada et al., 1992; INEGI, 2000a). Existing studies of child abuse and family violence have typically concentrated on the analysis of the prevalence of this phenomenon (Hijar Medina, Tapia-Yañez and Rascón-Pacheco, 1994) and, in some cases, on the determinants and characteristics of families where intra-family violence exists (Hijar-Medina, et al., 1995; De la Garza and Díaz-Michel, 1997). The ACTIVA surveys conducted by the Pan American Health Organization (PAHO) in eight major Latin American and Caribbean cities and in Madrid offer comparable cross-country survey data on domestic violence against women and children. These surveys supply rich data and show, among other things, consistently high rates of violence against women and children (Orpinas, 1998; PAHO, 1999).

A number of studies show that violence against women has substantial costs in terms of children's health (Santana-Tavira, Sánchez-Ahedo and Herrera-Basto, 1998). In a particularly interesting study based on health impacts of domestic violence in Mexico City, Lozano (2000) found that one in six disability-adjusted-life-years (DALYs) lost among girls aged 5 to 14 is associated with violence. In addition, child abuse accounts for approximately half as many lost DALYs as marital violence. The literature also documents the impact of violence against women during pregnancy and the severe health impacts on the mother and child (Elu et al., 2001).

Studies have also been undertaken on the intergenerational transmission of violence as well as the correlation between violence against women and violence against children. Daughters of women who have suffered domestic violence are more likely to suffer domestic violence as adults, and sons are more likely to be perpetrators of violence (Alvarado, et al., 1998; Heise, 1994; Morrison and Orlando, 1999). The literature on street children, particularly from Latin America, documents child abuse as one of the

key factors that drives children to live on the street (Knaul, 1995).

Few studies have analyzed the short- and long-term costs of violence in Latin America. Approaching this problem from a psychological perspective, there is evidence of the poor interpersonal relations and the low scholastic achievement of mistreated children in Chile (Larraín, 1997; Larraín, Vega and Delgado, 1997). Morrison and Orlando (1999) use an econometric framework similar to the one used in this report to analyze the impact of violence against women. They use simultaneous and instrumental variable equations to show that women who suffer violence tend to earn lower wages. Their evidence suggests that the impact of domestic violence on wages is negative and significant in samples of women from Managua, Nicaragua, and Santiago, Chile. They also found some evidence of the impact of domestic violence against women on children's educational attainment. Children who live in violent families in Santiago are more likely to have disciplinary problems. The evidence on grade repetition and academic difficulties is less strong and there is no significant relationship in the data from Managua.

In 2000, Mexico's Federal Elections Institute (*Instituto Federal Electoral*) in collaboration with UNICEF and a number of governmental and nongovernmental organizations undertook a survey of 4 million children and youths aged 6 to 17 (IFE, 2000). The survey showed that 28 percent of children aged 6 to 9, 9 percent of children aged 10 to 13, and 10 percent of youths aged 14 to 17 report being treated violently at home. A much larger proportion of 14 to 17 year olds in Mexico declare that, in general, they were treated violently. Further, 33 percent of rural children and youths and 26 percent of urban children and youths report that when adults disagree with children, they resort to insults and physical violence.

Colombia provides a particularly interesting and important case for the study of child abuse because violence is particularly widespread and has been a severe social and economic problem for several decades. According to a study performed by the Ministry of Health, 24.6 percent of the overall disease burden was attributed to homicides and violence, compared to 3.3 percent in Latin America as a whole and 1.3 percent at the global level (Ministry of Health, 1994). Londoño and Guerrero (1999) estimate that aggression affecting people and property destroys 25 percent of Colombia's productive capacity each year. PAHO reported a rate of 65 homicides per 100,000 inhabitants in 2000, which is one of the highest in the world. In comparison, the homicide rate in Mexico in 1999 was 12.5 per 100,000 inhabitants; in Venezuela it was 33 per 100,000; and in Brazil it was 25 per 100,000. Data from the *Defensoría del Pueblo* (the Human Rights Commission) show the impact of violence on children: 14 children die each day in Colombia and almost 46 percent of these deaths are homicides (Asociación Afecto Contra el Maltrato Infantil, 1998; UNICEF, 2001).

Colombia's Ministry of Health (2002) reports that 47 percent of women who have a male partner say that their husband or companion has physically abused them, and 53 percent of children endure physical punishment. The Survey of Poverty and Quality of Life in Bogota (1991) shows that in 59 percent of households children are punished with scolding and in 15 percent they are denied privileges. However, in 14 percent of households children are hit with a belt, while in 1.1 and 0.6 percent of households children are hit with objects such as sticks and are punished by being kicked, respectively (Knaul and Castillo, 1994). In a 1993 survey undertaken in the poorest neighborhoods of Bogota, 5 percent of children reported that they were punished every day; almost 60 percent were hit with a belt, and almost 10 percent were whipped (Knaul and Castillo, 1994). The 1995 National Survey of Demographics and Health suggests that children are beaten in 38 percent of households and that they witness physical violence between family members in 26 percent of the households. An estimated 2 million children are abused each year and, of these, 870,000 are severely abused (UNICEF, 2001).

The evidence also shows a direct link between family violence and street children. The literature on Colombian street children suggests that child abuse in the home is one of the principal

factors that drive children into the street (Felsman, 1981; Granados, 1976). Abuse and family disintegration are also factors in pushing women and girls into prostitution (Cámara de Comercio de Bogotá, 1991). Studies from other countries have similarly found that abuse is an important factor in pushing children onto the street (Ramírez, et al., 1991; Domic, et al., 1992). In a 1993 survey, 60 percent of the street children interviewed in the Bogota area left their homes due to family problems. Abuse was listed as the principal reason for leaving their homes by 37 percent of the children, and 43 percent of those who listed abuse singled out their parents as their abusers (Knaul and Castillo, 1994; Knaul, 1995; Knaul, 1997).

This report uses a human capital framework to analyze the impact of child abuse on adult labor market outcomes and on the educational outcomes of children in Colombia and Mexico. Data are taken from the urban segment of the Survey of Poverty and Quality of Life–SPQL (*Encuesta de Pobreza y Calidad de Vida)* undertaken in Colombia in 1993 and from the Survey of Family Violence-SFV (*Encuesta sobre Violencia Intrafamiliar*) undertaken in Mexico City in 1999.

The results for Colombia suggest a significant and robust impact of abuse on school attendance and educational attainment among urban children and youths. Data show that children who are abused have lower attendance rates and are more likely to be a grade behind. However, data show that having suffered abuse as a child has no significant direct impact on wages as an adult.

The results for Mexico, on the other hand, show a significant negative effect of abuse on wages with some evidence of a gradient. However, the results suggest little impact of abuse on educational attainment. This is likely due to the nature of the data. For Colombia, there is more direct information on the type of punishment that families use with their children, while the Mexican data provides information only on the presence of violence in the family, be it directed at children or toward other family members.

This report includes a description of the data and the definitions of abuse that are used in each case as well as details of the theoretical and econometric framework used in the analysis. It then provides descriptive data on child abuse suffered by adults, on violence in the family and on the intergenerational transfer of violence. Finally, it presents the results of wage regressions of the impact of abuse suffered as a child on later labor market outcomes, and on the association between violence in the family and educational outcomes. The last section offers conclusions and policy recommendations.

Data, Definitions of Abuse
and Econometric Models

COLOMBIA

Data for Colombia come from the Survey of Poverty and Quality of Life–SPQL (*Encuesta de Pobreza y Calidad de Vida*) undertaken in Colombia in 1993 by the *Departamento Administrativo Nacional de Estadística* (DANE). Since this is a national survey, only data for the suburban area of Bogota are used.

The questions on abuse are answered for each family by the head of the household or their family representative. The respondent is questioned about how the head of the family was punished as a child in the home where he or she grew up, and how children are punished in the home where they currently live. The sample includes 22,339 families and an equal number of household heads, with 36,283 children and youths under 18 years of age.

The survey provides two blocks of information on violence: retrospective data on the type of punishment or abuse suffered by the head of the household when he or she was a child; and data on the abuse or types of punishments used with children in the home of the household head. The first block of questions is used to generate retrospective measures of child abuse and the second provides measures of current child abuse. The questions are: (1) How were you punished or disciplined by your parents (or the people that brought you up) when you were a child?; and (2) how are children below age 18 in this household punished or disciplined? The possible responses are: (a) scolded or reprimanded; (b) denied privileges; (c) hit, slapped or punched; (d) hit with a belt; (e) kicked; (f) hit with an object (cable, wire, stick, etc.); (g) other forms of punishment; and (h) not punished or disciplined.

Given the difficulty of defining and identifying child abuse, the wage analysis includes two summary variables to describe cases that are likely to have involved child abuse. These variables and the questions they come from are listed in Table 1. Three definitions of abuse are generated for both retrospective and current information: *unlikely to be abused* (reprimanded or scolded; denied privileges; slapped or punched; not punished), *likely abuse* (hit with a belt; kicked; hit with an object; other manner of hitting) and *more severe abuse* (kicked; hit with an object; other manner of hitting). The difference between likely abuse and severe abuse is that the latter excludes being hit with a belt as abuse. Under some definitions of abuse, being hit with a belt might not be considered abusive and children are punished in that way in a large proportion of families.

MEXICO

The data for Mexico comes from the Survey of Family Violence-SFV (*Encuesta sobre Violencia Intrafamiliar*) undertaken in Mexico City in the third quarter of 1999 by the *Instituto Nacional de Estadística, Geografía e Informática–INEGI* (INEGI, 2000b). The survey explores the prevalence of physical, emotional and sexual abuse in the home where adult respondents grew up as well as the prevalence of emotional, physical and sexual abuse in households in the metropolitan area of Mexico City. The survey includes a series of questions about the households' physical characteristics as well as educational and labor market information for each family member. A copy of the complete questionnaire is available in INEGI (2000).

The sample includes 5,174 households (20,600 individuals) located in Mexico City. The metropolitan area includes the 16 delegations forming the Federal District and the 34 surrounding areas (*municipios conurbados*). The questions on abuse are answered by one adult respondent per family over the age of 18. The respondents are questioned about the presence of violence in the home where they grew up as well as violence in the home where they currently live. The ques-

tions also take into account the main perpetrators and victims of violence.

This survey also provides retrospective data on the abuse suffered by the adult respondent when he or she was a child, and data on the presence of violence in the family in which the adult respondent currently resides. While the first block of questions is used to generate measures of child abuse, the second is used to generate measures of family violence, as there is no direct information on which children have suffered or are currently suffering abuse.

For the retrospective questions on abuse experienced when the respondent was a child, the sample is equivalent to the number of households (5,174) since respondents answer only about themselves. Data on violence in the household where the respondent lives is also collected from a single adult family member, but it refers to family violence and can be applied to all family members (20,600).[1] The sample of respondents includes a large number of women, and their responses are likely to be biased if another adult family member is present in the home during the interview.

Due to the difficulty of defining and identifying child abuse and to the limitations of the data obtained from the survey, the analysis includes a number of variables referring to cases that are likely to have involved abusive acts toward a child. These variables and the questions they come from are listed in Table 2.[2]

To obtain retrospective data, respondents were first asked how problems were resolved in their childhood home. The possible responses were: (a) by talking about them, (b) by not speaking, (c) by imposing the will of one family member on the entire family, (d) through humiliation, (e) through insults, (f) by using threats or (g) by

hitting or spanking. The first variable on abuse, *resolve*, is based on this question and refers to those families where slapping, hitting and spanking were the means of resolving conflicts.

No further information is given on violence suffered when the respondent was a child for those persons who did not answer the question of how problems were resolved in their childhood home. Approximately 40 percent of respondents fall into this category. This is worrisome because it is not clear that a response of "none of the above" to this question should have been taken to indicate that no problems were present in the household where the respondent grew up.[3]

Those who answered the question on conflict resolution in the family where they grew up, were then asked a series of follow-up questions on how the respondent was punished when he or she was a child. These are the questions used to generate the variables on abuse suffered by the respondent as a child. First, there is a question on how the respondent's parents reacted when the person did something that bothered them. The second variable, *hitting or insults*, indicates whether the parents of the respondents hit or insulted them when they did something that was considered bothersome. A separate question asks if the respondent suffered physical consequences, if he/she had to get medical attention, if he/she was unable to attend school or if he/she became ill, as a result of punishment or aggression at home. If any of these options are answered in the affirmative, the variable *consequences* takes on a value of one. The fourth variable is a composite called *abuse* and is assigned a value of one if either *consequences, hitting* or *insults* or *resolve* is equal to one.

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[1] The sample was originally designed to include 6,000 households so that the nonresponse rate is just over 15 percent. This rate is rather high for INEGI surveys, which is not surprising given the topic.

[2] Other definitions were explored. For further information, contact the authors at knaul@attglobal.net or miguel.ramirez@imss.gob.mx.

[3] It would have been preferable to have continued the survey and applied the remaining questions on abuse in the family where the respondent grew up. It is important to establish that the survey questions on the state of violence in the present home are applied to all respondents. The regressions were repeated excluding the 40 percent that did not respond to the conflict resolution question and the impact of the variables on violence continues to be as described here. Thus, the results do not change significantly with the inclusion of this group.

The information on current violence in the family is summarized in Table 3. The survey considers four broad types of violence in the family: emotional abuse, intimidation, physical abuse, and sexual abuse. For this analysis there are four definitions of violence in the family that are inclusive and progressive (e.g., the last definition includes all cases considered abuse by the first three definitions). The first, and narrowest, definition or variable, *viofam1*, includes only the most severe forms of abuse, such as any sort of sexual or physical violence that resulted in injuries or health consequences for which the victim had to seek some form of medical or psychological attention. Sexual violence includes verbal pressure or being physically forced to have sexual relations. Physical violence includes being hit, kicked, punched, bitten, stabbed with a knife or hit with an object, burned, attacked with a firearm or attempts to strangle. Consequences include physical harm, fainting, being unable to go to school or work, needing medical attention or needing psychological help. The second variable on family violence, *viofam2*, includes sexual or physical abuse regardless of whether or not there were consequences. The third variable on violence in the family, *viofam3*, includes the first two variables, as well as cases where there was intimidation through pushing or shoving, hitting, throwing objects, verbal threats or threats with a weapon. The fourth variable, *viofam4*, includes all of the cases in *viofam3* as well as cases where the child suffered emotional abuse by being verbally humiliated or insulted or where food was denied.

METHODS AND ECONOMETRIC MODELS

The human capital model provides a framework for examining the effect of abuse suffered as a child on wages earned as an adult (Mincer, 1974; Becker, 1993). The human capital earnings function summarized by Mincer (1974) differentiates between schooling and post-schooling investments that may be referred to as training or on-the-job experience. The earnings function is of the following general form:

$$lnE_i = lnE_0 + r_sS + r_kK \qquad (1)$$

where E represents gross earnings, r_s is the return to a year of schooling, S is the total amount of schooling, r_k is the return to post-schooling investment and K is the cumulative amount of time spent in training. This function is used as the starting point for the analysis in this report.

This equation is empirically estimated as a log linear function, a basic formulation commonly used in the literature. A quadratic term for years of experience incorporates diminishing returns in terms of the training that is received through labor market experience. The basic equation is of the following form:

$$logY_i = \beta_0 + \beta_1 s_i + \beta_2 e_i + \beta_3 e_i^2 + X'\beta + \mu_i \qquad (2)$$

where, for each individual i, logY is the natural logarithm of earnings or wages at time t, e represents years of work experience, s is years of school and X is a matrix of control variables that may include personal, family background and labor market characteristics.[4] The error term is represented by μ.

