

“The (Lack of) Anticipatory Effects of the Social Safety Net on Human Capital Investment”

Paper by Manasi Deshpande & Rebecca Dizon-Ross (2022)

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Harvard Economics of Health Equity Reading Group

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Research question

- Do parents invest less (more) in children's human capital if they know their children will (not) receive social safety net benefits as adults?
- In other words, is there a “**dynamic discouragement effect**” of safety net benefits?

Why this matters: economic theory

- **Life-cycle models** assume that agents choose human capital investment in *early life* to maximize aggregate utility *over the life cycle*
- *Intuition*: if you expect your *future* consumption to be supported by govt transfers (i.e. non-work), you have less incentive to invest in human capital *today*
- Basis of theoretical models of human capital accumulation, macro models
 - (e.g., Guvenen et al., 2014; Heathcote et al., 2017; Stantcheva, 2017; Luduvic, 2021; Daruich and Fernandez, 2020)

Model details (Heathcote et al. 2017)

$$\max_{\{c, h, s\}} U = \underbrace{-\frac{\kappa^{-1/\psi}}{1 + 1/\psi} s^{1+1/\psi}}_{\text{Disutility of schooling today}} + \underbrace{(1 - \beta\delta) \sum_{a=0}^{\infty} (\beta\delta)^a u(c_a, h_a)}_{\text{Future utility streams}}$$

where

$$u(c_a, h_a) = \log(c_a) - \underbrace{\frac{e^{(1+\sigma)\phi}}{1 + \sigma} h_a^{1+\sigma}}_{\text{Disutility of work}}$$

- Agents choose schooling s , consumption c , hours worked h
- ψ determines elasticity of human capital investment w.r.t. return to human capital; learning ability κ
- σ, ϕ : disutility of work parameters
- Probability of survival δ , discount factor β , period a

Why this matters: American politics



The Washington Post 

@washingtonpost

Follow 

A school district opted out of free and reduced-price meals, saying students could “become spoiled”

- “Karin Rajnicek, a school board member, said the free [universal school lunch] program made it easy for families to **‘become spoiled.’**”
- “Darren Clark, assistant superintendent for business services, said there could be a **‘slow addiction’** to the service.”

(slightly different, but related to dynamic discouragement effect)

Why this matters: cost of redistribution

- Dynamic discouragement effects make **redistribution more costly**
 - don't invest in human capital → earn less as adults → less in taxes collected
- “Our finding of zero dynamic discouragement implies that **redistribution is less costly** and that income can be redistributed more efficiently.”

Why is estimating a dynamic discouragement effect challenging?

- Hard to isolate the **anticipatory** effect of future benefits from the **contemporaneous** effect of benefits
- How to exogenously vary expectations of future benefits?

Key idea for this paper

- Uninvesting in children requires that parents expect children to continue receiving benefits as adults
- In reality, many children DO NOT continue receiving benefits as adults
- Parents don't know this
- *Claim*: These **inaccurate beliefs** about the likelihood of future benefits could lead parents to ***underinvest*** in their **children's human capital**.
- *Idea*: correct beliefs w/ info intervention, see if **parents' investment behavior** increases
 - If so, then supports the hypothesis of dynamic discouragement effect

Why might parents underinvest in children's human capital?

- **Income effect:** “because they do not expect their child to ‘need’ money from working in the future”
 - “expected government transfers reduce the child’s expected marginal utility of earned income in the future”
- **Substitution effect:** because of the phase-out design of transfer programs, a child’s adult benefits will be reduced if they work as an adult

Outline

- SSI context & removals
- Experimental design
- Results
- Mechanisms
- Discussion, especially takeaways for young researchers

Study context: SSI & removals

Context: SSI basics

- Supplemental Security Income (SSI) = cash welfare program for disabled children and adults
- Totals
 - \$51 billion in cash payments in 2022
 - 1.0 million children
 - 5.5 million adults
- Focus on children
 - Cash benefits
 - Most receive \$10,000 / year = 50% of household income
 - (Other 50% comes from parent earnings)
 - Categorical eligibility for Medicaid (most states)

SSI medical eligibility

- Disability definition differs between children + adults
- **Adults:** inability to work
 - Specifically, inability to earn more than \$1,350 / month: “substantial gainful activity”
- **Children:** functional limitations that limit age-appropriate activity
 - Including social interaction and school performance
- This makes removal from SSI very likely at age 18 medical reviews

How do medical conditions differ b/w adults & children?

| Category | % adults, SSDI | % children, SSI |
|-----------------------------|--|---|
| Musculoskeletal conditions | 29.7 | n/a |
| Mental disorders | 20.1 | 73 |
| - Intellectual | n/a | 49 |
| -Other | n/a | 25 |
| Other disabilities | 50.2 | 18 |
| - Cancers | 11.6 | n/a |
| - Cardiovascular conditions | 10.3 | n/a |
| | Sample is all new DI beneficiaries from 1997 to 2009, N \approx 3,000,000. Source: Gelber et al. (2019). | Sample is SSI children with an 18th birthday within 37 weeks of the August 22, 1996 cutoff. Source: Deshpande (2016). |

SSI medical eligibility

- Different SSI eligibility criteria for adults and children leads to **large removals of the caseload at age 18**
- **40%** removal rate of *all* SSI children
- **70%** removal rate of SSI children *with mental and behavioral conditions*

Summary stats, experimental sample

| <u>Full Sample</u> | | <u>Control vs Information</u> | | |
|--------------------|-----|-------------------------------|-------|------------|
| | | Cntrl. | Info. | Std. Diff. |
| (1) | (2) | (3) | (4) | (5) |
| Mean | SD | Mean | Mean | Diff. |

A. Administrative Data

| | | | | | |
|------------------------------------|-------|-------|-------|-------|-------|
| Female Child | 0.27 | 0.44 | 0.27 | 0.27 | -0.01 |
| Child's Age | 15.58 | 0.88 | 15.58 | 15.58 | 0.00 |
| Single Parent Household | 0.73 | 0.44 | 0.73 | 0.74 | -0.04 |
| Mother's Age | 40.36 | 6.08 | 40.47 | 40.26 | 0.03 |
| Sibling on SSI | 0.26 | 0.44 | 0.26 | 0.24 | 0.05 |
| Months receiving SSI | 71.19 | 44.05 | 70.53 | 71.63 | -0.02 |
| Had a Child Medical Review | 0.77 | 0.42 | 0.77 | 0.76 | 0.03 |
| Lost SSI from Child Medical Review | 0.16 | 0.37 | 0.16 | 0.16 | 0.00 |
| Disability: Intellectual | 0.04 | 0.19 | 0.04 | 0.03 | 0.06 |
| Disability: Mental | 0.83 | 0.37 | 0.83 | 0.84 | -0.04 |
| Disability: Physical | 0.13 | 0.33 | 0.13 | 0.13 | 0.01 |

| Condition | % of sample |
|--------------------------------------|-------------|
| ADHD | 43% |
| Speech / language delays | 15% |
| Learning disorder | 7% |
| Autistic + other pervasive disorders | 5% |
| Oppositional / defiant disorder | 5% |

Summary stats, experimental sample, cont.

