

Does Growing Up in a High Crime Neighborhood Affect Youth Criminal Behavior?

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Online Appendix

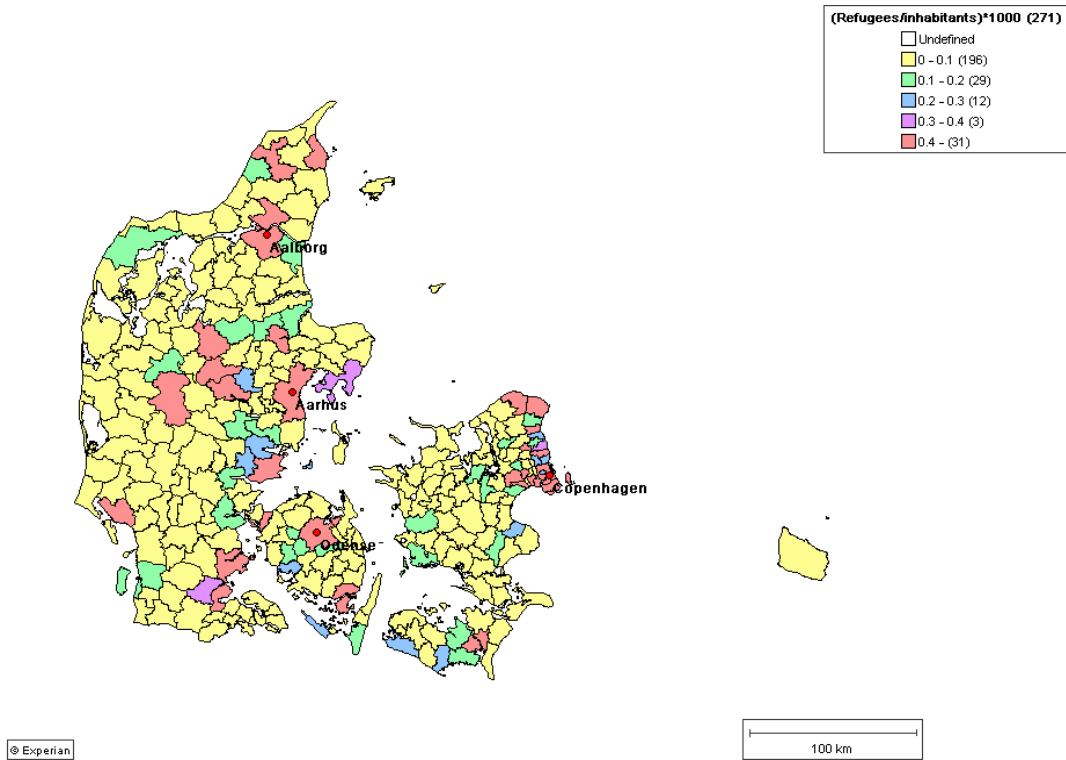


Figure A1a: Refugee Immigrant Allocation, pre-assignment policy

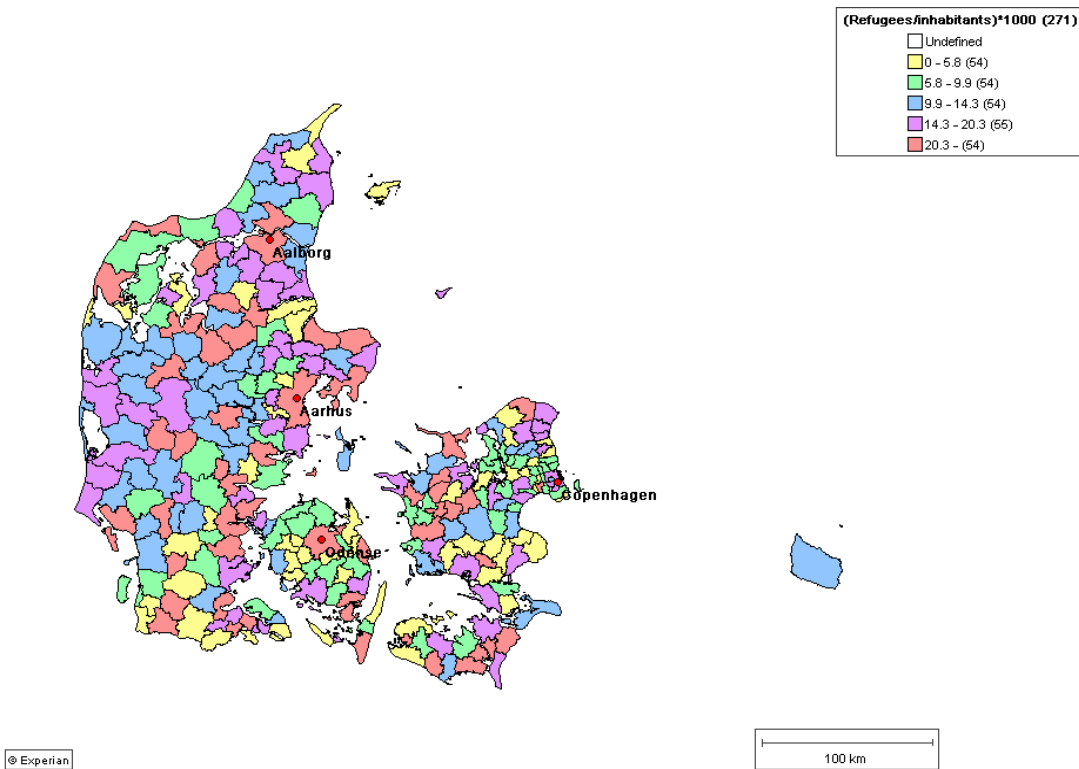


Figure A1b: Refugee Immigrant Allocation, post-assignment policy

Table A1: Kaplan-Meier survival rates in the municipality of assignment.