In order to analyze the impact of child abuse on wages, variables measuring whether the respondent suffered abuse as a child are added to the standard formulation of the human capital wage equations. The two variables that are presented differ slightly for each case studied.

For the case of Colombia, the two variables are:

- whether the parents of the family head hit him/her with a belt, kicked, hit with an object or punished in some other form (*likely to be abused*) as opposed to reprimanded, scolded, denied privileges, slapped or hit, or did not punish them, and

- whether the parents of the family head kicked, hit with an object or punished in some other form (*likely to be more severely abused*) as opposed to reprimanded, scolded,

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[4] This parabolic specification of the earnings function follows from modeling the pattern of investment in post-school training as linear and declining (Mincer, 1974, pp. 83-86).

denied privileges, slapped, hit with a belt, or did not punish them.[5]

For the case of Mexico, the two variables are:

- whether the family used slapping, hitting or spanking the child to resolve conflict (*resolve*), and

- whether the parents of the respondents hit or insulted them when they were children if their behavior was considered annoying (*hitting or insults*). [6]

The hypothesis being tested is whether, controlling for education and work experience, having suffered abuse as a child has a negative impact on wages. It is important to reiterate that we are using retrospective data that measure the severity of childhood abuse on the adult respondent's wages.

The definition of the dependent variable in the earnings function is not straightforward, particularly in developing countries where people may undertake numerous overlapping and informal jobs. The dependent variable for the case of Colombia is total hourly earned income. The SPQL data are extremely detailed in terms of information on labor income, permitting extensive analysis of multiple employment, and cash and in-kind remunerations. Taking advantage of these data, earned income includes all sources of income. This implies all income of salaried workers from the primary job, including overtime, benefits and the estimated monetary value of in-kind payments in the form of housing and food,[7] income from non-salaried work (employers, business owners and self-employed workers) and income from secondary jobs. The information on wages and earnings is "normal earnings" (rather than past

week) and is divided by total hours "normally" worked.

The dependent variable for the case of Mexico is monthly wages. The data do not include information on hours worked and the question on earnings refers to the month prior to the survey.

As in standard human capital regressions, the analysis includes a variable for years of education. In addition, the number of years of work experience is included with a linear and a quadratic term to measure decreasing returns. Work experience is defined as age minus education minus 6 because there is no precise information on years of actual work experience. In the case of the Colombian simulation the regressions include a dummy variable for gender because the sample are households heads rather than a random sample of males and females, and the majority of heads of household are male. The regressions for Mexico are run separately for males and females.

Selection bias is potentially an important problem with both the wage and earnings equations, especially for women. In Colombia, this problem is likely to be less severe among household heads, who are more likely to be working than the population in general. Among Colombian male household heads, approximately 88 percent are economically active and earning a positive income, while for females the figure is 58 percent. Overall, 81 percent of Colombian heads of household work and earn income with a monetary value. In Mexico, approximately 81 percent of adult males aged 18 to 64 are economically active and earning a positive wage, while the figure is 35 percent for females. In order to correct for any source of bias that may exist, the results for the ordinary least squares (OLS) model are compared to results using a full information maximum likelihood version of the Heckman selection correction (Heckman, 1979).

In the case of Colombia, the probit equations are identified using per capita family unearned income, which includes income from rent, interest, pension and severance pay, subsidies from other individuals and families or the government, and other sources. While the instability of sample se-

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[5] The regressions were also run with the other variables and the results follow the same general pattern, although the effect is not as strong.

[6] The regressions were also run with the other variables and the results follow the same general pattern, although the effect is not as strong.

[7] This is particularly important for certain occupational categories such as household workers (Parker and Knaul, 1997; Knaul, 1995).

lection models is well known (Mroz, 1987; Falaris, 1995), in this case the identifying variables prove to have the expected sign and be significant in the probit equations. The unearned income variable is consistently negative and significant, suggesting that family heads with greater wealth and income independent of work are less likely to work.

In the case of Mexico, the identifying variables (labor force participation) in the probit equation are the kind of home in which the family lives; the predominant building, roofing and flooring material; and whether or not the family has electricity, potable water, drainage, a telephone, a refrigerator or a water heater. These variables are used as proxies for wealth and are modeled as dummy variables.

The cross-sectional nature of the data makes it difficult to control for individual heterogeneity. It is difficult to know what the effect of child abuse would have been on the people who were not subjected to it, or what the adult wage would have been for the abused children if they had not suffered abuse.[8] These issues can only effectively be dealt with using panel data or with additional information on family background and individual characteristics. This is an important limitation of the Mexican analysis, which lacks background information on the family characteristics of the adults who suffered abuse when they were children or on the parents of the adults

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[8] Under some scenarios, there may be an upward bias in the estimation of the coefficients that measure early work experience. This would imply that early entry would appear to have a more positive (or a less negative) effect on earnings than is actually the case. This would be true if the children who entered the labor force were those who would be most likely to benefit from the early experience, possibly in the sense of being physically able to combine work and school. Selectivity may also operate in the opposite manner, leading to overestimation of the negative effect of early entry into the labor force on the "average" child, both because of the type of work undertaken and the condition of the children who are found to be working. It may be that the only children who begin working at an early age are those who come from households in extreme hardship, abusive families, or do not succeed at school for reasons such as having an inadequate diet.

in the sample. Ideally, additional family background information on the education and occupation of the adults' parents would have been available to conduct the study, as well as data on the characteristics of the family, such as wealth. In the absence of this information, it is possible that the variable describing whether the adult suffered abuse when he or she was a child is reflecting, at least in part, other characteristics of the family, such as whether or not the family was poor or lived in a violent community.

The Colombian survey does include additional information on family background of the household head in the regression analysis. Specifically, the Colombian simulation replicates the regression including variables for the education of the mother and father of the household head. While this information is prone to have some error because it is likely to be provided retrospectively by the head rather than by his/her parents, it should still provide an effective test of the hypothesis that what is driving the results is not the abuse variable but rather the family background of the head of household.

To test for robustness in the Colombian simulations, the regressions were also run including a full set of fixed effects for city and state. The Heckman selection models were estimated with a full set of *departamento* dummies and the OLS models were estimated with the full set of city and then with city-*departamento* dummies. All of these estimates were run including the control variables for education of the mother and father of the household head.

Education is one pathway through which child abuse affects human capital. Child abuse is likely to reduce educational attainment both in terms of number of years of education and school progress. The effect of child abuse on human capital may be via reduced educational attainment as well as other reductions in productivity that are measurable via a direct reduction in wages. This effect may not be seen clearly in the wage equations using the retrospective data. For this reason, the analysis also considers the impact of the type of punishment used with children and violence in the family on school attendance and on progression through school. These

regressions take into account the effect of current violence in the family of the respondent on the educational attainment of children living in the respondent's household.[9]

The analysis includes several measures of school attainment. First, logit models are used to consider the impact of abuse on school attendance among 7 to 17 year olds. Progression through school is measured using three techniques. An ordered logit model is used to indicate whether or not the child is behind at least one grade. It is defined as 0 if the child has completed one or more grades of school for each year beginning at the age of 6. The number of years behind in school is then coded as 1 to 7. The second set of equations uses tobit models where no upper limit is placed on the number of years behind in school. Finally, a logit model is used with 1 defined as a child who is behind in his/her studies.

For the case of Colombia, the regressions include controls for average education of the household head and spouse, age of the child,

gender of the child, total per capita family expenditure, and a variable to indicate the type of neighborhood in which the family home is located. This last variable is based on a stratification from 1 to 7 that is a function of the wealth of the neighborhood and the type of public services that are available. This stratification system was generally used to define the level of fees to be paid for public services and, while it is a noisy indicator of neighborhood wealth, it does provide some information.

For the case of Mexico, the regressions include controls for education of the household head, the child's age, per capita family income and, physical characteristics of the family home.

The results of the regressions are presented separately for males and females. The means and standard deviations of all of the dependent and independent regression variables are given in Appendix Tables A and B for Colombia, and Appendix Tables C and D for Mexico.

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[9] The Mexican wage regressions were also run including interaction terms for education and abuse in an attempt to disentangle the direct effect of abuse on wages from the effect via educational attainment. Unfortunately, the findings were inconclusive.

The Prevalence of Abuse

COLOMBIA

The survey data for Colombia indicate that approximately 29 percent of children aged 0 to 6, 31 percent of those aged 7 to 13, and 20 percent of youths aged 14 to 17 are likely to suffer abuse (Table 4). In nominal terms, there are 2 million children and youths in urban Colombia who suffered abuse under this definition. This amounts to over 810,000 families (23 percent). The figures are much lower for severe abuse given that being hit with a belt is very common but does not necessarily mean that more severe types of beatings occur. Only 2 percent of children or youths in any age group appear to suffer severe abuse. Still, this accounts for over 150,000 children and youths. It is also important to note that hitting and slapping of younger children is relatively common. While not all hitting is abusive, it is likely that a proportion of this refers to abusive beatings.

As for retrospective abuse, almost 60 percent of respondents suffered abuse and nearly 13 percent of respondents reported severe abuse. The proportion of respondents that report that they suffered abuse as children is presented in Table 5. There are at least two likely explanations for the higher rates for the retrospective questions. The optimistic hypothesis is that behavior is changing, and that abusive punishment is becoming less accepted and less practiced. A more pessimistic explanation is that the respondents are more likely to recognize the abuse that was perpetrated against them and less likely to admit what they are doing to their children.

Table 6 shows the correlations between the different definitions of abuse and violence in the family. There is a positive correlation in general between the different forms of punishment other than scolding. Still, these correlations are not especially high. The correlations between having suffered abuse as children and living in a violent home indicate that there is an intergenerational transfer of violence. Between the composite variable of likely abuse of household heads during childhood, and abuse and severe abuse of children living in the head's home, the correlation is 0.176 and 0.134 respectively. This suggests that in a relatively high proportion of families that use abusive forms of punishment, the household head suffered similarly abusive punishment when he or she was a child. The probability that the household head suffered severe abuse and, as a result, perpetrates severe abuse, or that they suffered likely abuse and perpetrate severe abuse, is lower.

The level of education of the household head and per capita family expenditure are consistently higher in households where there is no child abuse (Table 7). For example, average years of education of the household head is 8 years in families where children are unlikely to suffer abusive punishment and 6.1 years where they do suffer abuse. Similarly, average per capita expenditure in nonabusive families is 40,000 Colombian pesos compared to 30,000 pesos in abusive families. In families where children suffer severe abuse, average education of the household head is 6.4 years and per capita family expenditure is 30,000 pesos.

Household heads that report that they suffered abuse as children have lower income and education than the sample average, although they are just as likely to be working as those who did not suffer abuse (Table 8). Average years of education are 7.3 and 6.2 among those who declare abuse and severe abuse respectively, as compared to 8 on average. Hourly income is 1,237 and 1,057 pesos, respectively, as compared to an average of 1,346 pesos.

School attendance tends to be less common among both boys and girls who suffer abusive punishment, although the differences are not great. More obvious differences exist in the probability of being behind at least one grade for

age (Table 9). For males, 53 percent of those who suffer abuse and 56 percent of those who suffer severe abuse are behind at least one grade as compared to 47 percent of those who do not. The figures for females are 50 percent, 55 percent and 42 percent, respectively. These differences are statistically significant and there is some evidence of a gradient, as the proportion behind in school is higher among children who suffer severe abuse.[10]

MEXICO

The survey data indicate that approximately 18 percent of children and youths aged 17 or younger live in families where violence is present, with similar rates for younger and older children (Table 10).[11] These figures imply that family violence affects more than one million minors in Mexico City. Overall, approximately

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[10] These rates are high, which concurs with evidence on education in Colombia. The rates seem especially high because the age of 6 is used as the base and many children begin school late into their sixth year or in their seventh year.

[11] Eighteen percent may appear to be a conservative estimation of children and young people who have suffered violence, especially after comparing this figure with the outcomes of studies that attempt to determine the prevalence of child abuse. However, the intrinsic differences of each study must be taken into account, in particular, disparities in the definition of violence and abuse variables as well as variations in the methodology used for collecting information between countries and organizations. For example, in her study, Soledad Larraín (1997) reports that 34 percent of respondents suffered severe physical violence. This figure is based on a national study in Chile that only considers students between the ages of 12 and 13 years old, where the informant is the child. In Mexico, INEGI reports an abuse frequency of 38.6 percent in persons younger than 20 years old, using a similar survey. However, the violence definition that it uses considers all types of abuse, some of them not included in the definitions of violence in this paper. For example, two variables that were omitted from this paper are "to raise the voice" and "to become intensely angry," reported in 85 percent and 41 percent of the two million cases, respectively. The most inclusive variable of abuse used in this paper (*violfam4*) concentrates more heavily on physical and sexual abuse and, to a lesser extent, on intimidation and emotional mistreatment.

2.6 million people and almost 600,000 households (13.5 percent) are affected by violence within the family.

The proportion of respondents that reported abuse during childhood is given in Table 11. More than 28 percent of respondents suffered child abuse as defined by the composite variable *abuse*, which includes: having suffered illness or other serious consequences as a result of punishments; being hit for misbehaving as a child; or resolving conflicts through slapping, beating or spanking. Using the *resolve* variable, 18.7 percent of the respondents lived in households where slapping, beating or spanking was used to resolve conflicts. Female respondents are slightly more likely to have suffered abuse, while the youngest cohort, aged 18 to 24, appears slightly less likely to have suffered abuse. These patterns are relatively consistent across the different definitions of abuse.

The correlation between the different definitions of abuse and violence in the family are given in Table 12. As expected, given the inclusive and progressive nature of the definitions of family violence, the correlations are quite high. Still, the lower correlation of 0.27 between *viofam4* and *viofam1* illustrates that there is substantial variety in the nature of violence in the family and that children who suffer emotional or psychological abuse do not necessarily report severe physical or sexual abuse.

Similarly, the correlations between all the variables that describe whether adults suffered violence as children are relatively high. Still, many respondents report some sort of violence in conflict resolution or punishment for bothersome behavior that did not lead to health consequences, given the correlation of 0.39 between *consequences* and *abuse*. At the same time, it is important to note that these correlations suggest that a relatively large proportion of the cases of abuse did lead to serious health consequences that required medical attention or caused school absences.

The correlation between having suffered abuse during childhood and living in a violent home as an adult indicates that there is some intergenera-

tional transfer of violence. Between the composite variable of violence in the family (*violfam4*) and each of the variables indicating where the adults suffered violence in childhood, the correlations are over 0.2. This suggests the importance of controlling for other household characteristics and comparing the intergenerational transfer of violence across households with similar socioeconomic profiles.

As in the case of Colombia, respondents who reported higher levels of education are less likely to report having suffered abuse during childhood (Table 13). For example, 39.6 percent of respondents with incomplete primary education report having suffered abuse. The rate declines steadily as education increases. The number of years of completed education is also significantly lower at 8.4 years among respondents that report abuse as compared to the overall average of 9.4 years. The hypothesis test of mean equality between each value is rejected with a significance level of 10 percent.

Respondents that suffered abuse also have lower average and median income levels. Average wages for the entire sample are 4,176 pesos per month as compared to between 2,626 and 3,369 pesos per month among respondents who suffered different levels of abuse. Again, the hypothesis test of mean equality between each value is rejected. The respondents that have suffered violence are less likely to work, although this is likely to be related to gender differentials in labor force participation.

The next set of descriptive results refers to family characteristics and compares families that declare violent behavior at the time of the survey with those that do not. Per capita family income and education of the household head tend to be lower among families where violence is present as compared to those where there is no violence (Table 14). Using the most inclusive definition, *viofam4*, average per capita income is just below 1,000 pesos in families with violence as compared to 1,500 pesos in families where violence is not present. Similarly, the average number of years of completed education is 8.2 as compared to 9.3 years. These patterns hold for each of the four measures of violence in the family.

