Intergenerational Poverty in New York City

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Background

Children born into low-income families are at elevated risk for...



...an interrelated set of factors ...

Poor physical and mental health

Lower family investment

Neighborhood disadvantage



...that can lead to poor outcomes in adulthood.

Lower educational attainment

Lower earnings

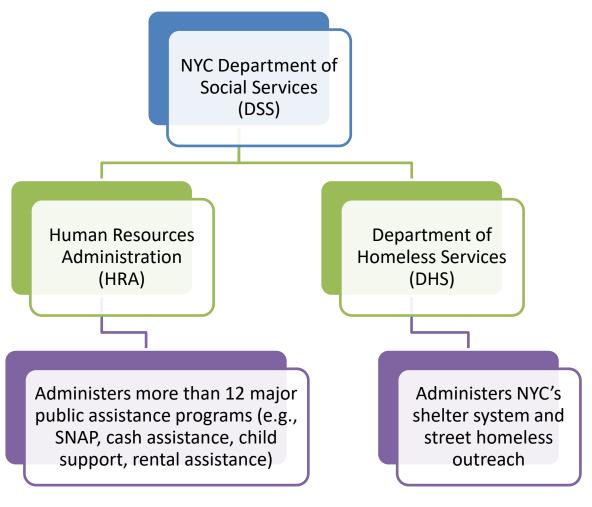
- Among adults who spend more than half of their childhood in poverty, more than one-third are poor in early and middle adulthood.
- The relationship between childhood and adult poverty is particularly strong for black Americans.
- Study goal: Gain insight re: children growing up in poverty in NYC through analysis of matched longitudinal administrative data



Social Services

Acs G., Matin S., Schwabish J., Sawhill I. (2016). The social genome model: Estimating how policies affect outcomes, mobility, and inequality across the life course. *Journal of Social Issues*, 72 (4), 656-675.

Policy Context



- DSS provides critical support to over 3 million New Yorkers annually.
- NYC's public benefit caseload size and composition changed substantially over the core 2000-2017 study period:
 - Cash assistance caseload decreased by more than 40% to ~370,000.
 - SNAP caseload nearly doubled to more than 1.6 million.
 - The number of individuals in DHS Families with Children shelter more than doubled, reaching a monthly average of ~40,000 in 2017 (before declining rapidly to 27,000 in 2018-22).

Key Research Questions

Our first set of analyses focus on patterns of benefit receipt / shelter use and postsecondary enrollment.

Among individuals who receive cash assistance as children:

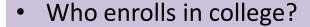


- What are their patterns of benefit receipt and shelter use as young adults?
- Do patterns vary by child and family characteristics?



Social Services

 What predicts benefit receipt and shelter use as young adults?*



- What types of educational institutions do they enroll in?
- What are their educational outcomes?
- Do patterns vary by individual and institutional characteristics?*







Methods

- Sample: Individuals born 1988-1996 and on cash assistance in NYC in 2000-2002 (n=231,805)
- Data sources: state, local, and national administrative data
 - Welfare Management System (WMS): child / case characteristics and benefit receipt by year from Jan
 2000 Dec 2017
 - CARES: use of DHS-administered shelter by age category (0-5, 6-11, 12-17, 18-21, and 22+) from Jan
 1988 Dec 2017
 - National Student Clearinghouse: postsecondary enrollment and outcomes from Jan 1988 June 2021
- Analytic approach:
 - Logistic regression to examine odds of CA receipt / DHS shelter use by select characteristics.
 - Bivariate analysis of differences in enrollment and graduation patterns assessed using z-test of proportions with Bonferroni correction.



Sample Characteristics by Birth Cohort

Characteristic	Birth years 1988- 1990 (n=74,598)	Birth years 1991- 1993 (n=83,907)	Birth years 1994- 1996 (n=73,300)
Female	50.0%	50.2%	49.8%
Race / Ethnicity			
Hispanic, any race	42.4%	42.9%	44.1%
Black	37.7%	37.6%	38.9%
White	8.5%	7.9%	7.5%
Asian / Pacific Islander	1.6%	1.5%	1.4%
Language, Head of Case			
English	80.5%	80.9%	80.8%
Spanish	16.6%	16.4%	16.7%
Ever in shelter < 18 years	23.2%	24.8%	27.7%
# persons in CA household (avg)	3.5	3.4	3.3

- Approximately half of the sample was female, most were Hispanic or Black, and most lived in households where the head of case spoke English.
- Generally small differences by birth cohort in gender, race / ethnicity, and household size.
- Those with a shelter stay as a child increased from 23% of those born in 1988-1990 to 28% of those born 1994-1996.