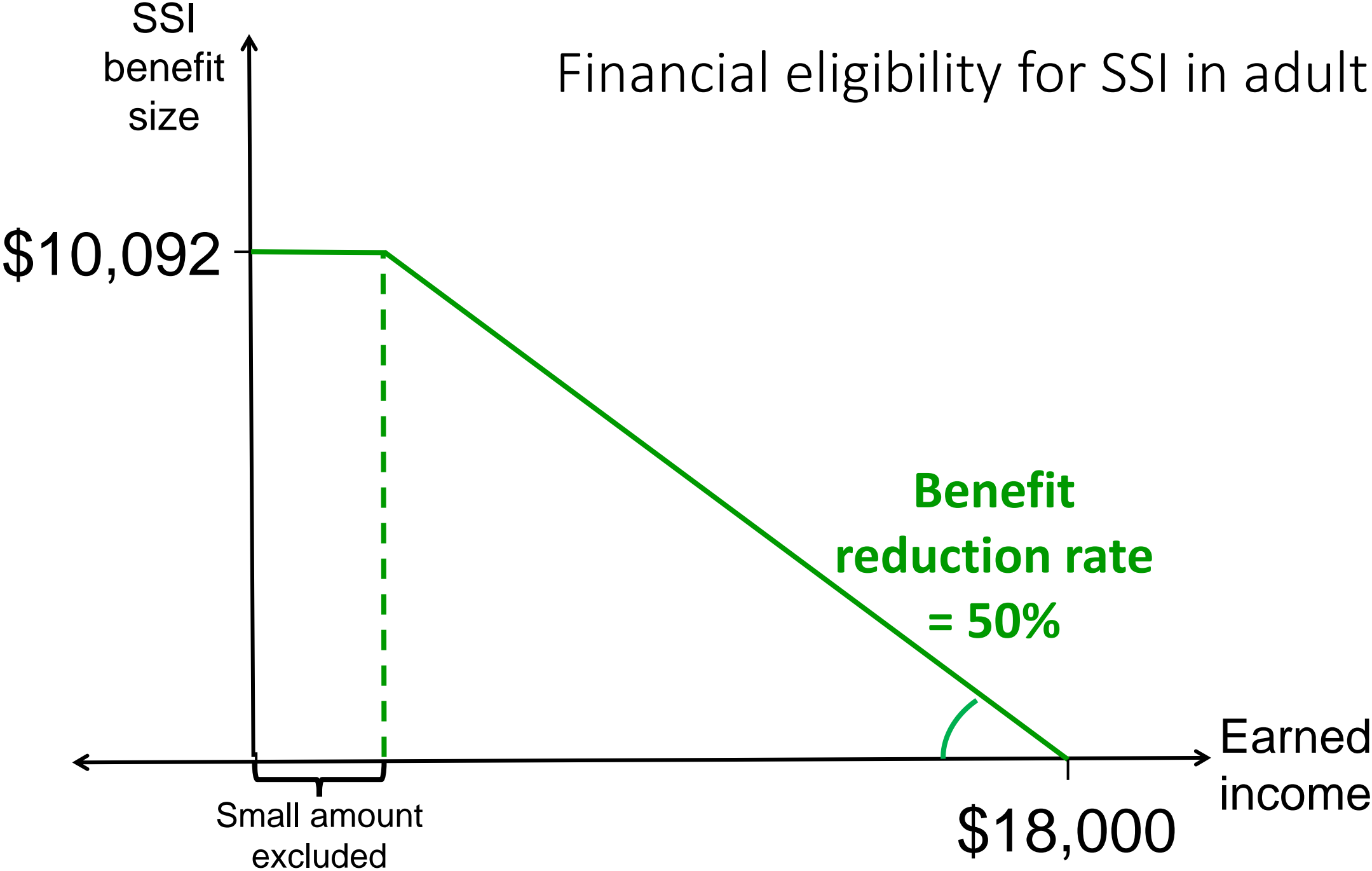
| | <u>Full Sample</u> | | <u>Control vs Information</u> | | |
|-------------------------------------|--------------------|------|-------------------------------|-------|---------------|
| | | | Cntrl. | Info. | Std. Diff. |
| | (1) | (2) | (3) | (4) | (5) |
| | Mean | SD | Mean | Mean | Diff. |
| <i>B. Baseline Survey</i> | | | | | |
| Female Respondent | 0.89 | 0.31 | 0.88 | 0.90 | -0.05 |
| Parent Respondent | 0.96 | 0.20 | 0.95 | 0.96 | -0.04 |
| Parent with Disability | 0.41 | 0.49 | 0.42 | 0.41 | 0.02 |
| Parent did not graduate HS | 0.20 | 0.40 | 0.20 | 0.20 | 0.01 |
| Child Receiving Edu. Accommodations | 0.76 | 0.43 | 0.75 | 0.77 | -0.03 |
| Child Grade | 9.52 | 1.06 | 9.53 | 9.52 | 0.01 |
| Race: White | 0.41 | 0.49 | 0.42 | 0.39 | 0.06 |
| Race: Black | 0.44 | 0.50 | 0.43 | 0.45 | -0.04 |
| Race: Other | 0.04 | 0.20 | 0.04 | 0.04 | 0.01 |
| Ethnicity: Hispanic/Latino | 0.18 | 0.38 | 0.17 | 0.18 | -0.02 |

Financial eligibility for SSI

- Max annual amount for:
 - An *individual* in 2022: \$10,092
 - A *couple*: \$15,137 ([ssa.gov](https://www.ssa.gov))
- Amount is reduced by income, including:
 - earned income
 - unearned income
 - cash & in-kind benefits

Most children qualify
for max annual
benefit of \approx \$10,000

Financial eligibility for SSI in adulthood



Baseline human capital investments in SSI kids

- Vocational rehabilitation services
 - *Goal*: prepare disabled youth for postsecondary education and/or employment
 - Take-up rates very low: **10-15%**

- High school completion rate: **48%**

Relationship between parent and SSI child

- **61%** of parents say their child will **continue living with them** in adulthood
 - **65%** of young adults who received SSI as children actually live with their parents in adulthood (National Survey of SSI Children and Families)
- **30%** of parents say they will **support their child**, even if the child lives separately

Aside: SSI removal consequences

- Youth removed at age 18 **recover $\approx 1/3$ of lost cash income through earnings** (Deshpande 2016)
- Youth removed at age 18 make up some lost income through **criminal activity** (Deshpande & Mueller-Smith 2022)
 - SSI removal increases criminal charges by **20%** over the next two decades
 - Shocking fact: removed youth are “twice as likely to be charged with an illicit income-generating offense than they are to maintain steady employment at \$15,000 / year”

Experimental design

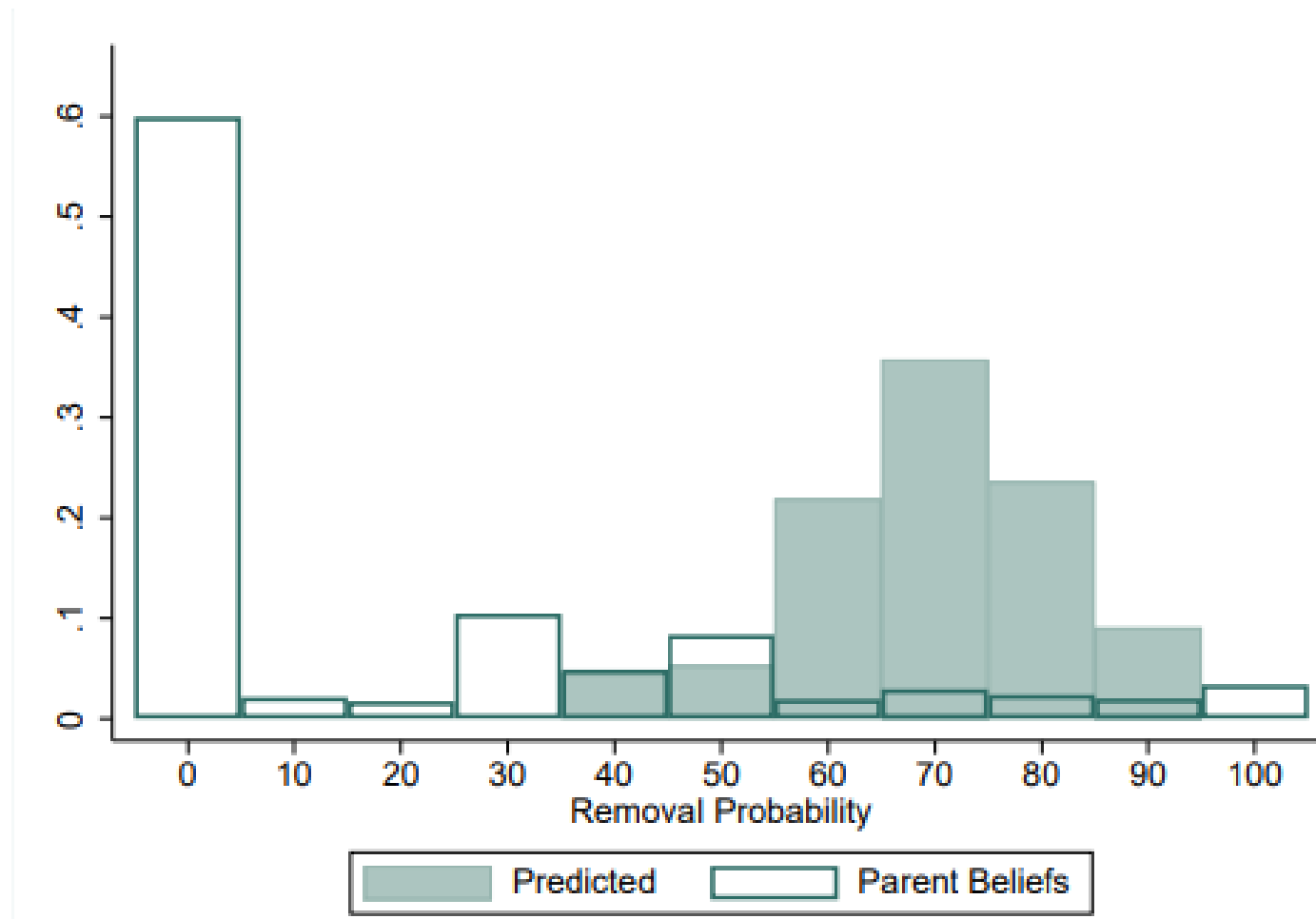
Key idea for this paper

- Uninvesting in children requires that parents expect children to continue receiving benefits as adults
- In reality, many children DO NOT continue receiving benefits as adults
- But parents don't know this
- *Idea: correct beliefs* using information intervention in RCT
 - identify effect of beliefs about the availability of SSI in adulthood → parents' human capital investments in their children
- *Recall:* Isolate the **anticipatory** effect from **contemporaneous** effect