Year	Kaplan-Meier survival rate
0	1.000
1	0.761
2	0.705
3	0.656
4	0.609
5	0.579
6	0.546
7	0.515
8	0.491
9	0.466
10	0.439
11	0.415
12	0.392
13	0.367
14	0.340
15	0.307
16	0.272
17	0.238
18	0.217
19	0.184
20	0.147

Note: Administrative register information from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1).

Table A2.a: Assignment location attributes and individual characteristics of assignees in the year of assignment. Sample of household heads of children in the full sample of refugee children.

	Dependent variable: Different measures of crime in municipality of assignment											
	Youth crime conviction rate (%)		Youth violent crime conviction rate (%)		Overall crime conviction rate (%)		Overall violent crime conviction rate (%)		Number of reported crimes per capita (%)		Number of reported violent crimes per 10,000 inhabitants	
	1	2	3	4	5	6	7	8	9	10	11	12
Years of education (ref. category: 0-9 years):												
10-12 years	-0.042 (0.041)	-0.012 (0.016)	-0.001 (0.007)	0.001 (0.005)	-0.019 (0.018)	-0.003 (0.005)	-0.001 (0.002)	-0.001 (0.001)	-0.168 (0.230)	0.031 (0.083)	0.063 (0.460)	0.334 (0.243)
More than 12 years	-0.031 (0.047)	-0.018 (0.018)	0.001 (0.008)	-0.003 (0.006)	-0.022 (0.020)	-0.006 (0.005)	-0.000 (0.002)	-0.001 (0.001)	-0.221 (0.260)	-0.119 (0.095)	-0.050 (0.520)	-0.155 (0.276)
Unknown	-0.021 (0.042)	-0.003 (0.016)	-0.001 (0.007)	0.006 (0.005)	-0.007 (0.018)	-0.004 (0.005)	-0.001 (0.002)	0.001 (0.001)	0.100 (0.232)	0.063 (0.084)	0.381 (0.464)	0.374 (0.245)
Age	0.002 (0.002)	0.000 (0.001)	-0.000 (0.000)	-0.000 (0.000)	0.001 (0.001)	0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	0.011 (0.008)	0.004 (0.003)	0.004 (0.017)	-0.006 (0.009)
Number of children	-0.016* (0.008)	0.004 (0.003)	-0.002 (0.001)	-0.000 (0.001)	-0.010** (0.003)	0.002* (0.001)	-0.001 (0.000)	0.000 (0.000)	-0.164** (0.042)	0.012 (0.016)	-0.274** (0.084)	0.049 (0.045)
Married	0.023 (0.044)	-0.006 (0.018)	-0.001 (0.008)	0.000 (0.006)	0.019 (0.019)	-0.002 (0.005)	0.001 (0.002)	0.000 (0.001)	0.296 (0.247)	0.060 (0.091)	0.484 (0.493)	-0.190 (0.264)
Country of origin F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year of immigration F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Municipality F.E.	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
N	2,882											
<i>Panel B: Test of joint insignificance of educational attainment categories in linear regressions above</i>												
F(3,2856) or F(3,2654)	0.38	0.48	0.03	1.31	0.69	0.42	0.16	1.42	1.06	1.91	0.46	2.49
Prob>F	0.7709	0.6927	0.9921	0.269	0.5577	0.741	0.9209	0.2353	0.3643	0.1251	0.708	0.0587
<i>Panel C: Test of joint insignificance of educational attainment dummies, age, number of children and married dummy in linear regressions above</i>												
F(6,2856) or F(6,2654)	1.52	0.63	0.86	0.79	2.50	1.22	0.94	1.16	3.82	1.54	2.19	1.54
Prob>F	0.1683	0.7031	0.5225	0.5811	0.0203	0.2948	0.4625	0.3222	0.0008	0.1620	0.0412	0.1595

Note: **: P<0.01, *:P<0.05. Administrative register information from Statistics Denmark for household heads of children in the full sample of refugee children. The full sample of refugee children are children of immigrants from one of the following refugee-sending country: Iraq, Iran, Vietnam, Sri Lanka, Lebanon, Ethiopia, Afghanistan or Somalia, who immigrated before age 15 in the 1986-1998 period and at most one year later than the refugee parent(s) and who turn 21 years old in the period 1986-2006. Linear regression of municipality of assignment crime rates in the year of assignment on individual characteristics in year of assignment. 22.6% of household heads are female.

Table A2.b: Location assignment of refugee children and personal characteristics: Linear regression of municipality of assignment crime rates in year of assignment on gender, age at assignment and family characteristics in year of assignment. Sample of refugee children.

