The lasting consequences of childhood sexual abuse on human capital and economic well-being

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Online Appendix
Online Appendix 1: Measures of Adverse Childhood Experiences

Sexual abuse—Report in audio computer-assisted self-interview (A-CASI) of contact sexual abuse by anyone before age 18: (i) report of at least one time to the question “How often did a parent or other adult caregiver touch you in a sexual way, force you to touch him or her in a sexual way, or force you to have sexual relations?” (Waves III and IV), (ii) affirmative response to “Have you ever been forced, in a non-physical way, to have any type of sexual activity against your will? For example, through verbal pressure, threats of harm, or by being given alcohol or drugs? Do not include any experiences with a parent or adult caregiver” (Wave IV), or (iii) affirmative response to “Have you ever been physically forced to have any type of sexual activity against your will? Do not include any experiences with a parent or adult caregiver” (Wave IV).

Emotional abuse—Report of 10+ times in A-CASI module of Wave IV interview to “Before your 18th birthday, how often did a parent or other adult caregiver say things that really hurt your feelings or made you feel like you were not wanted or loved?”

Physical abuse—Report in A-CASI module of Wave IV of at least one time to “Before your 18th birthday, how often did a parent or adult caregiver hit you with a fist, kick you, or throw you down on the floor, into a wall, or down stairs?” Reports from Wave III were not used because the question differed and may include reports of physical discipline not characterized as abuse: “How often had your parents or other adult care-givers slapped, hit, or kicked you?”

Knife or gun violence—Report in A-CASI module of Wave I of at least one time to any one of the three items in the following question: “During the past 12 months, how often did each of the following things happen? . . . Someone pulled a knife or gun on you . . . Someone shot you. Someone cut or stabbed you.”

Illegal drugs in household—Response in A-CASI module of Wave I of “Yes” to the question “Are illegal drugs easily available to you in your home?”

Parental divorce or separation—Biological mother or father is divorced or separated, stepmother or stepfather is parent survey respondent or in household roster, or parent’s spouse/partner is in household (Wave I).

Parental incarceration—Report of incarceration of biological mother, biological father, mother figure, or father figure after being born but before participant aged 18 years (Waves IV and V).

Neglect—Report of 6+ times to either of the follow questions: (i) “By the time you started 6th grade, how often had your parents or other adult care-givers left you home alone when an adult should have been with you?” or (ii) “How often had your parents or other adult care-givers not taken care of your basic needs, such as keeping you clean or providing food or clothing?” (Wave III).

Teen dating violence—Asked for up to three current/past romantic partners: “Did {initials} threaten you with violence? Did {initials} push or shove you? Did {initials} throw something at you that could hurt you?” (Wave III).
Online Appendix 2: Multiple Imputation

In all regression analyses, I address missing data by implementing multiple imputations, which involves imputing multiple values for the missing values, performing analyses on each complete data set, and pooling estimates, adjusting standard errors for the uncertainty of the imputation procedure. Values are imputed from the distribution of complete data and include random error, which makes it possible to compute approximately unbiased parameter estimates (Rubin, 1996). One important advantage of multiple imputation over imputation with maximum likelihood estimation is the ability to incorporate auxiliary variables that do not belong in the analysis model but are correlated with an incomplete variable or the likelihood of missingness. Including auxiliary variables in the imputation model can reduce bias (Enders, 2010; White, Royston, & Wood, 2011).

The multiple imputation procedure consists of three steps: (i) impute missing values $m$ times to create $m$ data sets, (ii) execute analysis models on each of the $m$ data sets, and (iii) use Rubin’s rules to combine the estimates produced from each of the $m$ data sets in the prior step (Rubin, 1987, 1996). I impute 25 sets of values for childhood household income. The imputation procedure uses the distribution of observed data to impute multiple values. Each imputed value includes a random component, reflecting the uncertainty around the true value (Rubin, 1987; Schomaker & Heumann, 2018).

I implement the imputation model with chained equations. Each of these equations included survey weights. In the imputation model for childhood household income, I include the covariates from the analysis models (control set described above) as well as auxiliary variables correlated with the incomplete variables or likelihood of missingness (Enders, 2010; White et al., 2011). I include variables from the analytic model to preserve the relationships between the variables of interest (Nguyen, Carlin, & Lee, 2017; Rubin, 1987; White et al., 2011). As auxiliary variables in the imputation model, I include variables from Wave 1 for full-time employment status of the resident father, family welfare receipt, whether the child had health insurance in the last year, and median household income of the census block group in which the child lived. I consider the following sociodemographic factors as auxiliary variables as well but excluded them from the imputation model due to low correlation with the variables for which values were to be imputed (correlation < 0.3): full-time employment status of resident mother, parental respondent age, parental respondent race, and parental respondent US nativity.

Variance of parameters estimated through multiple imputation is the sum of three components: variance within, variance between, and an additional source of sampling variance. Variance within is the arithmetic mean across sampling variances for an estimate across each of the imputed data sets, that is, the sampling variability expected had there been no missing data. Variance between is the variance of parameter estimates across each imputed data set; that is, it captures additional uncertainty that arises from missing data. Lastly, the additional sampling variance is the variance between divided by the number of imputations, representing the sampling error of the average coefficient estimates, which is larger for smaller number of imputations. Thus, the standard error for each parameter estimate obtained through multiple imputation is the square root of this total variance across the three components (Rubin, 1987).

White, Royston, and Wood (2011) suggest a rule of thumb that the number of imputations should be at least as large as the largest fraction of missing data x100, across variables. Here, the largest fraction of missing data is about 0.24 for log-household income.
Average marginal effects from the non-linear models and $R^2$ values from the OLS models are also calculated using Rubin’s rules (Rubin, 1996). Due to the multiple imputation strategy, the $R^2$ values are not from one model but rather represent the average $R^2$ across all imputations, using Fisher’s transformation. Following Harel (2009), the $R^2$ from each imputation is transformed to a correlation, and Fisher’s transformation is then used to convert the correlation to a z-score. The mean z-score is calculated across imputations and is then transformed back to an $R^2$ value (Harel, 2009).
### Table A 1. Sample means across Wave 1 child-interview sample and longitudinal study samples

|                  | (1) Wave 1 child-interview | (2) Longitudinal sample, complete cases | (3) Longitudinal sample, imputed cases | Diff. (1) vs. (2) | Diff. (1) vs. (3) |
|------------------|----------------------------|----------------------------------------|----------------------------------------|-------------------|-------------------|
| Female           | 0.493 (0.006)              | 0.489 (0.008)                          | 0.499 (0.007)                          |                   |                   |
| Race/ethnicity   |                           |                                        |                                        |                   |                   |
| Hispanic         | 0.116 (0.016)              | 0.105 (0.015)                          | 0.108 (0.015)                          |                   |                   |
| Non-Hispanic Asian/Pacific Islander | 0.033 (0.008) | 0.027 (0.007)                          | 0.031 (0.007)                          |                   |                   |
| Non-Hispanic Black | 0.160 (0.021)         | 0.134 (0.019)                          | 0.143 (0.020)                          |                   |                   |
| Non-Hispanic Native American | 0.010 (0.003) | 0.008 (0.003)                          | 0.009 (0.003)                          |                   |                   |
| Non-Hispanic white | 0.754 (0.025)            | 0.792 (0.023)                          | 0.777 (0.024)                          |                   |                   |
| Non-Hispanic, race not listed | 0.035 (0.003) | 0.036 (0.003)                          | 0.036 (0.003)                          |                   |                   |
| Parent education |                           |                                        |                                        |                   |                   |
| High school graduate | 0.849 (0.013)         | 0.877 (0.012)                          | 0.866 (0.012)                          | ***               | ***               |
| College graduate | 0.305 (0.017)              | 0.320 (0.018)                          | 0.317 (0.018)                          | ***               | ***               |
| Adverse childhood experiences |                   |                                        |                                        |                   |                   |
| Knife or gun violence | 0.140 (0.006)         | 0.137 (0.007)                          | 0.136 (0.007)                          |                   |                   |
| Parental divorce or separation | 0.300 (0.007) | 0.321 (0.008)                          | 0.301 (0.007)                          | ***               |                   |
| Illegal drugs in household | 0.030 (0.002)         | 0.030 (0.002)                          | 0.029 (0.002)                          |                   |                   |
| Physical disability | 0.023 (0.002)             | 0.025 (0.002)                          | 0.024 (0.002)                          |                   |                   |
| Observations     | 15,352                    | 10,953                                 | 13,179                                 |                   |                   |

**Notes:** Parent education measures come first from the parent questionnaire and when missing are replaced with child reports of parent education level. Standard errors are in parentheses. * p<0.05, ** p<0.01, *** p<0.001

**Source:** Author’s calculation from Add Health data.

### Table A 2. Correlation between adverse childhood experiences.

|                  | (1) Sexual abuse | (2) Physical abuse | (3) Emotional abuse | (4) Knife or gun violence | (5) Parental incarceration | (6) Parental divorce/separation | (7) Illegal drugs in household |
|------------------|------------------|--------------------|---------------------|---------------------------|----------------------------|----------------------------------|-------------------------------|
|                  | 1.000            | 0.186              | 0.170               | 0.050                     | 0.107                      | 0.079                            | 0.035                          |
| (1) Sexual abuse |                  |                    |                     |                           |                            |                                  |                                |
| (2) Physical abuse |                 |                    |                     |                           |                            |                                  |                                |
| (3) Emotional abuse |                |                    |                     |                           |                            |                                  |                                |
| (4) Knife or gun violence |            |                    |                     |                           |                            |                                  |                                |
| (5) Parental incarceration |         |                    |                     |                           |                            |                                  |                                |
| (6) Parental divorce/separation |        |                    |                     |                           |                            |                                  |                                |
| (7) Illegal drugs in household |     |                    |                     |                           |                            |                                  |                                |

**Notes:** This table displays correlations between adverse childhood experiences, where column numbers correspond to row labels of the same number.

**Source:** Author’s calculation from Add Health data.
Table A 3. OLS estimates from model of high school diploma receipt: baseline and robustness to additional controls.

