



**NOTICE OF PUBLIC MEETING**

**Monday, April 6, 2020  
City Council Chambers  
680 Park Avenue  
Idaho Falls, ID 83402  
3:00 p.m.**

*The public is invited to observe City Council Work Sessions. However, to observe appropriate social distancing guidelines, as recommended by the Centers for Disease Control and Prevention (CDC), the public is encouraged to view this meeting via livestream on the City's website at <https://www.idahofallsidaho.gov/429/Live-Stream>. The agenda does not include an opportunity for public interaction.*

*This meeting may be cancelled or recessed to a later time in accordance with law. If you need communication aids or services or other physical accommodations to participate or access this meeting or program of the City of Idaho Falls, you may contact City Clerk Kathy Hampton at 612-8414 or the ADA Coordinator Lisa Farris at 612-8323 as soon as possible and they will accommodate your needs.*

**COUNCIL WORK SESSION**

*Times listed in parentheses are only estimates.*

Call to Order and Roll Call

Joint Meeting with Bonneville County Commissioners: -Area of Impact (AOI) Discussion (45)

Council: -Liaison Reports and Council Concerns (15)

Mayor and Staff: -Acceptance and/or Receipt of Minutes  
-Calendars, Announcements and Reports  
-Discuss Temporary Suspension of Public Comment  
-Coronavirus (COVID-19) Update (30-45)

Airport: -Airport Improvement Program (AIP) Grants and Contracts Discussion (15)  
-Airport Revenue, Fee Waivers/Deferrals Discussion (15)

Executive Session: -The Executive Session is being called pursuant to the provisions of Idaho Code Section 74-206(1)(j) to consider labor contract matters authorized under section 74-206A(1)(a) and (b), Idaho Code. (open)

DATED this 3<sup>rd</sup> day of April, 2020

  
\_\_\_\_\_  
Kathy Hampton  
City Clerk

# CUSP Education Committee Meeting Minutes for February 20, 2020

Idaho Falls Public Library Room 2

The meeting was called to order at 6:30pm

**Those in attendance-** Tomm Larson, Marie Giraud, Christine Leusch, Margaret Wimborne, Pat Tucker, Michaelena Hix, Catherine Black, Kylie Dixon, and Sarah Cherry

**Introductions** were made, including meeting our new committee chair, Michaelena Hix.

**District 91 Kindergarten Program-** Kylie Dixon (Principal at Sunnyside Elementary) and Sarah Cherry (Assistant Principal at Sunnyside Elementary) came to present on their new full day kindergarten option for this year, as well as other programs being used within the district. (Please see the attached handout)

The problem local schools are facing is that first graders are not arriving prepared and possessing the skills they need. Sunnyside has started a pay-to-participate option for their Kindergarteners. Parents can opt to pay \$275/month for full day Kindergarten with a certified teacher. Approximately one third of the students are participating in this program.

Temple View and Bush Elementary schools have a new program that enrolls all Kindergarten students in a full day schedule. Half of the day is with a certified teacher, and the other half is with a para professional. This is paid for with Title 1 and K-3 money.

The remaining elementary schools in District 91 have an extended day program. Students scoring a 2-3 on the IRI have extended time with a para professional in addition to the half day with the certified teacher. This program varies from school to school and is paid for with Title 1 and K-3 money.

**Pat Tucker's presentation** was postponed and will take place next meeting

**United Way Education opportunities-** Christine Leusch came and explained ways that United Way is involved with education. (Please see the three attached handouts she provided.) They have just started a "SOAR" program for 4th-6<sup>th</sup> graders who are recommended due to issues with poor attendance or behavior. Attendance in SOAR is voluntary, and is held at Hawthorne Elementary after school 2 days per week. Students are paired with mentors that listen to them and participate in activities. They are seeking grants to expand this program.

They are also hoping to pilot another program this summer called Kindergarten Bootcamp to help get Pre-K students more prepared for Kindergarten.

**Focus Areas and Priorities Discussion-** It is important that in our next couple meetings we narrow our focus to create a few recommendations. We can then spend remaining months studying, supporting, and clarifying these recommendations before submitting them to the Mayor. We will try to meet every two weeks to meet this objective and avoid meeting often in the busy months of summer.

Meeting adjourned at 8:08

**The next meeting** will be March 10, 2020 at the Idaho Falls Public Library Rm 2 at 6:30pm  
A meeting had also been calendared for March 24, 2020 in the same location at 6:30pm

# 2019 Community Assessment for ALICE

• **41%** of Eastern Idaho are working hard and struggling to survive. They are **ALICE**.

Asset Limited, Income Constrained, Employed

• **7** county service region of United Way of Idaho Falls and Bonneville County is Bonneville, Clark, Fremont, Lemhi, Madison, and Teton

• **3,068** data points were collected through Surveys and Community Conversations

• **3 Focus Areas:**

**HEALTH:** Access to health care promotes wellness for all ages

**EDUCATION:** Quality education is essential to earning a living wage

**FINANCIAL STABILITY:** Improving financial stability leads to increased independence

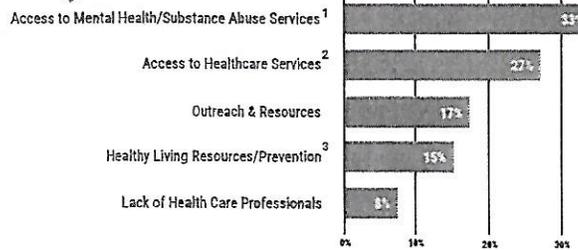
• **2 Outcomes:** Fostering collaboration and partnerships for action

• **1 Priority:** Help **ALICE**

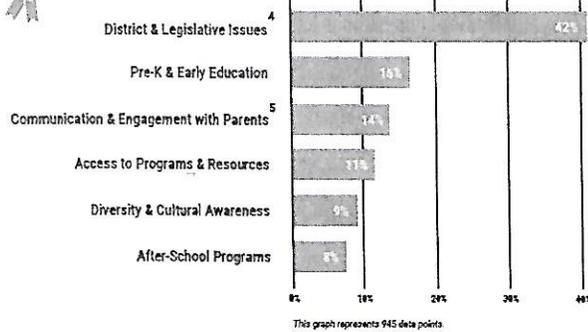
## Top Five Issues



### HEALTH



### EDUCATION



### FINANCIAL STABILITY



# CRADLE TO CAREER

## Mobilize Resources

Financial Resources

Volunteers & Community Engagement

Convene/Collective Impact

## Build Stronger Communities

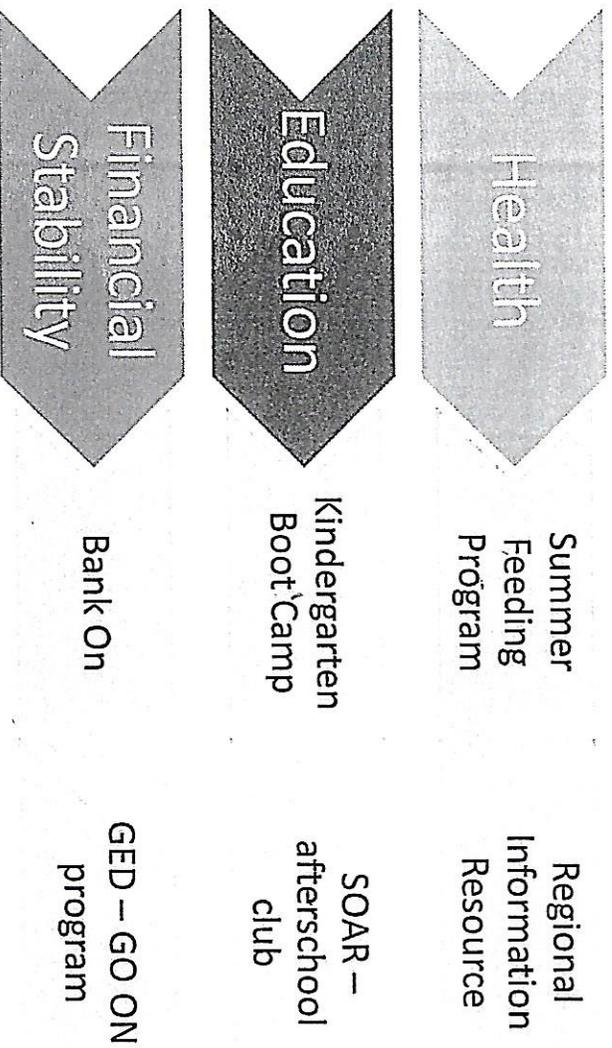
Direct services and supports

Partnerships with Idaho Business for Education, IdahoAETC, IDHW, School Districts, Regional Businesses, Federal Reserve, state and regional grants and foundations

## Systems Improvement

Increased community capacity via training, partnership, convening, and resource development

Goals driven by the 2019 UW Community Assessment Report



## D91 Kindergarten

### Problem:

- Students are showing up for kindergarten and are not well prepared in early literacy (print concepts, phonological awareness), math skills and social interaction.

### Goal:

- Reading: To have all students beginning reading by the time they leave kindergarten (blending and segmenting words.)
- Math: To have all students understanding count sequences, count to tell the number of objects, comparing numbers and basic addition and subtraction.
- Personal responsibility, self direction and logical thinking.

### Obstacles in Kindergarten right now:

- Half-day kindergarten is only 2.5 hours daily (14 hours a week)
- 2 hours of specials a week (PE, Music, Art, Library)= 12 hour a week for instruction
- Curriculum is built for all day kindergarten- difficult to fit into 2.5 hours.
- Students are coming in lacking social interaction with other students.
- Teachers need time to address responsibility, following directions and other adaptive skills while still meeting academic standards.

### D91 Solutions

- Pay to Participate Model
  - Sunnyside
- Extended Day Model
  - Bush and Temple View
- Extended Day Model (based on student data)
  - Remaining Schools

### What we have noticed so far:

- All Models:
  - Students are exhibiting responsibility, following directions and other adaptive skills far sooner in the school year.
  - Students are getting more opportunities to produce pieces of writing.
  - Students are getting more opportunities to practice effective social interactions with peers.
  - There is time for remediation instead of just differentiation.
  - Teachers are able to utilize more of the adopted curriculum.
  - Students are meeting end of year standards mid-year.
  - Available time to address social studies and science.

# 2019 UNITED WAY GRANT PROGRAMS



## HEALTH

SANE/Forensic Exams & Support Staff  
 DV/SAC  
 \$54,000

Smoke Detectors & Disaster Services  
 Red Cross  
 \$20,000

Program Staff  
 Community Food Basket & Soup Kitchen  
 \$45,000

Health, Wellness & Nutrition  
 Head Start/Early Head Start, EICAP  
 \$10,000

Meals on Wheels & Congregate Meals  
 Idaho Falls, S. Fremont &  
 Madison Senior Centers  
 \$49,500

Food Bank  
 Family Crisis Center  
 \$18,000

Food Pantry  
 Salvation Army  
 \$12,200

Case Manager Forums  
 \$6,000



## EDUCATION

GED Program  
 Haven Shelter  
 \$19,000

Drop-In Center Staff  
 Club Inc.  
 \$15,000

Education Materials  
 DARE  
 \$5,000

Volunteer Coordinator  
 Center for Hope  
 \$45,000

Early Head Start Scholarships  
 E. Idaho Community Action Partnership  
 \$10,000

Program Staff  
 Girl Scouting  
 \$9,500

Vocational Scholarships,  
 Development Workshop  
 \$24,800

Early Education Initiative  
 \$5,000



## FINANCIAL STABILITY

Project HVAC, Electrical & Plumbing  
 Habitat for Humanity  
 \$11,500

End of Live & Bereavement Care  
 Hospice of Eastern Idaho  
 \$21,500

Homemaker & Chore Program  
 E. Idaho Community Action Partnership  
 \$9,000

Guardianship & Family Unification  
 Idaho Legal Aid  
 \$15,000

Senior Tutor Stipend  
 Foster Grandparents of SE Idaho  
 \$5,000

Prescription Drug Assistance  
 Salvation Army  
 \$5,000

Rent & Utility Assistance  
 Salvation Army  
 \$35,000

Bank-On Initiative  
 \$6,000



City of Idaho Falls  
Environment & Sustainability  
CUSP Committee Meeting  
Chair: Kris Millgate  
Vice-Chair: Stephanie Austad

February 26, 2020  
10:30 a.m.  
Activity Center  
1575 N. Skyline Dr.  
Idaho Falls, ID 83402

## MINUTES

### Roll Call:

Adams C.	X	Evaly, J.	X	Millgate K.	X	Silverman H.	
Austad S.	X	Haney, C.	X	Morales K.	X	Vazhnik V.	
Cherry B.	X	Lepler K.		Sehlke G.			

### Call to Order:

The meeting called to order at 10:37 a.m. by committee chair Kris Millgate.

### Approval of Minutes:

Bob Cherry motioned to approve the 02/12/20 minutes  
Katelyn Morales seconded the motion  
All in Favor

### Speaker: David Richards, City of Idaho Falls Water Superintendent

See attached Water Quantity presentation  
(cont. from 02/12/20 meeting)

No treatment required for our aquifer water. City of IF chlorinates for water storage.

Aquifer extends from Rexburg to Thousand Springs.  
Total (Ground and surface) Water Use: 2015: 1.6% is cities; 86.3 Agricultural Irrigation; Other: 12.2 (Mgal per day) USGS Circular 1441

Groundwater Use: 2015: 4.6% cities; 91.6% Irrigation; 3.8% other (Mgal per day)

### Surface Water Coalition:

2017: Agreement to recharge aquifer in north to mitigate problems in south Idaho  
2018: Cities to provide 7650 acre-feet per year mitigation and 9640 if not mitigated.  
Provides a safe harbor from spring rights water calls  
Agreement term limits: Dec 31, 2053  
Combined City pumping reaches 120,000 acre-feet per year,

Sand Creek Recharge Site: Recharges from sand creek to the recharge site.  
2500 to 3000 acre feet into ground. 3200 acre feet = 1 billion gallons  
City of IF tests the water that goes into the recharge site to ensure contaminated water isn't going into aquifer.

Water Saving Tools in Toolbox:

Convert city parks from groundwater to surface water irrigation  
Metering  
Local-scape; xeriscape  
Wastewater effluent recharge  
Direct wastewater reuse

Adams: What is the biggest threat to our water supply?

Richards: The agricultural contaminants (bacteria, nitrates, semi VOCs (man-made pesticides), nitrates.

Austad: What are we currently doing to educate about local-scaping?

Richards: Mayor has created committee to find ways to use less water (street scapes). Talking to nurseries to promote local plants.

Committee contact: city horticulturalist Lee Washburn

Cherry: Is their goal to do demonstrations?

Richards: Yes, they are planning a demonstration. Master gardeners also have a demo near Sandy Downs that is demonstrating local plants. There is also a native plant society.

Adams: Is there anyone integrating sod/planting requirements so the plants are not directly adjacent to concrete, but instead has a buffer area of mulch?

Richards: Yes.

**Speaker: Carlin Feisthamel, Idaho DEQ water quality engineer**

We have very clean water in eastern Idaho with no industry that creates a lot of contamination. We rarely see any pesticide contamination and is usually not groundwater borne.

Discussed water quality in Eastern Idaho. Some areas have action plans for nitrate and the results are trending positively.

What is IDEQ doing to protect the aquifer:

Limit use of flood irrigation; using ground water and pivots to just use what you need directly at the plant

But that increases aquifer drawdown and so aquifer recharge is needed.

At discharge sites, you have a large amount of water going through a small amount of dirt, so the potential for contamination increases.

IDEQ has a monitoring program for discharge sites; monitor raw water going in (bacterial main concern because it is the most rapid health consequence). Monitor for VOCs (oil-based) herbicides, pesticides, e-coli, heavy metals. Also do a down-gradient well and up-gradient well. Non-detectable levels of non-coliform source contamination. Looking at making the Sand Creek site larger.

Cherry: Can you tell if e-coli is animal or human caused?

Feisthamel: Hard to tell. We do occasional events of e-coli in the island park area (very rare) because of fractured basalt and how fast the water enters the aquifer.

Adams: What are risks associated with flood events overcoming the agricultural lagoons and causing contamination?

Feisthamel/Richards: Some smaller cities still have lagoons. City wellheads must be located above flood levels.

Cherry: How will climate change affect our water quality?

Feisthamel/Richards: We have seen an increase in water use due to hotter weather. Starting to see a little more bacteria growth due to warmer ground conditions and thus warmer pipes.

Austad: Has there been any attempt to estimate the life of the aquifer?

Feisthamel: Not that he is aware of.

Millgate: Does the city directly dump waste into the snake river?

Feisthamel/Richards: Not untreated water. There may be areas where stormwater is discharged. They typically go through a stormwater pond first, which are designed to treat naturally. Wastewater treatment put 9-10 M gallons per day into the river. The city has the right to that water until it returns to the river. The city does not receive any credit for returning it to the river - cannot remove again. Pharmaceuticals are a big issue.

Austad: What are the biggest things that each household could do?

Richards: Flushable wipes clog pumps – they are not flushable; medications; non-organics are also issues.

Haney: How often should private wells be tested and how do you go about it?