There is some evidence to suggest that violence is more common in less wealthy families (Table 15). As a proxy for family wealth, information is given on the physical characteristics and contents of the home. These variables are classified according to whether or not there is violence in the family for each definition of violence. Families whose homes are built with less stable materials, such as carton or metallic sheeting, are more likely to report violence than families with concrete, brick or wood homes. Over 24.4 percent of the families whose homes are built with less stable materials report violence, compared to 15.4 percent of those whose homes are sturdier. The results are similar for roofing and flooring materials, although for flooring the sample size is very small and the differences are not statistically significant. Families without potable water, indoor drainage, telephone service, refrigerators or water heaters in their homes are also more likely to report violence. For example, 32.8 percent of families without potable water report violence, as defined by the composite variable *viofam4*, compared to 15.3 percent of families with potable water.

School attendance tends to be less common among children who live in violent families, although the pattern is not always clear and the differences are not large (Table 16). Attendance among children aged 13 to 17 tends to be lower for both males and females, across all definitions of violence in the family, except *viofam4* for males. For elementary school attendance the rates are similar across families with and without abuse, although using the most inclusive definition (*viofam4*), school attendance is less likely in families with violence.

The proportion of children with poor school performance for their age is given in Table 17. Again, the differences between families with and without violence are not very large. For 13 to 18 year old males, there is a significant difference in the proportion of children who are behind in their studies using the more inclusive definitions of violence (*viofam3* and *viofam4*).

A series of simple descriptive regressions is given in Table 18 showing the determinants of violence in the family. The control variables are

whether the adult suffered abuse during child-hood (*resolve*, *hitting or insults*, *consequences*), family income, education of the household head, physical characteristics of the family home and a dummy variable to indicate if the respondent is the household head. The regressions are run separately for male and female respondents. Marginal effects are presented in order to be able to interpret the magnitude of the correlation.[12] The regressions for *viofam1* and *viofam4* are presented, although the results are similar for each of the definitions of violence in the family.

The key result is that having experienced abuse as a child increases the probability of living in a violent family as an adult. The results are consistently positive and significant across all definitions of family violence and all definitions of abuse during childhood. The only exception is the *viofam1* variable for males and the variable *consequences*. This suggests that adults who suffered child abuse are more likely to live in violent families, lending further evidence to the

hypothesis that there is an intergenerational transfer of violence. Compared to households without antecedents of abuse, the probability of physical, sexual, emotional violence or intimidation (*viofam4*) is 13 percent higher for women who report having suffered abuse as a child. For male respondents the probability is between 5 percent and 11 percent. Regarding the most severe form of violence (*viofam1*) for men and women, the probability of observing physical or sexual violence is 1 percent higher when there are antecedents of violence against children.

The higher the family income, the less likely the family is to be violent. Similarly, the higher the education of the household head, the less likely the family is to be violent, although the results are insignificant for *viofam4* and reversed in sign for females using *viofam1*. The results for the variables describing the home characteristics tend to be insignificant and there is no clear pattern.

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[12] In regressions, using the ordinary least squares method, a marginal change of the independent variable is easily observable since it is only based on the coefficient, that is:

$$y_i = x_{ih}\beta_h + \varepsilon_i \implies \frac{\partial y_i}{\partial x_{ih}} = \beta_h$$

However, in methods that use a dichotomizing dependent variable such as the logit model, the marginal effects are not so easily interpreted and depend on both the value of the coefficients and the point at which the function is evaluated.

$$prob(y = 1) = \frac{e^{Bx}}{1 + e^{bx}} \implies$$
$$\frac{\partial prob(y_i = 1)}{\partial x_{ih}} = \left[\frac{e^{\beta_h x_{ih}}}{1 + e^{\beta_h x_{ih}}} \right] \beta_h$$

Thus, when using a logit regression, the magnitude of the changes is interpreted in terms of marginal effects.

[13] The higher returns for females coincide with earlier findings (Knaul, 2001).

The Impact of Abuse on Adult Wages and Educational Attainment of Children

COLOMBIA

The results of the human capital wage equations of the impact of having suffered abuse as children on adult earnings in Colombia are presented in Table 19. The ordinary least squares (OLS), results are given for the two definitions of abuse (*likely to have been abused* and *severe abuse*). The results show no significant impact of having suffered abuse during childhood on adult wages in either the OLS or the sample selection equations.

The results for the human capital variables have the expected sign and magnitude as do the experience variables. The return to a year of education is 11 percent and does not change substantially with the addition of the abuse variables. The lambda on the probit for labor force participation is positive and significant.

Interaction terms between abuse and education are added to the equations presented in the last two columns of the table. The abuse variables are significant and positive with the addition of the interactions, and the interaction on the abuse variable is significant and negative in sign. These findings are difficult to explain, although the overall impact on earnings is negative beyond five years of education in the case of severe abuse.

The regressions on attendance and being behind in school provide substantial evidence that abuse is related to lower educational attainment (Table 20). When included individually, abuse variables are significant and negative when compared to scolding as the base case. Children who are denied privileges are more likely to attend school, but children who are slapped, hit with a belt, or hit with an object are less likely to be in school. For those where there is no punishment declared, the rates of attendance are also lower.

This suggests that households may not be telling the truth when they report absolutely no punishment.

Further, the variables *likely abuse* and *severe abuse* are both negative and significant. The marginal effect is –2 percent and –3 percent, respectively, calculated at the midpoints of the other variables, suggesting some gradient in the impact of more severe abuse on school attendance.

The other variables show the expected sign. School attendance goes up at young ages and then goes down again reflecting the problem of late entry into the school system. Higher education of the household head and spouse, higher per capita family income and living in a wealthier neighborhood have a positive impact on the probability that the child is in school.

The equations on being behind in grades for age show similar results. The abuse variables are consistently negative and significant in each of the three econometric specifications (logit, ordered logit and tobit). This suggests that children that suffer abuse are more likely to be behind in school and more likely to fall further behind.

These findings are all reinforced by the results presented in Table 21 where the coefficients on the abuse variables are presented separately for males and females. There is also suggestive evidence that abuse is associated with greater reduction in school attendance and falling behind in grade for age among girls as compared to boys. In the absence of more detailed data it is impossible to conclude whether this is due to more severe abuse, a more severe reaction to abuse, or other gender differences in the types of families and children that suffer abuse.

MEXICO

The results of the human capital wage equations of the impact of having suffered abuse during childhood on adult earnings are presented in Table 22 for males and females aged 18 to 64. The ordinary least squares (OLS) as well as the sample selection corrected regressions are given by gender of the respondent. The regressions are given for two definitions of abuse: whether the family used slaps, hitting or spanking to resolve conflict (*resolve*) and whether the children were hit or insulted if they did something annoying (*hitting or insults*).

The results show a consistent pattern. Adults who did not suffer blows or insults as children tend to have higher wages. There is a significant and robust negative impact of having suffered abuse during childhood on adult wages in all of the OLS regressions for males and females. In the sample selection equations, the results are significant at the 10 percent level for all but males using the variable *resolve*. Based on the sample selection corrected wage equations, wages are 10 percent lower among males who suffered abuse using the variable *hitting or insults* and 9 percent lower among females. For men who were slapped, beat or spanked as children, income is 10 percent lower. For women, the figure is 21 percent.

The results for the human capital variables have the expected sign and magnitude. The return to a year of education is 13 percent for males and 14 to 17 percent for females.[13] The returns to experience are positive but decreasing with age. The lambda on the probit for labor force participation is positive and significant, indicating that there is significant sample selection bias and that the bias is stronger for females than for males.

As mentioned, the sample is likely to be biased because information on violence is only available for the respondents. One means of checking the degree of bias is to compare the wage equations in the sample of respondents that answered the questions on abuse against the wage equation for the entire sample. Table 23 gives the wage equations for the entire sample of respondents without including the information on abuse. The returns to education for the entire sample are slightly lower, suggesting that some bias may be introduced by using data only on respondents of the questions on family violence. Using the sample correction equations, the returns for males are 12 percent and for females 15 percent. The wage regressions are given in Table 24 for the respondents to questions about violence, without including the variable on family violence. The estimated returns to schooling are very similar including or excluding the variable on having suffered abuse during childhood. The estimated return to schooling for males is 13 percent and for females 17 percent.

The regressions on school attendance provide only minimal evidence of a relationship between family violence and educational attainment (Table 25). There is a negative, significant impact using the *violfam3* variable only for males. The results for the rest of the variables are as expected. School attendance increases with age but at a decreasing rate. This reflects the fact that many children begin school later than the ideal starting age, and then drop out early. Education of the household head is positive and significant, although family income has no significant effect. There is some evidence of an impact of family wealth on school attendance. A subset of the variables describing the characteristics of the family home (the proxies for family wealth) are positive and significant determinants of attending school.

The results of the impact of violence in the family on progression through school are given in Tables 26 (females) and 27 (males). For women, there is no significant impact of violence on progression through school. The child's age and the level of education of the household head are important determinants. The results are somewhat stronger for males, particularly when the age group is expanded to include 18 year olds. Violence in the family does appear to have some negative impact on progression through school for adolescents at the secondary level. The child's age, education of the household and family income are important determinants of progression through school.

These findings are reinforced in Table 28, which provides the regression coefficients on each of the family violence variables. In this table, each cell corresponds to a single regression. Again, the results for males show some effect of violence on progression through school at the secondary level using most of the definitions of violence. The results are stronger if 18 year-olds are included. For females there is no measurable impact.

Conclusions and Recommendations

This paper shows that child abuse affects a considerable proportion of families in Colombia and Mexico. In urban Colombia, the survey data indicate that approximately 23 percent of families, 30 percent of children below age 14, and 20 percent of youths aged 14 to 17 suffer abusive forms of punishment in their homes. This corresponds to over 2 million children and youths in the urban areas alone. Almost 60 percent of household heads report that they suffered abuse as children. The figures are much lower (2 to 3 percent among children and 13 percent among household heads) when only the most severe forms of abuse are included (being kicked or hit with an object). This is because the most common form of punishment is hitting with a belt, which is reported for almost 30 percent of children. While not every incident of being hit with a belt is necessarily abuse, the data suggest that this form of punishment or abuse is negatively associated with school attendance and progression through school.

In Mexico City, survey data indicate that approximately 18 percent of children and youths aged 17 or younger live in families where violence is present. Approximately 2.6 million people and more than one million minors live in violent families in Mexico City. Violence is present in more than 13 percent of households, which accounts for almost 600,000 families. Between 19 percent and 28 percent of respondents report that they suffered abuse during childhood. There is considerable evidence to suggest that there is an intergenerational transfer of violence. Adults that experienced abuse during childhood are more likely to form part of violent families. This finding holds even after controlling for the education, income and wealth of the family.

The regression results suggest that abuse has a significant negative impact on human capital. Colombian data show that abuse affects school attendance and progression through school among children and adolescents aged 7 to 17. These findings are consistent across different econometric specifications of the educational attainment equation and for boys as well as girls. There is some evidence of a gradient in that more severe abuse is associated with lower rates of school attendance and grade for age, although this seems to be associated with a particular low rate of school attendance among very young girls, which may reflect late entry into schooling.

In the case of Mexico, there are only limited findings in support of a relationship between family violence in the home where children currently live and the school attendance or progression through school of these children. There is some evidence that family violence has a negative impact on educational attainment for males at the secondary level but there is no evidence of an impact on females. These weak results are likely to reflect the lack of data on the abuse directly suffered by children, since the information on violence that is available from the survey data refers to violence within the family setting. This violence may or may not directly affect children.

The regression results for Colombia do not provide evidence that adults who suffered abuse as children have lower wages. However, this is not the case for Mexico, where adult respondents who experienced abuse during childhood *do* report lower wages. This finding is significant and holds true for both males and females and for different definitions of child abuse. While it could actually reflect other family background characteristics also associated with abuse in the parental home, the data are not sufficient to allow for further tests.

The findings give quantitative support to the significant social and economic costs of child abuse and family violence. The abuse suffered by children today is likely to translate into future violence in the families that these children will form. Child abuse can be associated with dropping out of school and with falling behind in school. The high costs of child abuse on physical and emotional health are compounded by a loss

of human capital through lower educational attainment. This translates into greater impoverishment of families and nations in succeeding generations. Abused children, many of whom are already at a disadvantage because they come from poorer and less educated families, are likely to earn less as adults. These are two pathways through which violence against children perpetuates and reinforces the poverty cycle.

Little empirical evidence is available on the short and longer term impact of family violence against children, particularly in developing countries. This paper demonstrates the long-term impact of child abuse on labor market outcomes of adults who suffered abuse as children. The results of this study should be useful to the ongoing efforts of public and nongovernmental institutions working to increase awareness and develop programs to assist children and reduce the prevalence and impact of child abuse.

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Statistical Tables

Table 1
Survey Questions and Composite Variables Used to Describe Abusive Punishment
Suffered by Households Heads When They Were Children,
and by Children and Youth From Parents

– Colombia –

Composite Variables		*Description of Variable*	*Survey Question*
SUFFERED BY HOUSEHOLD HEADS WHEN CHILDREN	UNLIKELY TO HAVE BEEN ABUSED	Reprimanded or scolded; denied privileges; slapped or punched; not punished.	CHAPTER VII (LIFE HISTORY OF THE HOUSEHOLD HEAD), QUESTION 15: *How did your parents (or the people that cared for you) punish you?* (multiple responses: scolding or reprimanding, denied privileges, hit or slapped, kicked, hit with an object (wire, stick, etc), other manner, not punished).
	LIKELY TO HAVE BEEN ABUSED	Hit with a belt; kicked; hit with an object (e.g. cable or wire, stick); other manner.	
	LIKELY TO HAVE BEEN MORE SEVERELY ABUSED	Kicked; hit with an object (e.g. cable or wire, stick); other manner.	
SUFFERED BY CHILDREN AND YOUTH	UNLIKELY TO BE ABUSED	Reprimanded or scolded; denied privileges; slapped or punched; not punished	CHAPTER VI (LIVING CONDITIONS OF THE HOUSEHOLD), QUESTION 9: *How are children or youth below age 18 punished in this household?* (multiple responses: scolding or reprimanding, denied privileges, hit or slapped, kicked, hit with an object (wire, stick, etc), other manner, not punished, no minors in the household).
	LIKELY TO BE ABUSED	Hit with a belt; kicked; hit with an object (e.g. cable or wire, stick); other manner.	
	LIKELY TO BE MORE SEVERELY ABUSED	Kicked; hit with an object (e.g. cable or wire, stick); other manner.	

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993. Colombia. Departamento Administrativo Nacional de Estadística.