|                          | (1)  | (2)  | (3)  | (4)  | (5)  | (6)  | (7)  | (8)  | (9)  | (10) |
|--------------------------|------|------|------|------|------|------|------|------|------|------|
|                          | Baseline | + parent disability | Baseline, non-missing learning disability | + learning disability | Baseline, non-missing dating violence | + dating violence | Baseline, non-missing neglect | + neglect | Baseline, non-missing foster care | + foster care |
| Sexual abuse             | -0.071*** (0.013) | -0.070*** (0.013) | -0.071*** (0.014) | -0.067*** (0.014) | -0.069*** (0.016) | -0.068*** (0.016) | -0.075*** (0.014) | -0.074*** (0.014) | -0.077*** (0.013) | -0.075*** (0.013) |
| Physical abuse           | 0.009 (0.011) | 0.009 (0.011) | 0.001 (0.012) | 0.000 (0.012) | 0.007 (0.012) | 0.006 (0.012) | 0.005 (0.011) | 0.006 (0.011) | 0.006 (0.011) | 0.007 |
| Emotional abuse          | -0.003 (0.014) | -0.003 (0.014) | 0.002 (0.015) | 0.001 (0.015) | -0.009 (0.017) | -0.008 (0.017) | 0.001 (0.017) | 0.003 (0.017) | 0.003 (0.017) | 0.004 |
| Knife or gun violence    | -0.116*** (0.016) | -0.116*** (0.016) | -0.113*** (0.017) | -0.110*** (0.017) | -0.112*** (0.017) | -0.111*** (0.018) | -0.103*** (0.017) | -0.102*** (0.018) | -0.101*** (0.016) | -0.101*** (0.018) |
| Parental incarceration    | No   | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. |
|                          | Yes  | -0.087*** (0.016) | -0.085*** (0.016) | -0.087*** (0.018) | -0.088*** (0.018) | -0.092*** (0.019) | -0.091*** (0.019) | -0.111*** (0.018) | -0.110*** (0.018) | -0.105*** (0.016) |
|                          | Don't know | -0.056** (0.020) | -0.057** (0.020) | -0.046* (0.021) | -0.042* (0.02) | -0.068** (0.022) | -0.069** (0.021) | -0.042* (0.019) | -0.042* (0.019) | -0.039* (0.018) | -0.033 |
| Parental union instability | -0.033** (0.013) | -0.036** (0.013) | -0.03* (0.013) | -0.029* (0.013) | -0.015 (0.015) | -0.015 (0.015) | -0.025 (0.013) | -0.024 (0.013) | -0.024 (0.013) | -0.025 |
| Illegal drugs in household | -0.014 (0.028) | -0.013 (0.028) | -0.003 (0.030) | -0.004 (0.030) | -0.016 (0.029) | -0.016 (0.029) | -0.023 (0.029) | -0.022 (0.029) | -0.028 (0.029) | -0.028 |
| Age                      | -0.004 (0.004) | -0.004 (0.004) | -0.005 (0.004) | -0.004 (0.004) | -0.019*** (0.005) | -0.019*** (0.005) | -0.001 (0.004) | -0.001 (0.004) | -0.001 (0.004) | -0.001 |
| Female                   | 0.031*** (0.009) | 0.031*** (0.009) | 0.032** (0.010) | 0.024* (0.010) | 0.035*** (0.010) | 0.036*** (0.010) | 0.032*** (0.009) | 0.031*** (0.009) | 0.030*** (0.009) | 0.030*** (0.009) |
| Race/ethnicity           | Hispanic | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. |
|                          | Non-Hispanic Asian/Pacific Islander | 0.013 (0.036) | 0.015 (0.036) | 0.009 (0.040) | 0.007 (0.039) | 0.006 (0.037) | 0.006 (0.037) | 0.028 (0.036) | 0.026 (0.036) | -0.019 (0.037) | -0.019 |
|                          | Non-Hispanic Black | 0.015 (0.035) | 0.016 (0.035) | 0.022 (0.038) | 0.025 (0.036) | -0.002 (0.038) | -0.000 (0.038) | -0.016 (0.035) | -0.016 (0.035) | -0.006 (0.037) | -0.005 (0.037) |
|                          | Non-Hispanic Native American | -0.011 (0.081) | -0.011 (0.081) | -0.007 (0.087) | -0.007 (0.086) | -0.016 (0.105) | -0.015 (0.105) | -0.064 (0.081) | -0.065 (0.081) | -0.055 (0.084) | -0.047 |
|                                      | Value 1    | Value 2    | Value 3    | Value 4    | Value 5    | Value 6    | Value 7    | Value 8    | Value 9    |
|--------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|                                      | (0.031)    | (0.031)    | (0.033)    | (0.032)    | (0.031)    | (0.031)    | (0.031)    | (0.034)    | (0.033)    |
| Non-Hispanic white                   | -0.023     | -0.021     | -0.014     | -0.009     | -0.039     | -0.037     | -0.049     | -0.050     | -0.043     |
|                                      |            |            |            |            |            |            |            |            | -0.042     |
|                                      |            |            |            |            |            |            |            |            |            |
| Non-Hispanic, race not listed        | -0.012     | -0.008     | -0.007     | -0.003     | -0.021     | -0.019     | -0.036     | -0.036     | -0.026     |
|                                      | (0.041)    | (0.041)    | (0.042)    | (0.041)    | (0.039)    | (0.040)    | (0.040)    | (0.040)    | (0.040)    |
| Parental education                   |            |            |            |            |            |            |            |            |            |
|                                      |            |            |            |            |            |            |            |            |            |
| < High school                        | -0.116***  | -0.114***  | -0.121***  | -0.120***  | -0.117***  | -0.118***  | -0.130***  | -0.131***  | -0.121***  |
|                                      | (0.022)    | (0.023)    | (0.023)    | (0.022)    | (0.027)    | (0.027)    | (0.024)    | (0.024)    | (0.023)    |
|                                      |            |            |            |            |            |            |            |            |            |
| GED                                  | -0.093**   | -0.093**   | -0.099**   | -0.097**   | -0.091*    | -0.09*     | -0.068     | -0.067     | -0.069     |
|                                      | (0.034)    | (0.034)    | (0.035)    | (0.035)    | (0.038)    | (0.038)    | (0.039)    | (0.039)    | (0.038)    |
| High school graduate                 | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       |
|                                      |            |            |            |            |            |            |            |            |            |
| Vocational school + high school      | 0.028      | 0.028      | 0.028      | 0.028      | 0.050**    | 0.049*     | 0.040*     | 0.040*     | 0.035*     |
|                                      | (0.016)    | (0.016)    | (0.017)    | (0.016)    | (0.019)    | (0.019)    | (0.018)    | (0.018)    | (0.018)    |
|                                      |            |            |            |            |            |            |            |            |            |
| Some college                         | 0.043**    | 0.043**    | 0.048***   | 0.046**    | 0.053**    | 0.053**    | 0.045**    | 0.045**    | 0.043*     |
|                                      | (0.014)    | (0.014)    | (0.014)    | (0.014)    | (0.017)    | (0.017)    | (0.016)    | (0.016)    | (0.017)    |
|                                      |            |            |            |            |            |            |            |            |            |
| College graduate                     | 0.064***   | 0.063***   | 0.065***   | 0.063***   | 0.076***   | 0.075***   | 0.064**    | 0.064***   | 0.061***   |
|                                      | (0.013)    | (0.013)    | (0.013)    | (0.013)    | (0.014)    | (0.014)    | (0.014)    | (0.014)    | (0.013)    |
|                                      |            |            |            |            |            |            |            |            |            |
| Beyond 4-yr college                  | 0.089***   | 0.089***   | 0.091***   | 0.087***   | 0.102***   | 0.101***   | 0.086***   | 0.085***   | 0.086***   |
|                                      | (0.015)    | (0.015)    | (0.015)    | (0.014)    | (0.017)    | (0.017)    | (0.016)    | (0.016)    | (0.015)    |
| Log household income                 | 0.041***   | 0.038***   | 0.041***   | 0.040***   | 0.039***   | 0.039***   | 0.043***   | 0.043***   | 0.045***   |
|                                      | (0.009)    | (0.009)    | (0.009)    | (0.009)    | (0.009)    | (0.009)    | (0.009)    | (0.009)    | (0.009)    |
|                                      |            |            |            |            |            |            |            |            |            |
| Physical disability                  | -0.080*    | -0.079*    | -0.072*    | -0.064     | -0.091*    | -0.091*    | -0.08*     | -0.079*    | -0.070     |
|                                      | (0.034)    | (0.034)    | (0.036)    | (0.036)    | (0.041)    | (0.042)    | (0.037)    | (0.037)    | (0.036)    |
| Parent disability                    | -0.047**   |            |            |            |            |            |            |            |            |
|                                      | (0.016)    |            |            |            |            |            |            |            |            |
| Child learning disability            | -0.099***  |            |            |            |            |            |            |            |            |
|                                      | (0.017)    |            |            |            |            |            |            |            |            |
| Dating violence                      |            |            |            |            |            |            | -0.078     |            |            |
|                                      |            |            |            |            |            | (0.041)    |            |            |            |
| Neglect                              |            |            |            |            |            |            | -0.022     |            |            |
|                                      |            |            |            |            |            | (0.013)    |            |            |            |
| Foster care                          |            |            |            |            |            |            |            | -0.142*    |            |
|                                      |            |            |            |            |            | (0.006)    |            |            |            |
| Observations                         | 13,672     | 13,672     | 12,371     | 12,371     | 9,766      | 9,766      | 11,059     | 11,059     | 11,479     |
|                                      |             |             |             |             |             |             |             |             |             |
| Notes: Each regression included the full control set described in notes to Table 2: demographics, childhood SES, school fixed effects, physical disability, and other ACEs. * p<0.05, ** p<0.01, *** p<0.001

Source: Author’s calculation from Add Health data.
| Table A 4. OLS estimates from model of Bachelor’s degree receipt: baseline and robustness to additional controls. |
|----------------------------------------------------------------------------------------------------------|
| (1) (2) (3) (4) (5) (6) (7) (8) (9) (10)                                                                 |
| Baseline, non-missing disability + parent disability + learning disability + dating disability + neglect + foster care |
| Sexual abuse                                                                                           |
| -0.072*** (0.012)                                                                                      |
| Physical abuse                                                                                         |
| -0.017 (0.013)                                                                                         |
| Emotional abuse                                                                                        |
| -0.001 (0.015)                                                                                         |
| Knife or gun violence                                                                                  |
| -0.109*** (0.011)                                                                                      |
| Parental incarceration                                                                                  |
| No                                                                                                      |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| Yes                                                                                                     |
| -0.072*** (0.013)                                                                                      |
| Don’t know                                                                                             |
| -0.043* (0.018)                                                                                         |
| Parental union instability                                                                              |
| -0.041*** (0.011)                                                                                      |
| Illegal drugs in household                                                                             |
| -0.024 (0.025)                                                                                         |
| Age                                                                                                     |
| -0.009* (0.004)                                                                                        |
| Female                                                                                                |
| 0.071*** (0.011)                                                                                       |
| Race/ethnicity                                                                                         |
| Hispanic                                                                                               |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| ref.                                                                                                    |
| Non-Hispanic Asian/Pacific Islander                                                                   |
| 0.160** (0.050)                                                                                        |
| Non-Hispanic Black                                                                                     |
| 0.049 (0.029)                                                                                          |
| Non-Hispanic Native American                                                                           |
| -0.025 (0.046)                                                                                         |
|                          | Non-Hispanic white | Non-Hispanic, race not listed | Parental education | Physical disability | Parent disability | Child learning disability | Dating violence | Neglect | Foster care | Observations |
|--------------------------|---------------------|-------------------------------|--------------------|---------------------|-------------------|--------------------------|----------------|---------|------------|--------------|
|                          | 0.047 (0.027)       | 0.058 (0.032)                 | -0.009 (0.017)     | -0.082* (0.027)     | -0.019 (0.018)    | -0.159*** (0.017)        | 0.036 (0.036)   | -0.020 (0.016) | -0.064* (0.029) | 13,672       |
|                          | 0.048 (0.027)       | 0.060 (0.032)                 | -0.009 (0.017)     | -0.081* (0.027)     |                   |                          | -0.036 (0.036)  |         |            | 13,672       |
|                          | 0.031 (0.026)       | 0.044 (0.034)                 | -0.003 (0.017)     | -0.077* (0.029)     |                   |                          |                 |         |            | 12,371       |
|                          | 0.039 (0.027)       | 0.049 (0.033)                 | -0.001 (0.017)     | -0.062* (0.026)     |                   |                          |                 |         |            | 9,766        |
|                          | 0.076* (0.036)      | 0.075 (0.040)                 | -0.005 (0.020)     | -0.075* (0.033)     |                   |                          |                 |         |            | 11,059       |
|                          | 0.077* (0.036)      | 0.076 (0.040)                 | -0.005 (0.020)     | -0.075* (0.033)     |                   |                          |                 |         |            | 11,059       |
|                          | 0.040 (0.031)       | 0.056 (0.035)                 | -0.013 (0.018)     | -0.066* (0.031)     |                   |                          |                 |         |            | 11,479       |
|                          | 0.039 (0.031)       | 0.056 (0.035)                 | -0.013 (0.018)     | -0.067* (0.031)     |                   |                          |                 |         |            | 11,479       |
|                          | 0.043 (0.030)       | 0.062 (0.034)                 | -0.011 (0.017)     | -0.066* (0.03)      |                   |                          |                 |         |            | 11,479       |
|                          | 0.043 (0.030)       | 0.062 (0.034)                 | -0.011 (0.017)     | -0.066* (0.03)      |                   |                          |                 |         |            | 11,479       |

**Notes:** Each regression includes the full control set described in notes to Table 2: demographics, childhood SES, school fixed effects, physical disability, and other ACEs. *p<0.05, **p<0.01, ***p<0.001

**Source:** Author’s calculation from Add Health data.
Table A 5. OLS estimates from model of full-time employment: baseline and robustness to additional controls.