Parents' inaccurate beliefs about removal

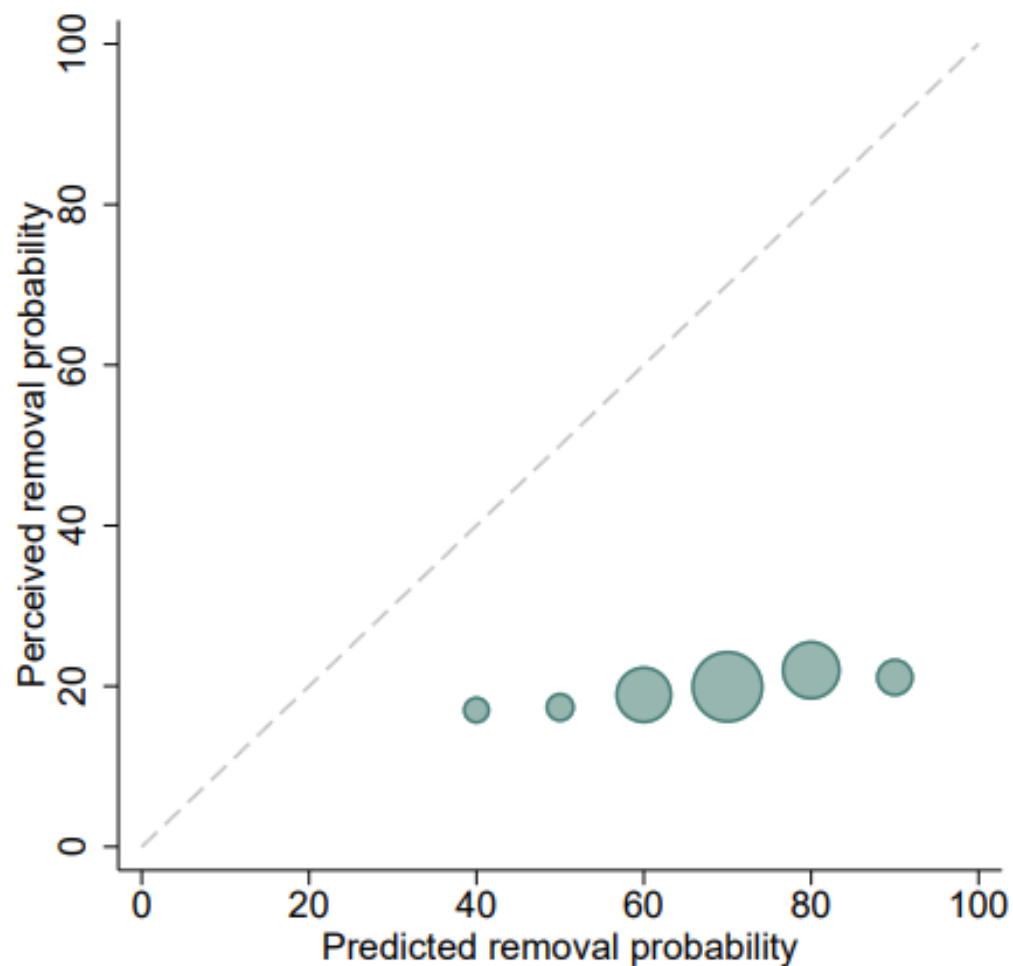
- Beliefs about removal rates are *very inaccurate*
 - (All #'s below are from the experimental sample)
- Range of predicted “truth”: 35% - 95%
 - 2/3 of SSI child recipients
- Avg “truth”: 70%
- Avg belief: 20%
- More than half of parents think there is a 0% chance of removal
 - Note: people may behave even differently in the face of this certainty

Parents' inaccurate beliefs about removal



(a) Histogram of predicted removal probability versus parents' baseline perceived probability

Parents' beliefs are uncorrelated with "truth"



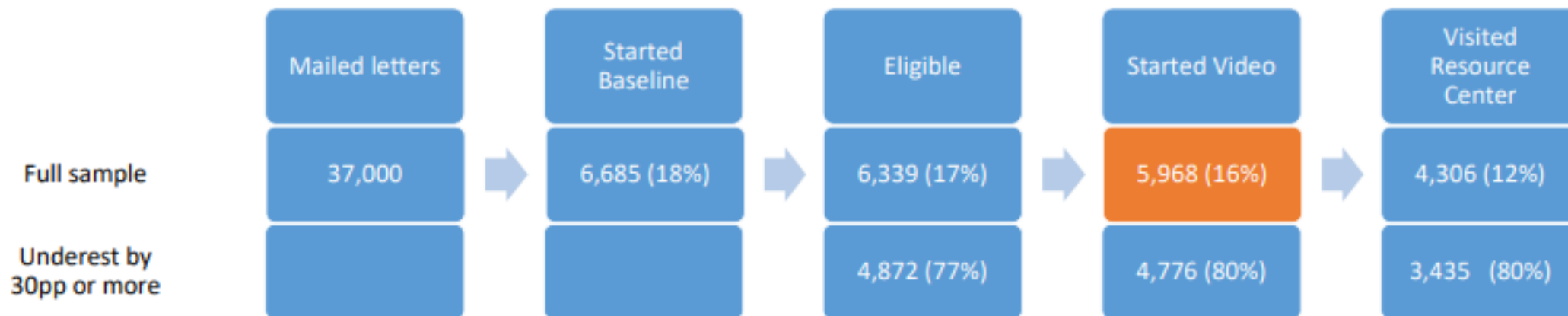
(b) Parents' baseline perceived removal probability by predicted removal probability

Parents' inaccurate beliefs about removal

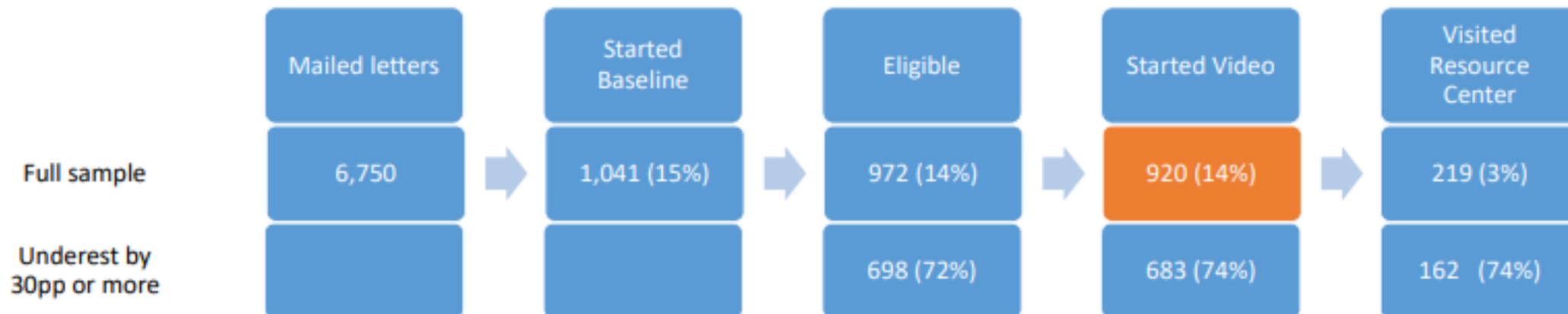
| | <u>Full Sample</u> | | <u>Control vs Information</u> | | |
|---------------------------------|--------------------|-----------|-------------------------------|-------------|----------------------|
| | (1) Mean | (2) SD | (3) Mean | (4) Mean | (5) Std. Diff. |
| <i>C. Removal Probability</i> | | | | | |
| Predicted Likelihood of Removal | 69.60 | 11.83 | 69.45 | 69.80 | -0.03 |
| Perceived Likelihood of Removal | 20.04 | 29.11 | 20.04 | 19.94 | 0.00 |
| Belief Gap | -49.58 | 30.96 | -49.39 | -49.91 | 0.02 |
| Thought No Chance of Removal | 0.60 | 0.49 | 0.60 | 0.60 | 0.01 |

Study sample

- Sampled 37,000 parents of SSI children from SSA admin data
 - *Stratified* by state & above/below-median removal probability within state
 - National sample, with *oversampling* from states with extra admin data for additional outcomes
- Children close to age of removal (aged 14-17)
- Mailed letters with info on web survey + reminders
- 17% sample inclusion rate → $N \approx 6,000$
- SSA admin data shows no meaningful selection of final sample