Table 2
Variables Used to Describe Violence Suffered By Adults When They Were Children

– Mexico –

Variable	Description	Question Number (Questionnaire)
RESOLVE	DUMMY: Family conflict resolved with slaps, beating or spanking.	1.2.g
HITTING OR INSULTS	DUMMY: Mother, father or caretaker hit or insulted them if they did something bothersome.	1.7.e OR 1.7.f
CONSEQUENCES	DUMMY: As a result of punishments or aggression, the informant suffered either physical damage, required medical attention, could not attend school or became ill.	1.11.a, 1.11.b, 1.11.d OR 1.11.e
ABUSE	DUMMY: RESOLVE=1, HITTING=1 OR CONSEQUENCES=1	RESOLVE OR HITTING OR CONSEQUENCES

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

Table 3
Variables Used to Describe Presence of Violence in the Family

– Mexico –

Variable	Description	Question Number (Questionnaire)
VIOLFAM1	**In the last six months, sexual or physical abuse occurred and the victim suffered injuries or required medical or psychological attention.**	(6.1.f=2 AND 6.8.h=2) OR (5.1.j=2 y 5.8.h=2)
VIOLFAM2	In the last six months, sexual or physical abuse occurred **(with or without the victim suffering injuries or requiring medical or psychological attention).**	6.1.f=2 OR 5.1.j=2
VIOLFAM3	In the last six months, sexual or physical abuse occurred **or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon.**	violfam2 OR 4.1.a OR 4.1.b OR 4.1.c OR 4.1.d OR 4.1.e OR 4.1.f OR 4.1.g OR 4.1.h
VIOLFAM4	In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon, **or suffered emotional abuse by being humiliated verbally, insulted or denied food.**	violfam3 OR 3.1.b OR 3.1.c OR 3.1.i

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

Table 4

Number of Children, Youth and Families Exposed to Abuse by Type of Punishment

- Urban Colombia -

Age Group	Scolding		Denied Privileges		Slaps		Hit with a Belt		Kicks		Hit with an Object		Other type of Punishment		Do not punish children		Abuse		Severe Abuse		Total Population	
	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
0-6	87.0	2,616,464	17.7	531,377	13.6	409,085	27.7	834,809	0.8	22,561	0.9	28,364	0.5	15,403	5.0	150,101	29.1	874,069	2.1	63,361	39.0	3,021,354
7-13	90.8	2,757,759	24.4	706,887	10.0	303,967	30.0	911,489	0.7	21,041	1.2	36,194	0.6	17,889	1.0	29,029	31.3	930,315	2.3	69,149	39.3	3,046,063
14-17	89.1	1,474,513	19.9	329,976	6.3	103,683	18.7	309,287	0.3	4,322	1.1	17,806	0.6	9,772	4.2	69,627	20.0	330,525	1.9	31,302	21.7	1,685,693
Families	87.0	3,038,784	19.4	692,323	9.6	340,778	21.6	468,288	0.5	19,360	0.8	28,385	0.7	23,725	5.5	193,244	22.8	811,441	1.9	67,045	23.2	4,822,835

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993. Colombia. Departamento Administrativo Nacional de Estadística.

Table 5

Abuse Suffered by Household Heads When They Were Children by Age and Type of Punishment

- Urban Colombia -

Age Group	Scolding		Denied Privileges		Slaps		Hit with a Belt		Kicks		Hit with an Object		Other type of Punish-ment		Do not punish children		Abuse		Severe Abuse		Total Population	
	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
18-24	76.2	706	13.1	123	8.2	83	46.3	426	3.4	30	8.7	78	0.1	5	1.4	19	51.4	470	11.6	100	4.4	940
25-44	68.0	7,608	13.2	1,568	9.2	1,019	53.4	6,003	3.9	393	9.8	1,014	0.1	112	2.2	266	58.9	6,614	12.9	1,335	50.6	11,289
45-64	63.5	4,547	12.5	971	8.7	623	54.0	3,889	4.0	253	12.5	791	1.7	116	3.0	244	60.8	4,530	15.6	1,050	32.4	7,230
65+	65.5	1,833	12.8	363	9.4	270	50.2	1,434	3.8	102	12.2	334	1.5	45	5.2	154	56.8	1,632	15.4	418	12.7	2,859
Total	65.8	14,694	13.6	3,027	8.9	1,995	52.7	11,752	3.5	778	9.9	2,217	1.3	278	3.1	683	58.7	13,094	12.8	2,866	100	22,318

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993. Colombia. Departamento Administrativo Nacional de Estadística.

Table 6
Correlation of Variables Used to Describe Abuse Currently Suffered by Children
With Abuse Suffered by Household Heads When They Were Children

- Urban Colombia -

	ABUSE TOWARDS CHILDREN										WHEN THE HOUSEHOLD HEAD WAS A CHILD									
	Scolding	Denied privileges	Slaps	Hit with a belt	Kicks	Hit with an object	Other type of punishment	Do not punish	Abuse	More severe abuse	Scolding	Denied privileges	Slaps	Hit with a belt	Kicks	Hit with an object	Other type of punishment	Do not punish	Abuse	More severe abuse
ABUSE TOWARDS CHILDREN																				
Scolding	1.000																			
Denied privileges	-0.104	1.000																		
Slaps	0.025	0.078	1.000																	
Hit with a belt	-0.041	0.046	0.105	1.000																
Kicks	-0.031	0.026	0.067	0.050	1.000															
Hit with an object	-0.015	0.021	0.072	0.073	0.145	1.000														
Other type of punishment	-0.137	-0.020	-0.010	-0.024	0.027	0.030	1.000													
Do not punish	-0.587	-0.116	-0.075	-0.119	-0.016	-0.019	-0.019	1.000												
Abuse	-0.072	0.041	0.105	0.966	0.132	0.156	0.156	-0.123	1.000											
More severe abuse	-0.108	0.006	0.055	0.043	0.527	0.623	0.620	-0.031	0.250	1.000										
WHEN HOUSEHOLD HEAD WAS A CHILD																				
Scolding	0.148	-0.006	0.051	0.001	0.0001	0.004	-0.008	-0.002	-0.001	-0.002	1.000									
Denied privileges	0.025	0.253	0.079	0.040	0.001	0.009	0.008	-0.008	0.039	0.007	0.138	1.000								
Slaps	0.040	0.082	0.197	0.081	0.027	0.031	0.011	-0.031	0.083	0.034	0.065	0.239	1.000							
Hit with a belt	0.015	0.096	0.067	0.148	-0.009	0.004	-0.010	-0.046	0.140	-0.008	-0.274	0.022	0.115	1.000						
Kicks	0.003	0.026	0.031	0.051	0.054	0.025	0.001	-0.011	0.053	0.034	-0.056	0.078	0.201	0.030	1.000					
Hit with an object	-0.011	0.032	0.055	0.107	0.035	0.088	0.020	-0.024	0.118	0.087	-0.148	0.007	0.117	0.024	0.202	1.000				
Other type of punishment	-0.012	0.019	-0.001	0.024	0.017	0.019	0.086	0.001	0.043	0.072	-0.051	0.024	0.033	-0.045	0.101	0.054	1.000			
Do not punish	-0.050	-0.020	-0.004	-0.012	0.006	0.001	0.002	0.073	-0.010	0.006	-0.220	-0.062	-0.050	-0.173	-0.030	-0.053	-0.017	1.000		
Abuse	-0.005	0.095	0.071	0.176	0.011	0.029	0.010	-0.052	0.176	0.027	-0.370	-0.004	0.102	0.883	0.155	0.273	0.086	-0.196	1.000	
More severe abuse	-0.015	0.038	0.055	0.115	0.050	0.082	0.041	-0.025	0.134	0.098	-0.198	0.010	0.123	-0.006	0.495	0.870	0.277	-0.061	0.313	1.000

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993. Colombia. Departamento Administrativo Nacional de Estadística.

Table 7

**Average Per Capita Family Expenditure and
Education of Household Head by Type of
Punishment Used Towards Children**

- Urban Colombia -

		Per Capita Family Expenditure	Education of Household Head	
		(Median)	Average	Std. Dev.
Scolded	No	65,000	7.8	4.9
	Yes	37,500	7.5	4.6
Denied privileges	No	45,000	7.5	4.7
	Yes	42,500	8.4	4.6
Slapped	No	45,000	7.7	4.7
	Yes	32,500	6.8	4.4
Hit with a belt	No	50,000	7.9	4.7
	Yes	30,000	6.1	4.1
Kicked	No	45,000	7.6	4.7
	Yes	27,000	5.7	3.7
Hit with an object	No	45,000	7.6	4.7
	Yes	26,700	5.2	3.8
Other type of punishment	No	44,800	7.6	4.7
	Yes	49,300	8.4	5.0
Do not punish	No	44,500	7.6	4.7
	Yes	47,500	8.4	4.6
Abuse	No	40,000	8.0	4.6
	Yes	30,000	6.1	4.1
Severe Abuse	No	37,500	7.6	4.6
	Yes	30,000	6.4	4.5

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993.
Colombia. Departamento Administrativo Nacional de Estadística.

Table 8

**Abuse Suffered by Household Heads When They Were Children, by
Years of Completed Education, Income and Employment**

- Urban Colombia -

		Type of Punishment									
		Scolded	Denied Privileges	Slapped	Hit with a belt	Kicked	Hit With an Object	Other Type of Punish-ment	Abuse	More Severe Abuse	Total Popula-tion
Years of Completed Education of Head	Average	8.2	8.9	7.4	7.4	6.7	5.9	6.8	7.3	6.2	8.0
	Std. Dev	4.6	4.7	4.6	4.4	4.1	3.9	4.8	4.3	4.1	4.6
Hourly Income (if > 0)	Average	1,387.6	1,716.6	1,247.0	1,247.5	1,068.6	1,028.4	1,363.5	1,237.1	1,056.8	1,346.0
	Std. Dev	2,219.2	2,988.0	1,802.4	2,081.4	1,338.3	1,933.3	1,773.2	2,095.9	1,822.7	2,184.5
If Works	%	85.1	83.7	85.5	83.5	81.9	83.5	78.4	85.2	83.1	84.9
	n	11,042	2,255	1,483	8,867	362	1,584	186	9,817	2,046	16,612

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993. Colombia. Departamento Administrativo Nacional de Estadística.

Table 9

Abuse and Progression Through School by Gender 1/

–Urban Colombia –

		Behind at Least One Grade for Age			
		Abuse		Severe Abuse	
		No	Yes	No	Yes
Male	%	46.7%	53.3%	48.5%	56.4%
Female	%	42.2%	49.7%	43.9%	55.0%

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993. Colombia. Departamento Administrativo Nacional de Estadística.

1/ Variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one or more years behind in grades for age.

Table 10

Number of Individuals and Children that Live in Violent Families 1/

- Mexico -

Age Group	VIOLFAM1		VIOLFAM2		VIOLFAM3		VIOLFAM4		Total Population
	%	N	%	N	%	N	%	N	
0-6	1.2	24,157	5.8	117,875	8.9	183,177	18.1	371,605	2,057,003
7-13	1.6	36,576	5.8	132,755	10.1	231,790	19.5	446,233	2,294,472
14-17	2.0	25,450	5.1	65,735	8.4	108,106	17.7	228,469	1,292,954
18-64	1.2	129,036	3.5	375,257	6.7	706,054	14.7	1,554,737	10,590,551
65 +	0.1	750	0.9	7,210	1.7	14,326	4.9	42,695	847,497
ALL	1.3	215,969	4.1	698,832	7.3	1,243,453	15.5	2,642,739	17,082,477
FAMILIES	1.1	47,492	3.5	151,975	6.4	278,045	13.4	577,245	4,317,462

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.
1/ Using expansion factors.

VIOLFAM1: In the last six months, sexual or physical abuse occurred and the victim suffered injuries or required medical or psychological attention.
VIOLFAM2: In the last six months, sexual or physical abuse occurred (with or without the victim suffering injuries or requiring medical or psychological attention).
VIOLFAM3: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon.
VIOLFAM4: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon, or suffered emotional abuse by being humiliated verbally, insulted or denied food.

Table 11

**Violence Suffered by Informants When They Were Children
by Age, Gender and Type of Violence 1/**

- Mexico -

		RESOLVE	WAS HIT OR INSULTED	WAS HIT	CONSEQUENCES	ABUSE	ALL INFORMANTS
All	(18-64)	18.7	21.8	21.0	5.6	28.4	91.3
Females	(18-64)	21.2	23.4	22.6	6.0	30.4	52.5
Males	(18-64)	16.1	20.2	19.8	5.0	26.2	47.5
	18-24	16.9	15.5	14.9	3.5	23.8	13.3
Age Group	25-44	18.9	22.5	21.7	6.1	29.0	52.9
	45-64	19.7	26.0	25.4	6.5	31.4	25.2
	65+	19.9	23.8	23.8	4.8	26.4	8.7
n		939	1,106	1,065	292	1,533	5,175

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

1/ Using expansion factors.

RESOLVE: family conflict resolved with slaps, beating or spanking.

HITTING OR INSULTS: Mother, father or caretaker hit or insulted them if they did something bothersom.

CONSEQUENCES: As a result of the of the punishments or aggression, the informant suffered either physical damage, required medical attention, could not attend school or became ill.

ABUSE: RESOLVE=1, HITTING=1 OR CONSEQUENCES=1.

Table 12
Correlation of Variables Used to Describe Presence of Violence in the Family and
Variables Used to Describe Violence Suffered When the Informants Were Children

- Mexico -

	VIOLFAM1	VIOLFAM2	VIOLFAM3	VIOLFAM4	RESOLVE	ABUSE	HITTING OR INSULTS	CONSE-QUENCES
VIOLFAM1	1.000							
VIOLFAM2	0.552	1.000						
VIOLFAM3	0.401	0.727	1.000					
VIOLFAM4	0.267	0.483	0.665	1.000				
RESOLVE	0.078	0.137	0.152	0.212	1.000			
ABUSE	0.083	0.132	0.166	0.239	0.764	1.000		
HITTING OR INSULTS	0.087	0.142	0.144	0.230	0.604	0.819	1.000	
CONSEQUENCES	0.069	0.037	0.089	0.092	0.203	0.394	0.230	1.000

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

VIOLFAM1: In the last six months, sexual or physical abuse ocurred and the victim suffered injuries or required medical or psychological attention.

VIOLFAM2: In the last six months, sexual or physical abuse ocurred (with or without the victim suffering injuries or requiring medical or psychological attention).

VIOLFAM3: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon.

VIOLFAM4: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon, or suffered emotional abuse by being humiliated verbally, insulted or denied food.

RESOLVE: family conflict resolved with slaps, beating or spanking.

HITTING OR INSULTS: Mother, father or caretaker hit or insulted them if they did something bothersom.

CONSEQUENCES: As a result of the punishments or aggression, the informant suffered either physical damage, required medical attention, could not attend school or became ill.

ABUSE: RESOLVE=1, HITTING=1 OR CONSEQUENCES=1.

Table 13

**Violence Suffered by Informants When They Were Children By Level of Education,
Years of Completed Education, Employment and Income (18-64 years)** 1/

- Mexico -

	RESOLVE	HITTING OR INSULTS	CONSEQUENCES	ABUSE	ALL INFORMANTS
LEVEL OF EDUCATION (%):					
Incomplete Primary	29.5	34.3	7.9	39.6	11.0
Complete Primary	24.7	29.5	6.0	37.2	20.9
Secondary	20.8	22.4	5.5	30.1	34.0
University	12.7	15.2	5.0	22.3	16.7
Graduate	9.5	12.5	4.3	17.0	17.4
YEARS OF COMPLETED EDUCATION:					
Average	8.1	8.2	8.7	8.4	9.4
Std. Dev.	3.6	3.8	3.9	3.8	4.11
IF WORKS (%)	17.7	21.5	5.4	28.0	51.4
INCOME (IF >0) (pesos)					
Average	2,626	2,907	3,369	3,014	4,176
Std. Dev	2,130	3,468	3,452	3,398	5,708
Percentiles					
25%	1,204	1,290	1,505	1,290	1,500
50%	1,800	2,000	2,300	2,150	2,500
75%	3,010	3,440	4,000	3,500	4,300

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

1/ Using expansion factors.

RESOLVE: family conflict resolved with slaps, beating or spanking.

HITTING OR INSULTS: Mother, father or caretaker hit or insulted them if they did something bothersome.

CONSEQUENCES: As a result of the of the punishments or aggression, the informant suffered either physical damage, required medical attention, could not attend school or became ill.

ABUSE: RESOLVE=1, HITTING=1 OR CONSEQUENCES=1.