Feisthamel: Go to Teton Labs – test for total coliform bacteria (\$20). At least 2 times/year. Nitrates once every few years (1-3 mg/liter is average in our area).

**Public Comment:**

No public attendees.

**Summary of Steering Committee Meeting:**

lack of guidance out of the gate is common concern  
committed to providing deliverables to steering chair in September

To consider:

If steering committee puts together a community survey, what would EnS want to ask? (1 or 2 questions)

**Target Practice:**

Decide not to debate more targets and hold at 3 targets for now

**Finalize Targets:**

Waste  
Water  
Energy

**Mini Committee assignments:**

Waste: Catherine Haney,  
Water: Stephanie Austad, Jennifer Evaly, Kris Millgate, Heather Silverman  
Energy: Colby Adams, Bob Cherry, Katelyn Morales  
Unassigned: Katrin Lepler, Gerry Sehlke, Veronika Vazhnik,

Adams: add resilience to each target

Kris: education is also part of every target

Cherry: add section at end of report for other targets to investigate.

**Call for Agenda Items:**

Focus on energy in March  
Invite Idaho Falls Power  
Cancelling March 25 meeting due to spring break  
Notify city of cigarette smell and cat in meeting room

**Set Next Meeting Date/Time:**

March 11, 2020 10:30 am – Activity Center

**Adjourn:**

Meeting adjourned at 12:05 p.m. by committee chair Kris Millgate.

**END NOTES**

Recorded by:  
Stephanie Austad  
Committee vice-chair  
and Kris Millgate  
Committee chair

# CITY OF IDAHO FALLS

## GROUNDWATER RECHARGE

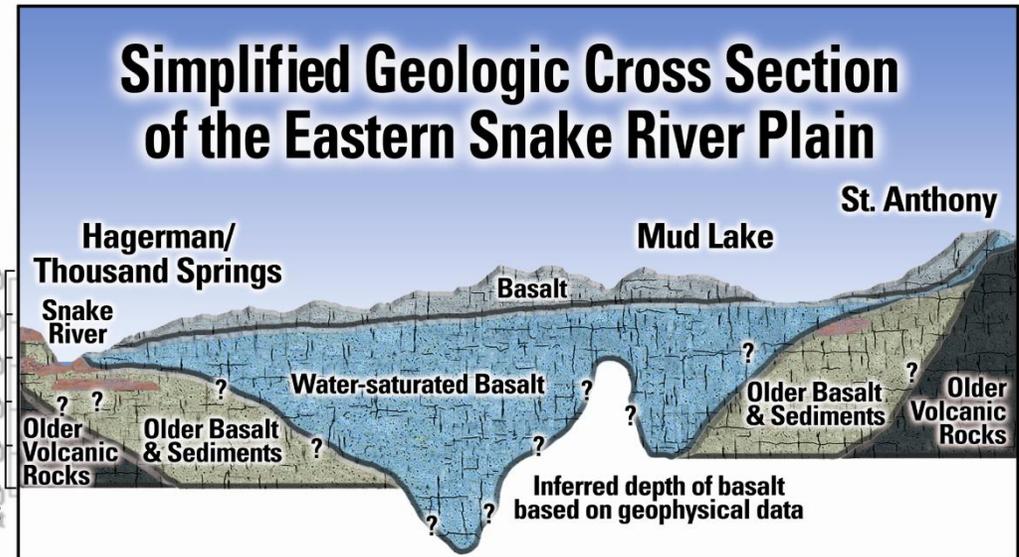
CUSP PRESENTATION – FEBRUARY 2020

By: David Richards, PE  
Water Superintendent



# CITY OF IDAHO FALLS – GROUNDWATER RECHARGE

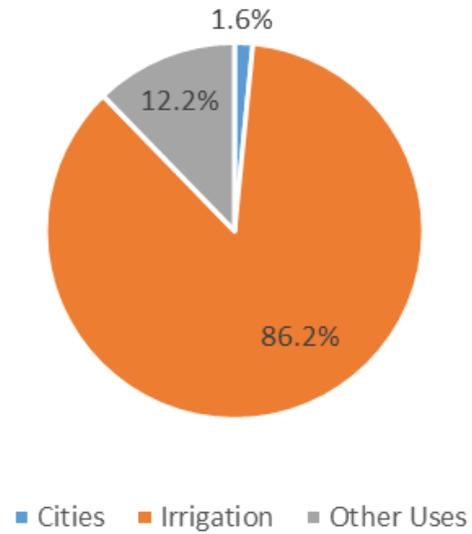
## The Eastern Snake Plain Aquifer (ESPA)



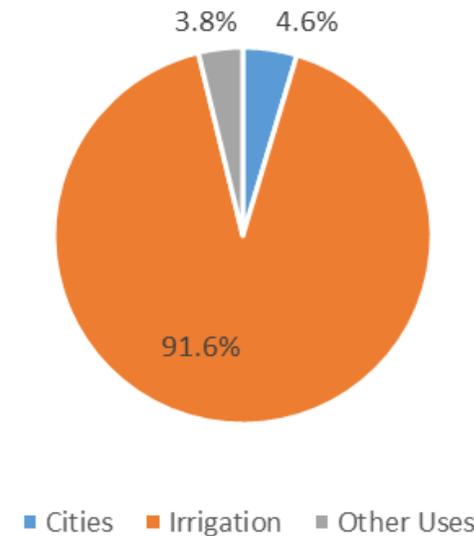
# CITY OF IDAHO FALLS – GROUNDWATER RECHARGE

## 2015 Idaho Water Use Statistics

2015 Idaho Total Water Use (Mgal per day)  
USGS Circular 1441



2015 Idaho Groundwater Use (Mgal per day)  
USGS Circular 1441



# CITY OF IDAHO FALLS – GROUNDWATER RECHARGE

## Surface Water Coalition/Coalition of Cities Settlement Agreement - 2018

### SETTLEMENT AGREEMENT (“AGREEMENT”) BETWEEN THE SURFACE WATER COALITION<sup>1</sup>, PARTICIPATING MEMBERS OF IDAHO GROUND WATER APPROPRIATORS, INC.<sup>2</sup>, AND SIGNATORY CITIES<sup>3</sup>

WHEREAS, Idaho water rights are constitutional property rights defined by the prior appropriation doctrine; and

WHEREAS, the Idaho Department of Water Resources (“IDWR”) administers ground water and surface water rights under the prior appropriation doctrine, the Conjunctive Management Rules (“CM Rules”; IDAPA 37.03.11 et seq.), statutes, and decisional law; and

WHEREAS, the SWC owns surface water rights for irrigation purposes; and

WHEREAS, IGWA’s members own ground water rights for irrigation and other purposes; and

WHEREAS, IGWA owns spring water rights for fish propagation; and

WHEREAS, the Cities own municipal ground water rights, some of which are junior to water rights owned by the SWC or IGWA; and

WHEREAS, the SWC filed a delivery call in 2005 with IDWR under the CM Rules; and

WHEREAS, ground water rights of the Cities and IGWA members have been subject to IDWR administration, including curtailment, as a result of the SWC delivery call; and

WHEREAS, in the Rangen, Inc. delivery call as part of assessing an individual city’s mitigation obligation, IDWR determined the amount of a city’s pumping that was junior to the

<sup>1</sup> The Surface Water Coalition (“SWC”) consists of A&B Irrigation District, American Falls Reservoir District No. 2, Burley Irrigation District, Milner Irrigation District, Minidoka Irrigation District, North Side Canal Company, and Twin Falls Canal Company.

<sup>2</sup> The participating members of Idaho Ground Water Appropriators, Inc. are Aberdeen-American Ground Water District, Bingham Ground Water District, Bonneville-Jefferson Ground Water District, Carey Valley Ground Water District, Henry’s Fork Ground Water District, Jefferson-Clark Ground Water District, Madison Ground Water District, Magic Valley Ground Water District, North Snake Ground Water District, and Southwest Irrigation District. The acronym “IGWA” is used in this Agreement to refer to all of these Districts collectively.

<sup>3</sup> The cities of Bliss, Burley, Carey, Deelo, Dietrich, Gooding, Hazelton, Heyburn, Idaho Falls, Jerome, Paul, Pocatello, Richfield, Rupert, Shoshone, and Wendell are referred to in this Agreement individually as a “Signatory City” and collectively as the “Signatory Cities.” The Signatory Cities and additional cities who participate in this Agreement in the future, pursuant to section I.B, are referred to herein individually as a “City” and collectively as the “Cities.” The SWC, IGWA, and Signatory Cities are referred to herein individually as “Party” and collectively as the “Parties.”

## Major Agreement Provisions

- Cities to provide 7,650 acre-feet per year mitigation
  - Delivery to IWRB for managed aquifer recharge
  - Private managed aquifer recharge
  - Groundwater to surface water conversions
  - Dry up of irrigated lands
- Cities to provide 9,640 acre-feet per year mitigation
  - If goals of IGWA-SWC Settlement Agreement not met
- Mitigation volume compliance met on 5-yr rolling average
- Annual reporting
- Will be incorporated into ESPA Groundwater Management Plan
- Safe harbor from spring rights water calls
- Agreement term limits
  - City pumping reaches 120,000 acre-feet per year (currently at 62,500 acre-feet per year), or
  - December 31, 2053



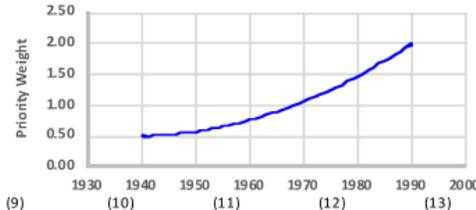
# CITY OF IDAHO FALLS – GROUNDWATER RECHARGE

## Internal City Mitigation Allocation Agreement

### Proposed Allocation of Mitigation Obligation Among Participating Cities Proposed Cities, IWGA, and SWC Settlement Framework

Annual Mitigation Volume (af)	7,650
Weighted by Pumping (%)	50%
Weighted by Priority (%)	50%

Priority Weighting	
Year	Weight
1940	0.5
1990	2.0



(1) City	(2) 2011 - 2015 Average Pumping (af/y)	(3) Proportion of Total Pumping (%)	(4) Mitigation Volume by Pumping (af/y)	(5) Avg Annual Pumping Rate (cfs)	(6) Peak Month Pumping Rate (cfs)	(7) Weighted Priority Date of Peak Month Pumping (cfs)	(8) Priority Weight	(9) Priority Weighted Pumping (af/y)	(10) Proportion of Total Priority Weighted Pumping (%)	(11) Mitigation Volume by Priority (af/y)	(12) Total Mitigation Volume (af/y)	(13) Proportion of Total Mitigation Volume (%)
Bliss	52.9	0.1%	3.2	0.1	0.1	8/1/1960	0.8	40.4	0.1%	3.7	6.9	0.1%
Burley	6,416.2	10.3%	392.8	8.9	17.0	10/1/1935	0.5	3,208.1	7.6%	290.3	683.1	8.9%
Carey	120.1	0.2%	7.4	0.2	0.4	2/21/1979	1.4	171.7	0.4%	15.5	22.9	0.3%
Declo	122.9	0.2%	7.5	0.2	0.3	10/17/1954	0.6	78.4	0.2%	7.1	14.6	0.2%
Dietrich	60.5	0.1%	3.7	0.1	0.2	12/31/1910	0.5	30.2	0.1%	2.7	6.4	0.1%
Gooding	1,074.1	1.7%	65.8	1.5	2.9	9/17/1930	0.5	537.1	1.3%	48.6	114.4	1.5%
Heyburn	501.6	0.8%	30.7	0.7	1.5	8/27/1989	1.9	974.3	2.3%	88.2	118.9	1.6%
Hazelton	98.7	0.2%	6.0	0.1	0.2	6/21/1917	0.5	49.3	0.1%	4.5	10.5	0.1%
Idaho Falls	27,407.3	43.9%	1,677.9	37.8	82.5	8/27/1961	0.8	21,623.3	51.2%	1,956.8	3,634.7	47.5%
Jerome	3,270.4	5.2%	200.2	4.5	7.7	2/5/1945	0.5	1,713.7	4.1%	155.1	355.3	4.6%
Paul	397.7	0.6%	24.3	0.5	1.1	2/6/1935	0.5	198.8	0.5%	18.0	42.3	0.6%
Pocatello	14,960.3	23.9%	915.9	20.6	42.5	3/9/1939	0.5	7,480.1	17.7%	676.9	1,592.8	20.8%
Pocatello (irr)	3,173.9	5.1%	194.3	n/a	n/a	5/31/1967	1.0	3,054.1	7.2%	276.4	470.7	6.2%
Richfield	805.2	1.3%	49.3	1.1	1.2	12/14/1975	1.3	1,011.4	2.4%	91.5	140.8	1.8%
Rupert	2,516.8	4.0%	154.1	3.5	8.1	1/8/1927	0.5	1,258.4	3.0%	113.9	268.0	3.6%
Shoshone	783.2	1.3%	47.9	1.1	2.1	10/1/1951	0.6	461.9	1.1%	41.8	89.7	1.2%
Wendell	716.9	1.1%	43.9	1.0	2.1	5/15/1945	0.5	375.7	0.9%	34.0	77.9	1.0%
<b>Total</b>	<b>62,478.7</b>	<b>100.0%</b>	<b>3,825.0</b>					<b>42,266.9</b>	<b>100.0%</b>	<b>3,825.0</b>	<b>7,650.0</b>	<b>100.0%</b>
Total Pocatello	18,134.2	29.0%	1,110.2					10,534.2	24.9%	953.3	2,063.5	27.0%

**Notes:**

- (1) Participating cities in ESPA Cities Settlement Agreement.
- (2) Five-year average annual pumping data provided by cities.
- (3) 2011 - 2015 Average Pumping (2) for City / Total 2011 - 2015 Average Pumping.
- (4) Proportion of Total Pumping (3) x Annual Mitigation Volume (af) x 50%.
- (5) 2011 - 2015 Average Pumping (2) / 365.25 days / 1.9835 af/cfs.
- (6) Avg Annual Pumping Rate (5) x Peaking Factor.
- (7) Weighted Priority Date of Peak Month Pumping.
- (8) Priority weight computed using Non-Linear Weighting method.
- (9) 2011 - 2015 Average Pumping (2) x Priority Weight (8).
- (10) Priority Weighted Pumping (9) for City / Total Priority Weighted Pumping.
- (11) Proportion of Total Priority Weighted Pumping (10) x Annual Mitigation Volume (af) x 50%.
- (12) Mitigation Volume by Pumping (4) + Mitigation Volume by Priority (11).
- (13) Total Mitigation Volume (12) for City / Total Mitigation Volume.

3,190.9 Acre-feet with addition of Ammon, Atomic City, Blackfoot, Firth & Rexburg.