(a) Main experiment



(b) Mechanism experiment

Appendix Figure B.1: Response rate at each survey phase

Info Treatment

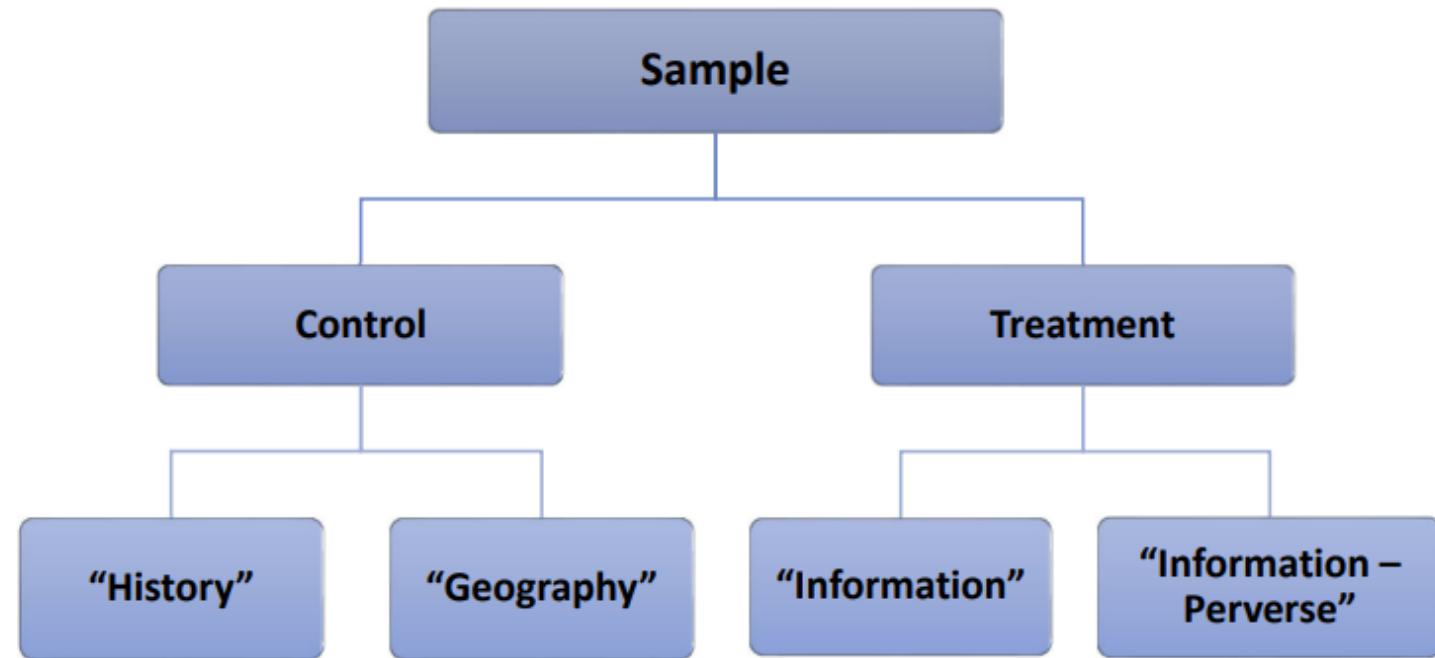
- Treatment groups received tailored information on their child's **predicted likelihood of SSI removal** at age 18
- *“[Your child] will most likely not receive SSI benefits as an adult. If that happens, they will not receive any monthly payments from SSI...and they will need to find other sources of income to support themselves.”*

Info Treatment: <https://youtu.be/57jvdStkhd4>



Control groups

- *Goal of intervention for control groups:* maintain similar length and salience of SSI, but with innocuous information:
- **Geography:** info about the geographic distribution of child SSI recipients across the U.S.
- **History:** info about the history of the SSI program
- Front and end of video kept the same



| | History | Geography | Information | Information - Perverse |
|---|---------|-----------|-------------|------------------------|
| Information about removal likelihood? | No | No | Yes | Yes |
| "Perverse incentives" message? | No | No | No | Yes |
| Share receiving confidentiality message | 50% | 50% | 50% | 0% |
| # of observations | 1,409 | 1,445 | 2,873 | 241 |

Figure 1: Experimental Design

Primary outcomes: parents' investments in human capital

| | Temporal (time cost) – through “Resource Center” | Financial (\$ cost) – outside “Resource Center” |
|------------|---|--|
| Education | Enrolling in online <u>math courses</u> tailored to student’s grade | Choosing \$300 of one-on-one <u>tutoring</u> over \$50 cash in survey lottery |
| Employment | Enrolling in <u>job training</u> offered by state vocational rehabilitation agencies | Choosing \$35 cash + <u>career guide book</u> (worth \$16) over \$40 cash in survey payment |

Secondary outcomes (survey)

- Parents' intentions for children to **attend college**
- Parents' intentions for children to **work in young adulthood.**
- Parents' interest in **saving for their child's future**
 - Provide info on ABLÉ savings accounts in the Resource Center
 - *Outcome*: requesting an email for how to sign up

Strengths: outcome measurement

- Primary outcomes intend to capture *different channels* of possible effects
- Outcomes were selected based on extensive pilots and focus groups & calibrated for power
 - E.g. in pilots about half preferred \$300 in tutoring to \$50 cash
- Can show that participants value these resources
 - Revealed preference: 30% take-up among control group
 - For 3 of 4 outcomes, most parents say the resource would be “extremely” useful
- Evidence supports that outcomes (e.g. job training) are worthwhile, economically meaningful investments

Discussion: outcome measurement

- What if families still don't value these offered resources?
 - E.g. if families' desired investments in human capital are more "lumpy"
- Minor concern: perceived likelihood of winning tutoring vs. cash, based on what other people might be choosing?
- This makes me almost more interested in the secondary outcomes
 - Although there's a clear argument against using stated beliefs

Results

Immediate “outcomes” checking that videos were understood

- Knowledge check questions
 - E.g. what fraction of children with their child’s removal probability were removed at age 18
- $\approx 75\%$ answer correctly on first round
- $\approx 96\%$ answer correctly on second round

First stage: treated parents update beliefs based on info

- Perceived likelihood of removal (-20 pp)

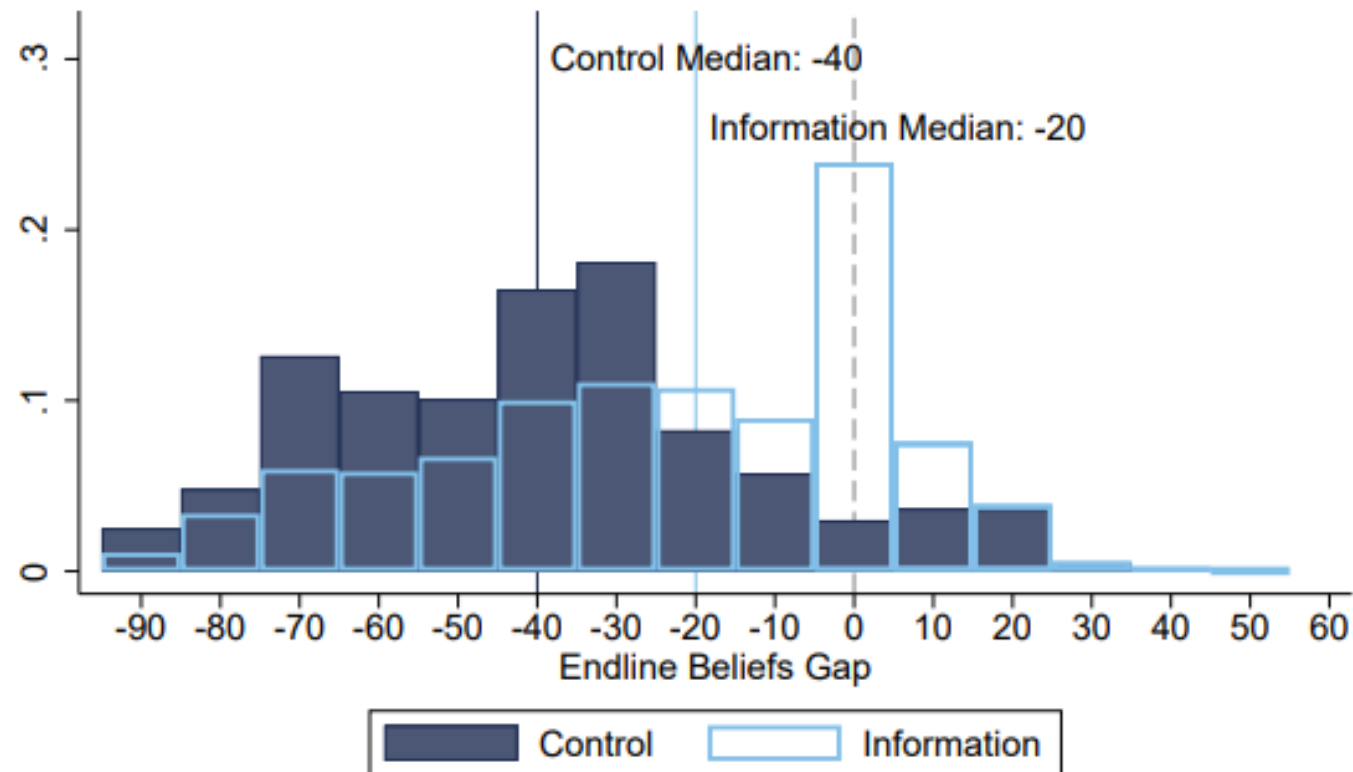


Figure 3: In response to information, treated parents update beliefs relative to control parents