	Dependent variable: Different measures of crime in municipality of assignment											
	Youth crime conviction rate (%)		Youth violent crime conviction rate (%)		Overall crime conviction rate (%)		Overall violent crime conviction rate (%)		Number of reported crimes per capita (%)		Number of reported violent crimes per 10,000 inhabitants	
	1	2	3	4	5	6	7	8	9	10	11	12
	<i>Panel A: OLS estimates</i>											
Child is female	0.059**	0.009	0.003	-0.002	0.017*	0.004	0.001	-0.000	0.041	-0.000	0.102	0.046
	(0.020)	(0.008)	(0.004)	(0.003)	(0.008)	(0.003)	(0.001)	(0.001)	(0.109)	(0.041)	(0.230)	(0.111)
Child's age at assignment	-0.002	-0.002	-0.000	-0.000	-0.001	-0.001	-0.000	-0.000	-0.005	-0.001	-0.048	-0.029
	(0.004)	(0.001)	(0.001)	(0.000)	(0.002)	(0.000)	(0.000)	(0.000)	(0.021)	(0.007)	(0.038)	(0.019)
Years of education of household head (ref. category: 0-9 years):												
10-12 years	0.048	-0.017	0.008	-0.001	0.012	-0.005	0.002	-0.001	-0.037	-0.122	0.319	-0.146
	(0.051)	(0.019)	(0.009)	(0.006)	(0.021)	(0.006)	(0.002)	(0.001)	(0.272)	(0.098)	(0.530)	(0.269)
More than 12 years	-0.017	-0.029	0.007	-0.006	-0.016	-0.011	0.002	-0.001	-0.211	-0.218	0.201	-0.515
	(0.057)	(0.023)	(0.010)	(0.007)	(0.024)	(0.007)	(0.003)	(0.001)	(0.304)	(0.114)	(0.587)	(0.311)
Unknown	0.031	-0.004	0.006	0.004	0.011	-0.006	0.002	0.001	0.218	-0.066	0.724	-0.027
	(0.052)	(0.019)	(0.009)	(0.006)	(0.021)	(0.006)	(0.002)	(0.001)	(0.280)	(0.097)	(0.520)	(0.259)
Household head is married	0.024	-0.020	0.005	0.003	0.018	-0.007	0.002	-0.000	0.167	-0.030	0.134	-0.704*
	(0.052)	(0.019)	(0.010)	(0.007)	(0.023)	(0.007)	(0.002)	(0.002)	(0.300)	(0.113)	(0.594)	(0.319)
Age of household head	0.005*	0.001	-0.000	0.000	0.002*	0.000	0.000	-0.000	0.030**	0.005	0.045*	0.007
	(0.002)	(0.001)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.011)	(0.004)	(0.022)	(0.011)
Number of siblings	-0.020	0.003	-0.000	0.002	-0.008	0.001	-0.000	0.000	-0.115*	-0.025	-0.162	-0.014
	(0.010)	(0.004)	(0.002)	(0.001)	(0.005)	(0.001)	(0.001)	(0.000)	(0.056)	(0.020)	(0.113)	(0.055)
Country of origin F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year of immigration F.E.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Municipality F.E.	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
N	4,425											

To be continued.

Table A2.b (continued): Location assignment of refugee children and personal characteristics: Linear regression of municipality of assignment crime rates in year of assignment on gender, age at assignment and family characteristics in year of assignment. Sample of refugee children.

	Dependent variable: Different measures of crime in municipality of assignment											
	Youth crime conviction rate (%)		Youth violent crime conviction rate (%)		Overall crime conviction rate (%)		Overall violent crime conviction rate (%)		Number of reported crimes per capita (%)		Number of reported violent crimes per 10,000 inhabitants	
	1	2	3	4	5	6	7	8	9	10	11	12
<i>Panel B: Test of joint insignificance of household head educational attainment categories in linear regressions above</i>												
F(3,2407)	0.79	0.85	0.29	1.16	0.81	0.71	0.38	1.66	0.98	1.42	0.83	1.29
Prob>F	0.5011	0.4650	0.8359	0.3237	0.4872	0.5443	0.7662	0.1734	0.3992	0.2354	0.4798	0.2766
<i>Panel C: Test of joint insignificance of household head educational attainment categories and gender and age of child in linear regressions above</i>												
F(5,2407)	2.35	1.23	0.29	1.15	1.45	1.52	0.51	1.28	0.64	0.87	0.84	1.31
Prob>F	0.0385	0.2905	0.9184	0.3340	0.2018	0.1808	0.7659	0.2687	0.6713	0.4992	0.5224	0.2547
<i>Panel D: Test of joint insignificance of household educational attainment dummies, gender of child, age of child, number of siblings of child, household head's age and marital status in linear regressions above</i>												
F(8,2407)	2.81	1.27	0.28	0.94	2.10	1.24	0.51	0.93	2.27	0.99	1.39	1.49
Prob>F	0.0042	0.2531	0.9737	0.4785	0.0323	0.2685	0.8460	0.4908	0.0204	0.4423	0.1971	0.1544

Note: **: P<0.01, *:P<0.05. Standard errors are clustered by household identifier. Administrative register information from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1).

Table A3: Correlation between municipality crime measures and other municipality characteristics for all Danish municipalities over the 1986-1998 period.

	Youth crime conviction rate (%)	Overall crime conviction rate (%)	Reported crimes per capita (%)	Reported violent crimes/ 10,000 inhabitants	Ln(inha bitants)	Relative poverty rate (%)	Immigr ant share (%)	Crime detection rate (%)	Police officers/ 1000 inhab.	Pupils/ teacher ratio	Mean	StdD
Youth crime conviction rate (%)	1										2.05	0.78
Overall crime conviction rate (%)	0.82	1									0.70	0.24
Reported crimes per capita (%)	0.50	0.64	1								7.14	3.19
Reported violent crimes/10,000	0.43	0.49	0.62	1							17.56	10.14
Ln(inhabitants)	0.33	0.52	0.62	0.35	1						9.40	0.79
Relative poverty rate (%)	0.20	0.23	0.23	0.10	0.12	1					5.87	1.55
Immigrant share (%)	0.44	0.57	0.54	0.41	0.53	0.03	1				2.84	2.39
Crime detection rate (%)	0.02	0.06	0.05	0.19	0.01	0.28	-0.09	1			20.02	4.96
Police officers/1000 inhabitants									1			
	0.28	0.33	0.30	0.25	0.18	0.14	0.45	-0.01			1.25	0.45
Pupils/teacher ratio	0.27	0.32	0.37	0.26	0.45	-0.07	0.45	-0.09	0.11	1	19.94	1.45
Weekly number of teacher hours/pupil	0.38	0.39	0.37	0.24	0.31	0.01	0.40	-0.09	0.25	0.07	2.39	0.24
N	3,588											