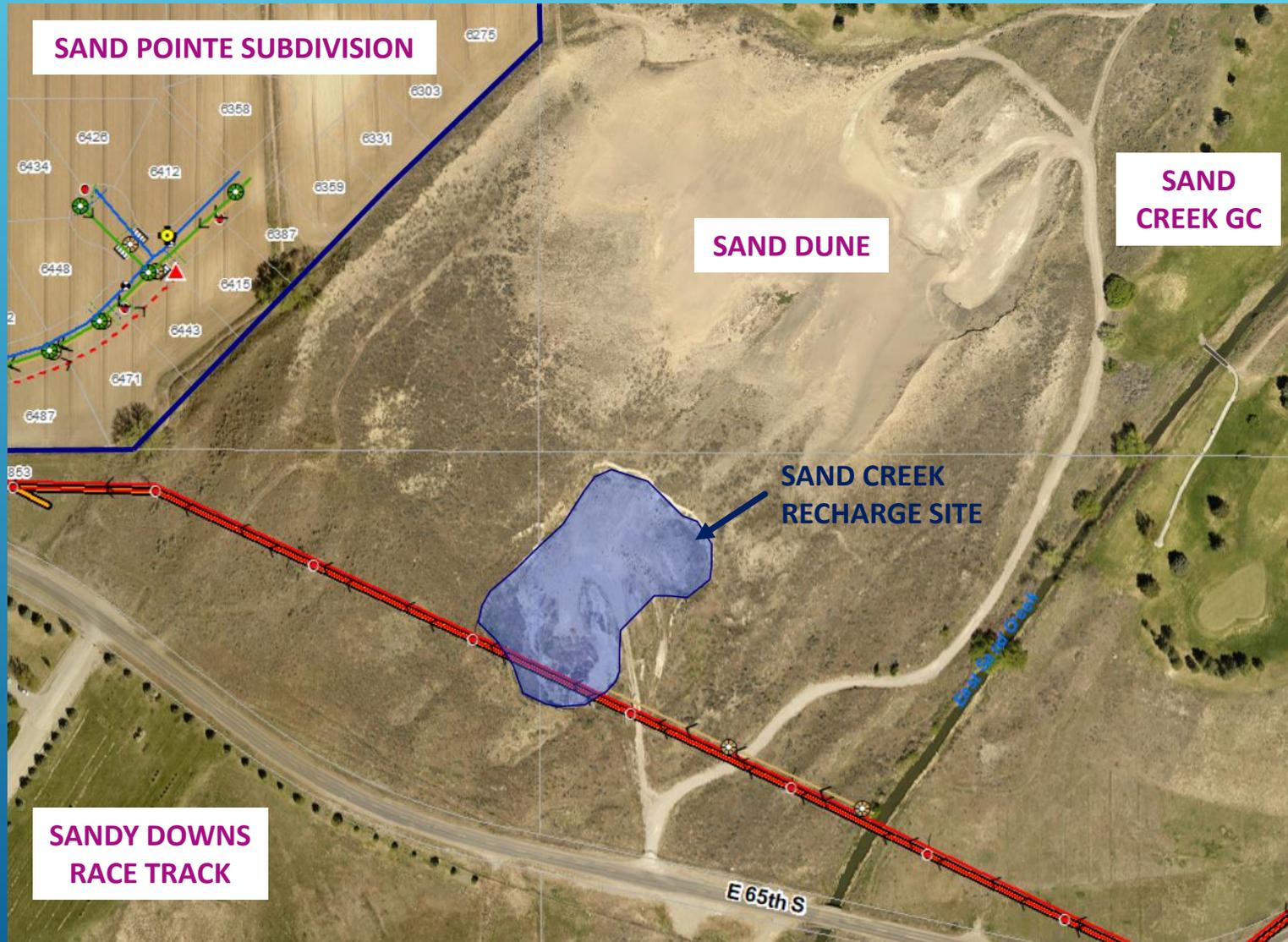
## Major Provisions

- Mitigation amount factors
  - Volume pumped by City
  - Priority date of existing City water rights
- Idaho Falls mitigation amount
  - 3,634.7 acre-feet per year initially
  - 3,190.9 acre-feet per year with addition of more cities to agreement



# CITY OF IDAHO FALLS – GROUNDWATER RECHARGE

## Sand Creek Recharge Site Vicinity



# CITY OF IDAHO FALLS – GROUNDWATER RECHARGE

Source Water Sustainability – Managed Aquifer Recharge



Eagle Scout Project



Diversion Gate



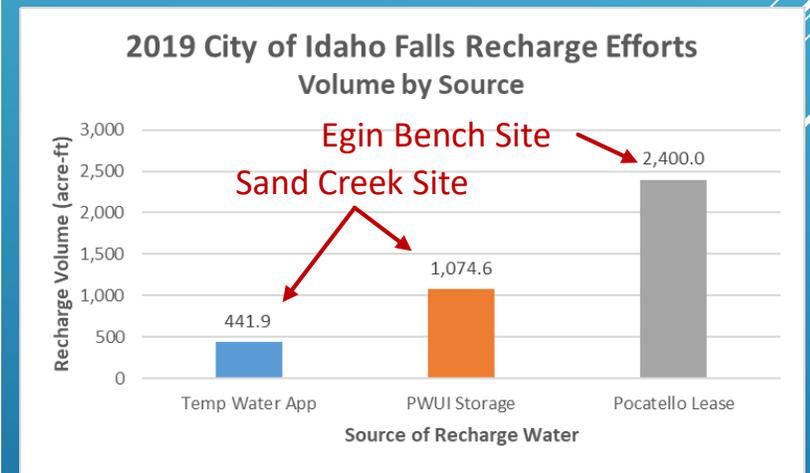
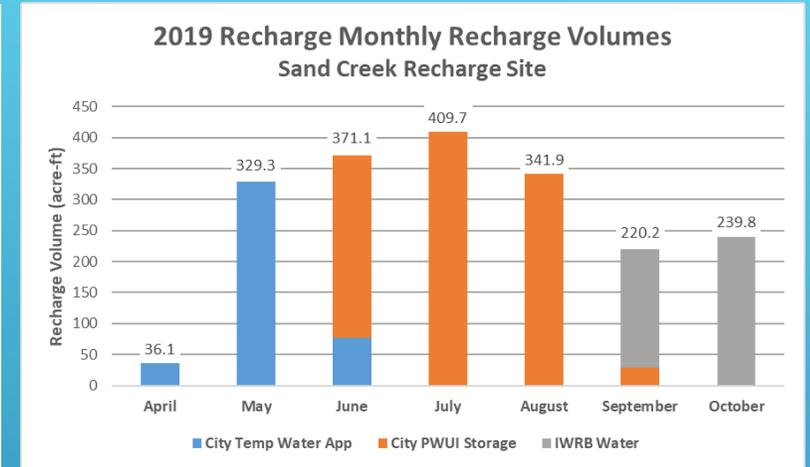
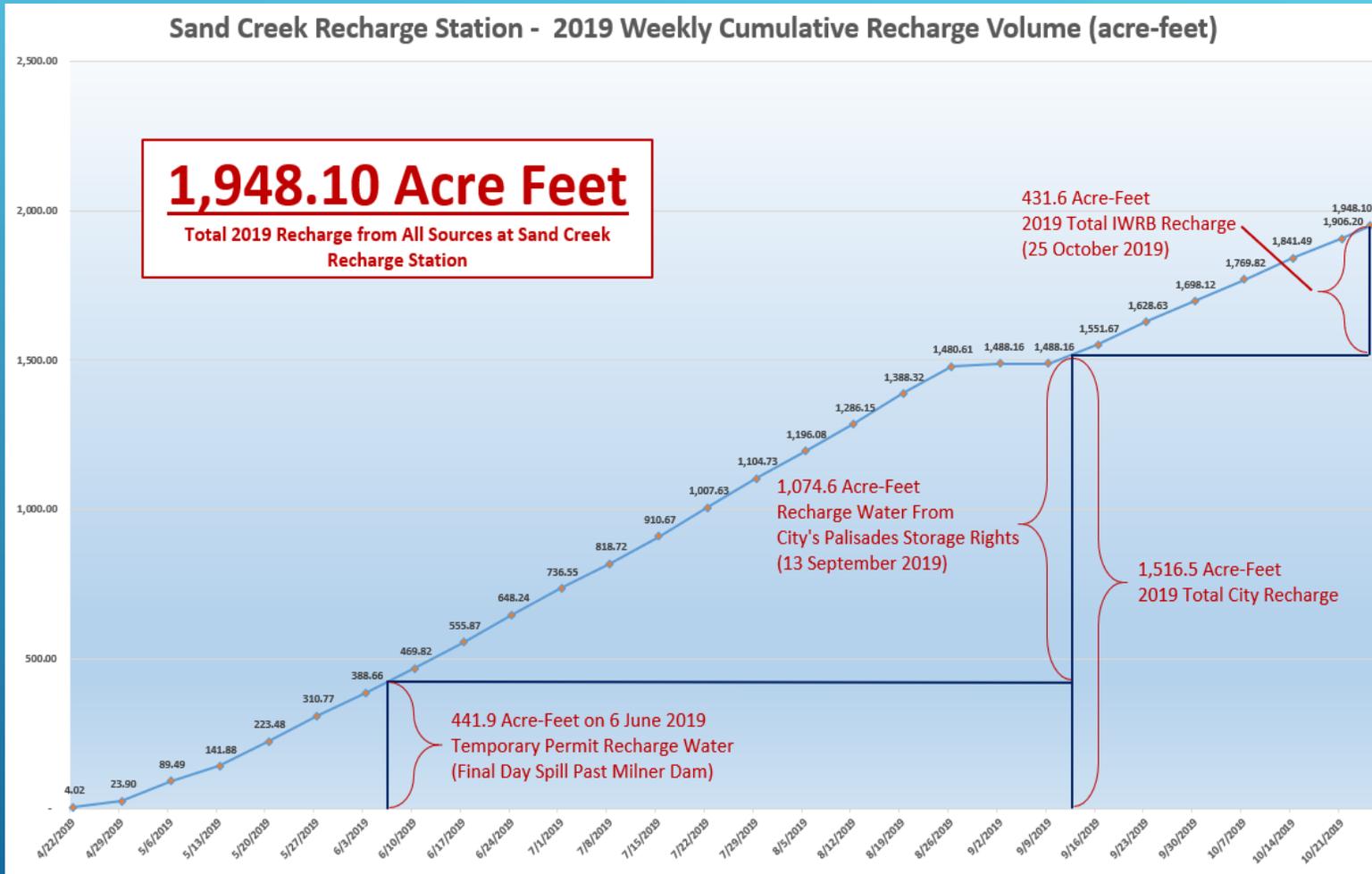
First Fill



Sand Creek Recharge Site – First Private MAR Site in Idaho

# CITY OF IDAHO FALLS – GROUNDWATER RECHARGE

## City of Idaho Falls 2019 Mitigation Efforts



2019 Groundwater Quality Monitoring: 156 Bacteria Tests; 1,917 Field Parameter Tests; 686 Laboratory Tests

# CITY OF IDAHO FALLS – GROUNDWATER RECHARGE

## City of Idaho Falls Next Steps for Mitigation

### Tools in Our Toolbox:

- Conversion of large City parks from groundwater to surface water irrigation.
  - Pincrest Golf Course
  - Tautphaus Park
  - Freeman Park
  - Community Park
- Conservation measures
  - Metering
  - Local-scape; Xeriscape
- Additional local recharge sites
- Wastewater effluent recharge
- Direct wastewater reuse

CITY OF IDAHO FALLS – GROUNDWATER RECHARGE

CITY OF IDAHO FALLS  
GROUNDWATER RECHARGE  
CUSP PRESENTATION – FEBRUARY 2020

ANY QUESTIONS???



# **CUSP Education Committee Meeting Minutes**

Tuesday, March 10, 2020  
Idaho Falls Public Library Rm. 2

The meeting was called to order at 6:44pm

**Attendees-** Shannon Taylor, Catherine Black, Aaron Johnson, Michaelena Hix, Marie Giraud, Pat Tucker, and Tomm Larsen

## **Presentation on Early Childhood Learning Research by Pat Tucker-**

- \*Investing in prevention not remediation is so key with teaching young children the skills and education they need to be successful adults
- \*Early education is shown to have long term benefits physically, socially, and mentally
- \*Children at higher risk have the greatest need for publicly funded Pre-K education
- \*Very recently a 3.3 million dollar grant was given in Idaho for early education and it is being governed by the Idaho Association for the Education of Young Children. We could potentially reach out to them to work on getting a Pre-K program piloted in our community.

- Discussion-**
- \*We should learn what the Head start program does in Idaho Falls.
  - \*We should look into the possibility of bolstering the Pre-K program at ISU.
  - \*We can look into what San Antonio did in 2012 to fund Pre-K programs.
  - \*A standing education committee is recommended.
  - \*It would be beneficial to understand what a city's governing body can actually do within the education sphere before finalizing our topics of interest for exploration.

**Action items-** We created sub committees to research topics of interest:

Early Education- Pat Tucker, Marie Giraud, and Shannon Taylor

Higher Education/Life Long Learning- Catherine Black and Michaelena Hix

Employer/Market Needs- Tomm Larsen and Aaron Johnson

The next meeting scheduled for March 24th was canceled and we will plan to meet April 7<sup>th</sup>.

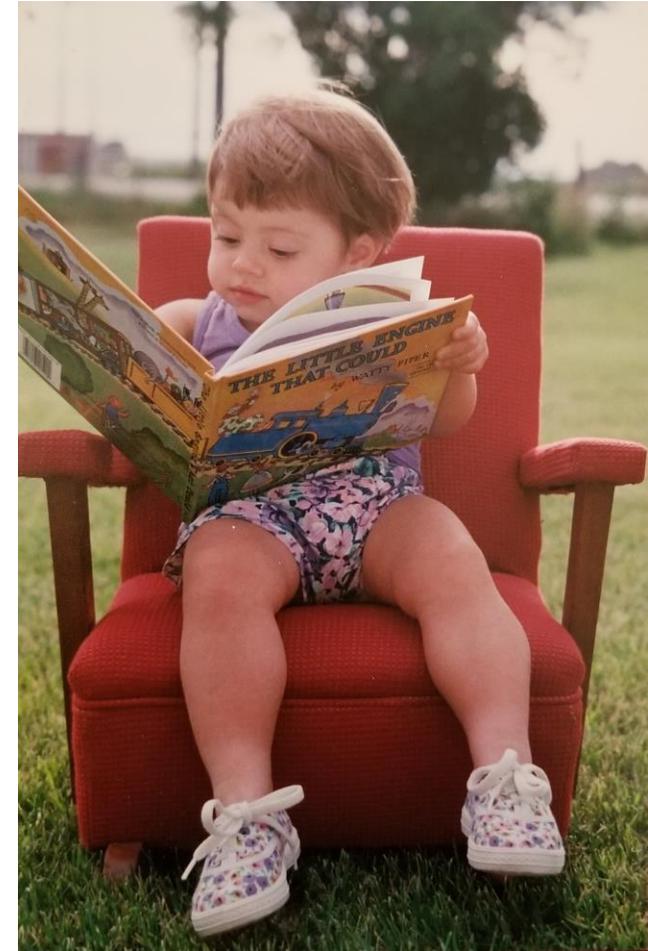
Meeting adjourned at 8:37

# Early Childhood Education

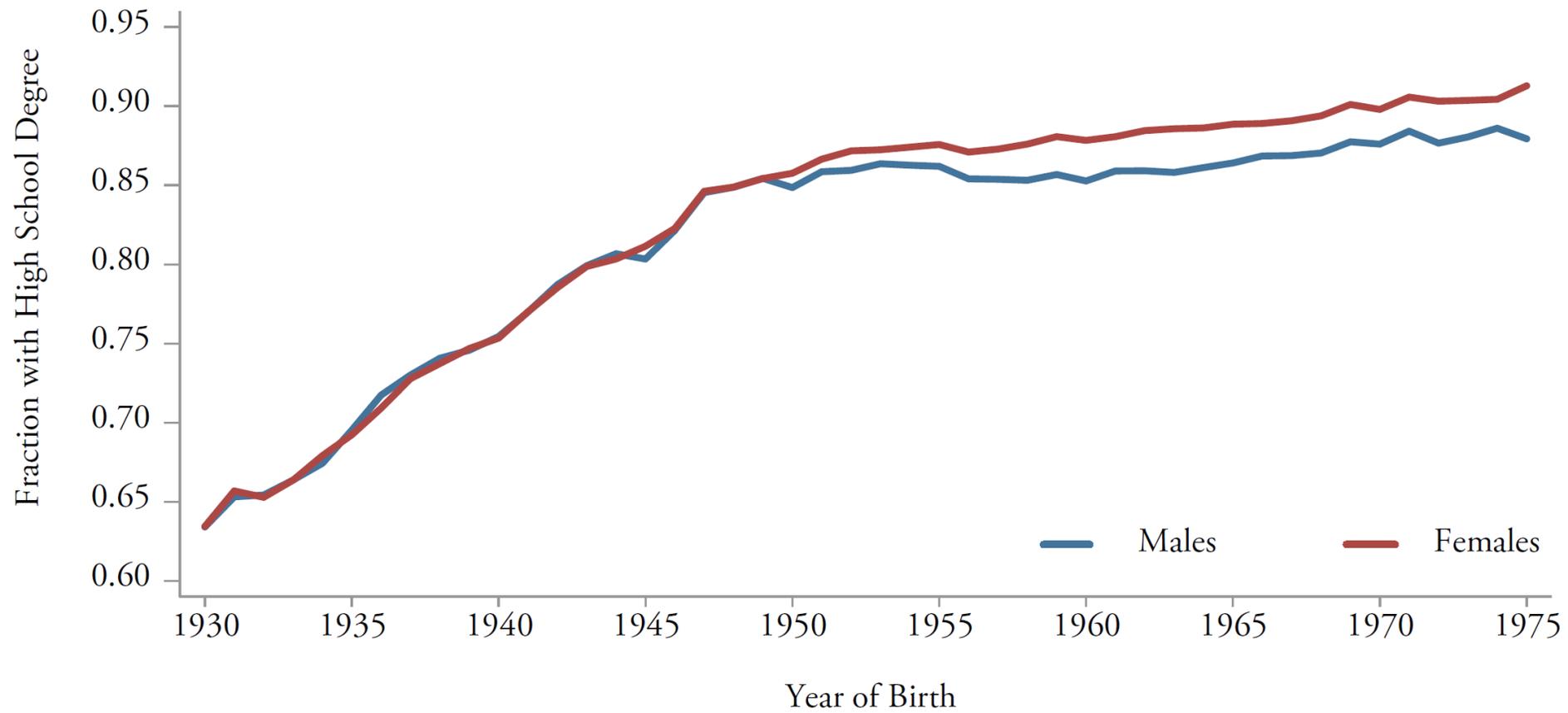
**Connecting Us Sustaining Progress (CUSP) Initiative**