Table 14

**Average Per Capita Family Income and Education of Household Health
by Presence of Violence in the Family** 1/, 2/

- Mexico -

		VIOLFAM1		VIOLFAM2		VIOLFAM3		VIOLFAM4	
		NO	*YES*	*NO*	*YES*	*NO*	*YES*	*NO*	*YES*
Per Capita Family Income 3/	Average	1,430.4	855.5	1,448.7	824.4	1,464.7	896.1	1,501.4	996.8
	Std.Dev	2,429.2	897.0	2,457.1	928.7	2,492.5	905.3	2,562.5	1,291.9
	Z 1/	**(9.88)**		**(17.12)**		**(19.25)**		**(16.81)**	
Education of Household Head	Average	9.11	8.19	9.13	8.30	9.18	8.11	9.27	8.15
	Std.Dev	4.35	4.22	4.35	4.11	4.37	3.93	4.41	3.83
	Z 1/	**(3.51)**		**(5.72)**		**(10.07)**		**(14.81)**	

Source: Encuesta de violencia intrafamiliar, 1999. Mexico, D.F., INEGI.

1/ Z statistic is for Ho: average1-average2=0 , between no and yes . **Bold** indicates significant at 10% level.

2/ Using expansion factors.

3/ Excluding income from child workers aged 16 or less.

VIOLFAM1: In the last six months, sexual or physical abuse occurred and the victim suffered injuries or required medical or psychological attention.

VIOLFAM2: In the last six months, sexual or physical abuse occurred (with or without the victim suffering injuries or requiring medical or psychological attention).

VIOLFAM3: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon.

VIOLFAM4: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon, or suffered emotional abuse by being humiliated verbally, insulted or denied food.

Table 15

Presence of Violence in the Family by Characteristics of the Home 1/

- *Mexico* -

	VIOLFAM1	VIOLFAM2	VIOLFAM3	VIOLFAM4	n
Predominant Building Material					
Concrete, brick or wood.	1.3	4.1	7.3	15.4	20,446
Adobe, asbestos, metallic sheeting, carton or other building material.	0.0	5.2	9.6	24.4	115
Z 2/	**(16.22)**	-(0.54)	-(0.83)	**-(2.22)**	
Roofing Material					
Concrete or brick.	1.1	3.7	6.8	14.8	17,786
Palm fronds, wood, asbestos sheeting, carton or other building material	2.4	6.6	10.3	20.2	2,752
Z 2/	**-(4.41)**	**-(5.80)**	**-(5.70)**	**-(6.66)**	
Flooring Material					
Wood, Tiles or other Covering	1.0	3.1	5.9	12.4	9,897
Concrete	1.5	5.1	8.6	18.5	10,498
Earth	1.7	5.1	9.7	13.7	175
Z (Wood, Tiles or other Covering Material Vs Earth)	-(0.73)	-(1.24)	**-(1.70)**	-(0.50)	
Has	Potable water	Yes	1.3	4.1	7.2	15.3	20,314
		No	0.0	7.4	16.0	32.8	256
	Drainage	Yes	1.3	4.0	7.1	14.9	19,767
		No	0.6	7.7	12.8	30.0	803
	Telephone Service	Yes	1.2	3.6	6.8	14.6	16,789
		No	1.5	6.2	9.4	19.5	3,781
	Refrigerator	Yes	1.1	3.7	6.7	14.6	17,569
		No	2.3	6.2	11.0	19.4	3,001
	Water heater (boiler for bathing)	Yes	1.0	3.1	6.0	13.5	13,829
		No	1.8	6.2	10.0	19.5	6,741

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.
1/ Using expansion factors.
2/ Z statistic is for Ho: p1-p2=0 , between material. **Bold** indicates significant at 10% level.

Table 16
**School Attendance of Children and Adolescents by Whether They Live in a Household
with Violence, by Age and Gender (% attending school)** 1/,2/

- Mexico -

		GENDER	VIOLFAM1		VIOLFAM2		VIOLFAM3		VIOLFAM4	
			YES	*NO*	*YES*	*NO*	*YES*	*NO*	*YES*	*NO*
AGE GROUP	7-12	*Male*	100.0%	97.1%	98.0%	97.1%	96.1%	97.3%	95.9%	97.5%
		Z	(273.13)		(23.55)		(30.72)		(17.05)	
		Female	90.4%	97.2%	98.1%	97.1%	97.5%	97.1%	96.1%	97.4%
		Z	(34.27)		(22.96)		(9.84)		(19.54)	
	13-17	*Male*	69.9%	81.7%	76.2%	81.7%	75.1%	82.0%	83.1%	81.1%
		Z	**(51.97)**		**(39.42)**		**(67.01)**		**(28.73)**	
		Female	54.5%	79.5%	68.0%	79.6%	74.2%	79.5%	75.5%	80.0%
		Z	(84.57)		(71.75)		(45.68)		(58.09)	
	7-17	*Male*	85.5%	89.8%	89.9%	89.7%	87.3%	90.0%	90.5%	89.5%
		Z	**(35.42)**		**(3.21)**		**(50.97)**		**(26.49)**	
		Female	70.0%	89.0%	84.9%	89.0%	87.5%	88.9%	86.3%	89.4%
		Z	(92.93)		(49.80)		(24.91)		(72.61)	
n			260	20,310	842	19,728	1,501	19,069	3,188	17,382

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

1/ Using expansion factors.

2/ Z statistic is for Ho: average1-average2=0, between no and yes violfam. **Bold** indicates significant at 10% level.

VIOLFAM1: In the last six months, sexual or physical abuse occurred and the victim suffered injuries or re-quired medical or psychological attention.

VIOLFAM2: In the last six months, sexual or physical abuse occurred (with or without the victim suffering injuries or requiring medical or psychological attention).

VIOLFAM3: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon.

VIOLFAM4: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon, or suffered emotional abuse by being humiliated verbally, insulted or denied food.

Table 17

**Impact of Family Violence on Progression Through School: Average Proportion
of Children that Are Behind School in Terms of Completed Grades Given Age,
by Age Group and Gender** 1/,2/

- Mexico -

	GENDER	VIOLFAM 1		VIOLFAM 2		VIOLFAM 3		VIOLFAM 4	
		NO	*YES*	*NO*	*YES*	*NO*	*YES*	*NO*	*YES*
AGE GROUP	7-12	*Male* Average								
		0.146	0.160	0.147	0.143	0.145	0.163	0.146	0.151
		Z								
		(0.180)		(0.105)		(0.563)		(0.211)	
		Female Average								
		0.135	0.143	0.136	0.125	0.135	0.140	0.134	0.140
		Z								
		(0.080)		(0.231)		-(0.148)		-(0.228)	
	13-18	*Male* Average								
		0.539	0.680	0.537	0.638	0.533	0.644	0.529	0.605
		Z								
		(1.464)		-(1.542)		**-(2.206)**		**-(2.054)**	
		Female Average								
		0.481	0.444	0.481	0.474	0.483	0.457	0.484	0.467
		Z								
		(0.308)		(0.111)		(0.486)		(0.456)	

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

1/ Variable is defined as: 0 if the child has completed 1 or more grades each year beginning at age 6; 1 if the child is one or more years behind in terms of grades for age.

2/ Z statistic is for Ho: average1-average2=0, between no and yes violfam. **Bold** indicates significant at 10% level.

VIOLFAM1: In the last six months, sexual or physical abuse occurred and the victim suffered injuries or required medical or psychological attention.

VIOLFAM2: In the last six months, sexual or physical abuse occurred (with or without the victim suffering injuries or requiring medical or psychological attention).

VIOLFAM3: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon.

VIOLFAM4: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon, or suffered emotional abuse by being humiliated verbally, insulted or denied food.

Table 18

Determinants of Probability of Violence in the Family Including Past Abuse, Family Income and Education

–Mexico –

Marginal Changes: Absolute value of Z-Statistic in parenthesis; **Bold indicates significant at 10% level.**

	VIOLFAM 1 LOGIT BY GENDER						VIOLFAM 4 LOGIT BY GENDER					
	Male			*Female*			*Male*			*Female*		
Suffered Abuse as a Child												
RESOLVE	**0.01** **(2.08)**			**0.01** **(2.98)**			**0.11** **(6.52)**			**0.13** **(7.77)**		
HITTING OR INSULTS		**0.01** **(2.44)**			**0.01** **(2.36)**			**0.11** **(6.91)**			**0.13** **(8.42)**	
CONSEQUENCES			0.001 (0.18)			**0.01** **(3.16)**			**0.05** **(1.89)**			**0.13** **(5.20)**
Family Income and Education												
Per Capita Family Income (xe7)	-9.43 (0.81)	-8.14 (0.75)	-14.10 (1.11)	-8.88 (0.96)	-10.50 (1.02)	-10.10 (1.12)	**-92.0** **(2.15)**	**-99.0** **(2.36)**	**-124.0** **(2.71)**	-62.4 (1.49)	-64.4 (1.58)	**-78.5** **(1.77)**
Education of Head of Household (x1000)	**-0.89** **(1.81)**	**-0.82** **(1.80)**	**-1.03** **(1.90)**	**0.96** **(2.42)**	**1.09** **(2.50)**	**0.93** **(2.53)**	-2.45 (1.14)	-2.43 (1.14)	-3.31 (1.49)	0.07 (0.03)	0.95 (0.46)	0.06 (0.03)
Education of Head of Household Missing (x1000)	**11.44** **(2.10)**	**10.06** **(1.99)**	**12.48** **(2.14)**	-8.05 (0.81)	-8.12 (0.74)	-8.93 (0.89)	2.65 (0.07)	-4.54 (0.12)	1.69 (0.04)	-60.97 (1.44)	-61.24 (1.48)	-66.85 (1.53)
Characteristics of the Family Home												
Home Ownership												
Private home (x1000)	-5.92 (1.54)	-5.13 (1.46)	-6.15 (1.48)	-2.10 (1.53)	-1.49 (0.33)	-1.36 (0.36)	-83.16 (0.73)	-84.01 (0.75)	-90.21 (0.78)	-6.91 (0.30)	3.76 (0.16)	-2.18 (0.09)
Apartment in Building (x1000)							-85.12 (0.74)	-88.65 (0.78)	-91.76 (0.78)			
Apartment in Smaller Residence (x1000)	-8.83 (1.42)	-7.79 (1.36)	-9.41 (1.41)	-5.39 (0.88)	-5.32 (0.78)	-2.70 (0.48)	-52.90 (0.46)	-60.87 (0.53)	-62.04 (0.53)	22.43 (0.76)	25.57 (0.87)	32.15 (1.06)
Room (x1000)				**25.07** **(1.76)**	**28.77** **(1.84)**	20.99 (1.57)				175.26 (1.05)	179.61 (1.08)	155.94 (0.89)
Other (x1000)												
Characteristics of the Home												
Predominant Material:												
Concrete or Brick												
Wood												
Adobe												
Asbestos Sheeting												
Carton Sheeting												
Other												
Roofing Material:												
Concrete or Brick (x1000)	2.71 (0.29)	2.65 (0.32)	1.92 (0.20)	4.66 (0.45)	4.26 (0.37)	2.27 (0.35)	-7.78 (0.07)	-20.74 (0.20)	-0.81 (0.01)	0.27 (0.00)	11.59 (0.13)	11.41 (0.12)
Palm Fronds or Wood												
Asbestos Sheeting (x1000)	4.01 (0.40)	3.95 (0.45)	3.78 (0.35)	2.69 (0.23)	2.25 (0.17)	-1.68 (0.14)	-23.68 (0.22)	-32.49 (0.30)	-8.14 (0.07)	17.27 (0.19)	2.03 (0.02)	-1.38 (0.01)
Carton Sheeting (x1000)							23.63 (0.21)	13.29 (0.12)	47.26 (0.411)	23.02 (0.23)	-1.54 (0.02)	13.05 (0.13)
Other Material (x1000)												
Flooring Material:												
Wood, Tiles or other Covering Material (x1000)										**-12.27** **(1.65)**	-15.24 (0.82)	-9.83 (0.51)
Concrete (x1000)	1.65 (0.43)	1.47 (0.42)	1.94 (0.48)	0.54 (0.14)	1.08 (0.26)	0.12 (0.03)	13.14 (0.72)	11.88 (0.65)	12.30 (0.65)			
Earth (x1000)	16.58 (1.44)	16.17 (1.50)	19.90 (1.61)				-30.87 (0.29)	-13.32 (0.13)	-9.07 (0.08)			
Has												
Electricity												
Potable Water (x1000)							15.07 (0.22)	37.78 (0.57)	51.66 (0.77)	52.24 (0.99)	32.89 (0.62)	30.38 (0.56)
Drainage (x1000)							**141.37** **(4.40)**	**132.36** **(4.17)**	**141.36** **(4.34)**	-9.58 (0.24)	-1.52 (0.04)	5.65 (0.14)
Telephone service (x1000)	0.24 (0.06)	0.15 (0.04)	0.62 (0.14)	3.22 (0.86)	4.02 (0.98)	1.95 (0.58)	13.22 (0.65)	10.59 (0.53)	16.73 (0.81)	**61.37** **(3.19)**	**61.30** **(3.24)**	**54.79** **(2.77)**
Refrigerator (x1000)	-4.25 (0.79)	-3.95 (0.80)	-4.27 (0.75)	5.42 (1.23)	5.58 (1.16)	5.36 (1.36)	-22.26 (0.91)	-17.96 (0.75)	-26.22 (0.04)	0.46 (0.02)	0.02 (0.00)	1.01 (0.04)
Water heater (boiler for bathing) (x1000)	0.14 (0.03)	0.22 (0.06)	-0.04 (0.01)	3.83 (0.91)	4.62 (0.99)	4.97 (1.30)	-28.33 (1.34)	-27.78 (1.33)	-23.28 (1.08)	26.35 (1.30)	28.01 (1.41)	**42.55** **(2.06)**
Individual Characteristics												
Respondent is Household Head (x1000)	**7.49** **(1.69)**	**7.54** **(1.81)**	**8.49** **(1.76)**	-1.70 (0.40)	-1.32 (0.27)	-0.90 (0.22)	-1.96 (0.11)	3.87 (0.23)	-1.02 (0.06)	**-48.89** **(2.18)**	**-41.07** **(1.85)**	**-43.91** **(1.91)**
Constant	-0.02 (1.40)	-0.02 (1.49)	-0.02 (1.25)	**-0.06** **(2.88)**	**-0.06** **(3.05)**	**-0.05** **(3.05)**	-0.21 (1.20)	-0.22 (1.24)	-0.22 (1.24)	**-0.35** **(3.04)**	**-0.37** **(3.25)**	**-0.36** **(2.99)**
Chi2 Statistic (Prob > Chi2, degrees of freedom)	17.47 (0.23, 14)	16.09 (0.31, 14)	18.73 (0.18, 14)	16.73 (0.27, 14)	17.49 (0.23, 14)	15.4 (0.04, 14)	97.59 (0..00, 18)	103.57 (0.00, 18)	56.41 (0.00, 18)	110.15 (0.00, 17)	124.43 (0.00, 17)	75.31 (0.00, 17)
Pseudo R^2	0.13	0.15	0.10	0.14	0.11	0.17	0.08	0.01	0.06	0.08	0.08	0.05
N	1,477	1,477	1,477	1,558	1,558	1,558	1,548	1,548	1,548	1,636	1,636	1,636

Source: Encuesta de Violencia Intrafamiliar, 1999. INEGI, Mexico.

Table 19
Wage Functions Including Abuse, OLS and Simple Selection Correction

- Urban Colombia -

For OLS absolute value of t-statistic in parenthesis. For sample correction absolute value of Z-Statistic in parenthesis. **Bold indicates significant at 10% level**.