Note: The youth crime conviction rates and the overall crime conviction rates are calculated using the Central Police Register for the age group of 15-25 year old individuals in Denmark and for all residents in Denmark in the period 1986-1998. respectively. The number of reported (violent) crimes is the number of reported (violent) offenses against the penal code from "Statistiske Efterretninger om Social Sikring og Retsvæsen", Statistics Denmark (1986-1998). The source of the number of inhabitants is BEF1A/Statistikbanken/Statistics Denmark. Relative poverty is constructed on the basis of the administrative tax and income registers from Statistics Denmark. The immigrant share is constructed on the basis of the administrative population registers from Statistics Denmark. The information on the crime detection rate comes from "Statistiske Efterretninger om social sikring og retsvæsen", Statistics Denmark (1986-1999). The information on police officers comes from annual police reports (1986-1999). The information on teacher wage hours per pupil comes from "Folkeskolen i de enkelte kommuner", Ministry of Education (1989/90, 1990/91, 1991-92 and 1992/93). The information on pupils/teacher ratio stem from "Folkeskolen i de enkelte kommuner", Ministry of Education (1989/90, 1990/91, 1991/92 and 1992/93) and "Folkeskolen i tal", Ministry of Education (1993/94,1994/95,1995/96,1996/97, 1997/98, 1998/99).

Table A4: Crime categorization. Main categories and main subcategories of crimes in the Central Police Register and our main categories of crimes.

Code/act violated	Main categories and main subcategories of crimes in the Central Police Register	Category	Category description
Penal code	1. All sexual assault convictions	1	Violence
	Rape	1	Violence
	Offense against decency (flasher)	1	Violence
	Sexual offense against children under the age of 12	1	Violence
	Other sexual assault convictions	1	Violence
	2. All violence convictions	1	Violence
	Violence against public authority	1	Violence
	Simple violence	1	Violence
	Threats	1	Violence
	Manslaughter	1	Violence
	Other violence convictions	1	Violence
	3. All offenses against property	2	Property crime
	Document fraud	2	Property crime
	Burglary in bank or shop	2	Property crime
	Shoplifting, etc.	2	Property crime
	Vandalism	2	Property crime
	Fraud	2	Property crime
	Other offenses against property	2	Property crime
	4. Other offenses against the penal code		
	Perjury	4	Other crimes
	Privacy violation and defamation	4	Other crimes
	Negligent manslaughter (road accident)	4	Other crimes
	Sale of narcotics	3	Drug crimes
Other offenses against the penal code	4	Other crimes	
Traffic Act	5. Offenses against the Traffic Act		Excluded
	Drunk driving		Excluded
	Other offenses against the Traffic Act (e.g., speeding)		Excluded
Special Acts	6. All offenses against the Drugs Act	3	Drug crimes
	7. All offenses against the Arms Act	4	Other crimes
	8. All offenses against tax acts and other special acts	4	Other crimes
	Other criminal special laws	4	Other crimes
	Laws concerning gambling and trade	4	Other crimes
	Tax and duty law, etc.	4	Other crimes
	Other offenses against tax acts and other special acts	4	Other crimes

Table A5.A: Variable definitions and primary data sources: Individual characteristics.

Variable	Definition	Primary data source
Criminal conviction in age range a_1 - a_2	Dummy for having been convicted (i.e., found guilty) of an offense (except traffic offenses) committed in age range a_1 - a_2 (15-21, 15-17 and 18-21).	Central Police Register, Statistics Denmark (DST).
Criminal conviction of type j in age range a_1 - a_2	Dummy for having been convicted (i.e., found guilty) of an offense (except traffic offenses) of type j in age range a_1 - a_2 (15-21, 15-17 and 18-21) (j =violence or sexual assault, property crime, drugs crime, other crimes).	Central Police Register, DST.
Number of criminal convictions in age range a_1 - a_2	Number of convictions for offenses (except traffic offenses) committed in age range a_1 - a_2 (15-21, 15-17 and 18-21).	Central Police Register, DST.
Number of criminal convictions of type j in age range a_1 - a_2	Number of convictions for offenses (except traffic offenses) committed in age range a_1 - a_2 (15-21, 15-17 and 18-21) (j =violence or sexual assault, property crime, drugs crime, other crimes).	Central Police Register, DST.
Woman	Dummy for female.	Population register, DST.
Age	Age.	Population register, DST.
Single parent	Dummy for living in a single-parent household.	Population register, DST.
Nuclear family	Dummy for living in a two-parent household.	Population register, DST.
Number of siblings	Number of persons living in the household after subtraction of the number of parents living in the household and 1 for individual i .	Population register, DST.
Years of education	Number of years of education before immigration, constructed based on an education code of the highest degree attained before immigration.	Survey-based register on immigrants' educational attainment before immigration, DST.
Source country	Dummy for source country.	Population register, DST.
Assignment year	Dummy for first year of receipt of residence permit.	Population register, DST.
Ethnic population	Number of immigrants and descendants of immigrants from the same source country as individual i .	Population register, DST. Authors' calculations based on full population data.

Table A5.B Variable definitions and primary data sources: Area Characteristics.

