

Supplement to:

Baker, Garrett. 2023. "Shattered Dreams: Paternal Incarceration, Youth Expectations, and the Intergenerational Transmission of Disadvantage." *Sociological Science* 10: 559-584.

Appendix A: Tables from additional robustness checks

Table A1. High school age (14-18) sample results from main strategic comparison group model predicting youth future orientation

	Model 1
Paternal Incarceration	-0.77*** (0.20)
Black	0.31* (0.14)
Hispanic	-0.05 (0.22)
Other race	0.17 (0.21)
Female	0.20 (0.12)
Age ² (Child)	0.02 (0.02)
Cognitive Test Score	0.01* (0.01)
College Degree (reference)	
HS Dropout	-0.42 (0.23)
HS Degree	-0.31 (0.22)
Some post-HS	-0.04 (0.24)
Pay Bills	0.30 (0.18)
Age (Parent)	0.01 (0.02)
R ²	0.18
Num. obs.	185

Note: Asterisks and coefficients represent differences between those who have already experienced paternal incarceration (Pasts) and those who will later experience paternal incarceration (Futures), restricted to a narrow 14-18 age window. Robust SEs (clustered at the school level) in parentheses. *** p < 0.001; ** p < 0.01; * p < 0.05. Two-tailed tests.

Table A2. Ever-incarcerated sample results from strategic comparison group models (with one variable dropped from future orientation index)

	Expect College	Want College	Live to Age 35	Killed by Age 21	Married by Age 25	Hopeful for Future
Paternal Incarceration	-0.32*** (0.09)	-0.31** (0.10)	-0.26** (0.09)	-0.31** (0.10)	-0.31** (0.10)	-0.27** (0.10)
Black	0.13 (0.11)	0.11 (0.12)	0.31** (0.10)	0.29** (0.10)	0.37** (0.11)	0.16 (0.11)
Hispanic	-0.15 (0.14)	-0.16 (0.15)	-0.08 (0.15)	-0.08 (0.15)	-0.05 (0.15)	-0.09 (0.14)
Other race	-0.01 (0.19)	-0.02 (0.19)	0.10 (0.20)	0.05 (0.19)	0.24 (0.17)	0.04 (0.17)
Female	0.11 (0.10)	0.12 (0.10)	0.19* (0.09)	0.23** (0.09)	0.15 (0.09)	0.17 (0.09)
Age ² (Child)	0.01 (0.01)	0.02 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Cognitive Test Score	0.01* (0.00)	0.01* (0.00)	0.01* (0.00)	0.02*** (0.00)	0.02*** (0.00)	0.01 (0.00)
College degree (reference)						
HS Dropout	-0.31 (0.18)	-0.36* (0.16)	-0.28 (0.17)	-0.33 (0.17)	-0.37* (0.15)	-0.50** (0.16)
HS Degree	-0.23 (0.19)	-0.33 (0.18)	-0.34 (0.19)	-0.33 (0.17)	-0.33* (0.15)	-0.49** (0.16)
Some post-HS	-0.09 (0.15)	-0.15 (0.15)	-0.10 (0.17)	-0.11 (0.15)	-0.11 (0.14)	-0.22 (0.15)
Pay Bills	0.01 (0.12)	-0.02 (0.12)	0.01 (0.11)	0.05 (0.11)	-0.03 (0.12)	-0.03 (0.12)
Age (Parent)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.01 (0.01)	-0.00 (0.01)

Note: The title of each model is the variable that is not present in the index. Robust SEs (clustered at the school level) in parentheses. N = 422. *** p < 0.001; ** p < 0.01; * p < 0.05. Two-tailed tests.

Appendix B: Additional technical information

For all models, I use multiple imputation to deal with missingness. This is primarily a concern for the parent education, parent ability to pay bills, and parent age variables: for the main models (Table 4, N = 422), parent education, parent ability to pay bills, and parent age were missing for 63 (14.9%), 74 (17.5%), and 67 (15.9%) observations, respectively. Specifically, I rely on the multiple imputation by chained equations (MICE) procedure, which adapts more flexibly to imputing different types of variables, especially binary or ordinal variables. Rubin's (1987) formula is used to calculate standard errors. I use 10 imputed data sets.