Education Committee, March 10, 2020

Pat Tucker

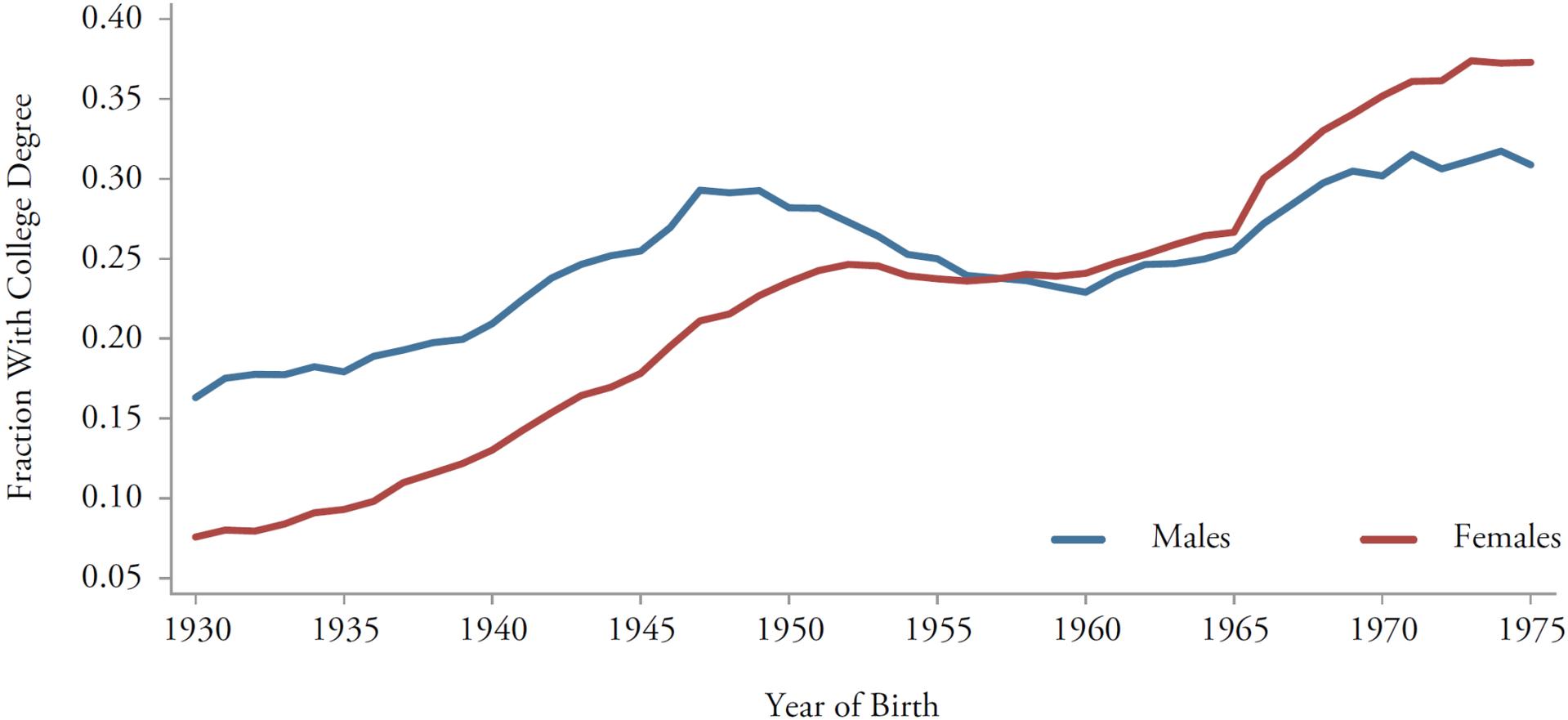


**Figure 1a: High School Graduation Rates at Age 35:  
U.S. Males and Females Born 1930-1975<sup>2</sup>**



Source: Census IPUMS 1 percent samples for years 1960 and 1970, Census IPUMS 5 percent samples for years 1980, 1990, and 2000 and American Community Survey (ACS) 2010.

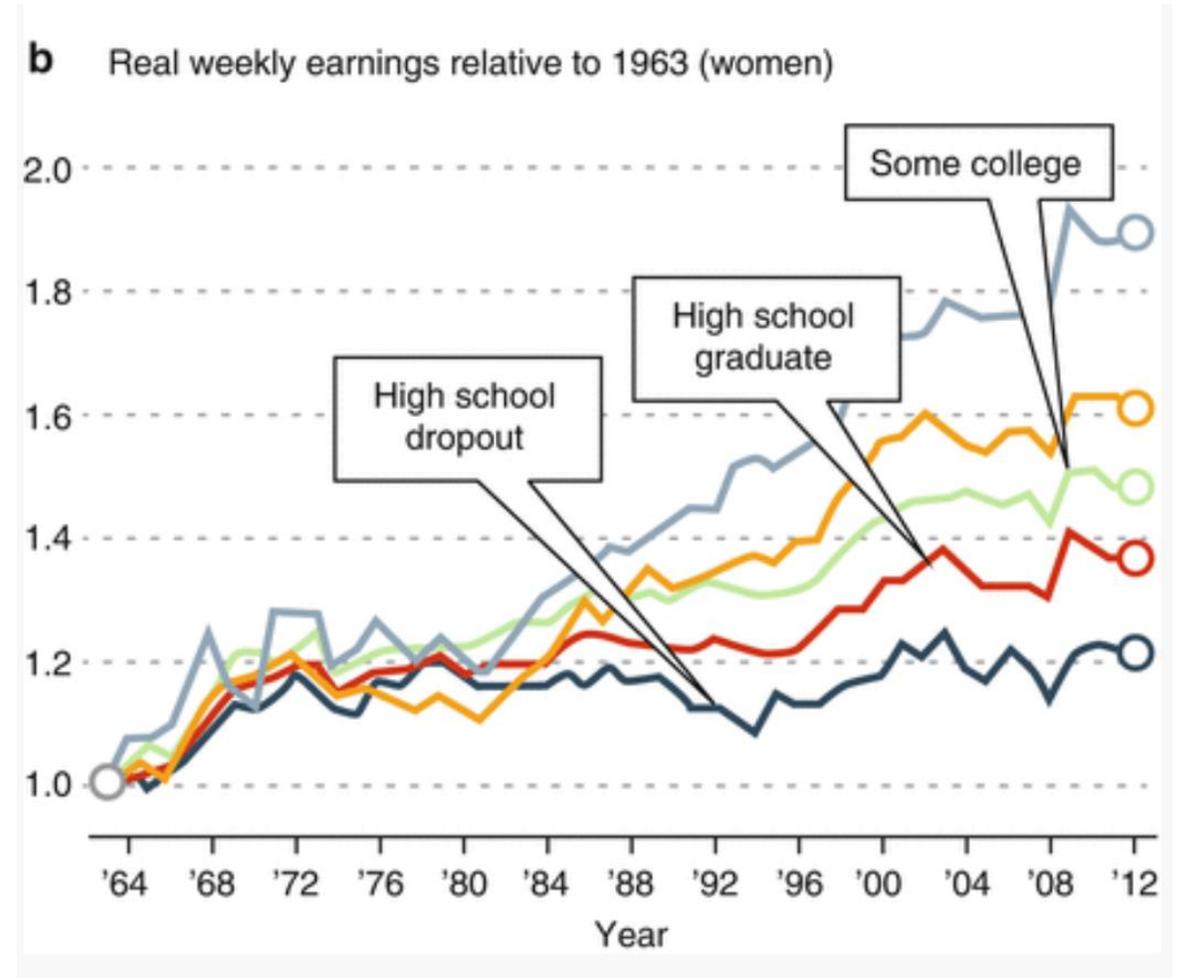
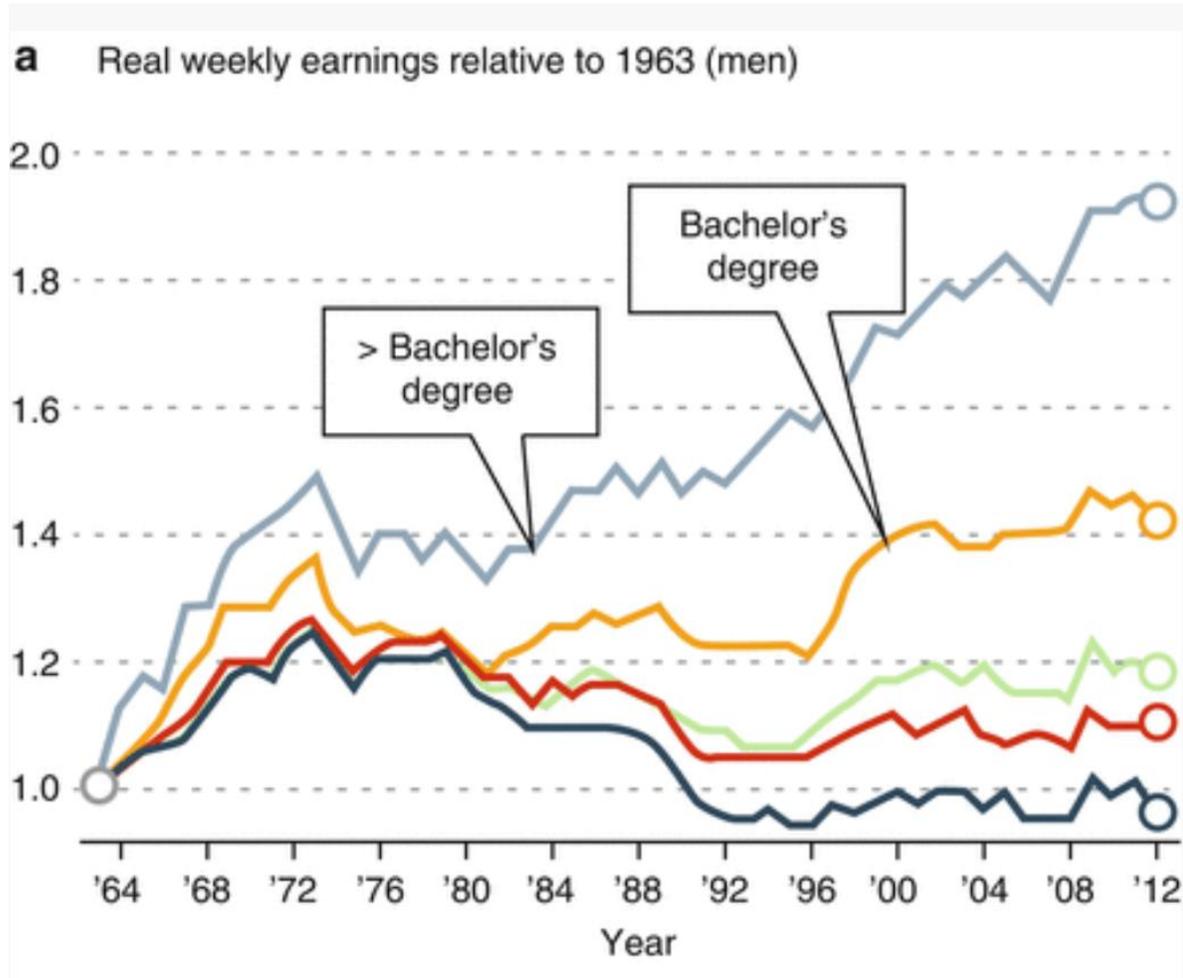
Figure 1c: Percent of Adults with Four-Year College Degree by Age 35<sup>7</sup>



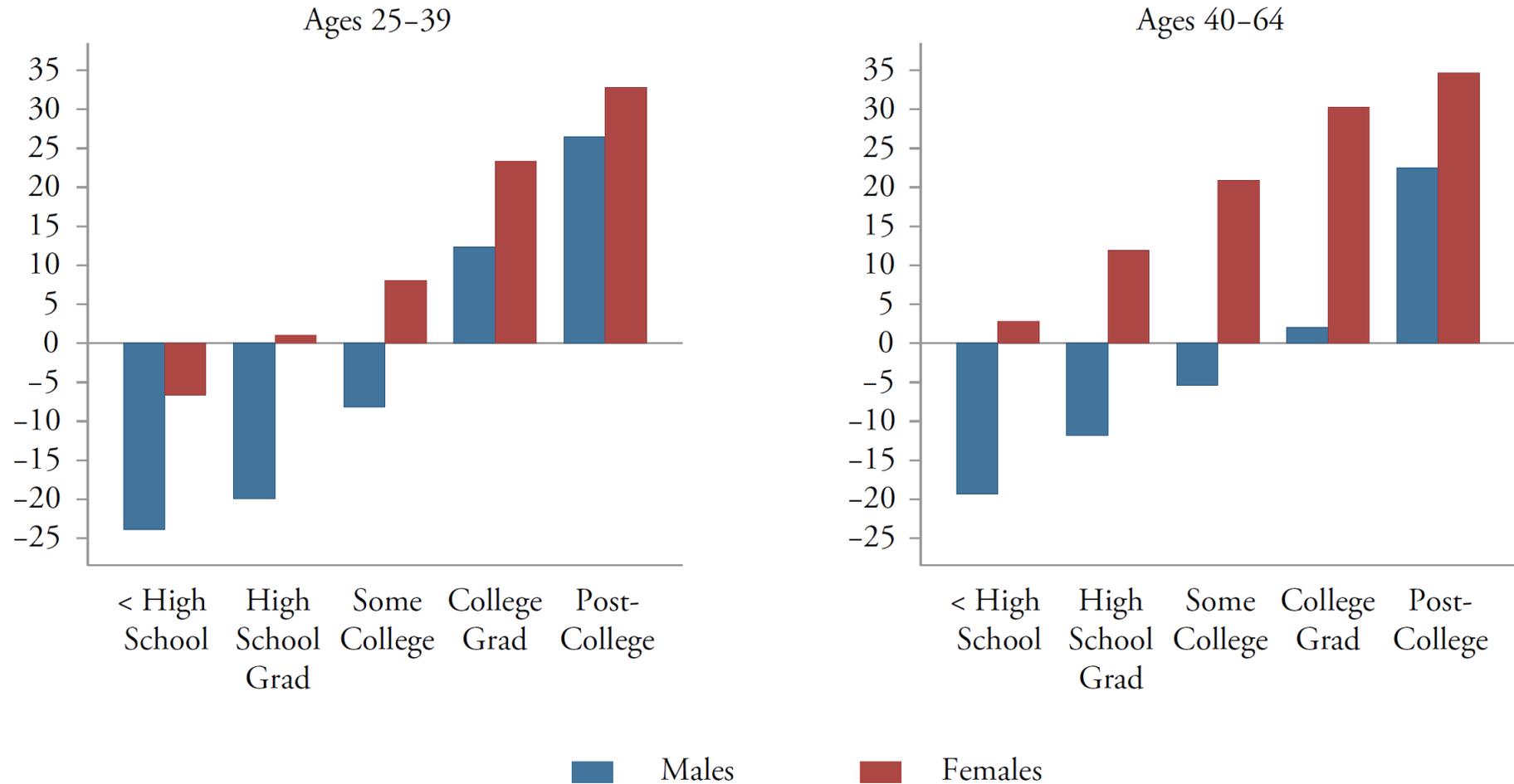
Source: Census IPUMS 1 percent samples for years 1960 and 1970, Census IPUMS 5 percent samples for years 1980, 1990, and 2000 and American Community Survey (ACS) 2010.

We can help uplift all of us by increasing the skills of the most disadvantaged by early intervention.

The more technological, the more important skills become. Often, the more our disadvantaged lag, and are likely to lag in the future.



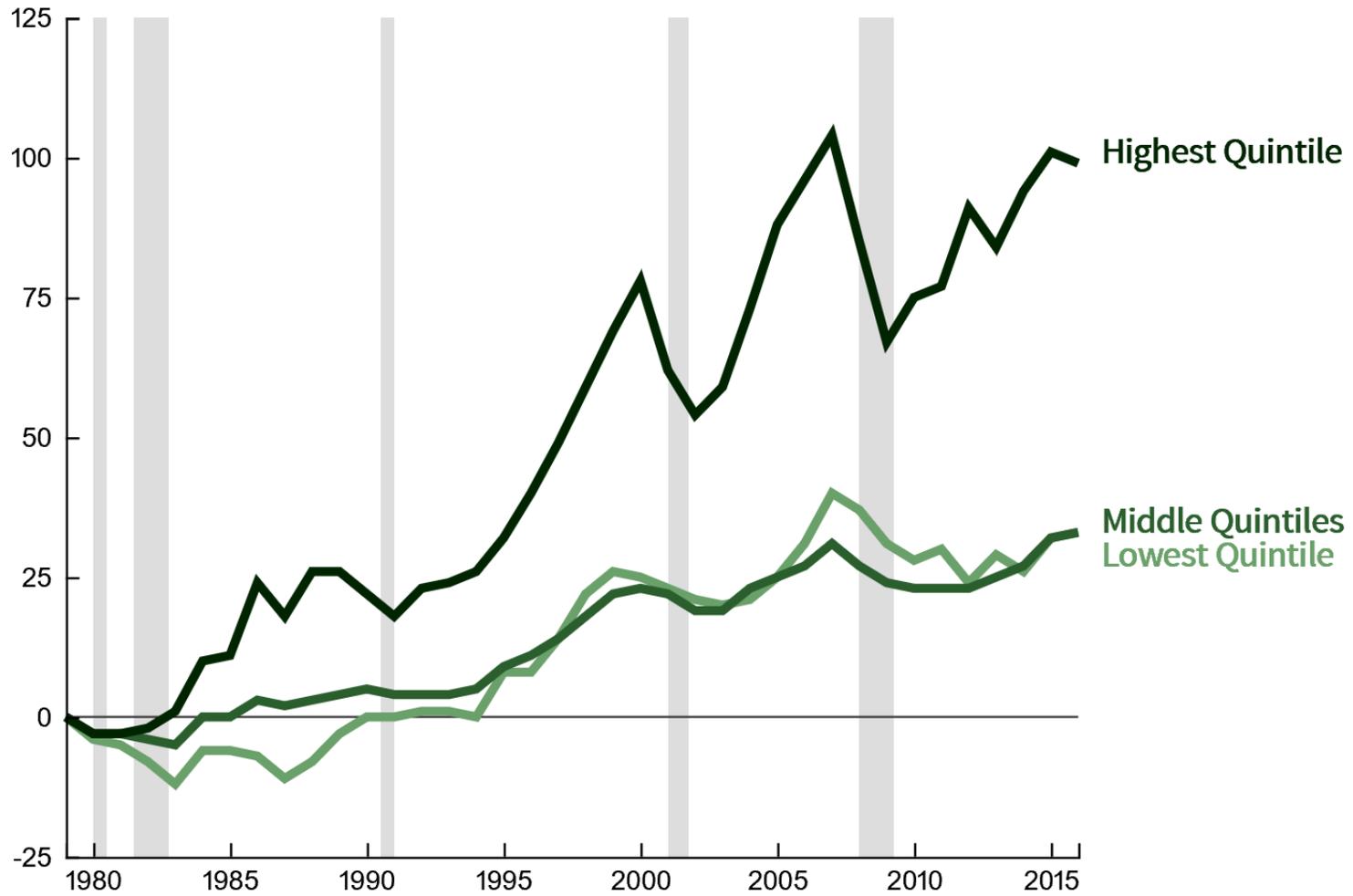
**Figure 2: Percent Changes in Real Hourly Wage Levels 1979-2010  
(By Education and Sex)<sup>9</sup>**



Source: May/Outgoing Rotation Groups Current Population Survey data for years 1979-2010.