| Race/ethnicity | (1) Baseline | (2) + parent disability | (3) Baseline, non-missing | (4) + learning disability | (5) Baseline, non-missing | (6) + dating violence | (7) Baseline, non-missing | (8) + neglect | (9) Baseline, non-missing |
|----------------|--------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------------|--------------------------|--------------|--------------------------|
|                | ref.         | ref.                     | ref.                     | ref.                     | ref.                     | ref.                   | ref.                     | ref.         | ref.                     |
| **Sexual abuse** | -0.059***    | -0.059***                | -0.058***                | -0.054**                 | -0.065**                 | -0.064**               | -0.076***                | -0.077***     | -0.075***               |
|                | (0.017)      | (0.017)                  | (0.017)                  | (0.017)                  | (0.020)                  | (0.019)               | (0.019)                  | (0.018)      | (0.018)                 |
| **Physical abuse** | -0.001       | -0.000                   | -0.007                   | -0.008                   | -0.001                   | -0.001                 | -0.008                   | -0.009        | -0.005                  |
|                | (0.013)      | (0.013)                  | (0.014)                  | (0.014)                  | (0.017)                  | (0.015)               | (0.015)                  | (0.015)      | (0.015)                |
| **Emotional abuse** | -0.035       | -0.035                   | -0.033                   | -0.033                   | -0.021                   | -0.021                 | -0.011                   | -0.013        | -0.014                  |
|                | (0.018)      | (0.018)                  | (0.020)                  | (0.020)                  | (0.022)                  | (0.020)               | (0.020)                  | (0.019)      | (0.019)                |
| **Knife or gun violence** | 0.007        | 0.007                    | 0.002                    | 0.006                    | 0.011                    | 0.011                 | -0.001                   | -0.002        | 0.006                   |
|                | (0.015)      | (0.015)                  | (0.016)                  | (0.016)                  | (0.018)                  | (0.018)               | (0.018)                  | (0.018)      | (0.018)               |

| Parental incarceration |
|------------------------|
| **No**         | ref.                 | ref.                     | ref.                     | ref.                     | ref.                     | ref.                   | ref.                     | ref.         | ref.                     |
| **Yes**        | -0.041**             | -0.040**                 | -0.043**                 | -0.044**                 | -0.037**                 | -0.037**               | -0.038**                 | -0.04*       | -0.04*                  |
|                | (0.015)               | (0.015)                  | (0.016)                  | (0.016)                  | (0.017)                  | (0.017)               | (0.017)                  | (0.016)      | (0.016)                |
| **Don't know** | -0.017                | -0.016                   | -0.010                   | -0.006                   | 0.019                    | 0.019                  | -0.012                   | -0.012       | -0.004                  |
|                | (0.021)               | (0.021)                  | (0.021)                  | (0.021)                  | (0.026)                  | (0.026)               | (0.026)                  | (0.026)      | (0.026)                |
| **Parental union instability** | -0.002         | -0.002                   | 0.002                    | 0.003                    | -0.003                   | -0.003                 | 0.012                    | 0.011        | 0.011                   |
|                | (0.010)               | (0.010)                  | (0.011)                  | (0.011)                  | (0.014)                  | (0.014)               | (0.013)                  | (0.013)      | (0.012)                |
| **Illegal drugs in household** | -0.036       | -0.034                   | -0.019                   | -0.020                   | -0.026                   | -0.026                 | -0.045                   | -0.046       | -0.049                  |
|                | (0.030)               | (0.030)                  | (0.031)                  | (0.031)                  | (0.033)                  | (0.033)               | (0.036)                  | (0.036)      | (0.035)                |
| **Age**       | -0.001                | -0.001                   | -0.001                   | 0.001                    | -0.007                   | -0.007                 | -0.003                   | -0.003       | -0.003                  |
|                | (0.004)               | (0.004)                  | (0.004)                  | (0.004)                  | (0.005)                  | (0.005)               | (0.005)                  | (0.005)      | (0.005)                |
| **Female**   | -0.157***             | -0.156***                | -0.161***                | -0.168***                | -0.156***                | -0.156***             | -0.152***                | -0.153***     | -0.153***              |
|                | (0.012)               | (0.012)                  | (0.012)                  | (0.012)                  | (0.014)                  | (0.014)               | (0.012)                  | (0.012)      | (0.012)               |

| Race/ethnicity |
|----------------|
| **Hispanic** | ref.                     | ref.                     | ref.                     | ref.                     | ref.                     |
| **Non-Hispanic Asian/Pacific Islander** | -0.086*        | -0.085*                  | -0.087**                 | -0.089*                  | -0.065                   |
|                | (0.034)               | (0.039)                  | (0.042)                  | (0.042)                  | (0.053)                  |
| **Non-Hispanic Black** | -0.079*       | -0.081*                  | -0.096**                 | -0.093**                 | -0.108**                 |
|                | (0.032)               | (0.032)                  | (0.033)                  | (0.032)                  | (0.038)                  |
| **Non-Hispanic Native American** | -0.048        | -0.049                   | -0.065                   | -0.093                   | -0.092                   |
|                | (0.080)               | (0.080)                  | (0.086)                  | (0.091)                  | (0.102)                  |
|                                      | Non-Hispanic white | Non-Hispanic, race not listed | Parental education | Physical disability | Parent disability | Child learning disability | Dating violence | Neglect | Foster care | Observations |
|--------------------------------------|--------------------|-------------------------------|-------------------|---------------------|------------------|--------------------------|----------------|---------|------------|--------------|
|                                      | -0.036 (0.029)     | -0.037 (0.029)               | -0.041 (0.030)    | -0.037 (0.029)     | -0.062 (0.032)   | -0.061 (0.032)           | -0.041 (0.032) | -0.041 (0.032) | -0.040 (0.033) | 13,697    |
|                                      | -0.060 (0.042)     | -0.060 (0.041)               | -0.070 (0.044)    | -0.067 (0.043)     | -0.125** (0.047) | -0.124** (0.047)         | -0.063 (0.042) | -0.063 (0.042) | -0.066 (0.043) | 13,697    |
| Parental education                   |                    |                               |                   |                     |                  |                          |                |         |            |              |
| < High school                        |                    |                               |                   |                     |                  |                          |                |         |            |              |
|                                      | -0.042* (0.021)    | -0.044* (0.021)              | -0.049* (0.022)   | -0.048* (0.022)    | -0.070** (0.023) | -0.070** (0.023)         | -0.048* (0.023) | -0.048* (0.023) | -0.05* (0.023) | 13,697    |
| GED                                  |                    |                               |                   |                     |                  |                          |                |         |            |              |
|                                      | -0.024 (0.033)     | -0.024 (0.032)               | -0.030 (0.032)    | -0.028 (0.032)     | -0.052 (0.038)   | -0.052 (0.038)           | -0.024 (0.037) | -0.025 (0.037) | -0.025 (0.035) | 13,697    |
| High school graduate                 | ref.               | ref.                          | ref.              | ref.                | ref.             | ref.                     | ref.           | ref.    | ref.       | ref.         |
| Vocational school + high school      | 0.002 (0.019)      | 0.002 (0.020)                 | 0.006 (0.021)     | 0.005 (0.020)      | -0.017 (0.023)   | -0.018 (0.023)           | -0.000 (0.023) | -0.000 (0.023) | 0.004 (0.022)  | 13,697    |
| Some college                        |                   |                               |                   |                     |                  |                          |                |         |            |              |
|                                      | -0.001 (0.014)     | -0.002 (0.015)                | -0.003 (0.016)    | -0.005 (0.016)     | -0.017 (0.017)   | -0.017 (0.017)           | -0.011 (0.017) | -0.012 (0.017) | -0.005 (0.017) | 13,697    |
| College graduate                    |                   |                               |                   |                     |                  |                          |                |         |            |              |
|                                      | -0.001 (0.017)     | -0.001 (0.017)                | -0.004 (0.016)    | -0.006 (0.016)     | -0.015 (0.017)   | -0.015 (0.017)           | -0.011 (0.017) | -0.012 (0.017) | -0.009 (0.017) | 13,697    |
| Beyond 4-yr college                  |                   |                               |                   |                     |                  |                          |                |         |            |              |
|                                      | -0.011 (0.019)     | -0.011 (0.019)                | -0.003 (0.020)    | -0.007 (0.019)     | 0.001 (0.021)    | 0.001 (0.021)            | -0.012 (0.020) | -0.013 (0.020) | -0.006 (0.020) | 13,697    |
| Log household income                 | 0.021* (0.009)     | 0.020* (0.009)                | 0.022* (0.010)    | 0.022* (0.010)     | 0.027* (0.011)   | 0.027* (0.011)           | 0.026* (0.010) | 0.026* (0.010) | 0.022* (0.010) | 13,697    |
| Physical disability                  |                   |                               |                   |                     |                  |                          |                |         |            |              |
|                                      | -0.063 (0.043)     | -0.062 (0.043)                | -0.060 (0.045)    | -0.052 (0.044)     | -0.071 (0.055)   | -0.071 (0.055)           | -0.054 (0.047) | -0.055 (0.047) | -0.056 (0.046) | 13,697    |
| Parent disability                    |                   |                               |                   |                     |                  |                          |                |         |            |              |
|                                      | -0.018 (0.021)     |                               |                   |                     |                  |                          |                |         |            |              |
| Child learning disability            |                   |                               |                   |                     |                  | -0.092*** (0.017)       |                |         |            |              |
| Dating violence                      |                   |                               |                   |                     |                  | -0.015 (0.045)         |                |         |            |              |
| Neglect                              |                   |                               |                   |                     |                  |                          | 0.020 (0.016)   |         |            |              |
| Foster care                          |                   |                               |                   |                     |                  |                          | -0.024 (0.052)  |         |            |              |
| Observations                         | 13,697             | 13,697                        | 12,394            | 12,394              | 9,785            | 9,785                    | 11,078         | 11,078  | 11,501     | 11,501       |

Notes: Each regression includes the full control set described in notes to Table 2: demographics, childhood SES, school fixed effects, physical disability, and other ACEs. * p<0.05, ** p<0.01, *** p<0.001

Source: Author’s calculation from Add Health data.
### Table A 6. Estimates of average marginal effects from a two-part model of earnings: baseline and robustness to additional controls.