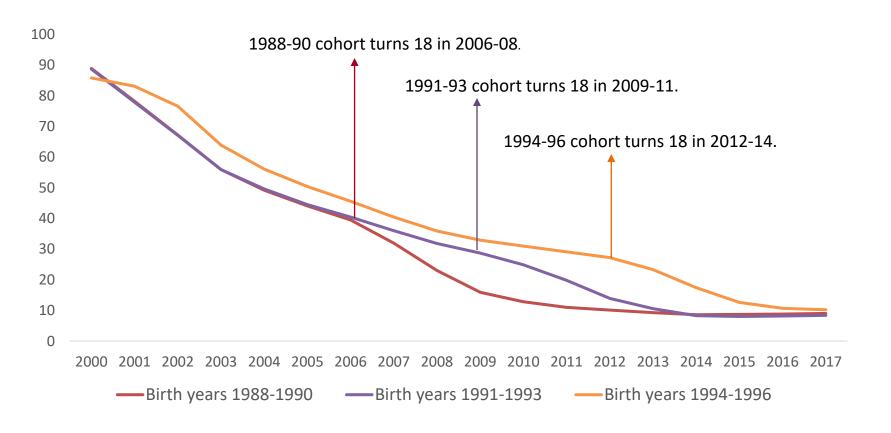


Findings

CASH ASSISTANCE RECEIPT AND SHELTER USE



Cash Assistance Receipt by Birth Cohort and Year, 2000-2017



- As each cohort entered young adulthood (22+), CA receipt declined and stabilized at close to 10%.
- increase among any of the cohorts during and immediately after the 2008 recession, although the rate of decline lessened.



Shelter Use by Birth Cohort and Development Stage, 1988-2017

Developmental Stage	Birth years 1988-1990 (n=74,598)	Birth years 1991-1993 (n=83,907)	Birth years 1994-1996 (n=73,300)
Childhood			
Ever in shelter, < age 18	23.2%	24.8%	27.7%
In shelter age 0-5	13.3%	14.0%	15.5%
In shelter age 6-11	9.9%	11.7%	14.3%
In shelter age 12-17	9.4%	9.0%	9.4%
Young Adulthood			
In shelter 18-21	9.6%	7.7%	7.7%
In shelter age 22+	14.4%	11.0%	7.3%*

- Shelter use was observed from birth through age 29 for the oldest in our sample (born in 1998) and through age 21 for the youngest (born 1996).
- About one-quarter of each cohort was in shelter as a child (< 18 years), with the highest rate among the youngest cohort.
- Shelter use was highest (13-15%) for very young children (0-5) and decreased to less than 10% by age 18-21.



^{*}Observable only for those born 1994-95 (n=53,071). Shelter use tracked through age 29 for the oldest individuals (born in 1998).

Predictors of CA Receipt in Young Adulthood

Characteristic	Receiving CA Age 22-27 (n=33,029)	Not Receiving CA Age 22-27 (n=178,547)	Odds Ratio (95% C.I.)
Female***	66.6%	46.9%	2.31 (2.25, 2.38)
Race / Ethnicity			
Hispanic, any race***	36.3%	44.1%	1.16 (1.11, 1.21)
Black***	51.2%	35.4%	1.94 (1.86, 2.02)
White	4.8%	8.6%	
CA receipt age 9-11***	90.2%	78.3%	1.47 (1.40, 1.54)
CA receipt age 12-14***	81.1%	58.8%	2.22 (2.15, 2.29)
Ever in shelter age 0-5***	20.9%	12.7%	1.43 (1.38, 1.49)
Ever in shelter age 12-17***	16.6%	7.8%	1.72 (1.65, 1.79)

- 15.6% of sample received CA as young adults.*
 - Expected to increase as cohorts age.
- Gender, race / ethnicity, and history of CA / shelter use significantly associated with CA receipt age 22-27.
 - Those who identify as women, Black, and who received CA in early adolescence ~ twice as likely to be on CA, holding other factors constant.
 - Shelter history as very young child or in adolescence also elevated risk.
- Model explained only small amount of variation (~10%) in CA receipt.



Source: WMS and CARES data pulled by DSS Office of Performance Management.

^{*}Individuals born in 1996 excluded from analysis since they did not reach age 22 during the study period.

^{***}p<.001 . Odds ratios compare female to male, Hispanic and Black to White/Asian/Other, and CA receipt / in shelter at each age to no CA receipt / not in shelter at that age. See Appendix for full model.