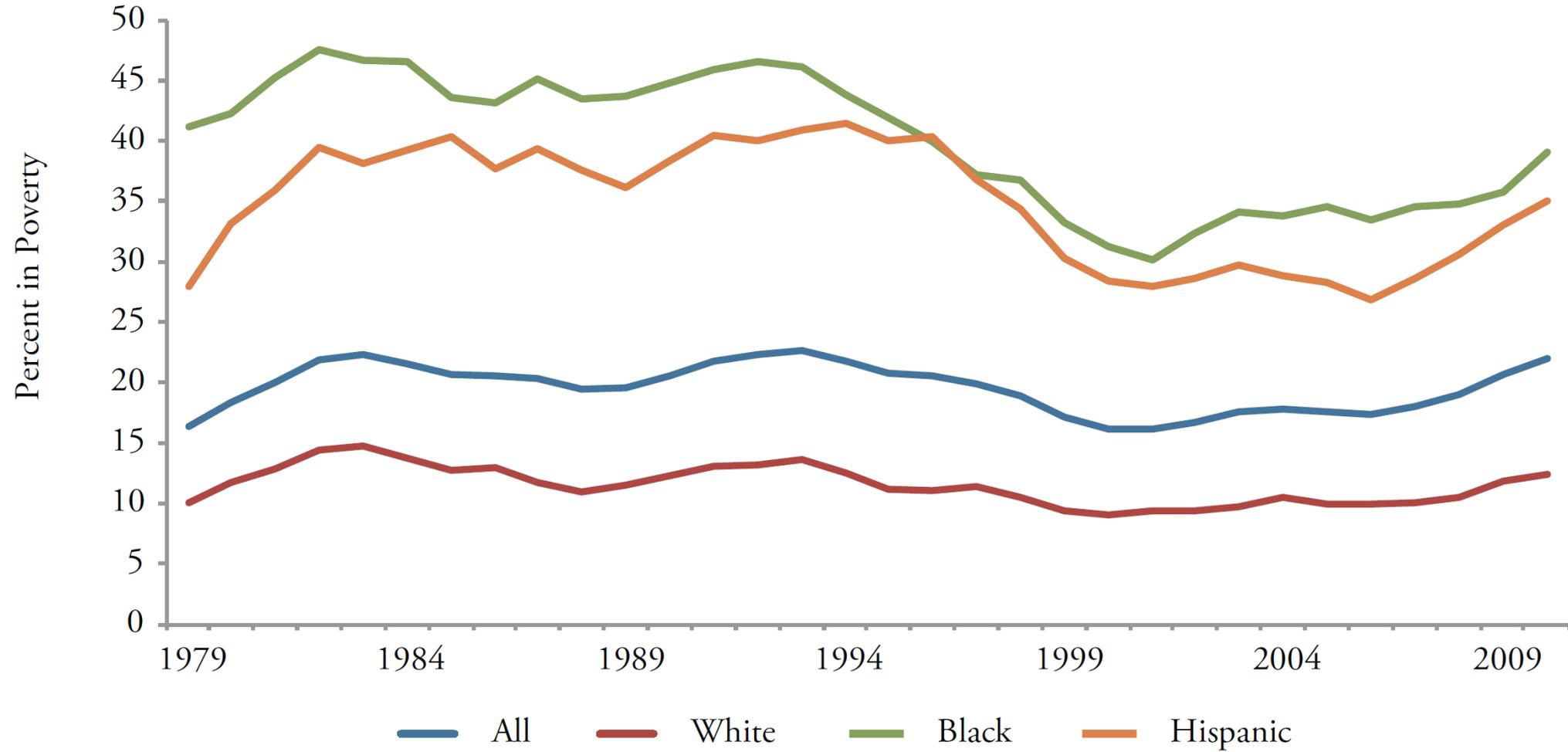
# Cumulative Growth in Average Income, by Income Group, 1979 to 2016

Percent



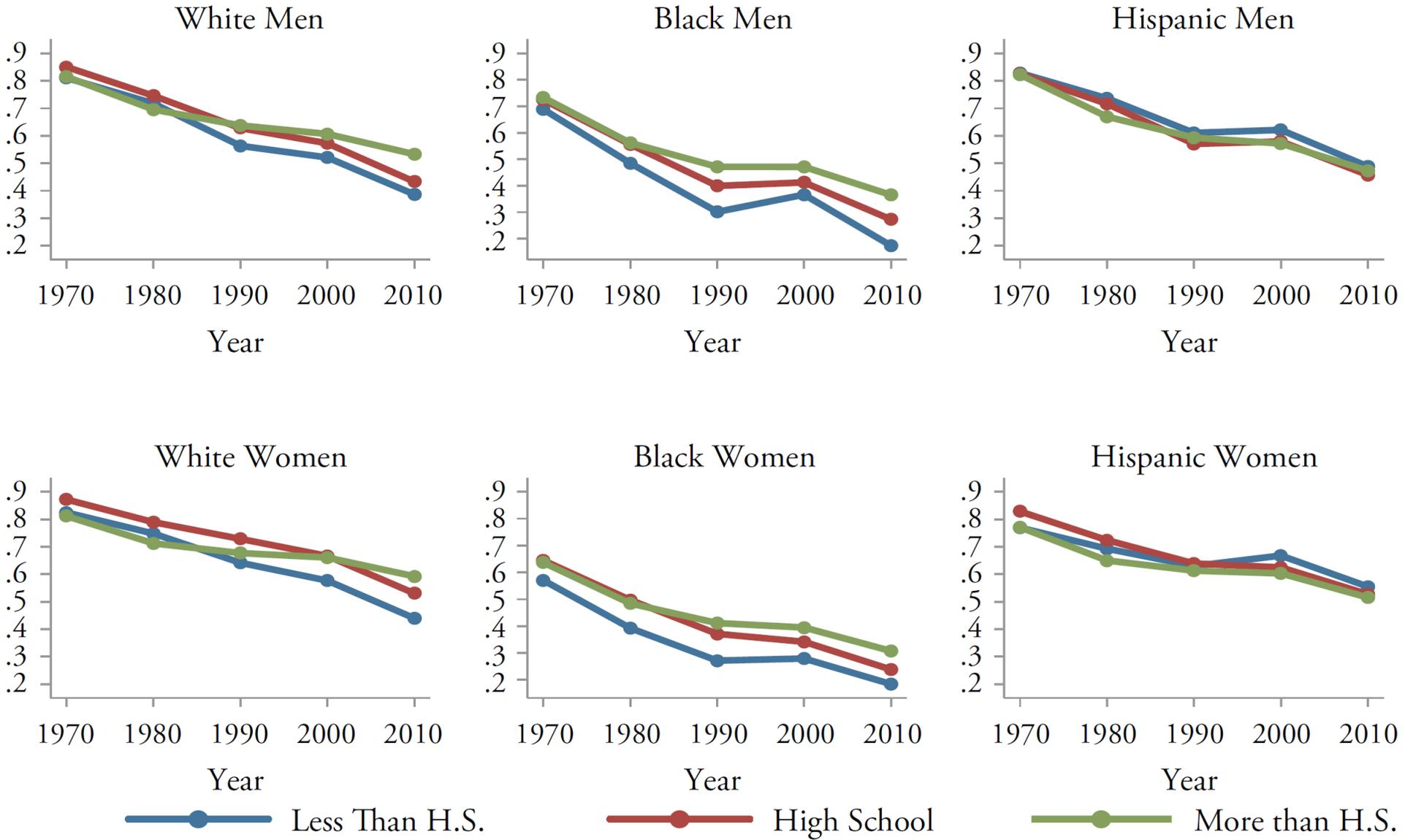
Congressional Budget Office

Figure 17: Childhood Poverty Rates by Race, 1979-2010<sup>79</sup>



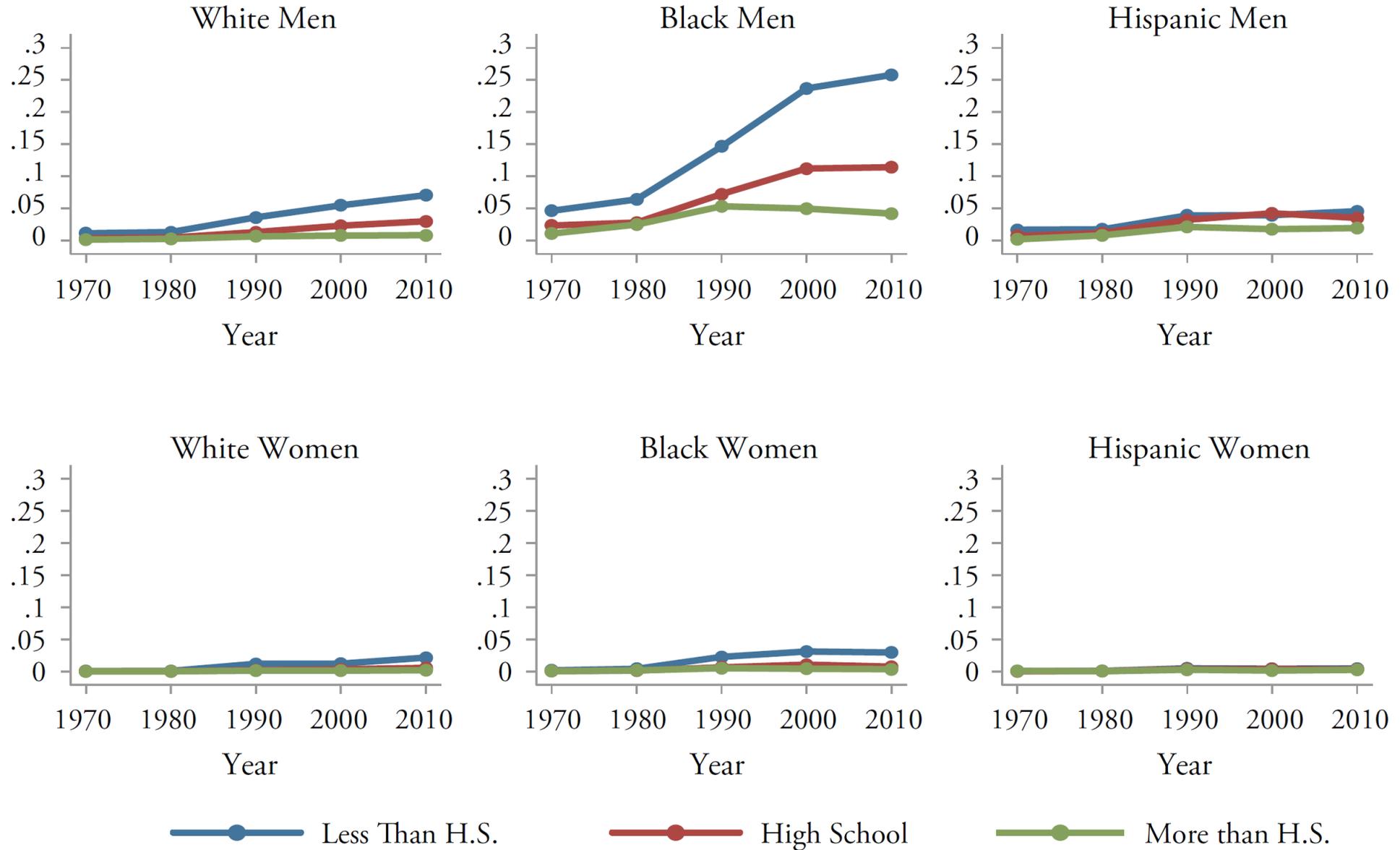
Source: United States, Department of Commerce, Census Bureau, 2010.

Marriage rate of men and women: 1970 to 2010 (Autor and Wasserman, "The Wayward Son: The Emerging Gender Gap in Labor Markets and Education")



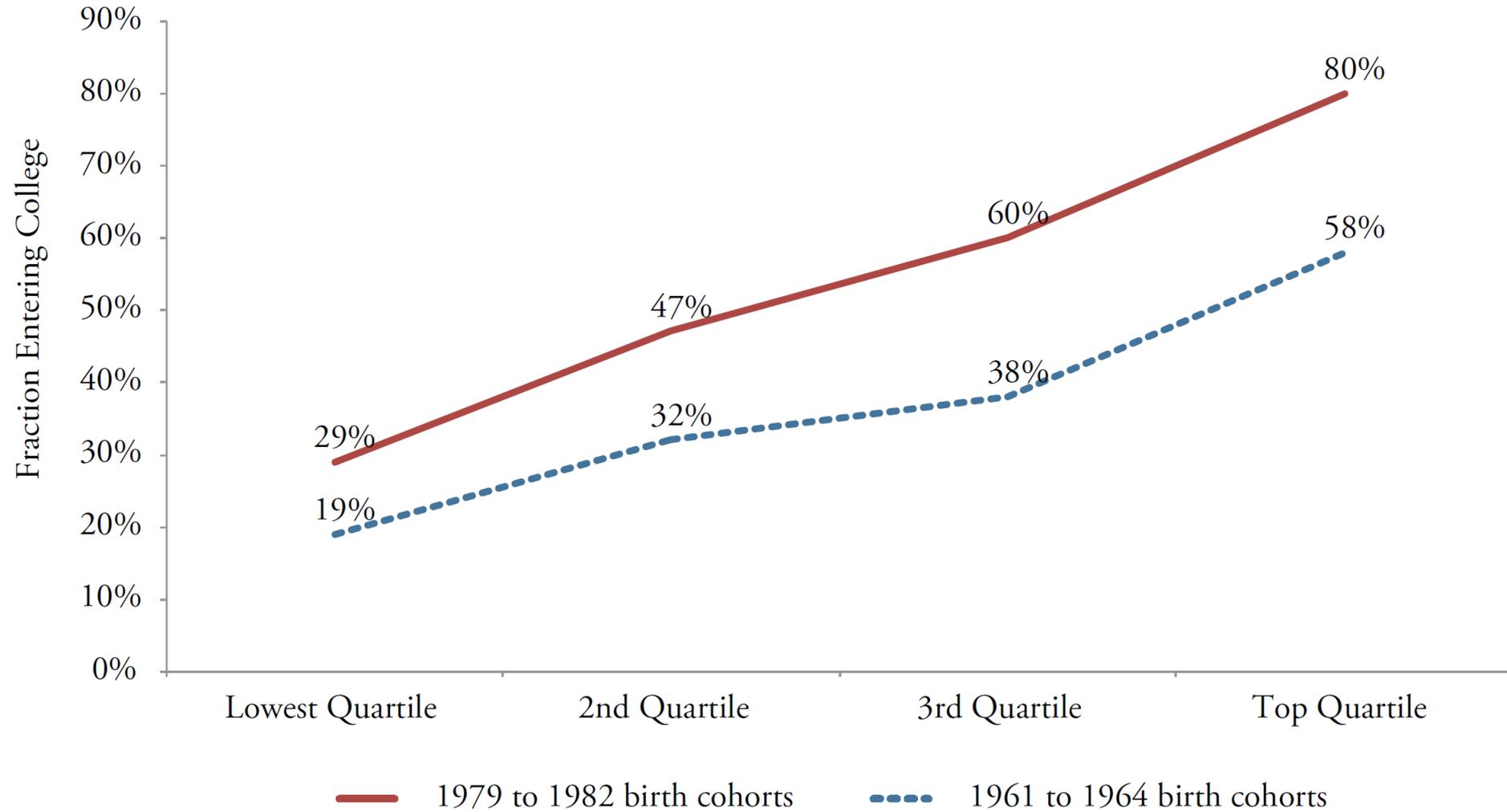
Source: Census IPUMS 5 percent samples for years 1980, 1990, and 2000 and American Community Survey (ACS) 2010.