|                          | (1)        | (2)        | (3)        | (4)        | (5)        | (6)        | (7)        | (8)        | (9)        | (10)       |
|--------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|                          | Baseline   | + parent   | Baseline, non-missing | + learning   | Baseline, non-missing | + dating   | Baseline, non-missing | + neglect  | Baseline, non-missing | + foster care |
|                          |            | disability| learning disability | disability | dating violence | violence | neglect | foster care |            |            |
| **1st part: probit for having positive earnings** |            |            |            |            |            |            |            |            |            |            |
| Sexual abuse             | -0.131     | -0.131     | -0.135     | -0.128     | -0.120     | -0.117     | -0.189     | -0.192     | -0.183     | -0.176     |
| (0.074)                  | (0.075)    | (0.076)    | (0.076)    | (0.074)    | (0.075)    | (0.082)    | (0.082)    | (0.078)    | (0.078)    |            |
| Physical abuse           | 0.046      | 0.045      | 0.070      | 0.064      | 0.031      | 0.029      | 0.050      | 0.047      | 0.023      | 0.024      |
| (0.074)                  | (0.074)    | (0.076)    | (0.077)    | (0.090)    | (0.090)    | (0.081)    | (0.081)    | (0.080)    | (0.081)    |            |
| Emotional abuse          | -0.062     | -0.062     | -0.087     | -0.095     | -0.027     | -0.025     | -0.058     | -0.066     | -0.046     | -0.044     |
| (0.081)                  | (0.081)    | (0.084)    | (0.084)    | (0.099)    | (0.098)    | (0.091)    | (0.092)    | (0.090)    | (0.089)    |            |
| Knife or gun violence    | -0.052     | -0.052     | -0.099     | -0.089     | -0.054     | -0.052     | -0.128     | -0.130     | -0.101     | -0.100     |
| (0.085)                  | (0.085)    | (0.089)    | (0.088)    | (0.106)    | (0.106)    | (0.099)    | (0.099)    | (0.102)    | (0.103)    |            |
| **Parental incarceration** |            |            |            |            |            |            |            |            |            |            |
| No                       | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       |            |
| Yes                      | -0.186**   | -0.187**   | -0.207**   | -0.210**   | -0.210**   | -0.210**   | -0.219**   | -0.213**   | -0.219**   | -0.210**   |
| (0.064)                  | (0.064)    | (0.068)    | (0.068)    | (0.077)    | (0.077)    | (0.077)    | (0.113)    | (0.113)    | (0.077)    | (0.077)    |
| Don't know               | -0.303**   | -0.303**   | -0.313**   | -0.301**   | -0.219     | -0.219     | -0.363**   | -0.366**   | -0.313**   | -0.300**   |
| (0.104)                  | (0.104)    | (0.110)    | (0.109)    | (0.113)    | (0.113)    | (0.113)    | (0.118)    | (0.118)    | (0.111)    | (0.111)    |
| Parental union instability | -0.044     | -0.044     | -0.016     | -0.007     | -0.012     | -0.012     | 0.001      | -0.002     | 0.003      | 0.000      |
| (0.057)                  | (0.058)    | (0.058)    | (0.058)    | (0.071)    | (0.071)    | (0.071)    | (0.070)    | (0.070)    | (0.067)    | (0.067)    |
| Illegal drugs in household | -0.022     | -0.022     | -0.025     | -0.018     | -0.157     | -0.156     | -0.038     | -0.039     | -0.010     | -0.009     |
| (0.134)                  | (0.135)    | (0.136)    | (0.136)    | (0.152)    | (0.153)    | (0.159)    | (0.161)    | (0.157)    | (0.158)    | (0.158)    |
| Age                      | -0.025     | -0.025     | -0.021     | -0.016     | -0.066*    | -0.066*    | -0.059**   | -0.053*    | -0.053*    | -0.053*    |
| (0.019)                  | (0.019)    | (0.020)    | (0.020)    | (0.025)    | (0.025)    | (0.021)    | (0.021)    | (0.021)    | (0.021)    | (0.021)    |
| Female                   | -0.534***  | -0.534***  | -0.549***  | -0.575***  | -0.655***  | -0.654***  | -0.638***  | -0.637***  | -0.617***  | -0.616***  |
| (0.074)                  | (0.074)    | (0.078)    | (0.077)    | (0.095)    | (0.095)    | (0.072)    | (0.072)    | (0.077)    | (0.077)    | (0.077)    |
| **Race/ethnicity**       |            |            |            |            |            |            |            |            |            |            |
| Hispanic                 | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       | ref.       |            |
| Non-Hispanic Asian/Pacific Islander | -0.379     | -0.380     | -0.52*     | -0.528*    | -0.557*    | -0.557*    | -0.53*     | -0.538*    | -0.491*    | -0.493*    |
| (0.216)                  | (0.216)    | (0.214)    | (0.21)     | (0.27)     | (0.27)     | (0.229)    | (0.229)    | (0.221)    | (0.22)     | (0.22)     |
| Non-Hispanic Black       | -0.195     | -0.195     | -0.284     | -0.283     | -0.389     | -0.387     | -0.243     | -0.244     | -0.200     | -0.199     |
| (0.192)                  | (0.192)    | (0.210)    | (0.223)    | (0.224)    | (0.182)    | (0.183)    | (0.174)    | (0.174)    |            |            |
| Parental education | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. | Ref. |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Non-Hispanic Native American | 0.197 | 0.198 | 0.155 | 0.157 | -0.075 | -0.075 | 0.540** | 0.547** | 0.625*** | 0.647*** | 0.197 | 0.198 | 0.155 | 0.157 | -0.075 | -0.075 | 0.540** | 0.547** | 0.625*** | 0.647*** |
| Non-Hispanic white | -0.162 | -0.162 | -0.220 | -0.213 | -0.333* | -0.331* | -0.259 | -0.259 | -0.232 | -0.230 | -0.162 | -0.162 | -0.220 | -0.213 | -0.333* | -0.331* | -0.259 | -0.259 | -0.232 | -0.230 |
| Non-Hispanic, race not listed | -0.035 | -0.036 | -0.127 | -0.112 | -0.107 | -0.105 | -0.033 | -0.030 | -0.060 | -0.060 | -0.035 | -0.036 | -0.127 | -0.112 | -0.107 | -0.105 | -0.033 | -0.030 | -0.060 | -0.060 |
| Parental education | < High school | -0.246* | -0.246* | -0.23* | -0.223* | -0.419*** | -0.420*** | -0.306** | -0.304** | -0.310** | -0.308** | -0.246* | -0.246* | -0.23* | -0.223* | -0.419*** | -0.420*** | -0.306** | -0.304** | -0.310** | -0.308** |
| GED | -0.025 | -0.026 | -0.027 | -0.018 | -0.179 | -0.178 | -0.070 | -0.076 | -0.016 | -0.019 | -0.025 | -0.026 | -0.027 | -0.018 | -0.179 | -0.178 | -0.070 | -0.076 | -0.016 | -0.019 |
| High school graduate | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. | ref. |
| Vocational school + high school | 0.075 | 0.075 | 0.086 | 0.085 | -0.019 | -0.020 | 0.154 | 0.157 | 0.136 | 0.134 | 0.075 | 0.075 | 0.086 | 0.085 | -0.019 | -0.020 | 0.154 | 0.157 | 0.136 | 0.134 |
| Some college | 0.147 | 0.147 | 0.144 | 0.136 | 0.040 | 0.040 | 0.145 | 0.144 | 0.151 | 0.151 | 0.147 | 0.147 | 0.144 | 0.136 | 0.040 | 0.040 | 0.145 | 0.144 | 0.151 | 0.151 |
| College graduate | 0.078 | 0.078 | 0.097 | 0.093 | -0.076 | -0.078 | 0.077 | 0.079 | 0.084 | 0.087 | 0.078 | 0.078 | 0.097 | 0.093 | -0.076 | -0.078 | 0.077 | 0.079 | 0.084 | 0.087 |
| Beyond 4-yr college | 0.079 | 0.080 | 0.112 | 0.103 | 0.005 | 0.003 | 0.110 | 0.110 | 0.090 | 0.094 | 0.079 | 0.080 | 0.112 | 0.103 | 0.005 | 0.003 | 0.110 | 0.110 | 0.090 | 0.094 |
| Log household income | 0.021 | 0.022 | 0.022 | 0.020 | 0.032 | 0.032 | 0.036 | 0.038 | 0.034 | 0.032 | 0.021 | 0.022 | 0.022 | 0.020 | 0.032 | 0.032 | 0.036 | 0.038 | 0.034 | 0.032 |
| Physical disability | -0.215 | -0.215 | -0.237 | -0.213 | -0.241 | -0.242 | -0.187 | -0.188 | -0.219 | -0.214 | -0.215 | -0.215 | -0.237 | -0.213 | -0.241 | -0.242 | -0.187 | -0.188 | -0.219 | -0.214 |
| Parent disability | 0.017 | 0.017 | 0.083 | 0.083 | 0.017 | 0.017 | 0.083 | 0.083 | 0.017 | 0.017 | 0.083 | 0.083 |
| Child learning disability | -0.263*** | -0.263*** | -0.073 | -0.073 | -0.263*** | -0.073 | -0.263*** | -0.073 |
| Dating violence | -0.094 | -0.094 | 0.162 | 0.162 | -0.094 | -0.094 | 0.162 | 0.162 |
| Neglect | 0.078 | 0.078 | 0.085 | 0.085 | 0.078 | 0.078 | 0.085 | 0.085 |
| Foster care | -0.202 | -0.202 | 0.168 | 0.168 | -0.202 | -0.202 | 0.168 | 0.168 |

2nd part: GLM for earnings level
|                        | Sexual abuse | Physical abuse | Emotional abuse | Knife or gun violence | Parental incarceration |
|------------------------|--------------|----------------|----------------|-----------------------|------------------------|
| **Age**                | -0.128***    | 0.041          | -0.032         | 0.016                 |                         |
|                        | (0.034)      | (0.032)        | (0.039)        | (0.041)               |                         |
| Parental union instability | -0.129***    | 0.041          | -0.032         | 0.016                 |                         |
|                        | (0.034)      | (0.032)        | (0.039)        | (0.041)               |                         |
| Parental incarceration | -0.143***    | 0.035          | -0.016         | 0.017                 |                         |
|                        | (0.037)      | (0.035)        | (0.040)        | (0.043)               |                         |
| Emotional abuse        | -0.132***    | 0.033          | -0.016         | 0.023                 |                         |
|                        | (0.037)      | (0.035)        | (0.039)        | (0.032)               |                         |
| Knife or gun violence  | -0.104**     | 0.024          | -0.025         | -0.008                |                         |
|                        | (0.034)      | (0.038)        | (0.038)        | (0.035)               |                         |
| Hispanic               | 0.017        | 0.008          | -0.008         | 0.045                 |                         |
|                        | (0.043)      | (0.035)        | (0.035)        | (0.050)               |                         |
| Parental union instability | 0.016        | 0.011          | -0.010         | 0.045                 |                         |
|                        | (0.041)      | (0.043)        | (0.035)        | (0.050)               |                         |
| Physical abuse         | 0.119**      | 0.008          | -0.018         | 0.044                 |                         |
|                        | (0.037)      | (0.030)        | (0.038)        | (0.050)               |                         |
| Emotional abuse        | -0.114**     | 0.007          | -0.019         | 0.050                 |                         |
|                        | (0.037)      | (0.031)        | (0.036)        | (0.050)               |                         |

|                       | Non-Hispanic Asian/Pacific Islander | 0.137 | 0.137 | 0.138 | 0.133 | 0.027 | 0.026 | 0.130 | 0.129 | 0.125 | 0.126 |
|                       |                                           | (0.079) | (0.079) | (0.083) | (0.081) | (0.072) | (0.072) | (0.077) | (0.077) | (0.076) | (0.076) |
|                       | Non-Hispanic Black                       | -0.015 | -0.015 | 0.010 | 0.019 | -0.024 | -0.026 | -0.068 | -0.069 | -0.070 | -0.070 |
|                       |                                           | (0.066) | (0.066) | (0.071) | (0.070) | (0.070) | (0.070) | (0.065) | (0.065) | (0.063) | (0.063) |
|                       | Non-Hispanic Native American             | 0.216 | 0.216 | 0.235 | 0.249 | -0.080 | -0.080 | 0.206 | 0.206 | 0.204 | 0.220 |
|                       |                                           | (0.233) | (0.233) | (0.259) | (0.255) | (0.200) | (0.200) | (0.253) | (0.254) | (0.251) | (0.251) |
|                       | Non-Hispanic white                       | 0.110 | 0.110 | 0.122* | 0.137* | 0.081 | 0.079 | 0.076 | 0.076 | 0.079 | 0.080 |
|                       |                                           | (0.058) | (0.058) | (0.061) | (0.060) | (0.057) | (0.056) | (0.051) | (0.051) | (0.050) | (0.050) |
|                       | Non-Hispanic, race not listed             | 0.045 | 0.044 | 0.060 | 0.075 | 0.010 | 0.008 | 0.050 | 0.050 | 0.045 | 0.048 |
|                       |                                           | (0.074) | (0.075) | (0.079) | (0.076) | (0.088) | (0.088) | (0.062) | (0.063) | (0.062) | (0.061) |

Parental education
|                          | < High school | GED | High school graduate | Vocational school + high school | Some college | College graduate | Beyond 4-yr college | Log household income | Physical disability | Parent disability | Child learning disability | Dating violence | Neglect | Foster care | Observations |
|-------------------------|--------------|-----|----------------------|---------------------------------|-------------|----------------|-------------------|---------------------|-------------------|----------------|-------------------------------|----------------|---------|------------|---------------|
|                         | -0.070       | -0.048 | ref.                 | ref.                            | 0.084**     | 0.104***        | 0.107**           | 0.118***           | -0.059            | 0.015         | -0.276***                          | 0.103          | 0.014   | -0.209*    | 12,305        |
|                         | (0.038)      | (0.068) | (0.042)              | (0.042)                          | (0.035)     | (0.034)         | (0.037)           | (0.019)            | (0.069)           | (0.049)       | (0.036)                               | (0.063)        | (0.035) | (0.087)    | 12,305        |
|                         | -0.070       | -0.047 | ref.                 | ref.                            | 0.079*      | 0.107***        | 0.107**           | 0.118***           | -0.060            | 0.015         | 0.000                               |                |         |            |               |
|                         | (0.038)      | (0.068) | (0.042)              | (0.042)                          | (0.035)     | (0.034)         | (0.037)           | (0.019)            | (0.069)           | (0.049)       | (0.036)                               |                |         |            |               |
|                         | -0.064       | -0.037 | ref.                 | ref.                            | 0.076*      | 0.091*          | 0.098*            | 0.120***           | -0.050            | -0.014        | 0.276***                            |                |         |            |               |
|                         | (0.042)      | (0.071) | (0.044)              | (0.044)                          | (0.037)     | (0.035)         | (0.039)           | (0.021)            | (0.070)           | (0.076)       | (0.036)                               |                |         |            |               |
|                         | -0.063       | -0.034 | ref.                 | ref.                            | 0.066*      | 0.086*          | 0.086*            | 0.120***           | -0.014            | -0.078        | 0.000                               | 0.103          |         |            |               |
|                         | (0.041)      | (0.069) | (0.044)              | (0.044)                          | (0.037)     | (0.036)         | (0.039)           | (0.021)            | (0.076)           | (0.081)       | (0.036)                               | (0.063)        |         |            |               |
|                         | -0.059       | -0.046 | ref.                 | ref.                            | 0.066*      | 0.087*          | 0.166***          | 0.125***           | -0.078            | -0.082        | 0.000                               |                |         |            |               |
|                         | (0.048)      | (0.085) | (0.044)              | (0.044)                          | (0.037)     | (0.036)         | (0.040)           | (0.020)            | (0.081)           | (0.079)       | (0.036)                               |                |         |            |               |
|                         | -0.059       | -0.048 | ref.                 | ref.                            | 0.066*      | 0.088**         | 0.167***          | 0.125***           | -0.082            | -0.015        | 0.000                               | 0.014          |         |            |               |
|                         | (0.048)      | (0.085) | (0.044)              | (0.044)                          | (0.037)     | (0.034)         | (0.040)           | (0.020)            | (0.086)           | (0.080)       | (0.036)                               | (0.063)        |         |            |               |
|                         | -0.073       | -0.073 | ref.                 | ref.                            | 0.066*      | 0.082*          | 0.092*            | 0.113***           | -0.016            | -0.016        | 0.000                               |                |         |            |               |
|                         | (0.044)      | (0.061) | (0.047)              | (0.047)                          | (0.037)     | (0.036)         | (0.036)           | (0.020)            | (0.088)           | (0.080)       | (0.036)                               |                |         |            |               |
|                         | -0.073       | -0.074 | ref.                 | ref.                            | 0.066*      | 0.082*          | 0.092*            | 0.113***           | -0.009            | -0.009        | 0.000                               |                |         |            |               |
|                         | (0.044)      | (0.061) | (0.047)              | (0.047)                          | (0.037)     | (0.036)         | (0.036)           | (0.020)            | (0.076)           | (0.076)       | (0.036)                               |                |         |            |               |
|                         | -0.064       | -0.071 | ref.                 | ref.                            | 0.073       | 0.082*          | 0.091*            | 0.115***           | -0.000            | 0.000         | 0.000                               |                |         |            |               |
|                         | (0.042)      | (0.060) | (0.047)              | (0.047)                          | (0.037)     | (0.036)         | (0.036)           | (0.020)            | (0.076)           | (0.076)       | (0.036)                               |                |         |            |               |
|                         | -0.065       | -0.075 | ref.                 | ref.                            |            |                |                  |                    |                   |              | 0.000                               |                |         |            |               |
|                         | (0.042)      | (0.060) | (0.047)              | (0.047)                          |            |                |                  |                    |                   |              | (0.036)                               |                |         |            |               |