Independent Variables	Not Including Abuse		Including Abuse				Including Abuse and Interacted with Education	
	OLS	Sample Selection Correction	OLS		Sample Selection Correction		Sample Selection Correction	
			Abuse	Severe Abuse	Abuse	Severe Abuse	Abuse	Severe Abuse
Suffered abuse as a Child								
Abuse (hit with belt, kicked, hit with an object or other punishment)			-0.016 (1.35)		-0.005 (0.37)		**0.092** **(3.63)**	
More severe abuse (hit with belt, kicked, hit with an object or other punishment)				-0.023 -(1.34)		-0.017 (0.93)		**0.089** **(2.56)**
Suffered Abuse as a Child Interacted with Education								
Abuse * Years of Education							**-0.013** **(4.68)**	
More severe abuse * Years of Education								**-0.017** **(3.66)**
Human Capital Variables								
Years of Education	**0.115** **(73.38)**	**0.112** **(73.57)**	**0.114** **(72.76)**	**0.114** **(72.92)**	**0.111** **(69.91)**	**0.111** **(69.93)**	**0.121** **(55.78)**	**0.116** **(71.37)**
Experience (age-education-6)								
Linear	**0.032** **(14.80)**	**0.037** **(16.69)**	**0.033** **(14.66)**	**0.033** **(14.63)**	**0.040** **(17.19)**	**0.040** **(17.19)**	**0.033** **(14.84)**	**0.033** **(14.83)**
Squared	**-0.0004** **(9.86)**	**-0.0005** **(13.14)**	**-0.0004** **(9.91)**	**-0.0004** **(9.87)**	**-0.001** **(14.11)**	**-0.001** **(14.09)**	**0.000** **(10.14)**	**0.000** **(10.11)**
Other								
Sex	**0.2536** **(15.98)**	**0.368** **(19.16)**	**0.254** **(16.03)**	**0.253** **(15.97)**	**0.431** **(19.28)**	**0.430** **(19.25)**	**0.255** **(16.10)**	**0.254** **(16.02)**
Lambda		**0.309** **(10.11)**			**0.480** **(11.10)**	**0.479** **(11.11)**		
Constant	**5.044** **(130.43)**	**4.883** **(118.82)**	**5.053** **(128.95)**	**5.048** **(130.15)**	**4.796** **(105.13)**	**4.797** **(106.76)**	**4.984** **(118.90)**	**5.028** **(128.36)**
F Statistic (Prob > F, degrees of freedom) or Values for Chi2 given for Probit model (degrees of freedom)	1563.63 (0.00,4)	4066.1 (0.00, 10)	1251.53 (0.00, 5)	1251.34 (0.00,5)	9531.81 (10)	9536.55 (10)	1047.59 (0.00,6)	1048.11 (0.00,6)
R^2	0.31		0.30	0.30			0.31	0.31
N	15,969	19,706	15,969	15,969	15,969	15,969	15,969	15,969

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993. Colombia. Departamento Administrativo Nacional de Estadística.

Table 20
Abuse as a Determinant of School Attendance and Progression Through School (7-17 Years)

- Colombia -

For Logit absolute value of Z-Statistics in parenthesis. For Tobit absolute value of t-Statistic in parenthesis. **Bold indicates significant at 10% level.**

Independent Variables	School Attendance 1/ LOGIT (marginal effects)			PROGRESSION THROUGH SCHOOL — Not Behind or Behind One or More Grades 2/ LOGIT (marginal effects)		OLOGIT (coefficients)		TOBIT (coefficients)	
Family Violence									
By Category 3/									
Denied privileges	**0.013** **(3.08)**								
Slaps	**-0.014** **(2.51)**								
Hit with a belt	**-0.021** **(5.42)**								
Kicks	0.019 (0.81)								
Hit with an object	**-0.056** **(4.53)**								
Other type of punishment	0.014 (0.62)								
Do not punish children	**-0.042** **(9.47)**								
Abuse		**-0.022** **(5.73)**		**-0.090** **(9.93)**		**0.000** **(9.93)**		**-0.145** **(9.85)**	
More Severe Abuse			**-0.035** **(3.46)**		**-0.077** **(2.86)**		**-0.312** **(2.86)**		**-0.130** **(2.99)**
Individual Characteristics									
Age									
Linear	**0.069** **(14.29)**	**0.078** **(14.59)**	**0.071** **(14.57)**	**-0.048** **(4.35)**	**-0.047** **(4.31)**	**-0.193** **(4.34)**	**-0.191** **(4.31)**	**-0.164** **(9.14)**	**-0.165** **(9.16)**
Squared	**-0.004** **(18.47)**	**-0.004** **(18.85)**	**-0.004** **(18.76)**	**-0.001** **(2.29)**	**-0.001** **(2.16)**	**-0.004** **(2.29)**	**-0.004** **(2.16)**	**0.002** **(2.32)**	**0.002** **(2.50)**
Gender 4/	-0.0002 (0.07)	0.001 (0.02)	0.0001 (0.05)	**-0.062** **(8.06)**	**-0.065** **(8.38)**	**-0.251** **(8.06)**	**-0.260** **(8.38)**	**-0.096** **(7.55)**	**-0.099** **(7.83)**
Family Expenditure and Education									
Average education of household head and spouse	**0.009** **(14.01)**	**0.009** **(14.53)**	**0.009** **(14.95)**	**0.034** **(25.35)**	**0.035** **(26.12)**	**0.139** **(25.31)**	**0.142** **(26.07)**	**0.058** **(26.11)**	**0.060** **(26.90)**
Education household head missing (dummy)	0.004 (1.07)	0.004 (1.08)	0.005 (1.26)	**0.038** **(3.64)**	**0.041** **(4.03)**	**0.152** **(3.65)**	**0.167** **(4.03)**	**0.063** **(3.75)**	**0.069** **(4.09)**
Per capita total family expenditure (x 10 e6)	**1.050** **(2.05)**	0.678 (1.33)	0.817 (1.58)	**4.040** **(3.80)**	**4.430** **(4.16)**	**16.300** **(3.80)**	**17.900** **(4.16)**	**6.370** **(3.65)**	**7.110** **(4.07)**
Total family expenditure missing (dummy)	**-0.036** **(2.16)**	**-0.034** **(2.06)**	**-0.033** **(2.00)**	0.023 (0.51)	0.027 (0.61)	0.092 (0.51)	0.111 (0.61)	0.043 (0.58)	0.048 (0.65)
Strata (classification of services available in area of city) 5/									
Strata 1	0.066 (1.42)	0.060 (1.27)	0.060 (1.29)	-0.014 (0.12)	0.113 (0.97)	-0.005 (0.12)	0.457 (0.97)	-0.008 (0.04)	0.217 (1.12)
Strata 2	-0.005 (0.26)	-0.009 (0.47)	-0.011 (0.56)	-0.159 (5.64)	-0.036 (0.84)	-0.641 (5.64)	-0.143 (0.84)	**-0.220** **(4.74)**	-0.004 (0.06)
Strata 3	0.026 (1.41)	0.021 (1.16)	0.020 (1.10)	0.001 (0.02)	0.126 (3.11)	0.002 (0.02)	0.508 (3.11)	0.004 (0.10)	**0.225** **(3.32)**
Strata 4	**0.069** **(3.85)**	**0.066** **(3.62)**	**0.066** **(3.64)**	**0.113** **(4.60)**	**0.245** **(6.18)**	**0.456** **(4.60)**	**0.988** **(6.18)**	**0.196** **(4.74)**	**0.428** **(6.46)**
Strata 5	**0.063** **(3.48)**	**0.058** **(3.17)**	**0.059** **(3.20)**	**0.105** **(4.02)**	**0.238** **(5.97)**	**0.422** **(4.02)**	**0.962** **(5.97)**	**0.181** **(4.13)**	**0.416** **(6.21)**
Strata 6	0.028 (1.43)	0.025 (1.28)	0.025 (1.27)		**0.130** **(3.06)**		**0.523** **(3.06)**		**0.226** **(3.19)**
Strata 7				**-0.134** **(3.15)**		**-0.539** **(3.15)**		**-0.232** **(3.27)**	
Constant	-0.248 (3.69)	0.359 (4.93)	-0.268 (3.96)	0.397 (2.19)	0.603 (2.68)			1.066 (3.81)	1.419 (3.66)
Cut						1.602 (2.19)	2.430 (2.68)		
Chi2 Statistic	2497.91	2493.78	2488.73	4636.11	3996.75	5616.98	5226.18	5630.22	5442.36
(Prob > Chi2, degrees of freedom)	(0.00, 83)	(0.00, 77)	(0.00, 77)	(0.00, 81)	(0.00, 81)	(0.00, 81)	(0.00, 81)	(0.00, 81)	(0.00, 81)
N	21,917	21,917	21,917	21,916	21,916	21,916	21,916	21,916	21,916

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993. Colombia. Departamento Administrativo Nacional de Estadística.
1/ Attending school
2/ 1=not behind, 0=one or more grades behind.
3/ Excluded category is "scolding".
4/ 1=male, 0=female.
5/ Strata 1 is poorest and strata 6 is the richest.

Table 21
Abuse as a Determinant of School Attendance and Progression Through School by Gender Ages (7-17 Years)[1]

– Colombia –

Marginal effects based on logit regressions. Absolute values of Z-statistics in parenthesis. **Bold indicates significant at 10% level.**

Independent Variables	School Attendance 2/						PROGRESS THROUGH SCHOOL Not behind or behind one or more grades 3/					
	Male			*Female*			*Male*			*Female*		
Family Violence												
By Category 4/												
Denied privileges	**0.013**			**0.012**			0.020			0.008		
	(2.45)			**(1.86)**			(1.46)			(0.60)		
Slaps	0.001			**-0.029**			**-0.047**			**-0.082**		
	(0.19)			**(3.65)**			**(2.34)**			**(4.30)**		
Hit with a belt	**-0.016**			**-0.022**			**-0.077**			**-0.092**		
	(3.55)			**(3.79)**			**(5.92)**			**(6.97)**		
Kicks	0.050			-0.007			-0.046			-0.020		
	(1.51)			(0.21)			(0.63)			(0.27)		
Hit with an object	**-0.041**			**-0.071**			**-0.105**			**-0.189**		
	(2.79)			**(3.62)**			**(1.93)**			**(3.13)**		
Other type of punish-ment	-0.001			0.030			0.058			0.112		
	(0.04)			(0.83)			(0.85)			(1.47)		
Do not punish children	**-0.031**			**-0.047**			-0.009			**-0.044**		
	(5.05)			**(7.85)**			(0.40)			**(2.37)**		
Abuse		**-0.017**			**-0.024**			**-0.083**			0.097	
		(3.65)			**(4.12)**			**(6.49)**			**(7.55)**	
More Severe Abuse			**-0.020**			**-0.046**			**-0.074**			**0.083**
			(1.66)			**(3.02)**			**(1.98)**			**(2.10)**
Chi2 Statistic	1195.5	1207.25	1209.9	1263.08	1256.25	1253.91	2067.42	2061.00	2044.79	2015.68	1998.59	1974.68
(Prob>Chi2, degrees of freedom)	(0.00, 75)	(0.00, 69)	(0.00,69)	(0.00, 78)	(0.00, 72)	(0.00, 72)	(0.00, 81)	(0.00, 75)	(0.00, 75)	(0.00, 85)	(0.00, 79)	(0.00, 79)
n	10,759	10,759	10,759	11,090	11,090	11,090	10,776	10,776	10,776	11,119	11,119	11,119

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993. Colombia. Departamento Administrativo Nacional de Estadística.

1/ Includes all independent variables given in Table 20 as well as a full set of departamento and city dummies.

2/ 1= attending school.

3/ 1=not behind, 0=one or more grades behind.

4/ Excluded category is "scolding".

Table 22
Wage Functions Including Abuse
OLS and Sample Selection Correction (Respondents aged 18 – 64)

For OLS absolute value of t-statistics in parenthesis. For sample correction absolute value of Z-Statistic in parenthesis; **Bold indicates significant at 10% level**

Mexico –

	MALE			FEMALE			MALE			FEMALE		
	OLS	Sample selection Correction		OLS	Sample selection correction		OLS	Sample selection correction		OLS	Sample selection correction	
	Wage Function	Wage Function	Probit for Labor Force Participation	Wage Function	Wage Function	Probit for Labor Force Participation	Wage Function	Wage Function	Probit for Labor Force Participation	Wage Function	Wage Function	Probit for Labor Force Participation
Suffered Abuse as a Child												
RESOLVE	**-0.10** **(1.88)**	-0.09 (1.58)	0.13 (1.02)	**-0.21** **(4.04)**	**-0.21** **(3.71)**	-0.02 (0.40)						
HITTING OR INSULTS							**-0.11** **(2.31)**	**-0.10** **(1.96)**	0.09 (0.78)	**-0.12** **(2.49)**	**-0.09** **(1.73)**	0.05 (0.92)
Human Capital												
Education												
Years of education	**0.13** **(26.52)**	**0.13** **(24.51)**	0.00 (0.26)	**0.14** **(23.98)**	**0.17** **(22.79)**	**0.09** **(11.13)**	**0.13** **(26.77)**	**0.13** **(24.83)**	0.00 (0.09)	**0.14** **(24.05)**	**0.17** **(22.86)**	**0.09** **(11.31)**
Experience (age – education – 6)												
Linear	**0.03** **(5.50)**	**0.05** **(5.95)**	**0.12** **(11.99)**	**0.02** **(3.52)**	**0.04** **(5.83)**	**0.05** **(7.05)**	**0.03** **(5.55)**	**0.05** **(5.75)**	**0.12** **(12.02)**	**0.02** **(3.31)**	**0.04** **(5.66)**	**0.05** **(6.97)**
Squared	**-0.0003** **(2.99)**	**-0.0007** **(4.16)**	**-0.0024** **(11.67)**	-0.0002 (1.72)	**-0.0006** **(4.11)**	**-0.0008** **(5.92)**	**-0.0003** **(2.99)**	**-0.0007** **(3.95)**	**-0.0024** **(11.76)**	-0.0002 (1.51)	**-0.0006** **(3.92)**	**-0.0008** **(5.84)**
Labor Force Participation												
Type of Home												
Private home			-0.19 (0.38)			**-0.15** **(2.39)**			-0.16 (0.31)			**-0.14** **(2.24)**
Apartment in Building			-0.14 (0.28)			0.02 (0.32)			-0.12 (0.24)			0.03 (0.36)
Apartment in smaller residence												
Room												
Other			0.09 (0.18)			-0.45 (0.97)			0.11 (0.20)			-0.44 (0.97)
Characteristics of Home												
Predominant building material												
Concrete or Brick			-0.31 (0.61)			-0.33 (0.58)			-0.30 (0.59)			-0.33 (0.59)
Wood						-0.42 (0.62)						-0.42 (0.63)
Adobe												
Asbestos Sheeting						-0.19 (0.25)						-0.18 (0.24)
Carton Sheeting			-1.20 (1.24)			-0.97 (1.13)			-1.02 (1.04)			-0.98 (1.15)
Other material												
Roofing Material												
Concrete or brick			0.25 (1.08)			-0.22 (0.75)			-0.15 (0.79)			-0.38 (0.42)
Palm fronds or wood						0.16 (0.17)						
Asbestos Sheeting			0.35 (1.28)			-0.08 (0.25)						-0.23 (0.26)
Carton Sheeting						-0.05 (0.15)			**-0.62** **(2.20)**			-0.21 (0.23)
Other material												
Flooring Material												
Wood, Tile or other covering material			**1.37** **(1.91)**			**-0.47** **(1.76)**			**-1.29** **(1.79)**			**-0.46** **(1.73)**
Concrete			-1.13 (1.59)			**-0.46** **(1.76)**			-1.06 (1.49)			**0.45** **(1.72)**
Earth												
Has:												
Electricity						0.25 (0.45)						0.26 (0.46)
Potable water			0.20 (0.60)			0.21 (1.00)			0.22 (0.65)			0.21 (0.99)
Drainage			-0.01 (0.04)			-0.14 (1.20)			0.01 (0.02)			-0.13 (1.19)
Telephone Services			0.01 (0.08)			-0.04 (0.71)			0.01 (0.05)			-0.04 (0.72)
Refrigerator			**0.29** **(1.99)**			**0.16** **(2.38)**			**0.31** **(2.13)**			**0.16** **(2.42)**
Water heater (boiler for bathing)			-0.04 (0.34)			**0.14** **(2.47)**			-0.03 (0.28)			**0.15** **(2.48)**
Lambda		**0.33** **(3.00)**			**0.61** **(8.05)**			**0.31** **(2.68)**			**0.61** **(8.16)**	
Constant	**6.26** **(71.64)**	**6.05** **(54.29)**	0.88 (0.77)	**6.02** **(55.12)**	**4.91** **(23.97)**	-1.33 (1.46)	**6.26** **(72.08)**	**6.06** **(53.95)**	1.13 (0.97)	**6.01** **(54.43)**	**4.87** **(26.52)**	-1.22 (1.13)
F-Statistic	195.31		210.53	182.71		218.07	196.07		212.67	178.57		219.08
(> F, degrees of freedom)	(0.00,4)		(0.00,23)	(0.00,4)		(0.00,28)	(0.00,4)		(0.00,23)	(0.00,4)		(0.00,28)
R^2	0.41			0.40			0.41			0.39		
n	1,133		1,400	1,111		3,149	1,133		1,400	1,111		3,149

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.
RESOLVE: Dummy, family conflict resolved with slaps, beating or spanking. HITTING OR INSULTS: Dummy. Mother, father or caretaker hit or insulted them if they did something bothersome.