# Incarceration Rate of Men and Women: 1970 to 2010 (Autor and Wasserman)

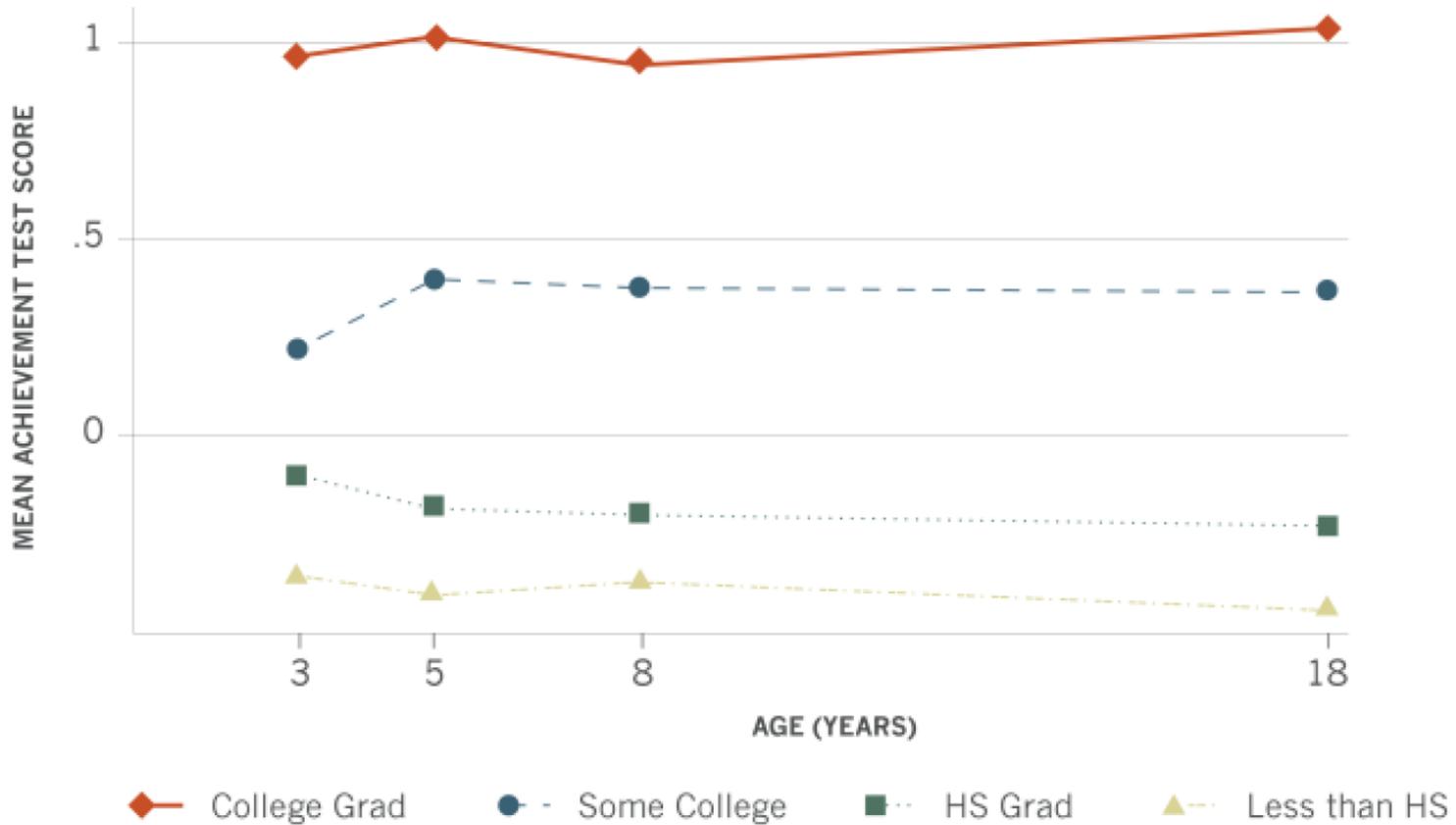


Source: Census IPUMS 1 percent sample for year 1970, and Census IPUMS 5 percent samples for years 1980, 1990, and 2000 and American Community Survey (ACS) 2010.

Figure 19a: Fraction of Students Entering College, by Income Quartile and Birth Year<sup>86</sup>

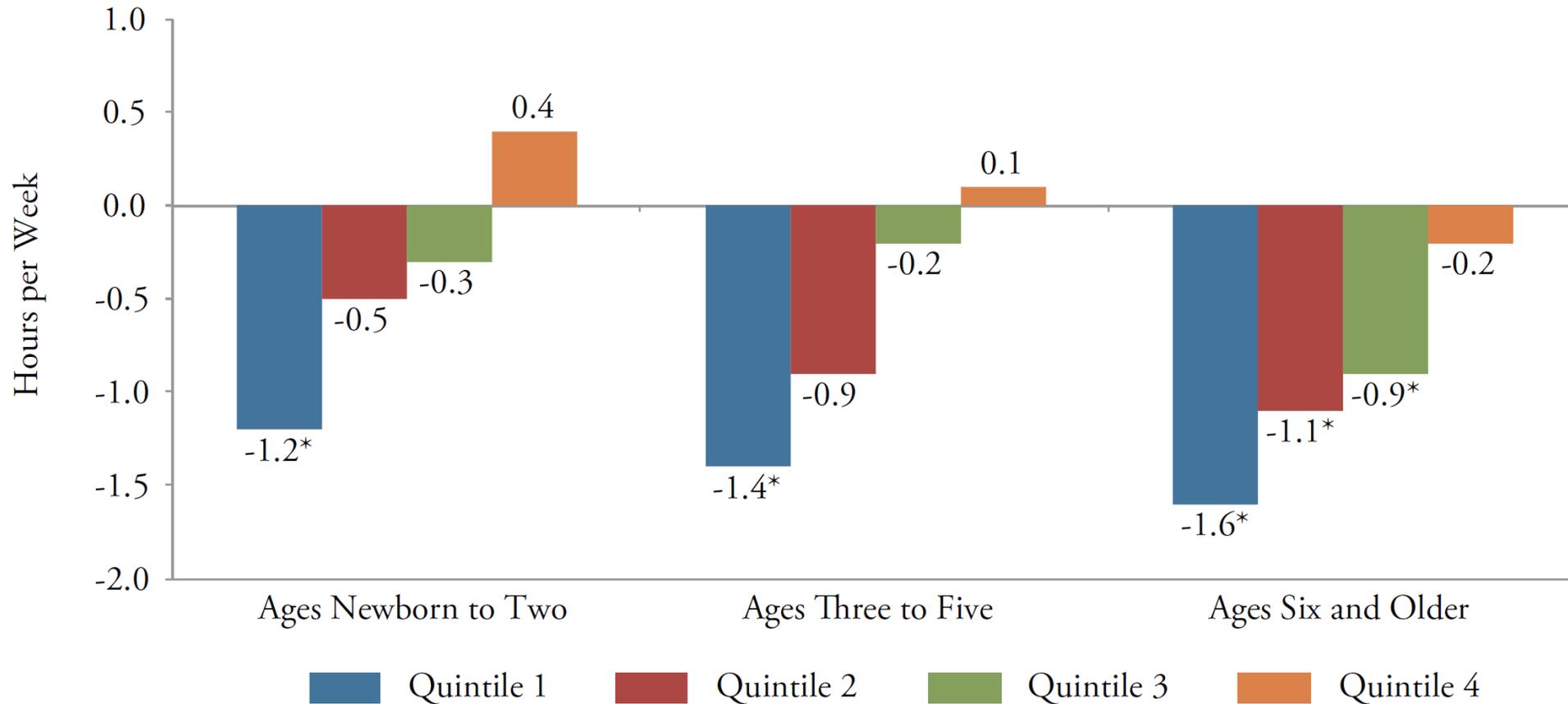


## Mean Achievement Test Scores by Age by Maternal Education



*Each score standardized within observed sample. Using all observations and assuming data missing at random. Source: Brook-Gunn et al. (2006).*

**Figure 21: Disparities in Weekly Time Spent in Literacy Activities by Age and Household Income Quintile<sup>101</sup>**



Source: Meredith Phillips, based on Panel Study of Income Dynamics, 2009. Bars show difference relative to children whose family is in the top quintile, adjusted for child's age in month and gender. \*Denotes statistically significant difference at the p < 0.05 level.

## Hart & Risley, 1995

Children enter school with “meaningful differences” in vocabulary knowledge.

### 1. Emergence of the Problem

In a typical hour, the average child hears:

Family Status	Actual Differences in Quantity of Words Heard	Actual Differences in Quality of Words Heard
Welfare	616 Words	5 affirmatives, 11 prohibitions
Working Class	1,251 Words	12 affirmatives, 7 prohibitions
Professional	2,153 Words	32 affirmatives, 5 prohibitions



### 2. Cumulative Vocabulary at Age 3

Cumulative Vocabulary at Age 3	
Children from welfare families:	500 words
Children from working class families:	700 words
Children from professional families:	1,100 words

“The highest rate of return in early childhood development comes from investing as early as possible, from birth through age five, in disadvantaged families.

“Starting at age three or four is too little too late, as it fails to recognize that skills beget skills in a complementary and dynamic way.

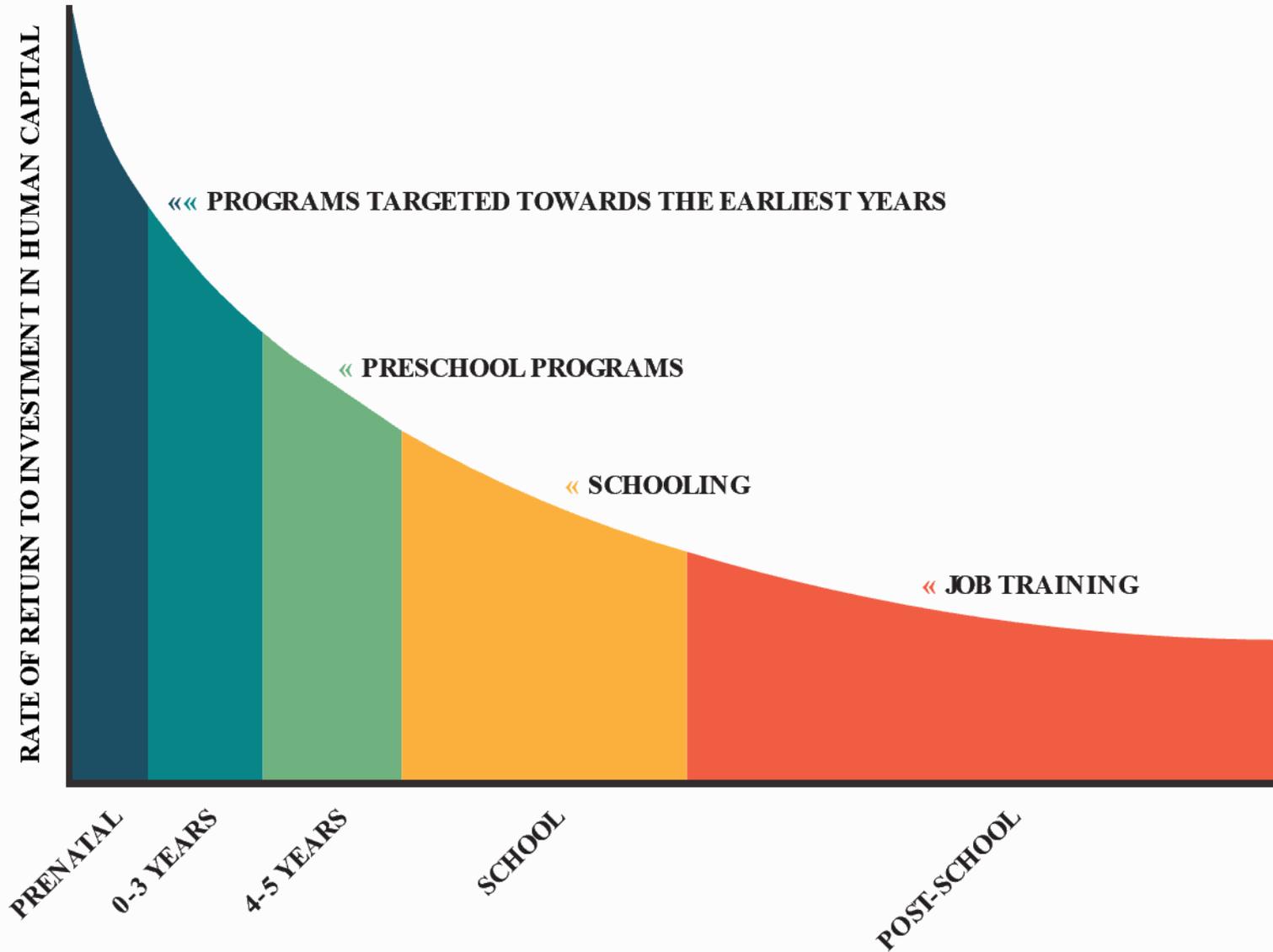
“Efforts should focus on the first years for the greatest efficiency and effectiveness. The best investment is in quality early childhood development from birth to five for disadvantaged children and their families.

“I am interested in the economics of human flourishing.”



Nobel economist James Heckman at the 2014 White House Summit on Early Education

# RETURNS TO A UNIT DOLLAR INVESTED



Source: Heckman (2008)

Higher education returns are very high for the most able and motivated students (22% for college education for the most capable).

# INVEST IN PREVENTION NOT REMEDIATION

## Terrie Moffitt crime study

Two main types of offenders:

- **Adolescence limited offenders**
- **Life course persistent offenders: Age 3 to 4 years of age is the onset of criminality for serious offenders.**

# **Three Longitudinal Studies of High-Quality Preschool Programs**

- Perry School Program
- Carolina Abecedarian Project
- Chicago Child-Parent Center Program

# The Perry Preschool Program



## **The Perry Program: Design and Background**

- Targeted African American children with low IQs (85 or lower) and low socioeconomic status.
- Conducted from 1962 to 1967 in the Ypsilanti, Michigan, school district to help children living in poverty avoid school failure and related problems.
- Children began at age 3 and were enrolled for 2 years.
- Parents were disadvantaged by income and education.
- Roughly 47% of the children in the study did not have fathers present in the household at age 3.
- 58 were in the program group, and 65 in a separate group with no preschool.
- Both groups were followed from 3 to 11, 14, 15, 19, 27, and 40.

# Perry Preschool Curricula

- Intentional adult-child interactive language
- Montessori tools
- Movement/dancing
- Teachers provided large and small group activities
- Personal initiative
- Social relations
- Resolution of interpersonal conflicts
- Self-control
- Creative representation
- Logic and mathematics
- “Plan, Do, Review”
- *Active participatory learning* with children and adults treated as equal partners in the learning process



# Outcomes

## Education

- 77% of Perry Preschool graduates graduated from high school vs. 60% of the no-program group
- **88% of program girls graduated from high school vs. only 45% of the no program group**
  - 8% of program girls treated for mental impairment vs. 36% of no-program group.
  - 21% grade repetition vs. 41%.
- Individual IQ scores rose an average of **27 points from 78 to 105 after 1 year of preschool**
- **IQ 90+ at age 5: 67% for participant, 28% no program.**

## Economic Performance

- 76% of program graduates were employed at age 40 vs. 62% no-program group.