Notes: Each regression included the full control set described in notes to Table 2: demographics, childhood SES, school fixed effects, physical disability, and other ACEs. * p<0.05, ** p<0.01, *** p<0.001

Source: Author’s calculation from Add Health data.
Table A 7. Sensitivity of effect sizes to confounding from unobservables relative to confounding from observables.

|        | (1) | (2) | (3) | (4) |
|--------|-----|-----|-----|-----|
|        | High school diploma | Bachelor’s degree | Full–time employment | Log earnings |
| $R_{max} = 1.3\bar{R}$ | 6.10 | 3.39 | 2.91 | 2.80 |
| $R_{max} = 2\bar{R}$ | 1.52 | 0.98 | 0.82 | 0.86 |

Notes: This table displays the minimum relative selection parameter, $\delta$ (ratio of amount of confounding from unobservables to confounding from observables), which would imply that the coefficient on childhood sexual abuse in the baseline model was fully explained by unobservables.

Source: Author’s calculation from Add Health data.

Table A 8. Estimates from seemingly unrelated regression.

|        | (1) | (2) | (3) | (4) |
|--------|-----|-----|-----|-----|
|        | High school diploma | Bachelor’s degree | Full–time employment | Log earnings |
| Sexual abuse | $-0.066^{***}$ | $-0.079^{***}$ | $-0.061^{***}$ | $-0.173^{***}$ |
|          | (0.008) | (0.011) | (0.011) | (0.027) |
| Observations | 14,819 | 14,791 | 14,816 | 13,296 |

Notes: This table displays coefficient estimates of the effects of childhood sexual abuse and bootstrapped standard errors, as measured from seemingly unrelated regression including (i) models of each ACE as an outcome observed with error, controlling for demographics, childhood SES, child physical disability, and school fixed effects; (ii) a model of the education or labor market outcome, regressed on ACEs, demographics, childhood SES, childhood physical disability, and school fixed effects; and allowing correlation between the error terms across models. For comparison of column (4) with results from the baseline specification, presented in the manuscript from a two-part model, I repeated the baseline model with log earnings as the outcome, and the OLS estimate for childhood sexual abuse was $-0.187$ (s.e., 0.045).

Source: Author’s calculation from Add Health data.

Table A 9. Testing for pre-existing differences in birthweight.

|        | Outcome: birth weight (ounces) |
|--------|---------------------------------|
|        | mean (s.d.): 118.0 (21.4)      |
| Sexual abuse | $-0.368$ (0.751) |
| Observations | 11,318 |

Notes: This table displays the coefficients and standard errors from an OLS regression corresponding to equation (1), including the full control set.

Source: Author’s calculation from Add Health data.
### Table A 10. Testing for pre-existing differences in vocabulary score.

|                          | Outcome: vocabulary score<sup>a</sup> | mean (s.d.): 101.3 (14.6) |
|--------------------------|---------------------------------------|---------------------------|
| Sexual abuse before Wave I | -1.183*                               | (0.511)                   |
| Sexual abuse after Wave I (but before age 18) | 0.069                                 | (1.035)                   |
| No sexual abuse in childhood | ref.                                 |                           |
| Observations             | 13,675                                |                           |

**Notes:** This table displays the coefficients and standard errors from an OLS regression corresponding to equation (1), including the full control set. To reduce contamination in the control group resulting from possibly imprecise recall of age when first sexually abused, participants who reported sexual abuse at an age within one-year of the Wave I interview were excluded from the falsification sample. Regression of each education and labor market outcome on vocabulary score confirms this measure as a valid surrogate outcome of human capital. Key: ref., reference group; s.d., standard deviation; * Vocabulary score is the age-normalized score from the Add Health Picture Vocabulary Test. ** p<0.01, *** p<0.001

**Source:** Author’s calculation from Add Health data.

### Table A 11. OLS estimates from model of high school diploma receipt: heterogeneity by child, family, and school characteristics.

|                          | (1) | (2) | (3) | (4) | (5) |
|--------------------------|-----|-----|-----|-----|-----|
|                          | Sample: females | Sample: males | By race | By childhood household income | By school services |
| Sexual abuse             | -0.070*** (0.017) | -0.103*** (0.030) | -0.064 (0.088) | -0.192 (0.208) | -0.093*** (0.031) |
| Age                     | 0.008* (0.003) | 0.011** (0.004) | -0.004 (0.004) | -0.004 (0.004) | 0.009** (0.003) |
| Female                  | 0.031*** (0.009) | 0.031*** (0.009) | 0.036*** (0.009) |                           |                 |
| Race/ethnicity           | ref. | ref. | ref. | ref. | ref. |
| Non-Hispanic Asian/Pacific Islander | 0.018 (0.053) | 0.006 (0.049) | 0.008 (0.040) | 0.012 (0.036) | 0.018 (0.039) |
| Non-Hispanic Black       | 0.046 (0.052) | -0.068 (0.050) | 0.015 (0.039) | 0.015 (0.035) | 0.017 (0.036) |
| Non-Hispanic Native American | 0.105 (0.077) | -0.068 (0.139) | -0.066 (0.086) | -0.011 (0.081) | 0.013 (0.085) |
| Non-Hispanic white       | 0.009 (0.047) | -0.070 (0.044) | -0.020 (0.035) | -0.023 (0.031) | -0.016 (0.031) |
| Non-Hispanic, race not listed | -0.006 (0.051) | -0.059 (0.059) | -0.010 (0.043) | -0.012 (0.041) | -0.015 (0.041) |
| Parental education       | ref. | ref. | ref. | ref. | ref. |
| < High school            | -0.106** (0.032) | -0.132*** (0.033) | -0.115*** (0.022) | -0.116*** (0.022) | -0.104*** (0.024) |
| GED                      | -0.102* (0.04) | -0.094 (0.056) | -0.092** (0.034) | -0.093** (0.034) | -0.099** (0.035) |
| High school graduate     | ref. | ref. | ref. | ref. | ref. |
| Vocational school + high school | 0.019 (0.022) | 0.040 (0.023) | 0.028 (0.016) | 0.028 (0.016) | 0.038* (0.017) |
| Some college             | 0.055** (0.018) | 0.027 (0.022) | 0.042** (0.014) | 0.043** (0.014) | 0.052*** (0.014) |
| College graduate         | 0.069*** (0.016) | 0.065** (0.021) | 0.064*** (0.012) | 0.065*** (0.012) | 0.072*** (0.013) |
| Beyond 4-yr college      | 0.089*** (0.019) | 0.101*** (0.020) | 0.089*** (0.015) | 0.090*** (0.014) | 0.101*** (0.016) |
| Log household income     | 0.046*** (0.010) | 0.048*** (0.012) | 0.041*** (0.009) | 0.038*** (0.008) | 0.045*** (0.008) |
|                          | Column (3) | Column (4) | Column (5) | Column (6) | Column (7) |
|--------------------------|-----------|------------|------------|------------|------------|
|                          | Coefficient | Standard Error | Coefficient | Standard Error | Coefficient | Standard Error |
| Physical disability      | -0.105*    | 0.046       | -0.082*    | 0.034       | -0.08*     | 0.035        |
| Physical abuse           | 0.011      | 0.017       | 0.009      | 0.011       | 0.009      | 0.011        |
| Emotional abuse          | 0.009      | 0.015       | -0.003     | 0.014       | -0.003     | 0.015        |
| Knife or gun violence    | -0.102***  | 0.025       | -0.116***  | 0.016       | -0.116***  | 0.016        |
| Parental incarceration   | No         | ref.        | ref.       | ref.       | ref.       |
|                          | Yes        | -0.095***   | -0.091***  | -0.087***   | -0.087***  | -0.090***    |
|                          | Don't know | -0.024      | -0.103**   | -0.057**    | -0.057**   | -0.060**     |
| Parental union instability|           | -0.043**   | -0.027     | -0.033*     | -0.034**   | -0.034*      |
| Illegal drugs in household|          | -0.020      | -0.035     | -0.017      | -0.014     | -0.026       |
| Sexual abuse # Hispanic  |             | 0.072       | (0.099)    |            |            |
| Sexual abuse # Non-Hispanic Asian or Pacific Islander| | -0.001 | (0.096) |
| Sexual abuse # Non-Hispanic Black| | 0.288* | (0.112) |
| Sexual abuse # Non-Hispanic Native American| | -0.016 | (0.090) |
| Sexual abuse # Non-Hispanic white| | -0.010 | (0.104) |
| Sexual abuse # Non-Hispanic, race not listed| | -0.011 | (0.019) |
| Sexual abuse # log household income| | -0.018 | (0.015) |
| Emotional counseling     |           |             |            |            |            |
| Rape counseling          |           |             |            |            |            |
| Physical violence program|           | 0.051**   | (0.019)    |            |            |
| Drug or alcohol use disorder program| | -0.021 | (0.015) |
| Drug awareness and resistance education| | -0.006 | (0.017) |
| Sexual abuse # Emotional counseling| | 0.038 | (0.028) |
| Sexual abuse # Rape counseling| | -0.053 | (0.043) |
| Sexual abuse # Physical violence program| | 0.009 | (0.049) |
| Sexual abuse # Drug or alcohol use disorder program| | 0.037 | (0.026) |
| Sexual abuse # Drug awareness and resistance education| | -0.014 | (0.037) |
| Observations             | 7,390      | 6,310       | 13,672     | 13,672     | 14,575      |

Notes: This table displays coefficients and standard errors from OLS. Regressions reported in columns (3) and (4) includes school fixed effects; regression reported in column (5) includes state fixed effects. * p<0.05, ** p<0.01, *** p<0.001

Source: Author’s calculation from Add Health data.
Table A 12. OLS estimates from model of Bachelor’s degree receipt: heterogeneity by child, family, and school characteristics.