Table 23

Wage Function with Sample Selection Correction for Labor Force Participation, Without Including Violence, Sample of All Adults (Ages 18-64)

- Mexico -

For OLS absolute value of t-Statistics in parenthesis; For sample correction absolute value of Z-Statistics in parenthesis.
Bold indicates significant at 10% level.

	MALE			*FEMALE*		
	OLS	Sample selection correction		OLS	Sample selection correction	
	Wage Function	Wage Function	Probit for Labor Force Participation	Wage Function	Wage Function	Probit for Labor Force Participation
Human Capital						
Education						
Years of education	**0.124**	**0.118**	-0.003	**0.128**	**0.146**	**0.064**
	(50.35)	**(43.91)**	(0.42)	**(35.31)**	**(34.15)**	**(11.93)**
Experience (age – education – 6)						
Linear	**0.036**	**0.061**	**0.127**	**0.026**	**0.049**	**0.056**
	(13.18)	**(18.99)**	**(26.42)**	**(6.84)**	**(10.98)**	**(12.88)**
Squared	-0.0004	-0.0009	-0.002	-0.0003	-0.0008	-0.0011
	(7.32)	(13.95)	(24.01)	(3.42)	(8.26)	(12.75)
Labor Force Participation						
Home Ownership						
House alone			**-0.187**			0.077
			(3.09)			(0.21)
Apartment in building			-0.116			0.165
			(1.55)			(0.45)
Apartment in smaller residence						0.145
						(0.39)
Room						
Other			-0.619			-0.432
			(1.59)			(0.87)
Characteristics of Home						
Predominant building material						
Concrete or Brick			**-0.705**			-0.188
			(1.82)			(0.58)
Wood			**-1.019**			-0.491
			(1.83)			(1.11)
Adobe						0.247
						(0.52)
Asbestos Sheeting						
Carton Sheeting						
Other material						
Roofing Material						
Concrete or brick			0.383			0.063
			(0.60)			(0.32)
Palm fronds or wood						0.403
						(0.71)
Asbestos Sheeting			0.305			0.124
			(0.47)			(0.61)
Carton Sheeting			0.276			0.138
			(0.43)			(0.64)
Other material			1.300			
			(1.53)			
Flooring Material						
Wood, Tile or other covering material						**-0.435**
						(2.00)
Concrete			**0.157**			-0.359
			(3.60)			(1.67)
Earthen floors			-0.041			
			(0.20)			
Has:						
Electricity			-0.496			-0.032
			(0.99)			(0.08)
Potable water			0.179			0.152
			(0.95)			(1.14)
Drainage			0.096			**-0.140**
			(0.86)			**(1.68)**
Telephone Services			0.057			0.011
			(1.08)			(0.27)
Refrigerator			0.041			**0.090**
			(0.63)			**(1.87)**
Water heater (boiler for bathing)			**0.230**			**0.096**
			(4.42)			**(2.44)**
Lambda		**0.469**			**0.611**	
		(16.24)			**(14.60)**	
Constant	**6.193**	**5.892**	0.55	**6.069**	**5.146**	**-1.130**
	(153.14)	**(128.71)**	(0.06)	**(99.29)**	**(56.37)**	**(1.71)**
F-Statistic	899.26		986.06	444.40		378.55
(> F, degrees of freedom) (Values for Chi2)	(0.00,3)		(0.00,24)	(0.00, 3)		(0.00, 26)
R^2	0.37			0.35		
n	4,690		5,899	2,525		6,389

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

Table 24
Wage Function with Sample Selection Correction for Labor Force Participation, Sample of Informants who Answered Questions on Violence (Ages 18-64)

- Mexico -

For sample correction absolute value of Z-Statistics in parenthesis. **Bold indicates significant at 10% level .**

Independent Variables	MALE			FEMALE		
	OLS	Sample selection correction		OLS	Sample selection correction	
	Wage Function	Wage Function	Probit for Labor Force Participation	Wage Function	Wage Function	Probit for Labor Force Participation
Human Capital						
Education						
Years of education	**0.134**	**0.130**	0.003	**0.143**	**0.172**	**0.091**
	(27.01)	**(24.81)**	(0.18)	**(24.76)**	**(23.51)**	**(11.30)**
Experience (age – education – 6)						
Linear	**0.031**	**0.048**	**0.122**	**0.021**	**0.043**	**0.049**
	(5.43)	**(5.94)**	**(12.06)**	**(3.19)**	**(5.60)**	**(7.04)**
Squared	**-0.0003**	**-0.0007**	**-0.002**	-0.0002	**-0.0006**	**-0.0008**
	(2.92)	**(4.15)**	**(11.74)**	(1.37)	**(3.85)**	**(5.89)**
Labor Force Participation						
Home Ownership						
House alone			-0.179			**-0.144**
			(0.36)			**(2.32)**
Apartment in building			-0.142			0.022
			(0.28)			(0.29)
Apartment in smaller residence						
Room						
Other			0.098			-0.461
			(0.19)			(1.00)
Characteristics of Home						
Predominant building material						
Concrete or brick			-0.292			-0.371
			(0.56)			(0.67)
Wood						-0.482
						(0.73)
Adobe						
Asbestos sheeting						-0.235
						(0.31)
Carton sheeting			-1.211			-1.039
			(1.26)			(1.22)
Other material						
Roofing Material						
Concrete or brick			0.256			-0.228
			(1.12)			(0.79)
Palm fronds or wood						0.090
						(0.09)
Asbestos sheeting			0.368			-0.086
			(1.35)			(0.29)
Carton sheeting						-0.060
						(0.20)
Other material						
Flooring Material						
Wood, tile or other covering material			**-1.341**			**-0.448**
			(1.87)			**(1.70)**
Concrete			-1.111			**-0.437**
			(1.57)			**(1.69)**
Earth						
Has*:*						
Electricity						0.220
						(0.40)
Potable water			0.195			0.209
			(0.58)			(0.99)
Drainage			0.010			-0.126
			(0.04)			(1.11)
Telephone services			0.017			-0.041
			(0.15)			(0.71)
Refrigerator			**0.290**			**0.157**
			(2.00)			**(2.37)**
Water heater (boiler for bathing)			-0.028			**0.150**
			(0.24)			**(2.57)**
Lambda		**0.337**			**0.620**	
		(3.05)			**(8.33)**	
Constant	**6.231**	**6.026**	0.806	**5.957**	**4.824**	**0.911**
	(72.21)	**(55.01)**	(0.70)	**(54.72)**	**(26.76)**	**(8.14)**
F-Statistic	258.65		208.48	234.93		217.71
(> F, degrees of freedom) (Values for Chi2)	(0.00,3)		(0.00, 21)	(0.00,3)		(0.00,26)
R^2	0.41			0.39		
N	1,133		1,400	1,111		3,149

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

Table 25
Impact of Family Violence on School Attendance by Age, Education of Household Head, Percapita Family Income and Characteristics of the Home (by Gender; Age 7-17 years) 1/

- Mexico -

Absolute value of Z-Statistic in parenthesis. **Bold indicates significant at 10% level.**

Independent Variables	*MALE* Education Function		*FEMALE* Education Function	
	LOGIT	LOGIT	LOGIT	LOGIT
Family Violence				
VIOLFAM3	**-0.02**		-0.002	
	(1.71)		(0.13)	
VIOLFAM4		-0.01		0.00
		(0.56)		(0.29)
Age				
Linear	**0.05**	**0.05**	**0.06**	**0.06**
	(3.53)	**(3.56)**	**(4.03)**	**(4.01)**
Squared	**-0.002**	**-0.002**	**-0.003**	**-0.003**
	(4.51)	**(4.53)**	**(5.13)**	**(5.11)**
Education of Household Head	**0.004**	**0.01**	**0.01**	**0.01**
	(3.31)	**(3.42)**	**(4.87)**	**(4.92)**
Education of Household Head Missing (Dummy)	**-0.05**	**-0.05**	**-0.04**	**-0.04**
	(3.22)	**(3.33)**	**(2.34)**	**(2.35)**
Per Capita Family Income (x 10,000)	0.21	0.21	-0.02	-0.02
	(1.50)	(1.53)	(0.31)	(0.30)
Characteristics of Home				
Predominant building material				
Concrete or Brick	-0.004	-0.01	**0.09**	**0.09**
	(0.11)	(0.19)	**(2.23)**	**(2.29)**
Wood				
Adobe				
Asbestos Sheeting				
Carton Sheeting				
Other material				
Roofing Material				
Concrete or brick	**0.04**	**0.04**	-0.01	-0.01
	(2.19)	**(2.32)**	(0.40)	(0.41)
Palm fronds or wood				
Asbestos Sheeting	0.02	0.02	0.0004	0.0004
	(1.05)	(1.11)	(0.02)	(0.02)
Carton Sheeting				
Other material	0.04	0.04	-0.05	-0.05
	(1.19)	(1.13)	(1.42)	(1.41)
Flooring Material				
Wood, Tile or other covering material	**0.07**	**0.07**	**0.07**	**0.07**
	(2.80)	**(2.71)**	**(2.35)**	**(2.37)**
Concrete	**0.06**	**0.06**	0.05	0.05
	(2.64)	**(2.60)**	(1.54)	(1.55)
Earth				
Constant	**-0.19**	**-0.20**	**-0.29**	**-0.29**
	(2.29)	**(2.31)**	**(2.94)**	**(3.00)**
Chi2 Statistic	**193.65**	**195.01**	**180.53**	**180.55**
(> Chi2, degrees of freedom) (Values for Chi2)	(0.00, 12)	(0.00, 12)	(0.00, 12)	(0.00, 12)
N	2,254	2,254	2,028	2,028

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

1/ Using expansion factors.

VIOLFAM3: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon.

VIOLFAM4: In the last six months, sexual or physical abuse occurred or a family member was intimidated by being pushed, hit with a fist or an object, by having an object thrown at them, with verbal threats, with a death threat or with a weapon, or suffered emotional abuse by being humiliated verbally, insulted or denied food.

Table 26
Impact of Family Violence on Progression Through School
Ordered Logit, Tobit and Logit Regressions of Years Behind in School
Controlling for Violence in the Family, Family Income and Education of the Household Head

Females aged 7-18

-Mexico-

Bold indicates significant at 10% level.

Independent Variables	Dependent Variables						
	Child is behind in school in terms of completed grades given age						
	Ordered Logit 2/ (Coefficient and z-statistic)		Tobit 3/ (Coefficient and t-statistic)		Logit 4/ (Coefficient and z-statistic)		
	Age Group		Age Group		Age Group		
	7-12	*13-17*	*7-12*	*13-17*	*7-12*	*13-17*	*13-18*
VIOLFAM3 1/	-0.090	0.051	-0.004	-0.023	-0.083	-0.014	-0.169
	(0.30)	(0.21)	(0.01)	(0.07)	(0.27)	(0.05)	(0.49)
Age of Child	**0.338**	**0.565**	**0.353**	**0.743**	**0.330**	**0.540**	**0.491**
	(5.87)	**(10.95)**	**(5.81)**	**(11.25)**	**(5.73)**	**(9.83)**	**(12.73)**
Education of head of household	**-0.107**	**-0.108**	**-0.103**	**-0.133**	**-0.107**	**-0.106**	**-0.126**
	(4.14)	**(5.92)**	**(4.04)**	**(5.71)**	**(4.13)**	**(5.52)**	**(7.19)**
Education of head of household missing	**1.057**	0.498	**1.140**	0.559	**0.890**	0.529	**0.688**
	(2.76)	(1.43)	**(2.87)**	(1.22)	**(2.34)**	(1.36)	**(1.97)**
Per Capita Family Income (x 1000)	0.004	0.018	-0.020	0.049	0.009	0.056	0.033
	(0.07)	(0.29)	(0.32)	(0.73)	(0.13)	(0.98)	(0.65)
Constant			**-4.698**	**-10.512**	**-4.262**	**-7.632**	**-6.778**
			(6.77)	**(10.13)**	**(6.82)**	**(9.12)**	**(10.67)**
n	1,110	910	1,110	910	1,110	910	1,149
X^2	65.66	173.29	69.83	170.53	62.27	142.38	232.68
	(0.00,5)	(0.00,5)	(0.00,5)	(0.00,5)	(0.00,5)	(0.00,5)	(0.00,5)
Pseudo R^2	0.063	0.076	0.058	0.069	0.071	0.115	0.146

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

1/ Family violence is defined to include any case of sexual or physical violence or severe emotional violence. For details see Table 3.

2/ Dependent variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one year behind in grades for age; 2 if two years behind; and up to 7 if 7 or more grades behind.

3/ Dependent variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one year behind in grades for age; 2 if two years behind; and up to the maximum number of years behind for age.

4/ Dependent variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one or more years behind in grades for age.