For the parent incarceration timing variable, a couple of challenges emerged, particularly for the "Pasts" group. For example, some respondents indicated that they did not know if their father had been incarcerated, or that they knew their father was incarcerated but did not provide their own age at the time of incarceration. These are excluded. Similarly, in calculating timing of paternal incarceration I only include incarcerations that occur after the respondent was born.

Another significant challenge arose whenever the respondent's age at Wave I was the same as their age when their father was first incarcerated. While others (see Porter and King 2015) attempt to use other questions (like paternal residential status at the time of Wave I) to "break the tie", I contend that—even when accounting for other information like residential status—it is not possible to know with certainty whether the incarceration was before or after the survey. For example, consider a respondent who was 15 years old at Wave I and who marked their father as residing in their home. Their father could have been incarcerated just after the respondent turned 15, released prior to the survey, and moved back into the child's residence. They would then be part of the pre-Wave I incarceration category (the "Pasts"). However, it's also possible that the father was residing with the child at the time of the survey and then became

incarcerated only *after* the survey was administered (but while the respondent was still 15 years old); they would then be part of the “Futures” group. Therefore, I exclude ties (50 total observations) from the main analyses. However, as an additional sensitivity analysis (and borrowing intuition from the so-called “donut hole” approach in econometrics, see Cattaneo and Titiunik 2022, 844-845), I ran two additional models that grouped these “ties” with the Pasts and then with the Futures. The coefficients change minimally in both cases while remaining statistically significant.

Finally, in the original survey, the scale of the likelihood of being killed by age 21 variable was structured opposite the other future-oriented questions. Specifically, the other questions were oriented such that a higher number on the scale meant a more positive outlook—but for the killed by 21 variable, a 5 indicated being “almost certain”. Thus, after reverse coding this variable, I also assessed this variable for potential misinterpretation by respondents. To do this, I simply compared it to the “live to 35” question, and subtracted the reverse coded version of being killed by age 21 from the live to age 35 variable. To be more specific: if a respondent indicated they were “almost certain” to be killed by age 21 (after reverse coding, this = 1 on the scale) but *also* said they were “almost certain” to live to age 35 (= 5 on the scale), this likely indicates a misinterpretation of the response structure of the killed by 21 question, and they would have a “difference” score of $5 - 1 = 4$. This is the case for only 3 out of 426 respondents eligible for the main analytic sample. One other respondent in the analytic sample had a difference of $5 - 2 = 3$ (they indicated being “almost certain” to live to 35 but also indicated “a good chance” of being killed by 21), and therefore I drop these four observations from my main models (and mirror this for the models using other samples as well).

Table 3. Full (pooled) sample results predicting youth future orientation

	Model 1	Model 2
Paternal Incarceration	-0.48** (0.07)	-0.31** (0.07)
Black		-0.08* (0.03)
Hispanic		0.00 (0.06)
Other Race		-0.02 (0.03)
Female		0.18** (0.02)
Age ² (Child)		0.01** (0.00)
Cognitive Test Score		0.01** (0.00)
College Degree (reference)		
HS Dropout		-0.50** (0.04)
HS Degree		-0.29** (0.03)
Some post-HS		-0.17** (0.02)
Pay Bills		0.10** (0.03)
Age (Parent)		0.00 (0.00)
R ²	0.01	0.11

Note: Asterisks and coefficients represent differences between those who have already experienced paternal incarceration (Pasts) and a pooled group of those who will later experience paternal incarceration (Futures) plus those who never experience parental incarceration (Nevers). Robust SEs (clustered at the school level) in parentheses. N = 11,901. ** p < 0.01; * p < 0.05. Two-tailed tests.