Variable	Definition	Primary data source
Youth crime conviction rate (%)	Share of individuals aged 15-25 living in municipality convicted of an offense (except traffic offenses) committed in that calendar year.	Central Police Register, DST
Type-specific youth crime convictions rates (%)	Share of individuals aged 15-25 living in municipality convicted of an offense (except traffic offenses) of type <i>j</i> committed in that calendar year (j=violent,property, drugs, other crimes).	Central Police Register, DST
Overall crime conviction rate (%)	Share of individuals living in municipality convicted of an offense (except traffic offenses) committed in that calendar year.	Central Police Register, DST
Type-specific crime convictions rates (%)	Share of individuals living in the municipality convicted of an offense of type <i>j</i> committed in that calendar year (j=violent,property, drugs, other crimes).	Central Police Register, DST
Reported crimes per capita (%)	Number of reported crimes in a given calendar year divided by the number of inhabitants living in the municipality (or police district) in that year.	"Statistiske Efterretninger om Social Sikring og Retsvæsen", DST (1986-1998).
Reported violent crimes per 10,000 inhabitants	Number of reported violent crimes in a given calendar year divided by the number of inhabitants living in the municipality (or police district) in that year and multiplied by 10,000.	"Statistiske Efterretninger om Social Sikring og Retsvæsen", DST (1986-1998).
Ln(inhabitants)	Natural logarithm of the number of inhabitants in the municipality.	www.statistikbanken.dk/BEF1A
Relative poverty rate (%)	Share of adults in the municipality who have equivalence-scaled disposable household income <50% of national median equivalence-scaled disposable household income.	Tax and income registers, DST. Authors' calculations based on full population data.
Immigrant share (%)	Number of immigrants and descendants of immigrants living in the municipality divided by the number of inhabitants in the municipality.	Population register, DST. Authors' calculations based on full population data.
Crime detection rate (%)	Annual number of charges divided by the annual number of reported crimes in the municipality (or police district).	Statistiske Efterretninger om social sikring og retsvæsen, Statistics Denmark (1986-1999).
Police officers per 1,000 inhabitants	Sum of number of detectives and uniformed police officers employed in the police district.	Annual reports from the Police (1986-1999).
Pupils/teacher ratio	Average number of pupils in a normal class in the municipality in a given school year.	"Folkeskolen i de enkelte kommuner", Ministry of Education (1989/90, 1990/91, 1991/92, 1992/93) and "Folkeskolen i tal", Ministry of Education (1993/94, 1994/95, 1995/96, 1996/97, 1997/98, 1998/99)
Weekly number of teacher wage hours per pupil	Weekly number of teacher wage hours per pupil in the municipality in a given school year.	"Folkeskolen i de enkelte kommuner", Ministry of Education (1989/90, 1990/91, 1991/92, 1992/93).

Note: Administrative register information from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1).

Table A6: Effect of a standard deviation increase in municipality crime conviction rates on living in Denmark in all years between age 15 and 21. Full sample of refugee children.

	1	2	3
Youth crime conviction rate	0.002 (0.008)		
Youth violent crime conviction rate		0.041 (0.058)	
Overall crime conviction rate			0.005 (0.007)
<i>Controls:</i>			
Gender	Yes	Yes	Yes
Country of origin, year, and age at assignment FE; Family background, size ethnic group DK	Yes	Yes	Yes
N		5,615	

Note: *** p<0.01, ** p<0.05, * p<0.1. Robust standard errors clustered by the municipality of assignment (204 cells) are reported in parentheses. Administrative register information from Statistics Denmark for the full sample of refugee children: Immigrant children from one of the following refugee-sending country: Iraq, Iran, Vietnam, Sri Lanka, Lebanon, Ethiopia, Afghanistan and Somalia, who immigrated before age 15 in the period 1986-1998 and at most one year later than their refugee parent(s) and who turn 21 years old in the period 1986-2006. Family background and municipality of assignment crime measures refer to the year of assignment. There are 5,615 individuals in the full sample of refugee children. The balanced sample of refugee children has 4,425 individuals. Excluded are i) children in the full sample of refugee children who have emigrated before age 21 (975 individuals) and ii) children in the full sample of refugee children who live in Denmark at age 21, but are not observed annually in the administrative registers between the age of 15-21 (215 individuals).

Table A7: Summary statistics: Mean (standard deviation) of personal attributes in the year of assignment of refugee children.

	All	Men	Women
Woman	.446 (.497)	0	1
Age	8.59 (3.66)	8.54 (3.68)	8.65 (3.63)
Single parent	.195 (.397)	.193 (.395)	.199 (.399)
Nuclear family	.801 (.399)	.805 (.396)	.797 (.403)
Number of siblings	2.78 (1.86)	2.75 (1.88)	2.83 (1.83)
Educational attainment by age 21:			
Less than 9 years of education	.059 (.236)	.071 (.256)	.046 (.209)
9 years of education	.217 (.412)	.233 (.423)	.197 (.398)
10 years of education	.433 (.496)	.440 (.496)	.426 (.495)
11 years of education	.139 (.346)	.135 (.341)	.146 (.353)
12 or more years of education	.151 (.358)	.122 (.328)	.186 (.389)
Father's educational attainment:			
0-9 years of education	.123 (.328)	.123 (.329)	.122 (.328)
10-12 years of education	.290 (.454)	.297 (.457)	.282 (.450)
More than 12 years of education	.158 (.365)	.164 (.371)	.150 (.357)
Unknown	.429 (.495)	.416 (.493)	.445 (.497)
Mother's educational attainment:			
0-9 years of education	.226 (.418)	.227 (.419)	.224 (.417)
10-12 years of education	.319 (.465)	.319 (.466)	.312 (.464)
More than 12 years of education	.113 (.316)	.113 (.317)	.113 (.316)
Unknown	.346 (.476)	.341 (.474)	.351 (.477)
Father's age	32.62 (17.64)	32.98 (17.23)	32.18 (18.14)
Mother's age	33.99 (10.93)	33.63 (11.19)	34.45 (10.58)
Source country:			
Iraq	.145 (.352)	.139 (.346)	.154 (.361)
Iran	.161 (.368)	.165 (.371)	.157 (.364)
Vietnam	.106 (.308)	.107 (.309)	.106 (.308)
Sri Lanka	.090 (.286)	.084 (.278)	.097 (.297)
Lebanon (no citizenship)	.383 (.486)	.387 (.487)	.377 (.485)
Ethiopia	.003 (.054)	.003 (.053)	.003 (.055)
Afghanistan	.036 (.187)	.038 (.191)	.034 (.183)
Somalia	.075 (.263)	.077 (.267)	.072 (.258)
N	4425	2453	1972

Note: Administrative register information from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1).