First stage

Main reduced-form results limit to “underestimators”: 80% of individuals who underestimate likelihood of removal by 30pp+

Table 2: Information about SSI removal affects beliefs about SSI removal

| Dependent Var: | Endline perceived probability of SSI removal | | | |
|--------------------------------|--|----------------------|---------------------|-----------------------|
| | Underestimators | | Full IV Sample | |
| | (1) | (2) | (3) | (4) |
| Information | 18.46*** [1.237] | -5.849 [6.113] | 16.08*** [1.340] | -3.666 [5.424] |
| Information × Removal Prob. | | 0.351*** [0.0891] | | 0.334*** [0.0782] |
| Removal Prob. | | -0.0138 [0.114] | | -0.00555 [0.0999] |
| Information × Baseline Beliefs | | 0.0225 [0.0694] | | -0.131*** [0.0404] |
| Baseline Beliefs | | 0.418*** [0.0604] | | 0.549*** [0.0375] |
| Control Mean | 22.90 | 22.90 | 30.02 | 30.02 |
| N (Individuals) | 2,559 | 2,559 | 3,194 | 3,194 |
| N (Control) | 345 | 345 | 436 | 436 |
| N (Information) | 2,214 | 2,214 | 2,758 | 2,758 |
| F-stat | | 94.4 | | 95.9 |

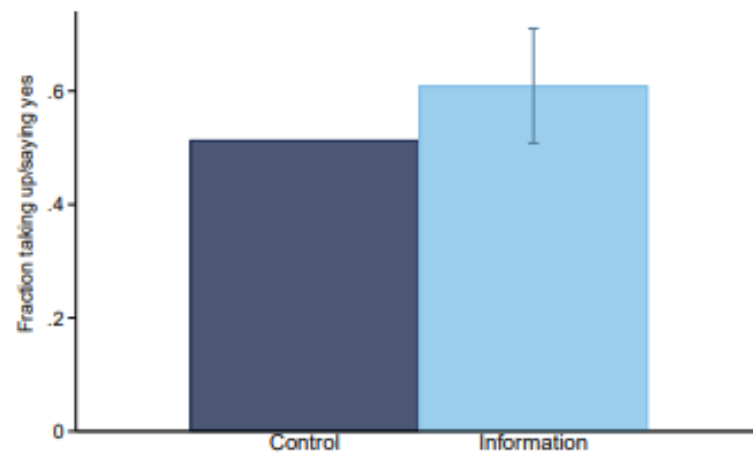
Notes: Table shows OLS regressions where the dependent variable is the endline perceived probability of removal (on a scale from 0-100) as measured in our endline survey. The sample in regressions (1) and (2) is the Information group (i.e., Treatment group excluding Information-Perverse) and the subset of the Control group we collected endline beliefs from, with both groups limited to individuals who underestimated their child’s likelihood of removal at baseline by at least 30pp. The sample in regressions (3) and (4) is the Information group and the subset of the Control group we collected endline beliefs from. All regressions include controls selected by double-LASSO for a specification that pools all four of our primary outcomes, along with stratum fixed effects. See Online Appendix Table G.3 for a list of selected controls. Significance levels: * 10%, ** 5%, *** 1%.

First-stage: beliefs persisted in the short-run

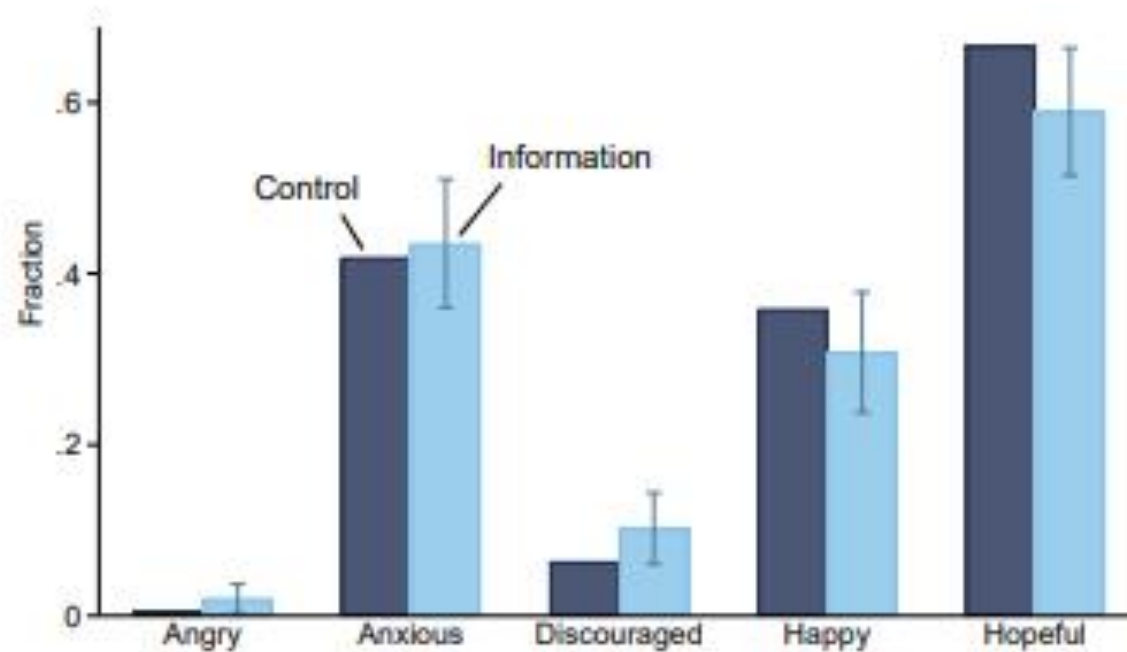
- End of Resource Center: asked 5-point Likert scale question about likelihood of removal
 - 50% response rate among those eligible to answer question
- Treatment effect is similar to endline survey
- *Concern: Will beliefs persist in the medium- or long-run?*
 - In main experiment, this is still the same day
 - In small mechanisms experiment, this is 11 days later, on average
 - *Challenge:* getting people to come back for additional survey rounds

First stage robustness: beliefs affect slightly different intermediate outcomes

- Small mechanism experiment: N = 1,000 ⇔ 14% response rate
- Treatment increased demand for a **hypothetical insurance product** to insure against the loss of SSI benefits (**+10 pp**)
- Treated group has **more negative emotions**
 - More likely to report feeling “discouraged”
 - Less likely to report feeling “hopeful”
 - → possible effects of interventions on parent mental health in LR?



(a) Information increases demand for insurance against loss of SSI



(b) Information has some effect on parent emotions

Figure 7: Information group internalizes information (mechanism, endline)