Table 4. Ever-incarcerated sample results from strategic comparison group models predicting youth future orientation

	Model 1	Model 2	Model 3	Model 4
Paternal Incarceration	-0.32** (0.09)	-0.29** (0.10)	-0.31** (0.09)	-0.35* (0.16)
Black		0.18 (0.10)	0.25* (0.11)	0.06 (0.14)
Hispanic		-0.23 (0.13)	-0.10 (0.15)	-0.20 (0.17)
Other Race		0.08 (0.19)	0.07 (0.18)	-0.03 (0.29)
Female		0.10 (0.09)	0.17 (0.09)	0.05 (0.11)
Age ² (Child)		0.01 (0.01)	0.01 (0.01)	-0.00 (0.01)
Cognitive Test Score			0.01** (0.00)	0.02** (0.00)
College Degree (reference)				
HS Dropout			-0.38* (0.16)	-0.16 (0.19)
HS Degree			-0.35* (0.17)	-0.17 (0.20)
Some post-HS			-0.14 (0.15)	0.09 (0.18)
Pay Bills			0.01 (0.13)	-0.04 (0.17)
Age (Parent)		0.00 (0.01)	0.00 (0.01)	0.00 (0.01)
R ²	0.02	0.06	0.11	0.13
Num. obs.	422	422	422	399

Note: Asterisks and coefficients represent differences between those who have already experienced paternal incarceration (Pasts) and those who will later experience paternal incarceration (Futures). Model 4 incorporates Add Health survey weights. Robust SEs (clustered at the school level) in parentheses. ** p < 0.01; * p < 0.05. Two-tailed tests.

Table 5. Pooled sample and ever-incarcerated sample results from covariate-balancing propensity score models predicting youth future orientation

	Model 1	Model 2
Paternal Incarceration	-0.32** (0.07)	-0.26* (0.11)
Black	0.08 (0.09)	0.22 (0.13)
Hispanic	-0.08 (0.11)	-0.07 (0.13)
Other Race	-0.08 (0.15)	0.08 (0.16)
Female	0.23** (0.07)	0.17 (0.11)
Age ² (Child)	-0.00 (0.00)	-0.00 (0.00)
Cognitive Test Score	0.01** (0.00)	0.01** (0.00)
College Degree (reference)		
HS Dropout	-0.46** (0.12)	-0.43** (0.17)
HS Degree	-0.45** (0.12)	-0.35* (0.17)
Some post-HS	-0.23* (0.11)	-0.13 (0.16)
Pay Bills	0.07 (0.09)	-0.02 (0.11)
Age (Parent)	0.00 (0.01)	0.00 (0.01)
R ²	0.10	0.12
Num. obs.	11901	422

Note: Model 1 represents differences between those who have already experienced paternal incarceration (Pasts) and a pooled group of those who have never experienced parental incarceration (Nevers) plus those who will later experience paternal incarceration (Futures). Model 2 represents differences between the Pasts and Futures group exclusively. Robust SEs (clustered at the school level) in parentheses. ** p < 0.01; * p < 0.05. Two-tailed tests.

Table 6. Once-incarcerated sample results from strategic comparison group models predicting youth future orientation

	Model 1	Model 2
Paternal Incarceration	-0.41** (0.13)	-0.46** (0.14)
Black		0.32 (0.18)
Hispanic		0.09 (0.17)
Other Race		0.04 (0.23)
Female		0.14 (0.13)
Age ² (Child)		0.03 (0.02)
Cognitive Test Score		0.02** (0.01)
College Degree (reference)		
HS Dropout		-0.58* (0.24)
HS Degree		-0.43 (0.25)
Some post-HS		-0.39 (0.24)
Parent Can Pay Bills		-0.06 (0.20)
Age (Parent)		-0.01 (0.01)
R ²	0.04	0.16

Note: Asterisks and coefficients represent differences between those who already experienced paternal incarceration *only one time* and those who will later experience paternal incarceration *only one time*. Robust SEs (clustered at the school level) in parentheses. N = 215. ** p < 0.01; * p < 0.05. Two-tailed tests.