Table A8. Correlation matrix for number of convictions in age range 15-17 and 18-21.

<i>Panel A: Men</i>								
Number of convictions in age range 18-21								
	0	1	2	3	4	5 or more	Total	%
Number of convictions in age range 15-17								
0	1328	233	72	30	9	10	1682	68.57
1	221	113	44	15	9	17	419	17.08
2	53	25	18	15	12	26	149	6.07
3	12	12	21	6	10	23	84	3.42
4	5	6	7	7	12	13	50	2.04
5 or more	4	5	4	11	9	36	69	2.81
Total	1623	394	166	84	61	125	2453	
%	66.16	16.06	6.77	3.42	2.49	5.10		100.00
N	2,453							
<i>Panel B: Women</i>								
Number of convictions in age range 18-21								
	0	1	2	3	4	5 or more	total	%
Number of convictions in age range 15-17								
0	1708	79	17	3	0	1	1808	91.68
1	114	16	4	0	0	0	134	6.80
2	18	3	2	1	0	0	24	1.22
3	1	0	0	1	0	1	3	0.15
4	0	0	0	0	0	0	0	0.00
5 or more	1	0	0	0	0	2	3	0.15
Total	1842	98	23	5	0	4	1972	
%	93.41	4.97	1.17	0.25	0.00	0.20		100.00
N	1,972							

Note: Administrative register information from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1).

Table A9.A: Effect of a standard deviation increase in characteristics of the municipality of assignment on conviction probability and number of convictions in the 15-21 age range. Men.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>Panel A: Convicted in the 15-21 age range</i>														
Poverty rate (%)	-0.002 (0.009)	0.033 (0.033)												
Immigrant share (%)			-0.005 (0.009)	0.052 (0.033)										
ln(inhabitants)					-0.001 (0.009)	0.624 (0.630)								
Weekly teacher hours per pupil							-0.002 (0.009)	-0.003 (0.011)						
Pupils/teacher ratio									-0.005 (0.011)	-0.035* (0.019)				
Crime detection rate (%)											0.006 (0.011)	-0.001 (0.014)		
Police officers/1000 inhabitants													0.002 (0.008)	-0.098 (0.074)
<i>Panel B: Number of convictions in the 15-21 age range</i>														
Poverty rate (%)	0.014 (0.046)	0.067 (0.150)												
Immigrant share (%)			0.041 (0.045)	0.089 (0.163)										
ln(inhabitants)					0.052 (0.050)	3.536 (3.307)								
Weekly teacher hours per pupil							0.098** (0.046)	-0.002 (0.071)						
Pupils/teacher ratio									0.024 (0.049)	-0.102 (0.069)				
Crime detection rate (%)											0.048 (0.080)	0.017 (0.130)		
Police officers/1000 inhabitants													0.088 (0.057)	-0.696** (0.289)
<i>Controls:</i>														
Personal background characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Municipality of assignment FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
N	4,425													

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Robust standard errors clustered by the municipality of assignment (204 cells) are reported in parentheses. Administrative register data from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1).

Table A9.B: Effect of a standard deviation increase in characteristics of the municipality of assignment on conviction probability and number of convictions in the 15-21 age range. Men.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
<i>Panel A: Convicted in the 15-21 age range</i>														
Crime conviction rate (%)	0.023*	0.035*	0.028**	0.049**	0.021*	0.038*	0.020*	0.036*	0.021*	0.041*	0.016	0.034	0.022*	0.043**
	(0.012)	(0.021)	(0.013)	(0.021)	(0.012)	(0.022)	(0.012)	(0.022)	(0.012)	(0.021)	(0.012)	(0.021)	(0.012)	(0.021)
Poverty rate (%)	-0.014	0.024												
	(0.013)	(0.034)												
Immigrant share (%)			-0.021*	0.061										
			(0.012)	(0.037)										
ln(inhabitants)					-0.010	0.669								
					(0.011)	(0.657)								
Weekly teacher hours per pupil							-0.010	-0.006						
							(0.009)	(0.011)						
Pupils/teacher ratio									-0.013	-0.042**				
									(0.012)	(0.020)				
Crime detection rate (%)											0.005	-0.002		
											(0.011)	(0.014)		
Police officers/1000 inhabitants													-0.010	-0.123
													(0.011)	(0.078)
<i>Panel B: Number of convictions in the 15-21 age range</i>														
Crime conviction rate (%)	0.141**	0.140	0.133*	0.171*	0.110*	0.143	0.089	0.128	0.121**	0.161	0.109**	0.137	0.091	0.155
	(0.065)	(0.103)	(0.070)	(0.102)	(0.064)	(0.105)	(0.056)	(0.101)	(0.055)	(0.103)	(0.053)	(0.101)	(0.066)	(0.099)
Poverty rate (%)	-0.059	0.029												
	(0.065)	(0.163)												
Immigrant share (%)			-0.036	0.113										
			(0.067)	(0.176)										
ln(inhabitants)					0.008	3.694								
					(0.063)	(3.434)								
Weekly teacher hours per pupil							0.067	-0.010						
							(0.054)	(0.077)						
Pupils/teacher ratio									-0.025	-0.133*				
									(0.049)	(0.068)				
Crime detection rate (%)											0.038	0.013		
											(0.080)	(0.131)		
Police officers/1000 inhabitants													0.039	-0.789***
													(0.070)	(0.301)
<i>Controls:</i>														
Personal background characteristics	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Municipality of assignment FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
N							4,425							

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Robust standard errors clustered by the municipality of assignment (204 cells) are reported in parentheses. Administrative register data from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1).