Zero effect on investments in children's human capital

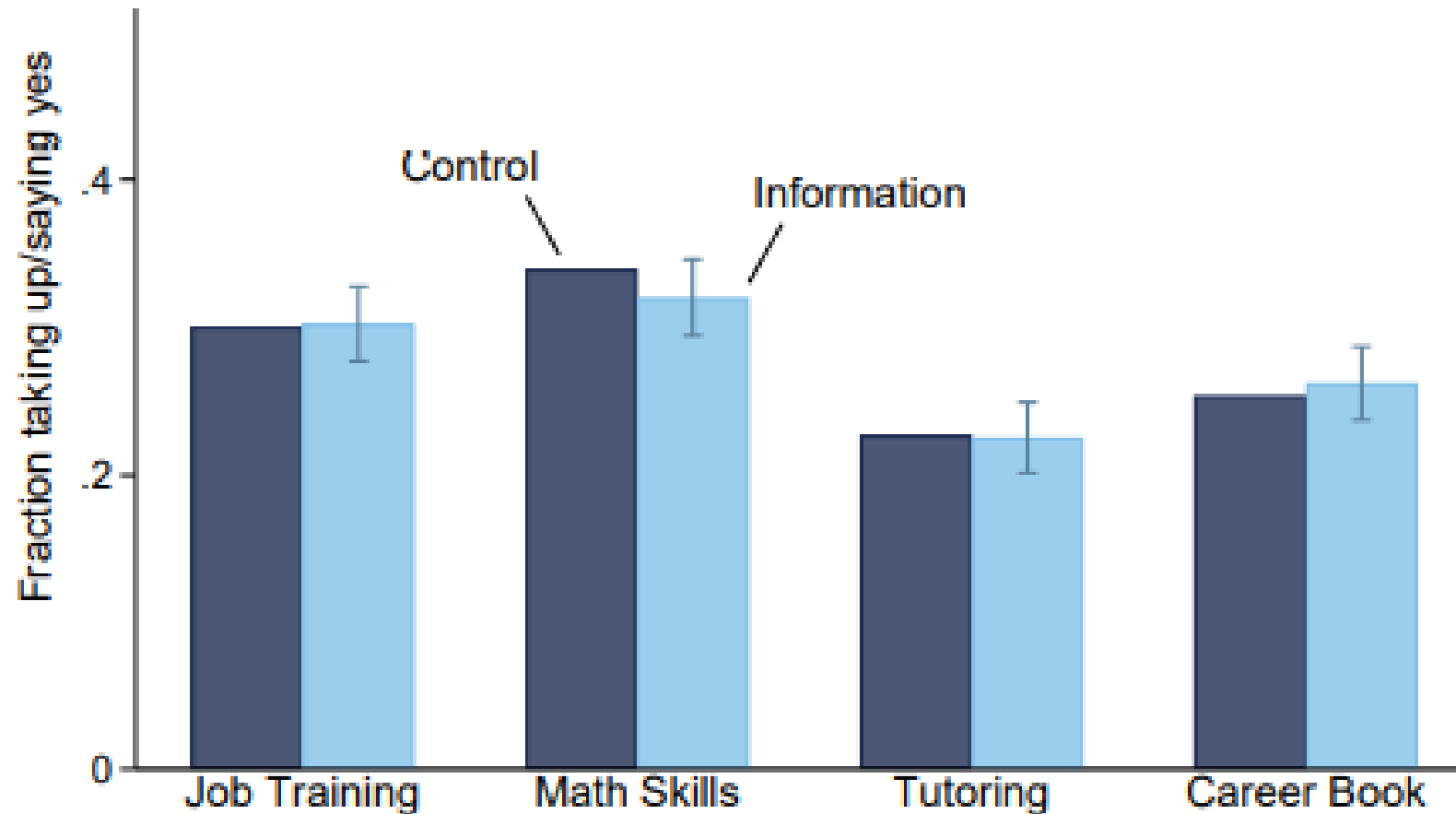


Figure 4: Providing removal information does not increase human capital investment

Table 3: Providing removal information does not increase human capital investment

| Dependent Var: | <u>Job Training</u> | <u>Math Skills</u> | <u>Tutoring</u> | <u>Career Book</u> | <u>Pooled</u> |
|--|------------------------|-------------------------|-----------------------|-----------------------|------------------------|
| | (1) | (2) | (3) | (4) | (5) |
| <i>Panel A. Treatment effect of information on resource take-up</i> | | | | | |
| Information | 0.00211 [0.0129] | -0.0189 [0.0132] | -0.00167 [0.0121] | 0.00831 [0.0127] | -0.00186 [0.00858] |
| Control Mean | 0.30 | 0.34 | 0.23 | 0.25 | 0.28 |
| N (Individuals) | 4,589 | 4,589 | 4,589 | 4,589 | 4,589 |
| N (Control) | 2,282 | 2,282 | 2,282 | 2,282 | 2,282 |
| N (Information) | 2,307 | 2,307 | 2,307 | 2,307 | 2,307 |
| N (Observations) | 4,589 | 4,589 | 4,589 | 4,589 | 18,356 |
| <i>Panel B. IV estimate of effect of removal beliefs on resource take-up</i> | | | | | |
| Endline Beliefs | -0.000247 [0.00128] | -0.00281** [0.00131] | -0.00170 [0.00123] | -0.00124 [0.00125] | -0.00126 [0.000844] |
| Control Mean | 0.28 | 0.32 | 0.27 | 0.30 | 0.29 |
| N (Individuals) | 3,194 | 3,194 | 3,194 | 3,194 | 3,194 |
| N (Control) | 436 | 436 | 436 | 436 | 436 |
| N (Information) | 2,758 | 2,758 | 2,758 | 2,758 | 2,758 |
| N (Observations) | 3,194 | 3,194 | 3,194 | 3,194 | 12,776 |

How precise is the null effect?

- Pooled estimate can rule out that information increased take-up of the investments by more than **1.5pp**, of a base of about 29%.
- 1.5pp is small relative to differences in investments between different subgroups:
 - parents who do / do not believe college has a high return (**8 pp**)
 - Parents above / below median “it’s too early to plan for my child’s future” (**11 pp**)
 - Parents who think resources are extremely useful / not (**17 pp**)

How precise is the null effect?

- Can rule out effects larger than **5%**
 - (5% = 1.5 pp over control mean 28%, from pooled estimate)
- A relevant model (Heathcote et al. 2017) predicts the info intervention should increase investments by **11%**
- Qualitative interviews with counselors who work with SSI families predicted positive effects
- Expert survey
 - 97% predicted a **positive** effect
 - Avg expert prediction: **34%** (14 pp)