|                           | Sample: females | Sample: males | By race | By childhood household income | By school services |
|---------------------------|-----------------|---------------|---------|-------------------------------|-------------------|
| **Sexual abuse**          |                 |               |         |                               |                   |
|                           | -0.076***       | -0.074***     | -0.079  | 0.490***                      | -0.084*           |
|                           | (0.017)         | (0.018)       | (0.052) | (0.016)                       | (0.038)           |
| **Age**                   |                 |               |         |                               |                   |
|                           | 0.001           | 0.005         | 0.009*  | 0.009*                        | 0.002             |
|                           | (0.005)         | (0.005)       | (0.004) | (0.004)                       | (0.004)           |
| **Female**                |                 |               |         |                               |                   |
|                           | 0.073***        | 0.072***      | 0.072***|                               |                   |
|                           | (0.011)         | (0.011)       | (0.012) |                               |                   |
| **Race/ethnicity**        |                 |               |         |                               |                   |
| Non-Hispanic Asian/Pacific Islander | 0.073     | 0.229***      | 0.162** | 0.161**                       | 0.178***          |
|                           | (0.067)         | (0.061)       | (0.052) | (0.050)                       | (0.052)           |
| Non-Hispanic Black        | 0.054           | 0.055         | 0.037   | 0.050                         | 0.066*            |
|                           | (0.039)         | (0.030)       | (0.029) | (0.028)                       | (0.026)           |
| Non-Hispanic Native American | -0.017      | 0.002         | -0.056  | -0.025                        | 0.010             |
|                           | (0.072)         | (0.050)       | (0.048) | (0.046)                       | (0.041)           |
| Non-Hispanic white        | 0.017           | 0.072*        | 0.048   | 0.048                         | 0.033             |
|                           | (0.033)         | (0.028)       | (0.026) | (0.027)                       | (0.022)           |
| Non-Hispanic, race not listed | 0.039       | 0.073         | 0.071*  | 0.060                         | 0.052             |
|                           | (0.042)         | (0.044)       | (0.033) | (0.032)                       | (0.030)           |
| **Parental education**    |                 |               |         |                               |                   |
| < High school             | -0.05*          | 0.012         | 0.009   | -0.009                        | -0.010            |
|                           | (0.022)         | (0.022)       | (0.017) | (0.017)                       | (0.018)           |
| GED                       | -0.088***       | -0.014        | 0.044   | -0.043                        | -0.038            |
|                           | (0.029)         | (0.037)       | (0.022) | (0.022)                       | (0.024)           |
| **High school graduate**  |                 |               |         |                               |                   |
| Vocational school + high school | 0.015      | 0.044         | 0.020   | 0.020                         | 0.030             |
|                           | (0.029)         | (0.023)       | (0.018) | (0.018)                       | (0.019)           |
| Some college              | 0.066**         | 0.066**       | 0.061** | 0.060**                       | 0.077***          |
|                           | (0.021)         | (0.025)       | (0.015) | (0.015)                       | (0.015)           |
| College graduate          | 0.219***        | 0.197***      | 0.187** | 0.186**                       | 0.204***          |
|                           | (0.025)         | (0.029)       | (0.018) | (0.018)                       | (0.018)           |
| Beyond 4-yr college       | 0.497***        | 0.408***      | 0.348** | 0.346**                       | 0.396***          |
|                           | (0.028)         | (0.029)       | (0.020) | (0.020)                       | (0.020)           |
| Log household income      | 0.095***        | 0.079***      | 0.064** | 0.074**                       | 0.079***          |
|                           | (0.011)         | (0.012)       | (0.008) | (0.009)                       | (0.009)           |
| **Physical disability**   |                 |               |         |                               |                   |
|                           | -0.099*         | -0.061        | -0.083* | -0.082*                       | -0.079***         |
|                           | (0.047)         | (0.038)       | (0.027) | (0.027)                       | (0.029)           |
| **Physical abuse**        |                 |               |         |                               |                   |
|                           | -0.017          | -0.014        | -0.017  | -0.017                        | -0.019            |
|                           | (0.018)         | (0.013)       | (0.013) | (0.013)                       | (0.013)           |
| **Emotional abuse**       |                 |               |         |                               |                   |
|                           | 0.010           | 0.005         | 0.001   | -0.002                        | 0.000             |
|                           | (0.019)         | (0.026)       | (0.015) | (0.015)                       | (0.016)           |
| **Knife or gun violence** |                 |               |         |                               |                   |
|                           | -0.101***       | -0.128***     | -0.110* | -0.109***                     | -0.112***         |
|                           | (0.023)         | (0.014)       | (0.011) | (0.011)                       | (0.011)           |
| **Parental incarceration**|                 |               |         |                               |                   |
| No                        |                 |               |         |                               |                   |
|                           | -0.129***       | -0.037        | -0.072**| -0.073**                      | -0.076***         |
|                           | (0.016)         | (0.019)       | (0.013) | (0.013)                       | (0.014)           |
| Don’t know                |                 |               |         |                               |                   |
|                           | -0.086***       | -0.033        | -0.042* | -0.042*                       | -0.053***         |
|                           | (0.020)         | (0.028)       | (0.018) | (0.018)                       | (0.017)           |
| Parental union instability|                 |               |         |                               |                   |
|                           | -0.03*          | -0.050**      | -0.041**| -0.040***                     | -0.039***         |
|                           | (0.014)         | (0.017)       | (0.011) | (0.011)                       | (0.011)           |
| **Illegal drugs in household** | 0.017      | -0.045        | -0.028  | -0.027                        | -0.031            |
|                           | (0.040)         | (0.028)       | (0.024) | (0.025)                       | (0.023)           |
| **Sexual abuse # Hispanic** |               |               |         |                               |                   |
|                           |                 |               |         |                               |                   |
| **Sexual abuse # Non-Hispanic Asian or Pacific Islander** | -0.029     |               |         |                               |                   |
|                           | (0.118)         |               |         |                               |                   |
| Sexual abuse # Non-Hispanic Black                   | 0.073 (0.062)                  |
|--------------------------------------------------|-------------------------------|
| Sexual abuse # Non-Hispanic Native American      | 0.162 (0.084)                 |
| Sexual abuse # Non-Hispanic white                | -0.004 (0.054)                |
| Sexual abuse # Non-Hispanic, race not listed     | -0.065 (0.064)                |
| Sexual abuse # log household income              | -0.053*** (0.015)             |
| Emotional counseling                             | -0.010 (0.019)                |
| Rape counseling                                  | 0.013 (0.024)                 |
| Physical violence program                       | 0.006 (0.024)                 |
| Drug or alcohol use disorder program             | -0.030 (0.021)                |
| Drug awareness and resistance education          | -0.033 (0.033)                |
| Sexual abuse # Emotional counseling              | 0.002 (0.029)                 |
| Sexual abuse # Rape counseling                   | 0.057 (0.033)                 |
| Sexual abuse # Physical violence program         | 0.028 (0.047)                 |
| Sexual abuse # Drug or alcohol use disorder program | -0.028 (0.027)             |
| Sexual abuse # Drug awareness and resistance education | 0.016 (0.041)            |
| Observations                                     | 7,390 6,310 13,672 13,672 14,575 |

Notes: This table displays coefficients and standard errors from OLS. Regressions reported in columns (3) and (4) include school fixed effects; regression reported in column (5) includes state fixed effects. * p<0.05, ** p<0.01, *** p<0.001

Source: Author’s calculation from Add Health data.
Table A 13. OLS estimates from model of full-time employment: heterogeneity by child, family, and school characteristics.

|                           | (1)          | (2)          | (3)          | (4)          | (5)          |
|---------------------------|--------------|--------------|--------------|--------------|--------------|
|                           | Sample: females | Sample: males | By race     | By household income | By school services |
| Sexual abuse              | -0.046* (0.020) | -0.057 (0.034) | 0.010 (0.071) | -0.095 (0.175) | -0.109** (0.036) |
| Age                       | -0.006 (0.005) | 0.016*** (0.005) | -0.001 (0.004) | -0.001 (0.004) | 0.002 (0.003)   |
| Female                    | -0.156*** (0.012) | -0.156*** (0.012) | -0.158*** (0.012) |                     |               |
| Race/ethnicity            |              |              |              |              |              |
| Hispanic                  |              |              |              |              |              |
| Non-Hispanic Asian/Pacific Islander | 0.070 (0.072) | -0.050 (0.064) | -0.082 (0.042) | -0.086* (0.04) | -0.043 (0.063) |
| Non-Hispanic Black        | 0.032 (0.055) | -0.143* (0.06) | -0.071* (0.033) | -0.082* (0.032) | -0.070 (0.043) |
| Non-Hispanic Native American | 0.020 (0.098) | -0.120 (0.105) | -0.050 (0.093) | -0.049 (0.080) | -0.037 (0.086) |
| Non-Hispanic white        | -0.049 (0.056) | -0.028 (0.050) | -0.023 (0.029) | -0.037 (0.029) | -0.045 (0.037) |
| Non-Hispanic, race not listed | -0.034 (0.071) | -0.079 (0.068) | -0.065 (0.044) | -0.061 (0.042) | -0.053 (0.054) |
| Parental education        |              |              |              |              |              |
| < High school             | -0.032 (0.033) | -0.060 (0.033) | -0.044* (0.021) | -0.044* (0.021) | -0.036 (0.026) |
| GED                       | -0.014 (0.044) | -0.036 (0.056) | -0.023 (0.033) | -0.024 (0.033) | -0.023 (0.035) |
| High school graduate      |              |              |              |              |              |
| Log household income      | 0.015 (0.031) | 0.002 (0.024) | 0.003 (0.020) | 0.002 (0.019) | 0.005 (0.019) |
| Physical disability       | -0.098 (0.051) | -0.018 (0.052) | -0.062 (0.043) | -0.062 (0.043) | -0.054 (0.042) |
| Physical abuse            | 0.008 (0.019) | 0.011 (0.020) | -0.000 (0.013) | -0.001 (0.013) | 0.004 (0.014) |
| Emotional abuse           | -0.026 (0.025) | -0.040 (0.025) | -0.035 (0.018) | -0.035 (0.018) | -0.024 (0.018) |
| Knife or gun violence     | 0.019 (0.030) | -0.003 (0.017) | 0.007 (0.015) | 0.007 (0.015) | 0.014 (0.016) |
| Parental incarceration     |              |              |              |              |              |
| Yes                       | -0.032 (0.023) | -0.059** (0.022) | -0.041** (0.015) | -0.041** (0.015) | -0.037* (0.017) |
| Don't know                | -0.047 (0.036) | -0.029 (0.029) | -0.017 (0.021) | -0.016 (0.021) | -0.042 (0.024) |
| Parental union instability | -0.018 (0.017) | 0.006 (0.015) | -0.001 (0.010) | -0.001 (0.010) | -0.004 (0.011) |
| Illegal drugs in household | -0.074 (0.052) | -0.011 (0.036) | -0.035 (0.030) | -0.035 (0.030) | -0.041 (0.030) |
| Sexual abuse # Hispanic    |              |              |              |              |              |
| Sexual abuse # Non-Hispanic Asian or Pacific Islander | 0.029 (0.101) |              |              |              |              |
| Sexual abuse # Non-Hispanic Black | 0.058 (0.075) |
|----------------------------------|--------------|
| Sexual abuse # Non-Hispanic Native American | -0.004 (0.128) |
| Sexual abuse # Non-Hispanic white | -0.086 (0.076) |
| Sexual abuse # Non-Hispanic, race not listed | 0.016 (0.091) |
| Sexual abuse # log household income | 0.003 (0.016) |
| Emotional counseling | 0.018 (0.014) |
| Rape counseling | 0.009 (0.026) |
| Physical violence program | 0.075*** (0.022) |
| Drug or alcohol use disorder program | -0.017 (0.022) |
| Drug awareness and resistance education | -0.049** (0.018) |
| Sexual abuse # Emotional counseling | -0.012 (0.040) |
| Sexual abuse # Rape counseling | 0.033 (0.054) |
| Sexual abuse # Physical violence program | -0.036 (0.050) |
| Sexual abuse # Drug or alcohol use disorder program | -0.019 (0.037) |
| Sexual abuse # Drug awareness and resistance education | 0.085 (0.050) |
| Observations | 7,389 6,308 13,672 13,672 14,575 |

**Notes:** This table displays coefficients and standard errors from OLS. Regressions reported in columns (3) and (4) include school fixed effects; regression reported in column (5) includes state fixed effects. * p<0.05, ** p<0.01, *** p<0.001

**Source:** Author’s calculation from Add Health data.
## Table A 14. Estimates from two-part models of earnings: heterogeneity by child, family, and school characteristics.