## Crime Prevention

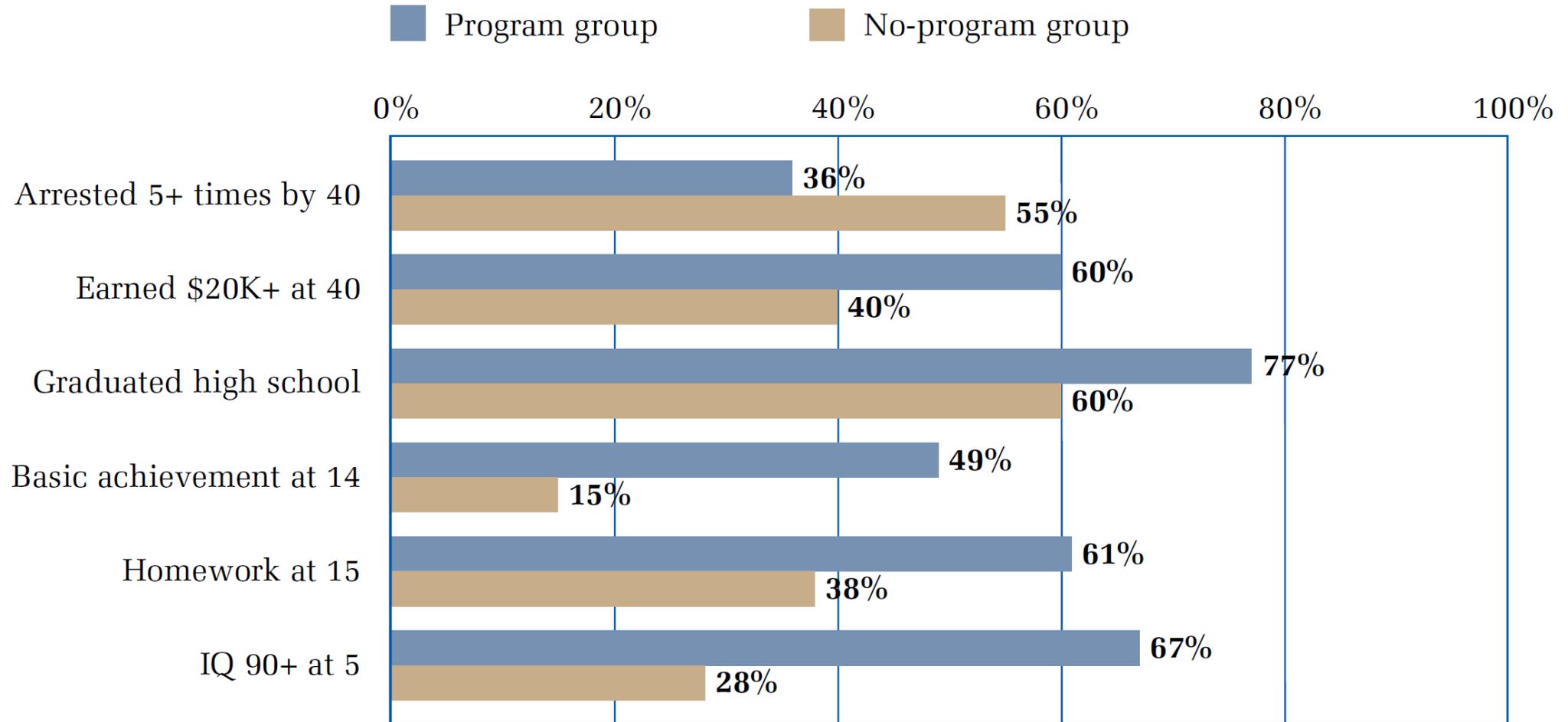
- Significant reduction in arrests, violent crime, property crime, drug crimes, and jail time.
  - Fewer arrests throughout a lifetime (36% vs. 55% arrested five or more times)
  - Drug crimes in adolescence (3% vs. 11%) and early adulthood (9% vs. 25%)
  - Assault and battery (19% vs. 37%) by age 40.
- Fewer months in prison for felonies (7% vs. 25%).

## Health, Family, and Children

- **More program males raised their own children (29% vs. 8%).**

# Figure 1

## Major Findings: High/Scope Perry Preschool Study at 40



# Return on Investment

- The return to society on investment per child in the Perry Program was \$366,750
- **\$12.90 for every dollar invested.**
  - 88% from crime savings, 4% education savings, 7% in increased taxed because of higher earnings; 1% in welfare savings.
  - Male participants cost the public 41% less in costs associated with crime.
  - Graduates earned 14% more over their lifetime than the no-program group (\$156,490 more over their lifetime)
- **93% of the cost benefit was based on the improved performance of males attributed to program males committing significantly fewer crimes.**

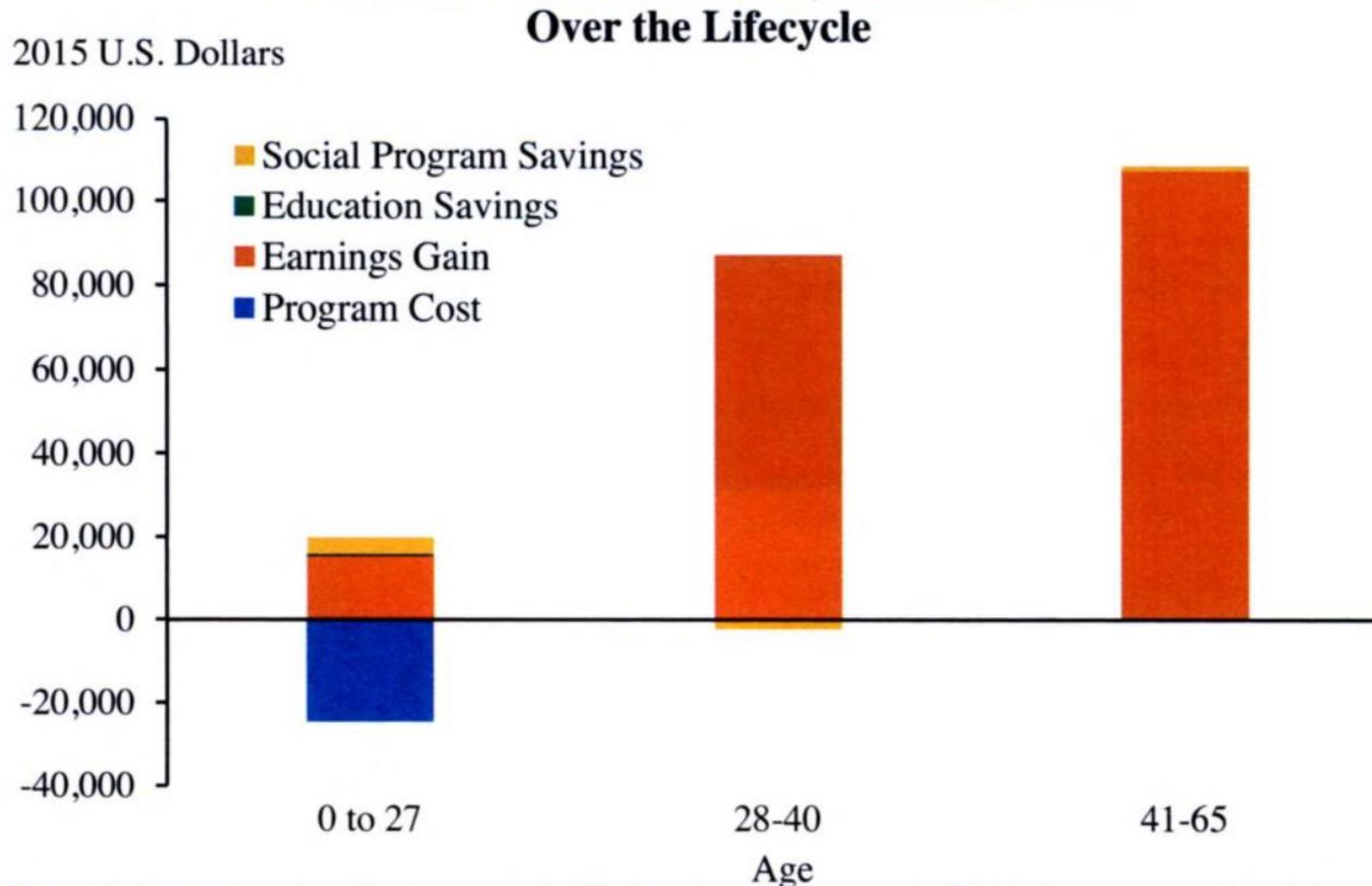


**“Preschool must demonstrate ability to affect the development of children in three areas: These are intellectual growth, academic achievement, and social behavior.”**

David P. Weikart  
Psychologist and Perry School founder



# Net Benefit of Perry School Preschool Rises Over the Lifecycle



Note: Estimates based on Heckman et al. (2010) using undiscounted 2006 dollars converted to 2015 dollars using CPI-U-RS. Additional costs and benefits, such as education beyond age 27, vocational training, savings from crime reduction, health benefits, and maternal earnings, have not been quantified in this chart.

Source: Heckman et al. (2010); CEA calculations.

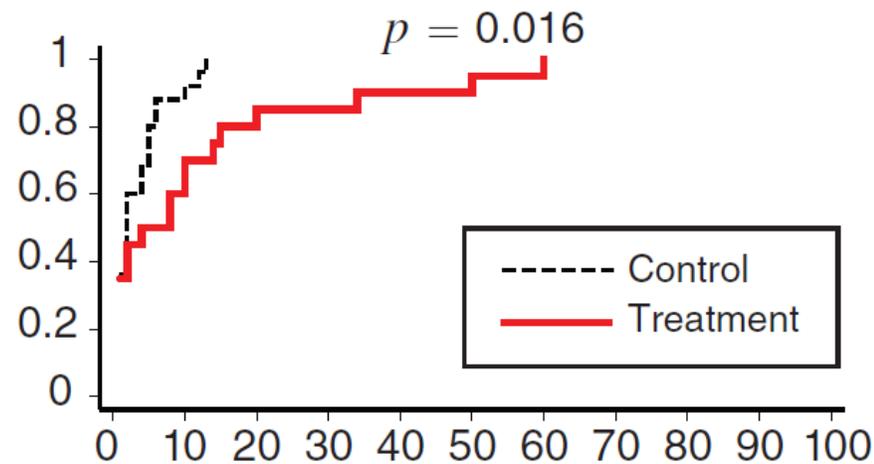
# Key Points

- **High-quality preschool program for young children living in poverty**
  - **Teachers had bachelor's degrees (or higher) and certification in education**
  - **Each served five to six children in 2.5-hour classes, and made weekly 1.5-hour home visits to treatment group mothers to increase their involvement in the socio-emotional development of their children**
  - **Teachers studied and received support using the High/Scope participation model**
- **A 2-year program (October through May)**
- **9 hours a day could provide greater benefits for the children and their parents**

While the Perry program did not boost long-term IQ, it did boost long-term achievement test scores.

Achievement tests measure acquired knowledge—enhanced for children with better cognitive and personality skills, which promote learning. Recent evidence shows that 30 to 40% of the gap in achievement test scores across students is due to personality skills and not IQ.

Panel E. CAT total at age 14, male



Panel F. CAT total at age 14, female

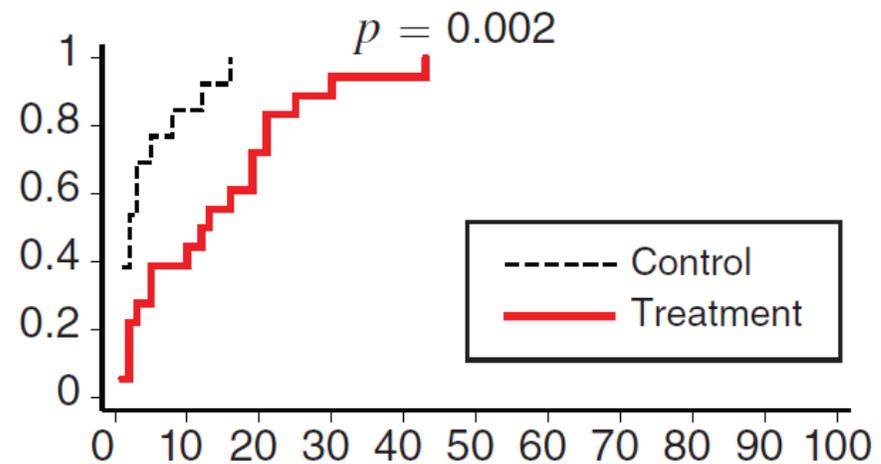


FIGURE 3. CUMULATIVE DISTRIBUTION FUNCTIONS OF INDICES OF PERSONALITY SKILLS AND CAT SCORES BY GENDER

- Personality skills, “soft skills,” physical and mental health, perseverance, attention, motivation, and self-confidence are also important and are often neglected.
- The family lives of young children are the major producers of cognitive and socioemotional skills. These, in turn, predict crime, health, and obesity
- Almost all antisocial adults were antisocial children (Robins 1978)
  - Disobedient and aggressive behaviors measured as early as ages 3 to 5 predict later childhood conduct disorders and adolescent arrests (Moffitt 1993; White et al. 1990)
  - Antisocial behaviors measured between ages 7 and 11 strongly predict criminal behaviors in adulthood (Moffitt 1993; Loeber 1982)

Skill leads to more skill.

Motivation leads to more motivation.

Develop COGNITION AND CHARACTER from birth to school to college to career training.

- **Motivation**
- **Sociability: ability to work with others**
- **Attention**
- **Self-regulation**
- **Self-esteem**
- **Ability to defer gratification**
- **Health and mental health.**

**Big Five Factors** in personality psychology: Openness, conscientiousness, extraversion, agreeableness, and neuroticism.

TABLE 2—COGNITIVE AND PERSONALITY FACTORS AND THEIR MEASURES

Cognition		Externalizing behavior		Academic motivation	
Measures <sup>a</sup>	Age	Measures <sup>a</sup>	Age <sup>b</sup>	Measures <sup>a</sup>	Age <sup>b</sup>
Stanford-Binet IQ	7	Disrupts classroom procedures	7–9	Shows initiative	7–9
Stanford-Binet IQ	8	Swears or uses obscene words	7–9	Alert and interested in school work	7–9
Stanford-Binet IQ	9	Steals	7–9	Hesitant to try, or gives up easily	7–9
		Lying or cheating	7–9		
		Influences others toward troublemaking	7–9		
		Aggressive toward peers	7–9		
		Teases or provokes students	7–9		
Cronbach's alpha, <sup>c</sup> males	0.838	Cronbach's alpha, males	0.906	Cronbach's alpha, males	0.901
Cronbach's alpha, females	0.913	Cronbach's alpha, females	0.916	Cronbach's alpha, females	0.896

Externalizing behavior is proxied by measures of behavior related to lying, stealing, and swearing, as well as being aggressive and disruptive. It has been linked to crime and aggressive behavior.

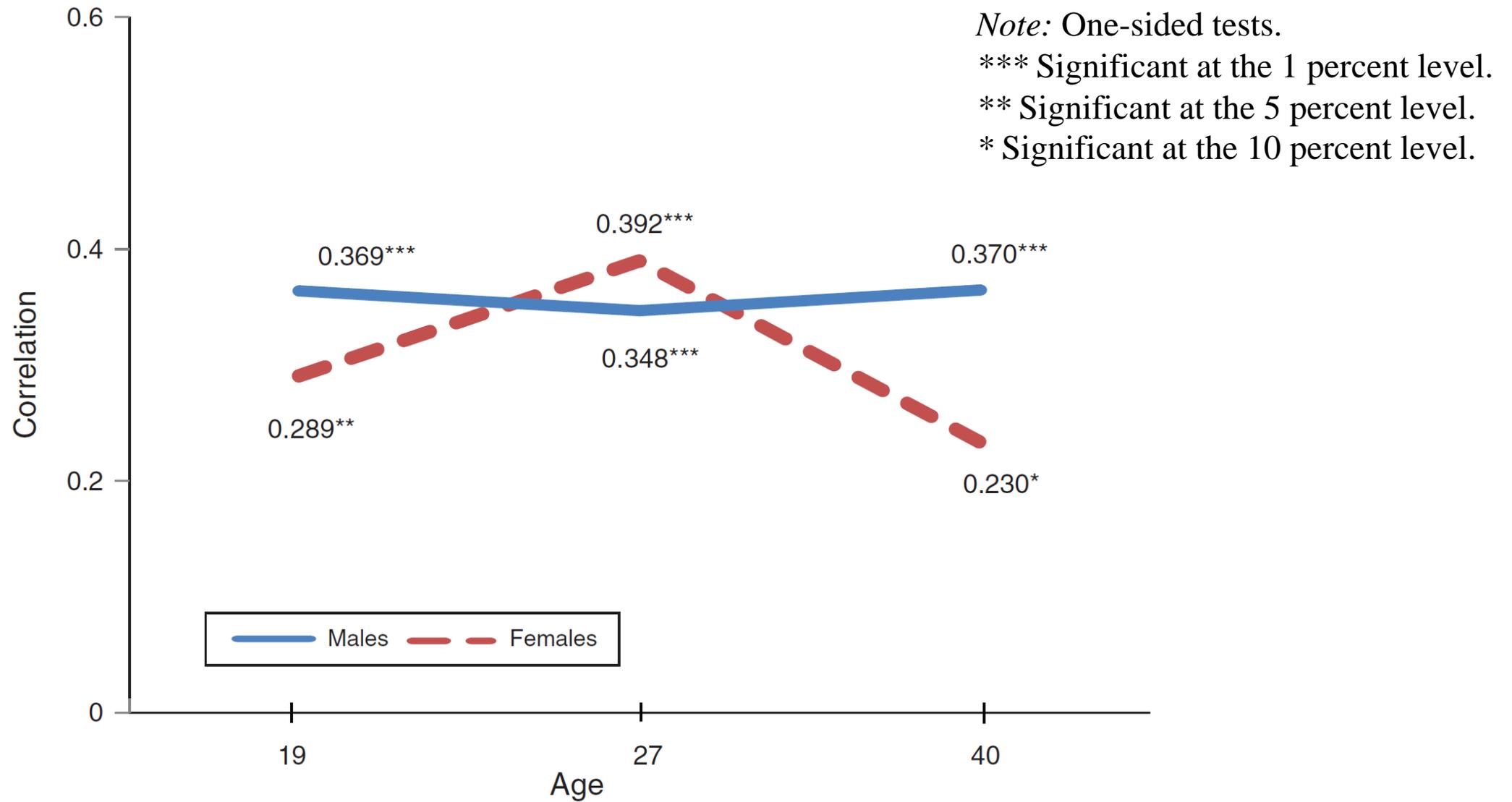


FIGURE 4. SPEARMAN'S RANK CORRELATIONS BETWEEN EXTERNALIZING BEHAVIOR AT AGES 7-9 AND NUMBER OF ARRESTS BY AGES 19, 27, AND 40