How precise is the null effect? Expert survey

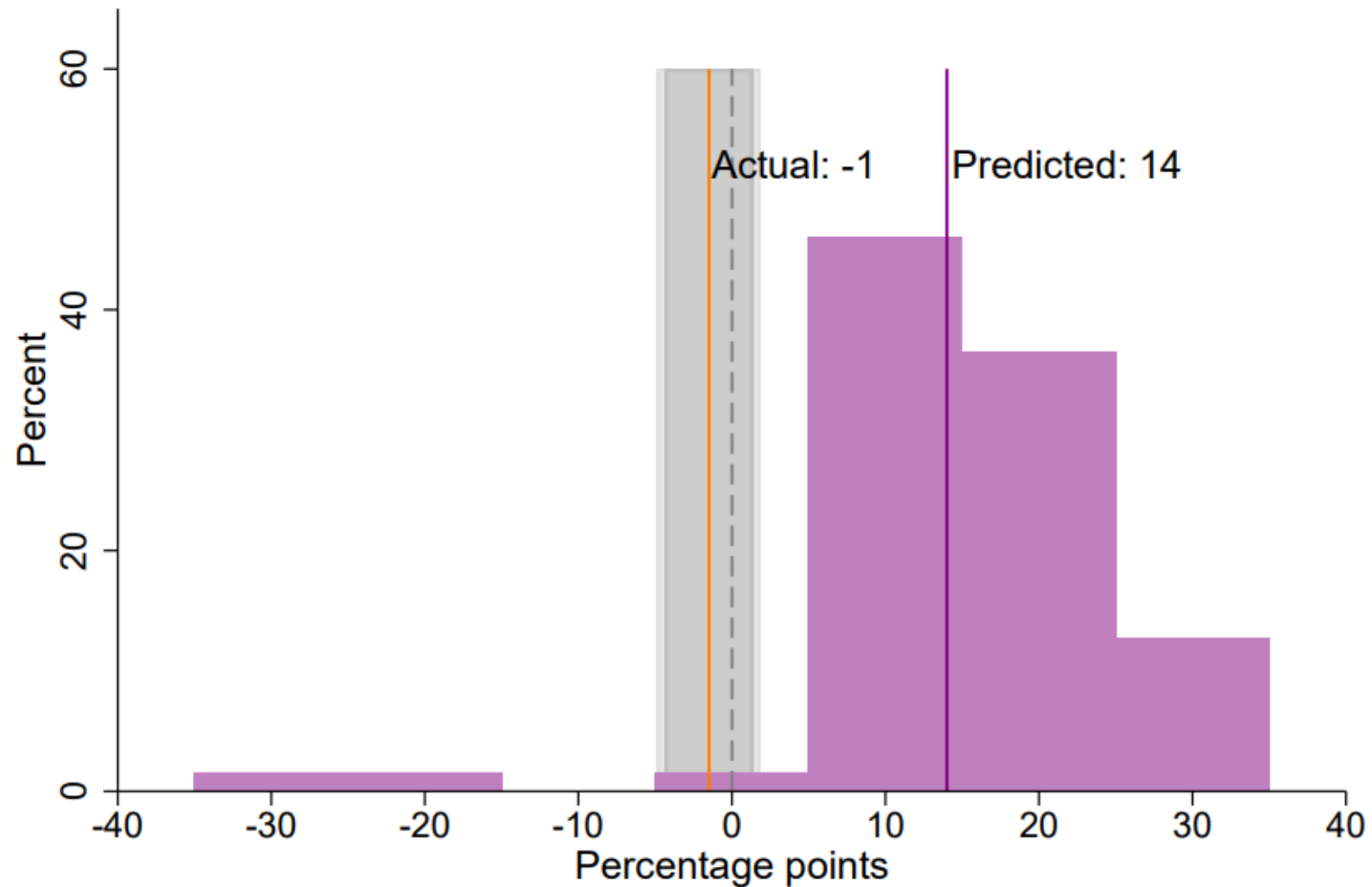


Figure 5: We strongly reject expert predictions of a positive treatment effect

Mechanisms

Mechanisms set-up

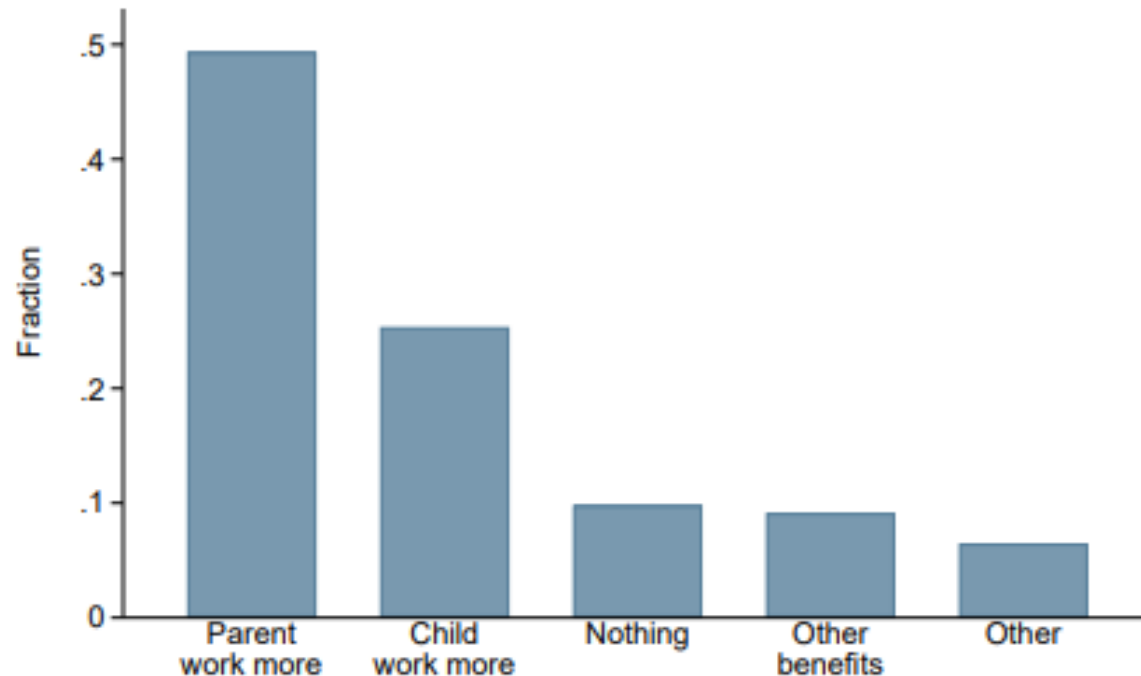
- Parents understand **income effects**...
 - A majority believe that losing SSI would be a major financial shock
 - 81% of treated parents said they would be “much” or “somewhat” worse off
- ...and understand **substitution effects**...
 - i.e. they understand that receiving SSI benefits as an adult decreases the financial returns to work
 - ~2/3 of parents perceive the marginal tax rate to be 50% (correct) or 100%

Mechanisms set-up

- ...and they believe that human capital **investments would increase earnings...**
 - Nearly 80% of parents say **high school** would increase their own child's earnings from work "a little" or "a lot"
 - Many parents say 4-year **college** would increase their children's earnings enough to cover the cost
- ...and have (over)-optimistic beliefs in their children's abilities.
 - 64% think their child could attend **college**
 - 84% expect their child to have a part-time or full-time **job in adulthood**
- *Why then do these updated beliefs not translate into more human capital investment?*

Why don't parents invest? Key factor

- Treatment increased **parents plans to work more** to recover the lost income (+9 pp)
 - From small mechanism experiment: N = 450



Why don't parents invest? Medium factors

- **Non-financial** objectives
 - E.g. wanting their child to achieve their potential
 - E.g. key margin is high school completion, and want to avoid the stigma of dropping out of high school
- Parents are close to **time, \$, and bandwidth constraints** for making investments in children

Why don't parents invest? Less relevant factors

- **Wealth effect:** loss of permanent SSI income → decrease in college-going plans
 - Suggests that parents believe they can no longer afford college without SSI
 - But cannot account for null treatment effect
 - for e.g. job training (an alternative to college)
 - & still no treatment effect among parents who are less credit constrained
- High discount rates (i.e. impatience, **not forward-looking**)
 - No evidence to support

Study takeaways

- Internal validity of this study is quite convincing
 - A “template paper” for running a beliefs-related experiment

- External validity is more shaky
 - Do we think these results apply to other, particularly non-disabled, populations?

External validity considerations

- What if effects are **asymmetric**?
 - i.e. if the effect of taking (expected) benefits *away* is not the same as *providing* new benefits?
- What if parents **expect to be responsible** for taking care of their disabled child?
- What if **SSI households** face more constraints on human capital investment than the average household?
- Potential to consider **real human capital investments** using admin data in the future?

Takeaways for young researchers

Research-related lessons: general

- A project where **null effects** are interesting
- Rewards to depth of **contextual knowledge**
 - I suspect that authors did not expect to do this project, until learning how inaccurate beliefs were
- **connections to admin data**
 - oversampling in states where they had connections to state admin data for later outcomes
 - Sampling from admin data to test selection into experiment

Research-related lessons: experiments

- A lot of background **qualitative work** and **piloting**
 - E.g. to determine video was the best way to communicate info to parents
- Running an information intervention: stages of **intermediate outcomes** to show that the intervention worked
- **Validating unconventional outcome measures**
 - i.e. checking that stated and revealed preference showed that parents value the resources they offered (e.g. tutoring)

Thank you!

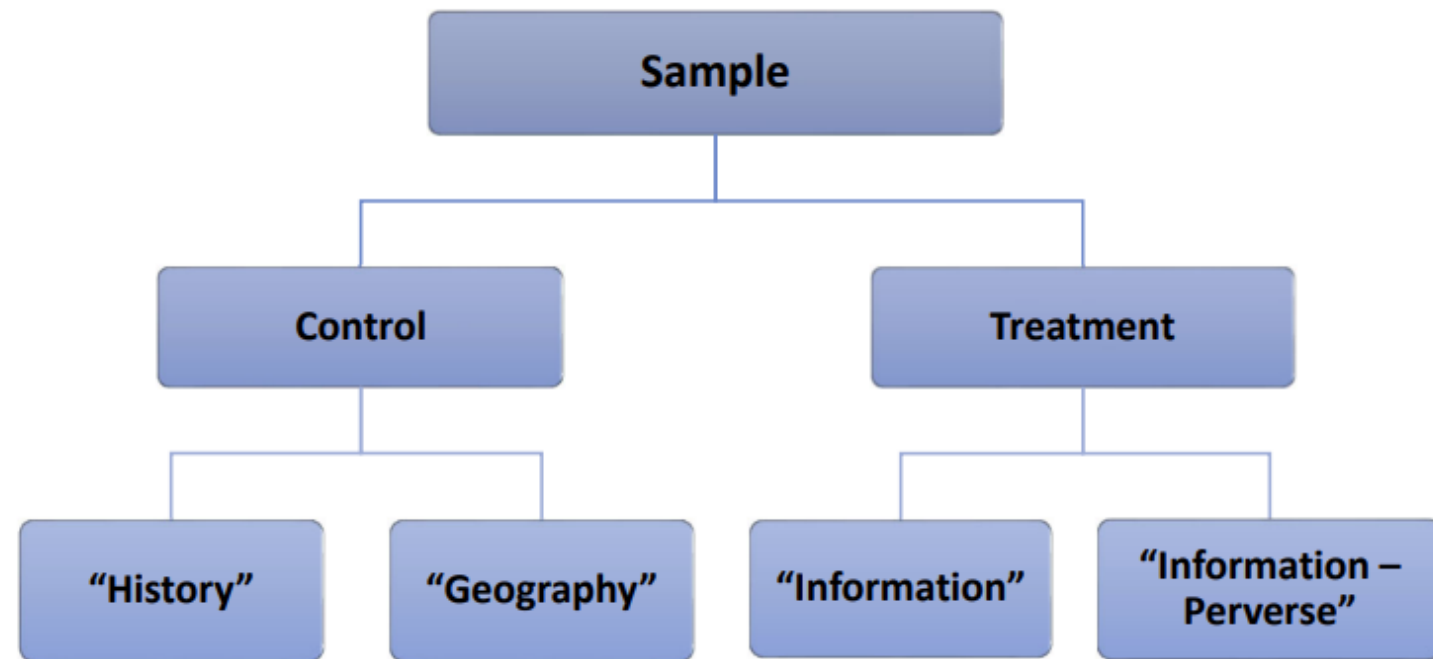
Appendix: perverse incentives

Ruling out an alternative effect

- Alternative effect they want to rule out: “**perverse incentive effect**”
- If parents believe that children with higher human capital are *more likely to be removed...*
- ...then increasing the perceived likelihood of removal (through the info intervention) could lead parents to actually *decrease* human capital investments (to prevent SSI removal).
 - Would offset main treatment effect of info potentially *increasing* human capital investment

2 sub-treatments to address possible “perverse incentives” channel

- **1) Confidentiality:** Parents also told that their take-up of resources will be kept confidential
 - i.e. It would not affect their child’s chances of removal
 - Meant to dampen perverse incentives
 - Cross-randomized
- **2) Info-perverse:** provide true information about what factors SSA considers in the age 18 removal decision
 - i.e. so that parents could know – and potential control – what factors do / do not affect removal
 - Meant to amplify preserve incentives
 - Separate treatment arm



| | | | | |
|---|-------|-------|-------|-----|
| Information about removal likelihood? | No | No | Yes | Yes |
| "Perverse incentives" message? | No | No | No | Yes |
| Share receiving confidentiality message | 50% | 50% | 50% | 0% |
| # of observations | 1,409 | 1,445 | 2,873 | 241 |