|                         | (1)          | (2)          | (3)          | (4)          | (5)          |
|-------------------------|--------------|--------------|--------------|--------------|--------------|
|                         | Sample:      | Sample:      | By race      | By           | By           |
|                         | females      | males        |              | childhood    | school       |
|                         |              |              |              | household    | services     |
| **1st part: probit for having positive earnings** |              |              |              |              |              |
| Sexual abuse            | -0.118       | -0.003       | 0.087        | 1.020        | -0.278       |
|                         | (0.078)      | (0.161)      | (0.330)      | (0.705)      | (0.161)      |
| Age                     | -0.032       | 0.017        | -0.025       | -0.026       | -0.015       |
|                         | (0.017)      | (0.028)      | (0.019)      | (0.019)      | (0.013)      |
| Female                  | -0.531***    |              |              | -0.536***    | -0.538***    |
|                         | (0.076)      |              |              | (0.075)      | (0.077)      |
| **Race/ethnicity**      |              |              |              |              |              |
| Hispanic                |              |              |              |              |              |
| Non-Hispanic Asian/Pacific Islander | -0.488*      | 0.111        | -0.342       | -0.373       | -0.338       |
|                         | (0.228)      | (0.339)      | (0.226)      | (0.214)      | (0.216)      |
| Non-Hispanic Black      | 0.242        | -0.592*      | -0.212       | -0.185       | -0.306       |
|                         | (0.126)      | (0.275)      | (0.187)      | (0.187)      | (0.199)      |
| Non-Hispanic Native American | 0.326        | 0.048        | 0.193        | 0.198        | -0.025       |
|                         | (0.289)      | (0.410)      | (0.312)      | (0.268)      | (0.266)      |
| Non-Hispanic white      | -0.223       | -0.013       | -0.099       | -0.156       | -0.246       |
|                         | (0.115)      | (0.240)      | (0.138)      | (0.139)      | (0.154)      |
| Non-Hispanic, race not listed | -0.053       | -0.111       | -0.040       | -0.028       | -0.196       |
|                         | (0.172)      | (0.321)      | (0.193)      | (0.184)      | (0.184)      |
| **Parental education**  |              |              |              |              |              |
| < High school           | -0.198       | -0.523**     | -0.248*      | -0.243*      | -0.239**     |
|                         | (0.111)      | (0.163)      | (0.104)      | (0.104)      | (0.106)      |
| GED                     | -0.131       | -0.243       | -0.028       | -0.020       | -0.080       |
|                         | (0.144)      | (0.261)      | (0.146)      | (0.145)      | (0.160)      |
| High school graduate    | ref.         | ref.         | ref.         | ref.         | ref.         |
| Vocational school + high school | 0.107        | 0.045        | 0.076        | 0.074        | 0.087        |
|                         | (0.099)      | (0.172)      | (0.084)      | (0.084)      | (0.092)      |
| Some college            | 0.209*       | -0.041       | 0.150        | 0.144        | 0.140        |
|                         | (0.084)      | (0.127)      | (0.076)      | (0.076)      | (0.077)      |
| College graduate        | 0.135        | 0.038        | 0.076        | 0.073        | 0.071        |
|                         | (0.122)      | (0.157)      | (0.105)      | (0.106)      | (0.113)      |
| Beyond 4-yr college     | 0.293*       | -0.270       | 0.077        | 0.069        | 0.121        |
|                         | (0.114)      | (0.162)      | (0.086)      | (0.085)      | (0.100)      |
| Log household income    | 0.045        | 0.083        | 0.021        | 0.047        | 0.033        |
|                         | (0.044)      | (0.058)      | (0.041)      | (0.043)      | (0.040)      |
| Physical disability     | -0.273       | -0.012       | -0.212       | -0.215       | -0.264**     |
|                         | (0.154)      | (0.256)      | (0.125)      | (0.124)      | (0.123)      |
| Physical abuse          | 0.005        | 0.143        | 0.046        | 0.047        | 0.058        |
|                         | (0.079)      | (0.120)      | (0.074)      | (0.073)      | (0.079)      |
| Emotional abuse         | -0.046       | -0.074       | -0.063       | -0.064       | -0.123       |
|                         | (0.086)      | (0.128)      | (0.081)      | (0.081)      | (0.082)      |
| Knife or gun violence   | 0.046        | -0.191       | -0.056       | -0.053       | -0.074       |
|                         | (0.121)      | (0.102)      | (0.084)      | (0.084)      | (0.088)      |
| **Parental incarceration** | ref.         | ref.         | ref.         | ref.         | ref.         |
| No                      | -0.180*      | -0.241*      | -0.187**     | -0.187**     | -0.215**     |
|                         | (0.082)      | (0.107)      | (0.064)      | (0.063)      | (0.070)      |
| Don't know              | -0.100       | -0.532***    | -0.299**     | -0.302**     | -0.311**     |
|                         | (0.110)      | (0.151)      | (0.103)      | (0.103)      | (0.105)      |
| Parental union instability | -0.046       | -0.044       | -0.040       | -0.043       | -0.031       |
|                         | (0.065)      | (0.082)      | (0.058)      | (0.058)      | (0.059)      |
| Illegal drugs in household | -0.049       | -0.003       | -0.030       | -0.031       | 0.000        |
|                         | (0.167)      | (0.212)      | (0.135)      | (0.134)      | (0.137)      |
| Sexual abuse # Hispanic | ref.         | ref.         | ref.         | ref.         | ref.         |
| Sexual abuse # Non-Hispanic Asian or Pacific Islander | -0.180    |              |              |              |              |
|                         | (0.507)      |              |              |              |              |
|                                |        |        |
|--------------------------------|--------|--------|
| Sexual abuse # Non-Hispanic Black | 0.139  | (0.340) |
| Sexual abuse # Non-Hispanic Native American | -0.010 | (0.505) |
| Sexual abuse # Non-Hispanic white | -0.316 | (0.327) |
| Sexual abuse # Non-Hispanic, race not listed | -0.016 | (0.433) |
| Sexual abuse # log household income | -0.109 | (0.067) |
| Emotional counseling | 0.020  | (0.058) |
| Rape counseling | 0.045  | (0.128) |
| Physical violence program | 0.065  | (0.095) |
| Drug or alcohol use disorder program | 0.009  | (0.062) |
| Drug awareness and resistance education | -0.027 | (0.066) |
| Sexual abuse # Emotional counseling | -0.079 | (0.131) |
| Sexual abuse # Rape counseling | -0.252 | (0.305) |
| Sexual abuse # Physical violence program | -0.094 | (0.216) |
| Sexual abuse # Drug or alcohol use disorder program | -0.005 | (0.130) |
| Sexual abuse # Drug awareness and resistance education | 0.288  | (0.187) |

**2nd part: GLM for earnings level**

|                                |        |        |        |        |        |        |
|--------------------------------|--------|--------|--------|--------|--------|--------|
| Sexual abuse | -0.074 | (0.054) | -0.214*** | (0.050) | -0.178 | (0.100) | 0.053  | (0.517) | -0.114 | (0.069) |
| Age | 0.057*** | (0.011) | 0.059*** | (0.008) | 0.036*** | (0.008) | 0.035*** | (0.008) | 0.056*** | (0.006) |
| Female | -0.277*** | (0.022) | -0.276*** | (0.022) | -0.245*** | (0.025) |
| Race/ethnicity |        |        |        |        |        |        |
| Hispanic |        |        |        |        |        |        |
| Non-Hispanic Asian/Pacific Islander | 0.247*** | (0.088) | 0.088 | (0.086) | 0.093 | (0.080) | 0.138  | (0.079) | 0.145  | (0.086) |
| Non-Hispanic Black | 0.076  | (0.079) | -0.118 | (0.065) | -0.023 | (0.066) | -0.015 | (0.066) | -0.027 | (0.070) |
| Non-Hispanic Native American | 0.450  | (0.247) | 0.160 | (0.296) | 0.231 | (0.263) | 0.216  | (0.233) | 0.329  | (0.255) |
| Non-Hispanic white | -0.009 | (0.059) | 0.065 | (0.061) | 0.104 | (0.058) | 0.111  | (0.058) | 0.036  | (0.050) |
| Non-Hispanic, race not listed | 0.022  | (0.093) | -0.011 | (0.088) | 0.015 | (0.075) | 0.046  | (0.075) | -0.032 | (0.081) |
| Parental education |        |        |        |        |        |        |
| < High school | -0.127* | (0.059) | 0.040 | (0.055) | -0.070 | (0.038) | -0.069 | (0.038) | -0.077 | (0.046) |
| GED | -0.087  | (0.064) | -0.056 | (0.074) | -0.044 | (0.068) | -0.048 | (0.068) | -0.058 | (0.077) |
| High school graduate |        |        |        |        |        |        |
| Vocational school + high school | 0.076  | (0.052) | -0.005 | (0.049) | 0.027 | (0.043) | 0.023  | (0.042) | 0.016  | (0.040) |
| Some college | 0.142* | (0.062) | 0.103* | (0.043) | 0.087* | (0.035) | 0.083* | (0.034) | 0.113** | (0.039) |
| College graduate | 0.182*** | (0.047) | 0.101* | (0.042) | 0.107** | (0.035) | 0.103** | (0.034) | 0.114** | (0.035) |
| Beyond 4-yr college | 0.211** | (0.065) | 0.167** | (0.056) | 0.109** | (0.037) | 0.106** | (0.037) | 0.141*** | (0.037) |
| Log household income | 0.140*** | (0.031) | 0.161*** | (0.024) | 0.117*** | (0.019) | 0.120*** | (0.018) | 0.129*** | (0.020) |
| Physical disability          | -0.248** | 0.104 | -0.056 | -0.059 | -0.024 |
|                            | (0.082)  | (0.117) | (0.070) | (0.069) | (0.078) |
| Physical abuse              | 0.022    | 0.053  | 0.040  | 0.041  | 0.014  |
|                            | (0.050)  | (0.041) | (0.032) | (0.032) | (0.036) |
| Emotional abuse             | -0.050   | 0.005  | -0.032 | -0.033 | -0.005 |
|                            | (0.049)  | (0.057) | (0.039) | (0.039) | (0.039) |
| Knife or gun violence       | 0.061    | 0.028  | 0.016  | 0.016  | 0.057  |
|                            | (0.118)  | (0.046) | (0.042) | (0.041) | (0.049) |

| Parental incarceration      | ref.     | ref.   | ref.   | ref.   | ref.   |
|                            | 0.007    | -0.133*| -0.058 | -0.055 | -0.058 |
|                            | (0.085)  | (0.058) | (0.055) | (0.055) | (0.062) |
| Parental union instability | 0.002    | -0.052 | -0.021 | -0.020 | -0.024 |
|                            | (0.033)  | (0.033) | (0.020) | (0.020) | (0.022) |
| Illegal drugs in household | -0.027   | 0.087  | -0.015 | -0.018 | -0.019 |
|                            | (0.086)  | (0.156) | (0.079) | (0.080) | (0.078) |

| Sexual abuse # Hispanic     | ref.     | 0.441* | 0.045  |
|                            | (0.185)  | (0.114) |
| Sexual abuse # Non-Hispanic Asian or Pacific Islander | ref. | 0.036 |
|                            | (0.106)  |
| Sexual abuse # Non-Hispanic Black | -0.101 |
|                            | (0.362)  |
| Sexual abuse # Non-Hispanic Native American | 0.036 |
|                            | (0.106)  |
| Sexual abuse # Non-Hispanic white | ref. |
|                            | (0.362)  |
| Sexual abuse # Non-Hispanic, race not listed | 0.170 |
|                            | (0.128)  |

| Sexual abuse # log household income | -0.017 |
|                            | (0.047) |

| Emotional counseling        | 0.023 |
|                            | (0.034) |
| Rape counseling             | 0.027 |
|                            | (0.044) |
| Physical violence program  | -0.029 |
|                            | (0.047) |
| Drug or alcohol use disorder program | -0.029 |
|                            | (0.037) |
| Drug awareness and resistance education | -0.045 |
|                            | (0.048) |
| Sexual abuse # Emotional counseling | -0.089 |
|                            | (0.094) |
| Sexual abuse # Rape counseling | 0.001 |
|                            | (0.079) |
| Sexual abuse # Physical violence program | 0.059 |
|                            | (0.080) |
| Sexual abuse # Drug or alcohol use disorder program | -0.098 |
|                            | (0.082) |
| Sexual abuse # Drug awareness and resistance education | 0.085 |
|                            | (0.108) |

| Observations | 6,700 | 5,761 | 12,305 | 12,305 | 10,097 |

Notes: This table displays coefficients and standard errors from a two-part model. Regressions reported in columns (3) and (4) include school fixed effects; regression reported in column (5) includes state fixed effects. * p<0.05, ** p<0.01, *** p<0.001

Source: Author’s calculation from Add Health data.
Table A 15. Average marginal effects from models with childhood sexual abuse interacted with school services.