Table 27
Impact of Family Violence on Progression Through School
Ordered Logit, Tobit and Logit Regressions of Years Behind in School
Controlling for Violence in the Family, Family Income and Education of the Household Head

Males aged 7-18

- Mexico -

Independent Variables	*Dependent Variables*								
	Child is behind in school in terms of completed grades given age								
	Ordered Logit 2/ (Coefficient and z-statistic)			Tobit 3/ (Coefficient and t-statistic)			Logit 4/ (Coefficient and z-statistic)		
	Age Group			Age Group			Age Group		
	7-12	*13-17*	*13-18*	*7-12*	*13-17*	*13-18*	*7-12*	*13-17*	*13-18*
VIOLFAM3 1/	0.096	**0.398**	**0.364**	0.066	0.263	**0.411**	0.049	0.304	**0.402**
	(0.38)	**(1.85)**	**(1.88)**	(0.23)	(1.07)	**(1.81)**	(0.19)	(1.19)	**(1.67)**
Age of Child	**0.460**	**0.580**	**0.562**	**0.516**	**0.683**	**0.667**	**0.442**	**0.562**	**0.491**
	(8.05)	**(12.31)**	**(16.10)**	**(7.81)**	**(13.37)**	**(17.58)**	**(7.77)**	**(10.80)**	**(12.73)**
Education of head of household	**-0.089**	**-0.105**	**-0.124**	**-0.093**	**-0.125**	**-0.149**	**-0.086**	**-0.105**	**-0.115**
	(3.88)	**(6.35)**	**(8.61)**	**(3.71)**	**(6.73)**	**(8.93)**	**(3.70)**	**(5.62)**	**(6.92)**
Education of head of household missing	**0.753**	**0.822**	**0.784**	**0.826**	**1.016**	**1.036**	**0.673**	**0.861**	**0.757**
	(2.37)	**(2.95)**	**(3.29)**	**(2.33)**	**(3.32)**	**(3.80)**	**(2.11)**	**(2.61)**	**(2.53)**
Per Capita Family Income (x 1000)	0.086	**-0.113**	**-0.111**	0.088	**-0.163**	**-0.186**	0.093	**-0.119**	**-0.161**
	(1.59)	**(2.11)**	**(2.55)**	(1.47)	**(2.56)**	**(3.28)**	(1.67)	**(1.84)**	**(2.71)**
Constant				**-6.529**	**-9.044**	**-8.637**	**-5.548**	**-7.513**	**-6.371**
				(8.61)	**(11.32)**	**(13.90)**	**(9.03)**	**(9.61)**	**(10.63)**
n	1,213	1,017	1,272	1,213	1,017	1,272	1,213	1,017	1,272
X²	93.39	238.53	400.27	98.99	267.47	35.61	86.92	196.22	281.29
	(0.00,5)	(0.00,5)	(0.00,5)	(0.00,5)	(0.00,5)	(0.00,5)	(0.00,5)	(0.00,5)	(0.00,5)
Pseudo R²	0.074	0.088	0.106	0.069	0.090	0.106	0.086	0.139	0.160

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

1/ Family violence is defined to include any case of sexual or physical violence or severe emotional violence. For details see Table 3.

2/ Dependent variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one year behind in grades for age; 2 if two years behind; and up to 7 if 7 or more grades behind.

3/ Dependent variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one year behind in grades for age; 2 if two years behind; and up to the maximum number of years behind for age.

4/ Dependent variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one or more years behind in grades for age.

Table 28
Impact of Family Violence on Progression Through School
Ordered Logit, Tobit and Logit Regressions of Years Behind in School Varying the Definition of Family Violence
Controlling for Family Income and Education of the Household Head 1/

Males and Females aged 7-18

- Mexico -

Bold indicates significant at 10% level.

	Dependent Variables								
	Child is behind in school in terms of completed grades given age								
Variable used to indicate presence of violence in the family	Ordered Logit 2/ (Coefficient and z-statistic)			Tobit 3/ (Coefficient and t-statistic)			Logit 4/ (Coefficient and z-statistic)		
	Age Group			Age Group			Age Group		
	7-12	*13-17*	*13-18*	*7-12*	*13-17*	*13-18*	*7-12*	*13-17*	*13-18*
MALES									
VIOLFAM1	-0.135	0.282	0.330	-0.272	0.108	0.248	-0.137	0.298	0.411
	(0.24)	(0.72)	(0.92)	(0.43)	(0.24)	(0.58)	(0.24)	(0.62)	(0.89)
VIOLFAM2	-0.001	**0.464**	**0.531**	-0.048	0.329	0.473	-0.020	0.406	**0.522**
	(0.00)	**(1.70)**	**(2.14)**	(0.13)	(1.06)	(1.60)	(0.06)	(1.24)	**(1.67)**
VIOLFAM3	0.096	**0.398**	**0.364**	0.066	0.263	**0.411**	0.049	0.304	**0.402**
	(0.38)	**(1.85)**	**(1.88)**	(0.23)	(1.07)	**(1.81)**	(0.19)	(1.19)	**(1.67)**
VIOLFAM4	0.057	0.177	**0.249**	0.053	0.169	**0.321**	0.015	0.144	**0.284**
	(0.27)	(1.08)	**(1.75)**	(0.23)	(0.92)	**(1.94)**	(0.07)	(0.77)	**(1.65)**
FEMALES									
VIOLFAM1	-0.063	0.052		-0.183	0.022		0.001	0.316	-0.424
	(0.08)	(0.09)		(0.22)	(0.03)		(0.00)	(0.49)	(0.78)
VIOLFAM2	-0.291	0.179		-0.192	0.113		-0.261	0.045	-0.160
	(0.68)	(0.59)		(0.46)	(0.29)		(0.61)	(0.14)	(0.53)
VIOLFAM3	-0.090	0.051		-0.004	-0.023		-0.083	-0.014	-0.169
	(0.30)	(0.21)		(0.01)	(0.07)		(0.27)	(0.05)	(0.49)
VIOLFAM4	-0.044	-0.004		0.011	-0.072		-0.065	-0.083	-0.161
	(0.19)	(0.02)		(0.05)	(0.32)		(0.28)	(0.45)	(0.94)

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

1/ Other variables include per capita family income, age of child, and education of household head. Coefficients do not vary significantly from those presented in Table 15 and are available from the author.

2/ Dependent variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one year behind in grades for age; 2 if two years behind; and up to 7 if 7 or more grades behind.

3/ Dependent variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one year behind in grades for age; 2 if two years behind; and up to the maximum number of years behind for age.

4/ Dependent variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one or more years behind in grades for age.

Appendix

Table A

Means and Standard Deviation of Dependent Regression Variables 1/

- Urban Colombia -

	Household Head		Children	
	Mean	**Std. Dev.**	**Mean**	**Std. Dev.**
Wages	1364.21	2561.98		
Females	1124.52	3001.27		
Males	1414.02	2458.07		
Educational Attainment of Children				
School attendance, 7-17			0.88	0.33
Females			0.87	0.33
Males			0.88	0.32
Progression through school, 7-17				
Not behind one or more grades			0.47	0.50
Females			0.45	0.50
Males			0.49	0.50

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993. Colombia. Departamento Administrativo Nacional de Estadística.

1/ Using expansion factors.

2/ For school attendance, dependent variable is defined as: 0 if not attending, 1 if attending school.

3/ For progression through school, dependent variable is defined as: 0 if the child is one or more years behind in grades for age, 1 if the child is not behind.

Table B

Means and Standard Deviation of Independent Regression Variables 1/

-Urban Colombia-

	Household Head		Children (7-17 years)	
	Mean	**Std. Dev.**	**Mean**	**Std. Dev.**
Suffered Abuse as a Child				
Scolding	0.66	0.47		
Denied privileges	0.14	0.34		
Slaps	0.09	0.28		
Hit with a belt	0.53	0.50		
Kicks	0.03	0.18		
Hit with an object	0.10	0.30		
Other type of punishment	0.01	0.11		
Do not punish children	0.03	0.16		
Composite Variables used to Describe Abuse as a Child				
Abuse	0.59	0.49		
Severe abuse	0.13	0.33		
Family Violence				
Scolding			0.89	0.31
Denied privileges			0.23	0.42
Slaps			0.09	0.28
Hit with a belt			0.26	0.44
Kicks			0.01	0.07
Hit with an object			0.01	0.10
Other type of punishment			0.01	0.08
Do not punish children			0.04	0.27
Composite Variables used to Describe Abuse on Family Violence				
Abuse			0.27	0.44
Severe Abuse			0.02	0.14
Education & Labor Force Variables				
Education (years)	7.96	4.55		
Average education of household and spouse			6.14	4.00
Education of household head missing			0.25	0.43
Abuse*Years of education	4.30	4.90		
Scolding* Years of education	5.45	5.41		
Denied privileges*Years	1.22	3.53		
Slaps*Years of education	0.66	2.51		
Hit with a belt*Years	3.92	4.87		
Kicks*Years of education	0.23	1.44		
Hit with an object*Years	0.57	2.14		
Other type of punishment*Years of education	0.08	0.91		
Do not punish children*Years of education	0.21	1.49		
Experience	28.48	12.91		
Experience squared	977.62	801.55		
Age	41.43	11.17	11.96	3.12
Age squared	1841.30	961.63	152.77	75.17
Gender (male equals 1)	0.76	0.43	0.49	0.50
Per capita total family expenditure			45336.00	49404.74
Total family expenditure missing			0.01	0.08
Classification of Services Available in Area of City				
Strata 1			0.20	0.40
Strata 2			0.09	0.29
Strata 3			0.24	0.43
Strata 4			0.33	0.47
Strata 5			0.09	0.29
Strata 6			0.03	0.18
Strata 7			0.01	0.11

Source: Encuesta de pobreza y calidad de vida urbana nacional, 1993. Colombia. Departamento Administrativo Nacional de Estadística.
1/ Using expansion factors.

Table C
Means and Standard Deviations of Dependent Regression Variables 1/,2/

- Mexico -

	Full Sample of Adults		Informants/Households		Children	
	Mean	**Std. Dev**	**Mean**	**Std. Dev**	**Mean**	**Std. Dev**
Family Violence						
VIOLFAM1						
All	0.01	0.11	0.01	0.11		
Females					0.01	0.11
Males					0.02	0.13
Females and Males (7-18)					0.01	0.12
VIOLFAM2						
All	0.04	0.20	0.04	0.18		
Females					0.04	0.21
Males					0.05	0.21
Females and Males (7-18)					0.05	0.21
VIOLFAM3						
All	0.07	0.26	0.06	0.25		
Females					0.08	0.27
Males					0.09	0.28
Females and Males (7-18)					0.08	0.28
VIOLFAM4						
All	0.15	0.36	0.13	0.34		
Females					0.18	0.38
Males					0.18	0.38
Females and Males (7-18)					0.18	0.38
Wages						
Males	2,178.60	5,442.58	2,568.67	5,148.53		
Female	844.29	2,943.48	959.63	2,551.51		
	Used in LOGIT 3/		**Used in TOBIT** 4/		**Used in Ordered LOGIT** 5/	
Educational Attainment of Children						
School attendance, 7-17	0.53	1.03				
Females	0.49	1.02				
Males	0.57	1.03				
Child behind in school given age, 7-12	0.14	0.35	0.18	0.48	0.18	0.48
Females	0.13	0.34	0.15	0.42	0.15	0.42
Males	0.15	0.36	0.20	0.53	0.20	0.53
Child behind in school given age, 13-17	0.49	0.50	0.93	1.29	0.88	1.31
Females	0.45	0.50	0.88	1.33	0.84	1.34
Males	0.52	0.50	0.97	1.26	0.91	1.29
Child behind in school given age, 13-18	0.55	0.50	1.27	1.59	1.19	1.63
Females	0.51	0.50	1.21	1.62	1.12	1.65
Males	0.59	0.49	1.34	1.56	1.26	1.60

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

1/ Informants are aged 18 to 64 and are those who answered the questions on abuse when they were children; the full data set of adults includes all individuals aged 18-64.

2/ Using expansion factors.

3/ Dependent variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one or more years behind in grades for age.

4/ Dependent variable is defined as: 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one year behind in grades for age; 2 if two years behind; and up to the maximum number of years behind for age.

5/ Dependent variable is defined as: : 0 if the child has completed 1 or more grades for each age beginning at age 6; 1 if the child is one year behind in grades for age; 2 if two years behind; and up to 7 if seven or more grades behind.

Table D
Means and Standard Deviations of Independent Regression Variables 1/

- Mexico -

	Full Sample of Adults		Informants/Households		Children	
	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev
Suffered Abuse as a Child						
RESOLVE			0.20	0.40		
HITTING OR INSULTS			0.24	0.42		
CONSEQUENCES			0.06	0.23		
ABUSE			0.30	0.46		
Family Violence						
VIOLFAM1	0.01	0.11	0.01	0.11	0.01	0.12
VIOLFAM2	0.04	0.20	0.04	0.18	0.05	0.21
VIOLFAM3	0.07	0.26	0.06	0.25	0.08	0.28
VIOLFAM4	0.15	0.36	0.13	0.34	0.18	0.38
Education & Labor Force Variables						
Education of household head	9.13	4.36	9.45	4.45	8.79	4.25
Education of household head missing	0.06	0.23	0.06	0.23	0.06	0.23
Education (years)	7.67	4.81	8.08	4.92	6.50	3.10
Education (level)	1.67	1.36	1.78	1.38	1.29	1.14
Experience	14.83	16.89	17.26	18.25		
Age	28.60	19.07	31.69	20.20	13.05	3.62
Age squared	1,181.94	1,398.10	1,411.99	1,569.38	183.45	93.41
Age children, 7-12					9.52	1.68
Age children, 7-17					12.12	3.17
Age children, 13-17					15.06	1.78
Age children, 13-18					15.90	1.40
Gender	0.49	0.50	0.48	0.50	0.52	0.49
Income	1,489.34	4,386.26	1,730.38	4,090.48		
Income, Females	844.29	2,943.48	959.63	2,551.51		
Income, Males	2,178.29	5,442.58	2,568.67	5,148.53		
Family income	6,252.06	10,497.47	5,767.83	9,400.63	6,700.43	10,724.03
Per capita family income	1,446.39	2,500.18	1,716.22	3,169.21	1,177.06	1,720.81
Per capita family income excluding child workers	1,457.45	2,498.66	1,724.26	3,167.94	1,197.82	1,719.33
Characteristics of the Family Home						
Home Ownership						
House alone	0.69	0.46	0.66	0.47	0.73	0.44
Apartment in building	0.17	0.37	0.20	0.40	0.14	0.34
Apartment in smaller residence	0.14	0.34	0.14	0.34	0.12	0.33
Room	0.002	0.05	0.003	0.05	0.005	0.07
Other	0.002	0.05	0.002	0.05	0.003	0.06
Predominant Building Material						
Concrete or brick	0.99	0.09	0.99	0.09	0.99	0.10
Wood	0.004	0.06	0.003	0.05	0.01	0.08
Adobe	0.002	0.04	0.002	0.04	0.001	0.04
Asbestos sheeting	0.002	0.05	0.002	0.04	0.002	0.04
Carton sheeting	0.002	0.04	0.001	0.04	0.001	0.04
Roofing Material						
Concrete or brick	0.86	0.34	0.88	0.33	0.84	0.14
Palm fronds or wood	0.001	0.03	0.001	0.04	0.001	0.03
Asbestos sheeting	0.09	0.29	0.08	0.28	0.11	0.31
Carton sheeting	0.04	0.19	0.03	0.18	0.04	0.20
Other building material	0.01	0.09	0.01	0.08	0.01	0.10
Flooring Material						
Wood, tiles or other covering material	0.48	0.50	0.51	0.50	0.45	0.50
Concrete	0.51	0.50	0.49	0.50	0.54	0.50
Earth	0.01	0.09	0.01	0.09	0.01	0.10
Electricity	1.00	0.03	1.00	0.03	1.00	0.03
Potable water	1.01	0.11	1.01	0.11	1.01	0.12
Drainage	1.04	0.20	1.04	0.19	1.04	0.20
Telephone service	1.19	0.39	1.18	0.38	1.20	0.40
Refrigerator	1.15	0.35	1.15	0.36	1.15	0.36
Water heater (boiler for bathing)	1.33	0.47	1.31	0.46	1.37	0.48

Source: Encuesta de violencia intrafamiliar, 1999. INEGI, Mexico.

1/ Informants are aged 18 to 64 and are those who answered the questions on abuse when they were children; the full data set of adults includes all individuals aged 18-64.

2/ Using expansion factors.