Table A10: Effect of a standard deviation increase in type-specific youth crime conviction rates in the municipality of assignment in year of assignment on the number of convictions. Men.

	Dependent variable:					
	Number of convictions in age range					
	15-21		15-17		18-21	
	1	2	3	4	5	6
<i>(In %)</i>						
<i>Panel A</i>						
Youth violent crime conviction rate	0.183*** (0.066)	0.179** (0.079)	0.084*** (0.031)	0.089** (0.036)	0.099** (0.041)	0.090* (0.054)
<i>Panel B</i>						
Youth property crime conviction rate	0.070 (0.065)	0.090 (0.107)	0.036 (0.035)	0.058 (0.053)	0.034 (0.037)	0.033 (0.063)
<i>Panel C</i>						
Youth drugs crime conviction rate	-0.075 (0.063)	0.002 (0.084)	-0.048 (0.032)	0.000 (0.041)	-0.027 (0.038)	0.001 (0.056)
<i>Panel D</i>						
Youth conviction rate of other offences	0.097 (0.069)	0.101 (0.085)	0.050 (0.031)	0.057 (0.039)	0.047 (0.043)	0.044 (0.055)
<i>Controls:</i>						
As in Specification 4, Table 3	Yes	Yes	Yes	Yes	Yes	Yes
Municipality of assignment FE	No	Yes	No	Yes	No	Yes
N	4,425					

Note: ***: P<0.01, **:P<0.05, *:P<0.10. Robust standard errors clustered by the municipality of assignment (204 cells) are reported in parentheses. Administrative register information from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1). Family background and municipality of assignment characteristics refer to the year of assignment. Mean (standard deviation) of type-specific youth crime conviction rates (of 15-25 year olds) in the municipality of assignment and year of assignment (in percentages) prior to standardization as deviations from the mean relative to the standard deviation: Violence assault: 0.286 (0.123), Property crime: 1.782 (0.528), Drugs offences: 0.301 (0.238) and other offences: 0.342 (0.159).

Table A11: Effect of a standard deviation increase in type-specific youth crime conviction rates in the municipality of assignment in year of assignment on type-specific convictions in the 15-21 age range. Men.

	Dependent variable:							
	Convicted of an offense of type j				Number of convictions of an offense of type j			
	Violent crime and sexual assault	Property crime	Drugs crime	Other crimes	Violent crime and sexual assault	Property crime	Drugs crime	Other crimes
	1	2	3	4	5	6	7	8
<i>(ln %)</i>								
<i>Panel A</i>								
Youth violent crime conviction rate	0.017** (0.008)	0.035*** (0.011)	0.015** (0.006)	0.008 (0.009)	0.034** (0.015)	0.117*** (0.043)	0.020* (0.011)	0.012 (0.012)
<i>Panel B</i>								
Youth property crime conviction rate	0.010 (0.009)	0.011 (0.011)	0.012* (0.007)	0.004 (0.009)	0.015 (0.018)	0.029 (0.043)	0.008 (0.009)	0.017 (0.013)
<i>Panel C</i>								
Youth drugs crime conviction rate	0.004 (0.010)	-0.017 (0.012)	-0.005 (0.006)	0.004 (0.008)	-0.015 (0.021)	-0.075* (0.040)	-0.005 (0.011)	0.019 (0.012)
<i>Panel D</i>								
Youth crime conviction rate of other offenses	0.020** (0.009)	0.018 (0.011)	0.001 (0.006)	0.012 (0.008)	0.026 (0.020)	0.037 (0.043)	-0.001 (0.010)	0.035** (0.014)
N	4,425							

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Robust standard errors clustered by the municipality of assignment (204 cells) are reported in parentheses. Administrative register information from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1). Controls: As in Specification (4), Table 3. Family background and municipality of assignment characteristics refer to the year of assignment. Mean (standard deviation) of type-specific youth crime conviction rates in the municipality of assignment and year of assignment (in percentages) prior to standardization as deviations from the mean relative to the standard deviation: Violence and sexual assault: 0.286 (0.123), Property crime: 1.782 (0.528), Drug offenses: 0.301 (0.238) and other offenses: 0.342 (0.159).

Table A12: Effect of a standard deviation increase in different crime measures in the municipality of assignment on the number of convictions. Men.

	Dependent variable:	
	1	2
<i>Panel A</i>		
Youth crime conviction rate	0.106* (0.063)	0.169* (0.097)
<i>Panel B</i>		
Youth violent crime conviction rate	0.183*** (0.066)	0.179** (0.079)
<i>Panel C</i>		
Number of reported crimes per capita	0.001 (0.078)	-0.152 (0.118)
<i>Panel D</i>		
Number of reported violent crimes per 10,000 inhabitants	0.094 (0.070)	-0.071 (0.103)
<i>Panel E</i>		
Youth crime conviction rate	0.113 (0.077)	0.173 (0.108)
Number of reported crimes per capita	-0.054 (0.088)	-0.177 (0.124)
<i>Panel F</i>		
Youth violent crime conviction rate	0.176*** (0.067)	0.194** (0.078)
Number of reported violent crimes per 10,000 inhabitants	0.024 (0.069)	-0.133 (0.098)
<i>Panel G</i>		
Youth crime conviction rate	0.216* (0.128)	0.367** (0.160)
Overall crime conviction rate	-0.178 (0.154)	-0.418** (0.199)
<i>Panel H</i>		
Youth violent crime conviction rate	0.247** (0.095)	0.320*** (0.102)
Overall violent crime conviction rate	-0.086 (0.087)	-0.219* (0.112)
<i>Controls:</i>		
As in Specification (4), Table 3	Yes	Yes
Municipality of assignment F.E.	No	Yes
N	4,425	

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Robust standard errors clustered by the municipality of assignment (204 cells) are reported in parentheses. Administrative register information from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1). Youth crime conviction rate: 2.47 (0.70), overall crime conviction rate: 0.95 (0.31), number of reported crimes per capita: 7.25 (3.17), number of reported violent crimes per 10,000 inhabitants: 17.16 (9.63), overall violent crime conviction rate: 0.09 (0.03), youth violent crime conviction rate: 0.29 (0.12).