|                              | High school diploma | Bachelor’s degree | Full-time employment | Earnings       |
|------------------------------|---------------------|-------------------|----------------------|----------------|
| Sexual abuse                 | -0.075*** (0.014)   | -0.071*** (0.012) | -0.051** (0.018)    | -$4,723*** ($1,343) |
| Emotional counseling         | -0.013 (0.015)      | -0.009 (0.018)    | 0.017 (0.013)       | $489 ($1,200)   |
| Rape counseling              | -0.005 (0.021)      | 0.021 (0.022)     | 0.014 (0.024)       | $961 ($1,736)   |
| Physical violence program    | 0.052** (0.017)     | 0.010 (0.020)     | 0.070** (0.021)     | -$571 ($1,653)  |
| Drug or alcohol use disorder program | -0.016 (0.015) | -0.034 (0.020)    | -0.020 (0.021)      | -$1,317 ($1,334) |
| Drug awareness and resistance education | -0.008 (0.018) | -0.031 (0.030)    | -0.037* (0.018)     | -$1,167 ($1,686) |
| Observations                 | 14,575              | 14,575            | 14,575               | 10,097          |

Notes: This table displays average marginal effects and standard errors from OLS in columns (1) to (3) and from a two-part model in column (4). Regressions include state fixed effects. * p<0.05, ** p<0.01, *** p<0.001

Source: Author’s calculation from Add Health data.
### Observations

|                           | Depressive symptoms, Wave I | Health-related absence, Wave I | Anxiety diagnosis, Wave IV | Depressive symptoms, Wave IV | Health-related absence, Wave IV |
|---------------------------|-----------------------------|--------------------------------|-----------------------------|-----------------------------|---------------------------------|
| Sexual abuse before Wave I| 0.058*                      | 0.021                          |                             |                             |                                 |
| Sexual abuse after Wave I (but before age 18) | 0.020                      | 0.089                          |                             |                             |                                 |
| Sexual abuse (any time before age 18) |                            |                                |                             |                             |                                 |
| Physical abuse            | 0.047**                     | 0.038*                         | 0.018                       | 0.066**                     | 0.031*                          |
| Emotional abuse           | 0.075**                     | 0.004                          | 0.108***                    | 0.074***                    | 0.021                           |
| Knife or gun violence     | 0.133***                    | 0.084***                       | 0.025*                      | 0.063***                    | 0.042**                         |
| Parental incarceration     |                             |                                |                             |                             |                                 |
| No                        | 0.037*                      | 0.011                          | 0.026*                      | 0.022                       | 0.021                           |
| Don't know                | 0.010                       | 0.049                          | 0.038*                      | 0.007                       | 0.022                           |
| Parental divorce/separation | 0.045**                    | 0.002                          | -0.015                      | -0.004                      | -0.004                          |
| Illegal drugs in household| 0.095**                     | 0.072*                         | 0.047                       | 0.074*                      | -0.006                          |
| Age                       | 0.020**                     | 0.014**                        | -0.002                      | 0.003                       | -0.007                          |
| Female                    | 0.116***                    | 0.106***                       | 0.085***                    | 0.047***                    | 0.049***                        |
| Race/ethnicity            |                             |                                |                             |                             |                                 |
| Hispanic                  |                             |                                |                             |                             |                                 |
| Non-Hispanic Asian or Pacific Islander | 0.060                      | -0.063                         | -0.083**                    | 0.005                       | 0.009                           |
| Non-Hispanic Black        | -0.032                      | 0.001                          | -0.001768                   | 0.061                       | 0.006                           |
| Non-Hispanic Native American | 0.032                      | 0.061                          | -0.057                      | 0.036                       | -0.030                          |
| Non-Hispanic white        | -0.002244                   | 0.011                          | 0.022                       | -0.016                      | -0.006                          |
| Non-Hispanic, race not listed | -0.042                     | -0.029                         | 0.003                       | 0.016                       | 0.023                           |
| Parent education          |                             |                                |                             |                             |                                 |
| < High school             | 0.063**                     | 0.015                          | 0.002                       | 0.031                       | 0.012                           |
| GED                       | -0.037                      | 0.044                          | 0.067*                      | -0.031                      | 0.010                           |
| High school graduate      |                             |                                |                             |                             |                                 |
| Vocational school + high school | -0.032                    | -0.020                         | 0.015                       | 0.002                       | -0.012                          |
| Some college              | -0.046**                    | -0.019                         | 0.004                       | -0.012                      | -0.007                          |
| College graduate          | -0.026                      | -0.035                         | 0.004                       | -0.019                      | 0.002                           |
| Beyond 4-yr college       | -0.069**                    | -0.001034                      | 0.014                       | -0.000578                   | -0.012                          |
| Log household income      | 0.065                       | -0.016                         | 0.006                       | -0.000171                   | -0.005                          |
| Physical disability       | 0.167***                    | 0.106**                        | 0.080**                     | 0.119***                    | 0.014                           |
| Observations              | 14,799                      | 14,764                         | 14,798                      | 14,796                      | 14,741                          |

\( (1) \) OLS estimates from models of ancillary outcomes.

- **Depressive symptoms, Wave I**: Depressive symptoms scores for Wave I.
- **Health-related absence, Wave I**: Health-related absence scores for Wave I.
- **Anxiety diagnosis, Wave IV**: Anxiety diagnosis scores for Wave IV.
- **Depressive symptoms, Wave IV**: Depressive symptoms scores for Wave IV.
- **Health-related absence, Wave IV**: Health-related absence scores for Wave IV.

All p-values are reported with standard errors in parentheses.
Notes: This table displays coefficients and standard errors from OLS. All regressions include school fixed effects and a constant. * $p<0.05$, ** $p<0.01$, *** $p<0.001$

Source: Author’s calculation from Add Health data.
|                                | (1)     | (2)     | (3)     | (4)     | (5)     |
|--------------------------------|---------|---------|---------|---------|---------|
| Sexual abuse before Wave I    | 0.756***| 0.785** | 0.854*  | 0.896   | 0.717***|
|                               | (0.059) | (0.059) | (0.077) | (0.088) | (0.062) |
| Sexual abuse after Wave I (but before age 18) | 0.844   | 0.857   | 0.947   | 0.770   | 0.943   |
|                                | (0.156) | (0.172) | (0.180) | (0.168) | (0.189) |
| Physical abuse                 | 0.976   | 0.966   | 0.975   | 1.082   | 0.951   |
|                                | (0.054) | (0.057) | (0.058) | (0.061) | (0.073) |
| Emotional abuse                | 1.014   | 1.138   | 0.944   | 0.957   | 1.012   |
|                                | (0.078) | (0.102) | (0.074) | (0.079) | (0.101) |
| Knife or gun violence          | 0.546***| 0.544***| 0.636***| 0.681***| 0.660***|
|                                | (0.035) | (0.036) | (0.048) | (0.051) | (0.053) |

Parental incarceration

|                                | ref.    | ref.    | ref.    | ref.    | ref.    |
|--------------------------------|---------|---------|---------|---------|---------|
| No                             | 0.788***| 0.810** | 0.844*  | 0.792** | 0.896   |
|                                | (0.054) | (0.057) | (0.059) | (0.070) | (0.066) |
| Don't know                     | 0.881   | 0.819*  | 0.827   | 0.854   | 0.997   |
|                                | (0.084) | (0.077) | (0.090) | (0.093) | (0.091) |
| Parental divorce/separation    | 0.782***| 0.840** | 0.831***| 0.808***| 0.853** |
|                                | (0.040) | (0.044) | (0.043) | (0.047) | (0.047) |
| Illegal drugs in household     | 1.108   | 1.258   | 0.847   | 1.080   | 1.181   |
|                                | (0.161) | (0.181) | (0.104) | (0.211) | (0.170) |
| Age                            | 0.963   | 1.007   | 0.944*  | 0.961   | 0.970   |
|                                | (0.024) | (0.023) | (0.023) | (0.025) | (0.025) |
| Female                         | 1.584***| 1.962***| 1.174** | 1.414***| 1.421***|
|                                | (0.089) | (0.095) | (0.060) | (0.080) | (0.083) |

Race/ethnicity

|                                | ref.    | ref.    | ref.    | ref.    | ref.    |
|--------------------------------|---------|---------|---------|---------|---------|
| Hispanic                       | 2.644***| 1.761** | 2.686***| 1.832** | 2.445***|
|                                | (0.499) | (0.317) | (0.594) | (0.390) | (0.492) |
| Non-Hispanic Asian or Pacific Islander | 0.830   | 1.012   | 1.003   | 0.766   | 0.867   |
|                                | (0.119) | (0.143) | (0.137) | (0.162) | (0.112) |
| Non-Hispanic Black             | 0.723   | 0.686   | 1.109   | 0.773   | 0.803   |
|                                | (0.226) | (0.325) | (0.292) | (0.349) | (0.367) |
| Non-Hispanic Native American   | 1.111   | 1.109   | 1.110   | 1.041   | 1.237   |
|                                | (0.153) | (0.154) | (0.141) | (0.176) | (0.168) |
| Non-Hispanic white             | 1.087   | 1.150   | 1.117   | 1.043   | 1.109   |
|                                | (0.177) | (0.185) | (0.195) | (0.207) | (0.216) |

Parent education

|                                | ref.    | ref.    | ref.    | ref.    | ref.    |
|--------------------------------|---------|---------|---------|---------|---------|
| < High school                  | 0.711***| 0.693***| 0.998   | 0.725** | 0.674** |
|                                | (0.063) | (0.063) | (0.095) | (0.071) | (0.083) |
| GED                            | 0.776   | 0.605** | 1.104   | 0.786   | 0.848   |
|                                | (0.101) | (0.099) | (0.176) | (0.124) | (0.121) |
| High school graduate           | ref.    | ref.    | ref.    | ref.    | ref.    |
|                                |         |         |         |         |         |
| Vocational school + high school| 1.092   | 1.007   | 1.227*  | 1.051   | 1.044   |
|                                | (0.091) | (0.087) | (0.106) | (0.093) | (0.099) |
| Some college                   | 1.187*  | 1.165*  | 1.199*  | 1.157*  | 1.148   |
|                                | (0.084) | (0.080) | (0.088) | (0.084) | (0.081) |
| College graduate               | 1.658***| 1.636***| 1.329***| 1.666***| 1.502***|
|                                | (0.116) | (0.113) | (0.135) | (0.135) | (0.117) |
| Beyond 4-yr college            | 2.902***| 2.443***| 2.029***| 2.448***| 2.406***|
|                                | (0.255) | (0.213) | (0.193) | (0.203) | (0.216) |
| Log household income           | 1.192***| 1.213***| 1.086*  | 1.217***| 1.148** |
|                                | (0.045) | (0.048) | (0.042) | (0.051) | (0.047) |
| Physical disability            | 0.811   | 0.810   | 0.946   | 0.746   | 1.048   |
|                                | (0.135) | (0.140) | (0.173) | (0.128) | (0.174) |
| Observations                   | 12.398  | 12.265  | 11.714  | 11.055  | 11.039  |

Notes: This table displays odds ratios and standard errors from ordered logit regressions. All regressions include school fixed effects. * p<0.05, ** p<0.01, *** p<0.001
**Source:** Author’s calculation from Add Health data.

### Table A 18. Estimates of average marginal effects of childhood sexual abuse on earnings: exploring mechanisms.

|                                | (1)                      | (2)                      | (3)                      |
|--------------------------------|--------------------------|--------------------------|--------------------------|
|                                | + child depressive       | + current depressive     | + educational attainment |
| symptoms                       | symptoms                 | symptoms                 |                          |
| Sexual abuse (AME (s.c.))      | $-4,489^{* * *}$         | $-4,008^{* * *}$         | $-3,491^{* * *}$         |
|                                | (1,128)                  | (1,157)                  | (1,171)                  |
| AME % of median earnings       | -15%                     | -13%                     | -11%                     |
| Child depressive symptoms      | $-4,031^{* * *}$         |                          |                          |
|                                | (777)                    |                          |                          |
| Current depressive symptoms    |                          | $-7,142^{* * *}$         |
|                                |                          | (822)                    |
| Educational attainment         |                          |                          |                          |
| < High school                  |                          | $-7460^{* * *}$          |
|                                |                          | (1,469)                  |
| GED                            | $-3,326$                 |                          |
|                                | (2,549)                  |                          |
| High school graduate           | ref.                     |                          |                          |
| Vocational school + high school|                          | $2,114$                  |
|                                |                          | (1,333)                  |
| Some college                   | $3,193^{* *}$            |
|                                | (996)                    |                          |
| College graduate               | $16,658^{* * *}$         |
|                                | (1,446)                  |                          |
| Beyond 4-yr college            | $16,674^{* * *}$         |
|                                | (1,790)                  |                          |

**Notes:** Each regression included the full control set described in notes to Table 2: demographics, childhood SES, school fixed effects, physical disability, and other ACEs. * p<0.05, ** p<0.01, *** p<0.001

**Source:** Author’s calculation from Add Health data.
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