Predictors of Shelter Use in Young Adulthood

Characteristic	In Shelter Age 22+ (n=24,193)	Not In Shelter Age 22+ (n=187,383)	Odds Ratio (95% C.I.)
Female***	60.5%	48.6%	1.67 (1.62, 1.71)
Race / Ethnicity			
Hispanic, any race***	33.8%	44.1%	1.23 (1.18, 1.29)
Black***	54.9%	35.6%	2.19 (2.10, 2.29)
White	3.5%	8.6%	
SNAP receipt age 15-17***	77.4%	62.3%	1.63 (1.57, 1.69)
Ever in shelter age 0-5***	25.9%	12.4%	1.72 (1.66, 1.78)
Ever in shelter age 12-17***	22.8%	7.4%	2.38 (2.29, 2.47)

- 11.4% of sample used DHS shelter as young adults.*
 - Expected to increase as cohorts age.
- Gender, race / ethnicity, and history of SNAP / shelter use significantly associated with shelter use age 22+.
 - Those who identify as Black and who were in shelter as adolescents twice as likely to use shelter as young adults, holding other factors constant.
 - Young women, those on SNAP as adolescents (proxy for low-income household), and those in shelter as very young children also at elevated risk.
- Model explained only small amount of variation (~6%) in shelter use.



Source: WMS and CARES data pulled by DSS Office of Performance Management.

^{*}Individuals born in 1996 excluded from analysis since they did not reach age 22 during the study period.

^{***}p<.001 . Odds ratios compare female to male, Hispanic and Black to White/Asian/Other, and SNAP receipt / in shelter at each age to no SNAP receipt / not in shelter at that age. See Appendix for full model.

Findings

POST-SECONDARY ENROLLMENT AND ATTAINMENT



Post-Secondary Enrollment: Demographic Patterns

Characteristic (n=original cohort)	% Enrolling
Gender	
Female (n=115,856)*	49.8%
Male (n=115,949)	36.6%
Race / Ethnicity	
Hispanic, any race (n=99,929)	44.1%
Black* (n=88,220)	40.7%
White (n=18,423)	43.7%
Asian/Pacific Islander (n=3,505)*	57.4%
Shelter use as child	
Ever in shelter < age 18 (n=58,397)	35.9%
Not in shelter < age 18 (n=173,408)*	45.7%

- Of the 231,805 individuals in the original cohort, 43% (n=100,343) enrolled in post-secondary education by June 2021 the year the oldest turned 33 and the youngest turned 25.
- Average age at first enrollment was 19.1 years.
- Statistically significant differences in enrollment by gender, race / ethnicity, and shelter history.
 - Women, Asian/Pacific Islanders, and those not in shelter as a child had comparatively higher rates of enrollment.
 - Blacks had lower enrollment rates compared to other race / ethnicities.



^{*}Statistically significant difference compared to other subgroup(s), p<.05.

Post-Secondary Attainment: Demographic Patterns

Characteristics (n=enrolled)	% Awarded any Degree	
Gender		
Female* (n=57,829)	40.4%	
Male (n=42,514)	28.8%	
Race / Ethnicity		
Hispanic, any race (n=44,188)	35.9%	
Black* (n=36,010)	30.2%	
White (n=8,063)	48.9%	
Asian / Pacific Islander* (n=2,018)	57.7%	
Shelter use as child		
Ever in shelter < age 18 (n=21,022)	26.8%	
Not in shelter < age 18 (n=79,321)*	37.8%	

- Just over one-third of those enrolled (15% of the original cohort) achieved a degree.
 - For context, 38% of Pell Grant recipients entering college in 2009 earned a degree within 8 years.**
- Statistically significant differences in college achievement by gender, race / ethnicity, and childhood shelter history mirror those seen in enrollment patterns.
 - Women, Asian / Pacific Islanders, and those not in shelter as a child had comparatively higher graduation rates.
 - Blacks had lower graduation rates
 compared to other race / ethnicities.



Source: WMS, CARES, and National Student Clearinghouse data.

^{*}Statistically significant difference compared to other subgroup(s), p<.05.

^{**}Yuen, V. (2019). New insights into attainment for low-income students. Center for American Progress. https://www.americanprogress.org/article/new-insights-attainment-low-income-students/.

Post-Secondary Outcomes: Institutional Patterns

Characteristic	% of Graduates (n=35,592)
By institution type: any degree from	
Public institution	74.0%
Private institution	33.9%
CUNY	46.7%
SUNY	11.4%
Degree type: awarded any	
Associate degree	52.0%
Bachelor's degree	68.0%
Graduate degree	14.2%
Number of institutions attended (avg)	2.2

- Almost three-quarters of graduates earned a degree from a public institution, and nearly half earned a degree from CUNY.
- Associate degrees are an important pathway for postsecondary education: 40% of students who earned an AA went on to earn a higher degree.



Implications and Next Steps

- Our cohort of individuals receiving cash assistance as children was at elevated risk for poverty and homelessness as adults compared to the general NYC population, but still only a minority received public benefits or stayed in shelter in young adulthood.
- Certain groups face greater barriers or challenges to self-sufficiency.
 - Young women, those who identify as Black, and those in shelter as very young children or teens more likely to be receive CA / use DHS shelter as young adults.
 - Young men, those who identify as Black, and those in shelter as children less likely to enroll in / graduate from college.
- Future work will extend these analyses in several ways:
 - More detailed exploration of the relationship between depth and persistence of poverty across developmental stages and young adult outcomes.
 - Use of additional administrative datasets to explore other critical factors such as health, labor market participation, residential mobility, and cross-systems involvement.