Figure 1: Experimental Design

Evidence against this hypothesis

- At baseline: if anything, parents thought that having higher human capital leads to a lower (not higher) likelihood of removal
- No effect of “perverse incentive” sub-treatments
 - So the authors largely ignore this when discussing the main results

Appendix: Extras

Null results
across
subgroups
(pooled specification)

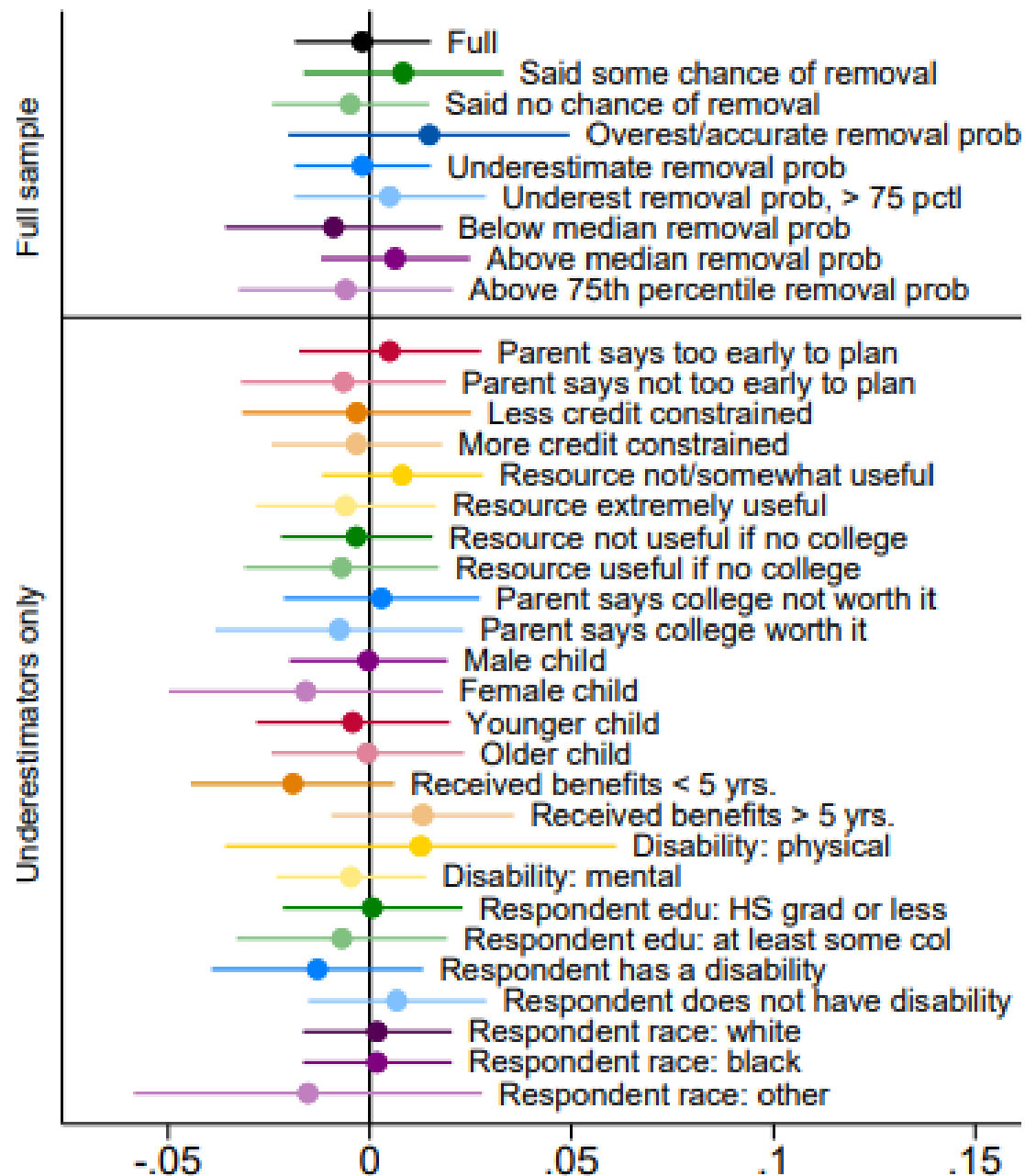


Figure 6: No significant effects of information on human capital in any sub-sample

Table 4: Providing information does not increase college, work, or savings plans

| Dependent Var: | Thinks child will go to college | Thinks child will work | Savings account |
|-------------------|---------------------------------------|------------------------------|---------------------|
| | (1) | (2) | (3) |
| Information | -0.0575*** [0.0128] | -0.00156 [0.0138] | -0.0141 [0.0116] |
| Control Mean | 0.51 | 0.58 | 0.21 |
| N (Individuals) | 4,394 | 4,379 | 4,589 |
| N (Control) | 2,186 | 2,183 | 2,282 |
| N (Information) | 2,208 | 2,196 | 2,307 |

Notes: Table shows OLS regressions where the dependent variables are 0/1 indicators for if the parent thinks the child will go to college or if the child will work as an adult, as measured in our endline survey, and if the parent requests information about the ABLE savings account in the Resource Center. All regressions include a vector of controls selected by double-LASSO, shown in Online Appendix Table G.3, as well as stratum fixed effects. Robust standard errors are in brackets. The sample limits to those who a) underestimate the removal probability by at least 30pp at baseline, and b) are not in the Information-Perverse group. Significance levels: * 10% ** 5% *** 1%.

Null or
opposite
effects on
secondary
outcomes

Aside: IV specifications

- Instrument for endline beliefs (D) using:
 - Information
 - Information X actual removal probability
 - Information X baseline perceived removal probability
- *Intuition for interactions*: reduce monotonicity concern
 - Effects of info intervention could be non-monotonic since parents could update beliefs upward or downward, based on initial beliefs
- IV results are also nulls, as expected given null reduced-form effects

Survey belief questions

- Do you think there's any chance [KID] will stop receiving SSI benefits over the next 10 years? *[No, there is no chance that [his/her] benefits will stop. / Yes, there is some chance that [his/her] benefits will stop.]*
- (If “Yes”) How likely do you think it is that [KID] will stop receiving benefits? *[10% (highly unlikely to lose benefits) / 20% (unlikely) / 30% (some chance) / 40% (could very well) / 50% (good chance) / 60% (likely) / 70% (probably) / 80% (most likely) / 90% (almost certainly) / 100% (certainly will lose benefits)]*

Aside: predicting SSI removal probability

- OLS prediction: Regressed an indicator for not being on SSI at age 19 on:
 - Sex
 - diagnosis (primary and secondary diagnosis code)
 - medical diary (which determines how often they face review, generally based on severity or expected recovery)
 - family structure
 - # of years on SSI
 - # of moves
 - age at last medical review
 - number of older siblings who received SSI
 - Race
 - parental earnings
 - 3-digit zip code
 - R-squared = 0.216
- Applied to the universe of all current SSI recipients
- Tried fancier ML things (e.g. LASSO), but ended up just going with OLS

Does Welfare Inhibit Success?
The Long-Term Effects of Removing Low-Income Youth
from the Disability Rolls[†]

By MANASI DESHPANDE*

I estimate the effects of removing low-income youth with disabilities from Supplemental Security Income (SSI) on their earnings and income in adulthood. Using a regression discontinuity design based on a 1996 policy change in age 18 medical reviews, I find that youth who are removed from SSI at age 18 recover one-third of the lost SSI cash income in earnings. SSI youth who are removed and stay off SSI earn on average \$4,400 annually, and they lose \$76,000 in present discounted observed income over the 16 years following removal relative to those who do not receive a review. (JEL I30, I38, J14)

Abstract

We estimate the effect of losing Supplemental Security Income (SSI) benefits at age 18 on criminal justice and employment outcomes over the next two decades. To estimate this effect, we use a regression discontinuity design in the likelihood of being reviewed for SSI eligibility at age 18 created by the 1996 welfare reform law. We evaluate this natural experiment with Social Security Administration data linked to records from the Criminal Justice Administrative Records System. We find that SSI removal increases the number of criminal charges by a statistically significant 20% over the next two decades. The increase in charges is concentrated in offenses for which income generation is a primary motivation (60% increase), especially theft, burglary, fraud/forgery, and prostitution. The effect of SSI removal on criminal justice involvement persists more than two decades later, even as the effect of removal on contemporaneous SSI receipt diminishes. In response to SSI removal, youth are twice as likely to be charged with an illicit income-generating offense than they are to maintain steady employment at \$15,000/year in the labor market. As a result of these charges, the annual likelihood of incarceration increases by a statistically significant 60% in the two decades following SSI removal. The costs to taxpayers of enforcement and incarceration from SSI removal are so high that they nearly eliminate the savings to taxpayers from reduced SSI benefits. *JEL* Codes: I38, J14, K42.