Table A13: Effect of a standard deviation increase in different youth crime conviction rates on the number of convictions. Men.

	Dependent Variable: Number of convictions in the 15-21 age range									
	1	2	3	4	5	6	7	8	9	10
<i>Youth crime conviction rate</i>										
All	0.106*	0.169*	0.096	0.214**	0.089	0.159	0.103	0.163*	0.090	0.153
	(0.063)	(0.097)	(0.064)	(0.097)	(0.065)	(0.098)	(0.062)	(0.096)	(0.065)	(0.096)
Immigrants and descendants			0.025	-0.127*						
			(0.071)	(0.072)						
Immigrants and descendants from refugee-sending countries					0.099	0.017				
					(0.085)	(0.104)				
Co-nationals							0.105**	0.098**	0.104**	0.096**
							(0.047)	(0.043)	(0.048)	(0.044)
Immigrants and descendants from other refugee-sending countries									-0.043	-0.089
									(0.061)	(0.063)
<i>Controls:</i>										
As in Specification (4), Table 3	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Municipality of assignment F.E.	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
N	4,425									

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Robust standard errors clustered by the municipality of assignment (204 cells) are reported in parentheses. Administrative register information from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1). Mean (standard deviation) of the different youth crime rates (in %) in the municipality of assignment before standardization as deviations from the mean relative to the standard deviation: Youth crime conviction rate: 2.47 (.70), youth crime conviction rate of immigrants and descendants: 3.86 (2.55), youth crime conviction rate of immigrants and descendants from refugee-sending countries in sample: 4.64 (5.65), youth crime conviction rate of co-nationals: 4.99 (5.65), youth crime conviction rate of immigrants and descendants from other refugee-sending countries: 4.46 (7.36).

Table A14. Initial age structure of sample.

	Year of immigration													N
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	
Age at immigration														
0	1													1
1	92													92
2	73	93												166
3	83	77	50											210
4	75	80	37	61										253
5	74	83	28	55	52									292
6	55	82	43	63	54	57								354
7	52	66	46	50	54	61	52							381
8	41	59	36	55	53	42	48	42						376
9	38	54	23	43	39	47	58	26	27					355
10	42	45	22	42	46	45	45	25	19	20				351
11	43	36	20	38	31	45	59	26	19	24	30			371
12	29	36	22	37	44	45	44	45	18	24	40	22		406
13	28	42	21	28	21	35	53	30	21	15	32	32	54	412
14	20	33	27	37	28	41	47	31	19	25	33	23	41	405
N	746	786	375	509	422	418	406	225	123	108	135	77	95	4425

Note: Administrative register information from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1).

Table A15: Effect of a standard deviation increase in the youth crime conviction rate, by groups of age at assignment. Men.

	Panel 4: Dependent variable: Convicted in age range					
	15-21		15-17		18-21	
	1	2	3	4	5	6
Youth crime conviction rate*assigned before age 6	-0.001 (0.019)	0.024 (0.026)	-0.001 (0.017)	0.013 (0.024)	0.004 (0.020)	0.017 (0.027)
Youth crime conviction rate*assigned between age 6 and 9	0.014 (0.026)	0.037 (0.033)	-0.005 (0.021)	0.009 (0.026)	0.029 (0.020)	0.038 (0.026)
Youth crime conviction rate*assigned between age 10 and 14	0.043*** (0.013)	0.057** (0.023)	0.037** (0.015)	0.045** (0.020)	0.031** (0.013)	0.034 (0.021)
	Panel B: Dependent Variable: Number of convictions in age range					
	15-21		15-17		18-21	
	1	2	3	4	5	6
Youth crime conviction rate*assigned before age 6	0.081 (0.078)	0.142 (0.104)	0.047 (0.041)	0.100* (0.052)	0.034 (0.055)	0.042 (0.075)
Youth crime conviction rate*assigned between age 6 and 9	0.052 (0.092)	0.118 (0.121)	0.008 (0.050)	0.057 (0.066)	0.044 (0.056)	0.061 (0.070)
Youth crime conviction rate*assigned between age 10 and 14	0.160* (0.083)	0.214* (0.114)	0.083** (0.042)	0.122** (0.056)	0.077 (0.048)	0.092 (0.065)
<i>Controls:</i>						
As in Specification (4), Table 3	Yes	Yes	Yes	Yes	Yes	Yes
Municipality of assignment FE	No	Yes	No	Yes	No	Yes
Observations in pooled sample	4,425					

Note: ***p<0.01, **p<0.05, *p<0.10. Robust standard errors clustered by the municipality of assignment (204 cells) are reported in parentheses. Administrative register information from Statistics Denmark for the balanced sample of refugee children (described in the footnote to Table 1). Family background and municipality of assignment characteristics refer to the year of assignment. Mean (standard deviation) of the youth crime conviction rate in the municipality of assignment and year of assignment (in percentages) prior to standardization as deviations from the mean relative to the standard deviation: 2.47 (0.70).