Appendix

ANALYTIC APPROACH



Analysis of Benefit Trajectories and Shelter Use

- OPPM pulled initial cohort of individuals born in 1988-1996 and who were on CA in 2000-2002 by WMS recipient ID.
 - OER aggregated across IDs using SSN and excluded those not age 6-12 at time of CA receipt.
- Descriptive analysis of benefit receipt over time: calculated using % of each birth cohort receiving benefits each year in the study period.
- Descriptive analysis of benefit receipt by developmental stage: calculated using % of each birth cohort receiving benefits by developmental stage in the study period, separately for each program type and for shelter history.
- Exploration of factors associated with CA receipt and DHS shelter use in young adulthood (age 22+):
 - Bivariate analysis of individual and family characteristics for those receiving / not receiving CA and for those with and without a shelter stay.
 - Logistic regression to examine odds of CA receipt / DHS shelter use by select characteristics.



Characteristics Associated with Receipt of Cash Assistance Ages 22-27

Characteristic	В	SE B	Wald X ²	Odds Ratio (95% C.I.)
Gender, female (compared to male)***	.838	.014	3563.070	2.311 (2.249, 2.376)
Ethnicity (compared to White/Asian/Other)				
Hispanic***	.144	.021	44.974	1.155 (1.107, 1.205)
Black***	.663	.021	991.756	1.941 (1.863, 2.023)
CA receipt (compared to no CA receipt)				
Age 9 to 11***	.385	.023	280.002	1.469 (1.404, 1.537)
Age 12 to 14***	.796	.017	2286.907	2.216 (2.145, 2.290)
Any time in shelter (compared to no time in shelter)				
Age 0 to 5***	.360	.018	390.412	1.434 (1.383, 1.486)
Age 6 to 11***	.114	.021	30.595	1.121 (1.076, 1.167)
Age 12 to 17***	.540	.021	677.574	1.717 (1.648, 1.788)
Birth year (proxy for policy environment)***	106	.004	856.863	.900 (.893, .906)

- Model explains
 ~7% of variation in
 outcomes (Cox and
 Snell R² = .074).
- Model correctly classifies 99.7% of those not on CA age 22-27 and 1.8% of those on CA age 22-27.



Source: WMS and CARES data pulled by OPPM.

Characteristics Associated with Use of DHS Shelter Age 22+

Characteristic	В	SE B	Wald X ²	Odds Ratio (95% C.I.)
Gender, female (compared to male)***	.510	.014	1246.901	1.665 (1.619, 1.713)
Ethnicity (compared to White/Asian/Other)				
Hispanic***	.210	.023	79.843	1.233 (1.178, 1.291)
Black***	.785	.023	1197.528	2.192 (2.097, 2.292)
SNAP receipt (compared to no CA receipt)				
Age 12 to 14***	.183	.024	60.186	1.200 (1.146, 1.257)
Age 15 to 17***	.489	.019	629.668	1.630 (1.569, 1.693)
Any time in shelter (compared to no time in shelter)				
Age 0 to 5***	.543	.018	912.016	1.722 (1.662, 1.783)
Age 6 to 11***	.386	.020	371.086	1.471 (1.414, 1.530)
Age 12 to 17***	.866	.020	1928.952	2.377 (2.287, 2.471)
Birth year (proxy for policy environment)***	116	.003	1242.702	.890 (.885, .896)

- Model explains
 ~6% of variation in
 outcomes (Cox and
 Snell R² = .059).
- Model correctly classifies 99.6% of those not in shelter age 22+ and 2.4% of those in shelter age 22+.



Source: WMS and CARES data pulled by OPPM.

Post-Secondary Enrollment and Outcomes

- National Student Clearinghouse matched data based on first name, last name, and date of birth.
 - Provided file with separate rows by enrollment period, institution, and (if applicable) degree granted for individuals with at least one match -> restructured using Study ID assigned by OER and included in original file.

Decision rules:

- Analysis restricted to degrees coded as associate, bachelor, or graduate (i.e., certificates excluded).
- For students with multiple degrees of the same type, used data related to the first degree.
- Students with joint degrees (e.g., BA/MA) were coded as obtaining each degree.
- Time of enrollment based on first and last dates of enrollment; does not reflect time spent out of school.
- Descriptive analysis of enrollment and graduation patterns calculated based on individual and institutional characteristics.
- Bivariate analysis of differences in enrollment and graduation patterns assessed using z-test of proportions with Bonferroni correction.