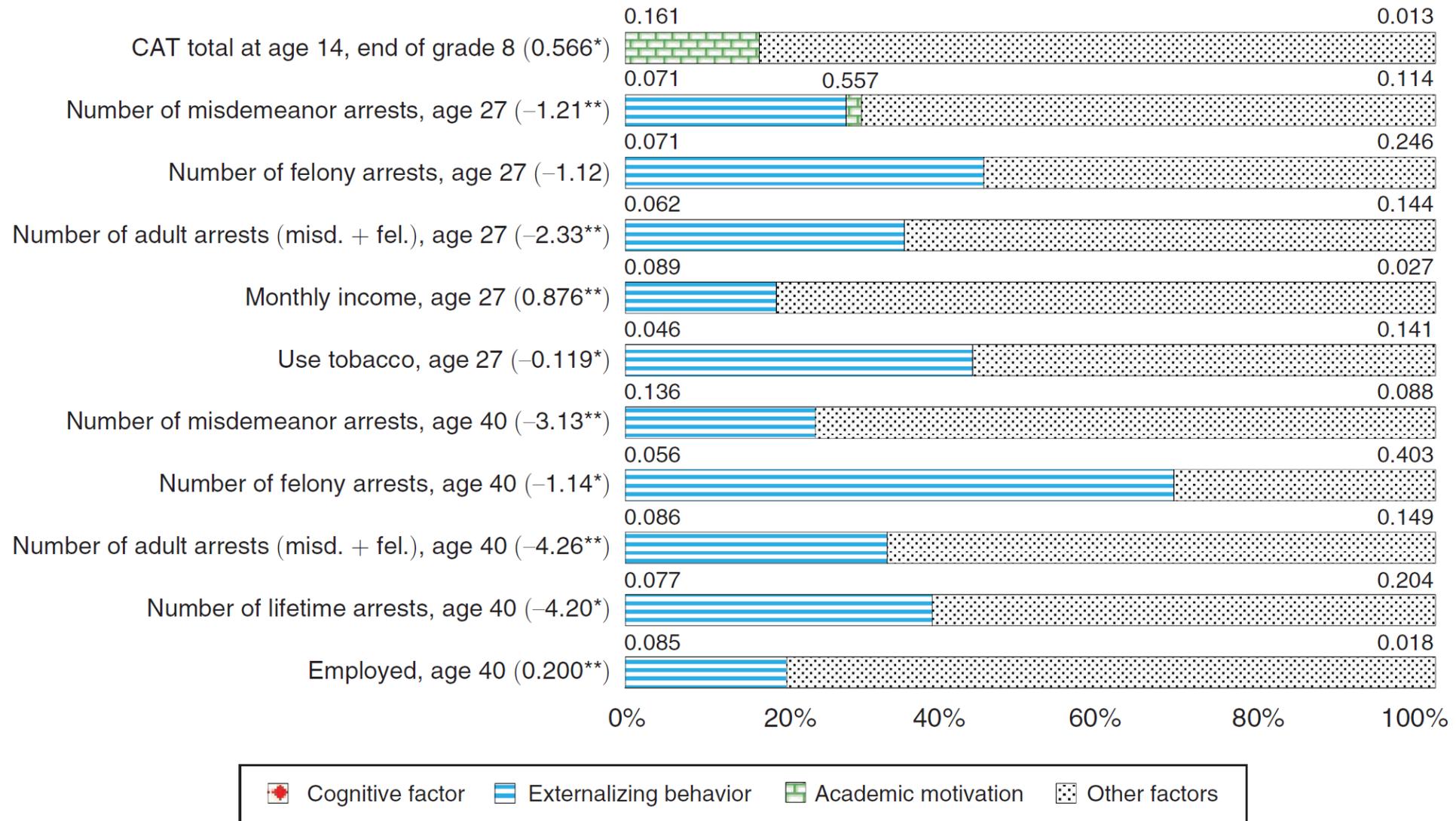
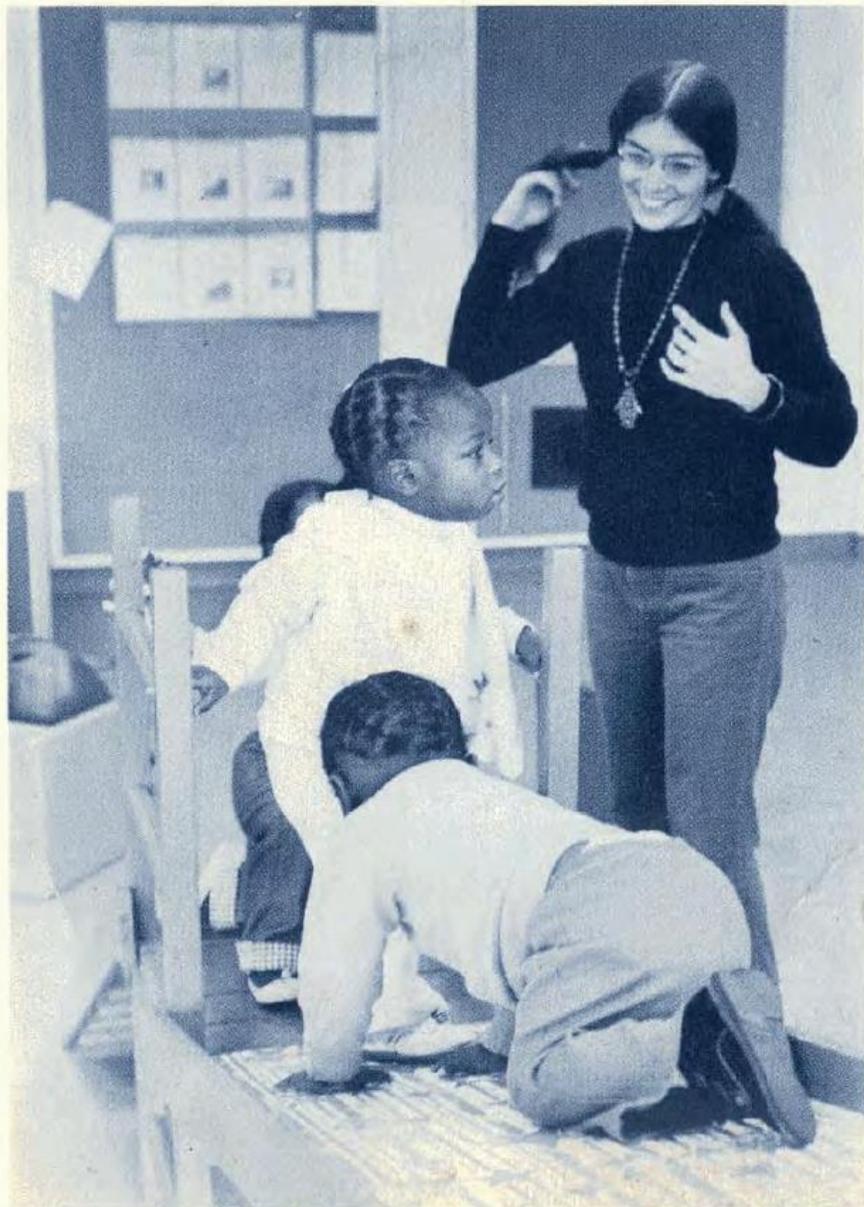


FIGURE 6. DECOMPOSITIONS OF TREATMENT EFFECTS ON OUTCOMES, MALES

# Lasting effects, not fadeout

- Data from the Perry Preschool Program showed that increased **academic motivation** creates 30% of the effects on achievement and 40% on employment for females
- **Reduced externalizing behavior** creates a 65% reduction in lifetime violent crime, 40% reduction in lifetime arrests and 20% reduction in unemployment

- Persistent changes in personality skills played a substantial role in the success of the Perry program
- Reduction in externalizing behavior, which explains the bulk of the effects of the Perry program on criminal, labor market, and health behavior outcomes is especially strong
- A few hours per day of preschool at ages 3 and 4 with a curriculum that promotes social competency, planning, and organization can significantly promote positive life outcomes



# THE CAROLINA ABECEDARIAN PROJECT

Frank Porter Graham Child Development Center



## **Carolina Abecedarian Project (ABC)**

- Based on at-risk primarily Afro-American youth
- Performed at the Frank Porter Graham Child Development Institute on the University of North Carolina Chapel Hill campus
- Participants were followed through their mid 30s. The programs started early in life (at 8 weeks of life)
- Parents of participants (primarily mothers) received free childcare that facilitated parental employment and adult education.



- Conducted by Dr. Craig Ramey
- Compared students with intervention against students randomly assigned to a control group
- Funded by federal and state grants
- Children were born between 1972 and 1977
- 111 low-income Afro-American children tracked from infancy to age 5 and 12, 15, 21, 30, and 35
- Designed to prevent lack of cognitive development for low-income, multi-risk children
- Most were in single-mother households with less than a high school education with no income
- High-quality educational intervention in a childcare setting from infancy through age 5
- Year-round schooling five days a week
- 6.5 to 10 hours a day
- 1:3 ratio for infants; 1:6 for 5-year-olds
- Each child had an individualized prescription of educational activities
- Educational activities consisted of "games" incorporated into the child's day
- Activities focused on social, emotional, and cognitive areas of development but gave particular emphasis to language
- Programs being adapted in China, Mexico, Canada, and Australia

## Program Details

- Two stages 0 to 5, and 6 to 8
- Stable environment during hours of the program
- Onsite pediatric health care: Well and ill child checks, periodic checkups and daily screening—good health has been found to be a bedrock for success in many other areas
- Nutritious meals—two meals and a snack at the care center during first stage (years 0 through 5 is a critical period for preventing obesity)
- Improved adult education
- Objective: Could early development prevent development of mild mental retardation in disadvantaged children?
- Cost annually per child \$19,932 today; total cost per child: \$96,075 today
- Children were transported to the center by Frank Porter Graham Center staff
- Children stayed for up to 9 hours/day 50 weeks/year
- Learning Games for the First Three Years were developed by Joseph Sparling and Isabelle Lewis (shown at right)
- Focus on fun
- Focus on language. Teachers were told, “Every game is a language game,” and to talk to children and elicit responses from them
- Play-based, adult-child activities to minimize at-risk, anti-social behaviors and support language, cognitive, motor, social-emotional skills and task orientation
- Specific program every 2 to 3 weeks.



## 0 to 5

- Cognitive and social stimulation interspersed with caregiving and supervised play throughout a full 8-hour day for the first 5 years
- “Abecedarian Approach,” comprised four key elements:
  - Language Priority
  - Conversational Reading
  - Enriched Caregiving
  - **LearningGames** (200 games with playful back and forth exchanges between the adult and child)



## Program Details (cont.)

### 6 to 8

- Improving early math and reading skills through having “home-school resource teachers” customize learning activities based on materials being covered at school and then deliver these materials to the parents to use at home
- *No evidence of any treatment effect on adult health from the second-stage randomization*
- *Treatment effects are much smaller in magnitude than those estimated for the first-stage treatment and fail to achieve statistical significance at conventional levels*
- *Previous work has shown no health effects from a school-age (as compared with a preschool) educational intervention*



# Daycare

ABC provided childcare to the parents of treated children for more than **9 hours a day for 5 years, 50 weeks a year.**

Only 27% of participant mothers of children reported living with a partner at baseline.

**The childcare component generates substantial treatment effects on maternal labor force participation and parental labor income. Subsidized childcare induced wage growth through enhanced parental educational attainment and wage growth based on work experience.**

Any childcare inducements of the program likely benefit parents who, at baseline, did not have any other children who were not eligible for program participation.

**Parental labor income effects induced by the childcare subsidy are an important component of the benefit/cost ratio.**

U.S. Lanham Act of 1940 studied providing childcare subsidies through wartime stimulus grants between 1943 and 46. Follow-up studies were done into adulthood.

- Increased educational attainment and earnings capacity
- Children were more likely to graduate from high school, college, and work full-time.
- For every \$100 spend on the program, participants average annual earnings rose 1.8%.
- Benefits were largest for poorest children served.

## Health Benefits

Reported in *Science*, March 2014: Blind controls were done with actual biomarkers including blood samples and physician examinations to determine health:

- Lower rates of hypertension (126 systolic vs. 143 for nonparticipants)
- Lower obesity (correlated with increased absenteeism, lower productivity, lower wages) BMI surged for control group at 1 year; above normal BMI at age 5 is trajectory for severe obesity in mid-30s
- Lower diabetes is shown to be associated with higher rates of employment 8 to 11%, less likely to be on social programs (8 to 13%), and higher wages
- No metabolic syndrome for men (waist circumference greater than 40 in., which is highly associated with heart disease, stroke, and diabetes) vs. 25% for nonparticipants
- Women also but less so (waist circumference greater than 35 in.)
- Reduced “total” coronary heart disease (CHD)
- Better “good” cholesterol (HDL)
- Up to 5.5 years longer life expectancy for men and 5.7 for women
- A way to reduce costs of U.S. health care





Dr. Frances Campbell, participant in the Abecedarian study from the beginning

## Follow-up Studies

- Through age 15, IQ scores were higher for participants and at age 3 IQs were 94 vs. 79 at Perry Preschool
- Higher scores in math and reading through high school
- Lower level grade retention; lower placement in special education

At age 21

- Better intellectual performance in math and reading
- More years of education and more likely to attend college or a university
- More likely to have a skilled job
- Less likely to be a teen parent
- Increased income of mothers

At age 30

- Four times more likely to hold a bachelor's degree and job, and delay parenthood

At age 35

- Striking health benefits
- Much higher percentage enrolled in school at age 21 (42% vs. 20%)
- Much higher percentage attended, or still attending, a 4-year college (36% vs. 14%)
- Much higher percentage engaged in skilled jobs (47% vs. 27%)



**A way to prevent chronic diseases such as hypertension, heart disease, diabetes and obesity**

Noncommunicable diseases such as hypertension, heart disease, and diabetes, are responsible for two-thirds of deaths worldwide

Abecedarian Project, Health Effects at Age 35 (Males)

	Treatment Mean	Control Mean	Treatment p-value
Systolic Blood Pressure	125.79	143.33	0.018
Diastolic Blood Pressure	78.53	92.00	0.024
Pre-Hypertension	0.68	0.78	0.235
Hypertension	0.10	0.44	0.011
HDL Cholesterol	53.21	42.00	0.067
Cholesterol/HDL-C	3.89	4.69	0.057
Abdominal Obesity	0.65	0.87	0.136
Metabolic Syndrome	0.00	0.25	0.009

Source: Campbell, Conti, Heckman, Moon, Pinto, Pungello and Pan (2014).

# Chicago Child-Parent Center Program Longitudinal Study

- Study of intervention for low-income children with a strong family engagement component from preschool to 9 years of age (published in JAMA Pediatrics 2016) to address (1) low student attendance, family disengagement, and low student achievement
- Followed 1,398 children through age 35
- Correlation with post-secondary education (48% higher degree completion), which influences
  - Mental health
  - Physical health
  - Economic prosperity
  - Rates of criminal behavior
- Preschool: 51% vs. 44% high school completion; 4 to 6 years: 55% vs. 44%; full program: on-time high school graduation 53% vs. 31%
- Black boys and high school dropouts showed the greatest gains
- High parental involvement
- Low student teacher ratio
- Balance of teacher and student-directed learning
- Teachers with bachelor's or higher
- All preschools are housed in elementary schools where the child will attend kindergarten
- Require 2.5 hours of parental involvement each week (hurdle and a help)
- Parent Resource Teacher provides home visits

## **Chicago Child-Parent Center Program Longitudinal Study (cont.)**

- Success based on staying the same school for 4 to 5 years (shows need for interconnectedness in social services)
- Chicago Public School District was the first to allocate Title 1 funding for preschool
- First federally funded pre-K to 3<sup>rd</sup> grade program
- Chicago spent \$8,000/child for the first 2 years of preschool, and \$3,000 for kindergarten through 3<sup>rd</sup> grade for a \$10 return on investment for every \$1 spent
- High-quality educational enrichment through reduced class sizes and a balance of teacher- and child-directed learning
- Family support services that include participation in school activities, support groups and workshops, and home visits
- Comprehensive services that include nutritional and health supports (subsidized meals, health screening, and speech therapy)

Chicago Child-Parent Center Program Philosophy:

“In a success-oriented environment in which young children can see themselves as important, they are ‘turned on’ for learning.”

## **High School and College Graduation Rates of the Three Studies**

Abecedarian: High school completion about the same, but completion of a bachelor's degree was four times higher

Perry Preschool: 66% vs. 45% for the control group

Chicago CPC: 22% higher high school graduation rate

*(from the Handbook of Economics of Education; Higher Education Handbook of Theory and Research, Vol. 28;*

Develop COGNITIVE AND CHARACTER skills early.

Invest in the “whole child” and family.

Effective early childhood education packages cognitive skills with character skills such as attentiveness, impulse control, persistence and teamwork.

Together, cognition and character drive education, career and life success—with character development often being the most important factor.

## **Programs work for the disadvantaged.**

Heckman finds that effectiveness depends on program quality.

Government programs that provide disadvantaged families with access to high-quality, center-based care are better and more effective alternatives than no formal care.

Affluent families who can afford higher quality center-based and in-home care are more likely to do better with those alternatives, calling into question the economic effectiveness of influencing their choices with government subsidies.

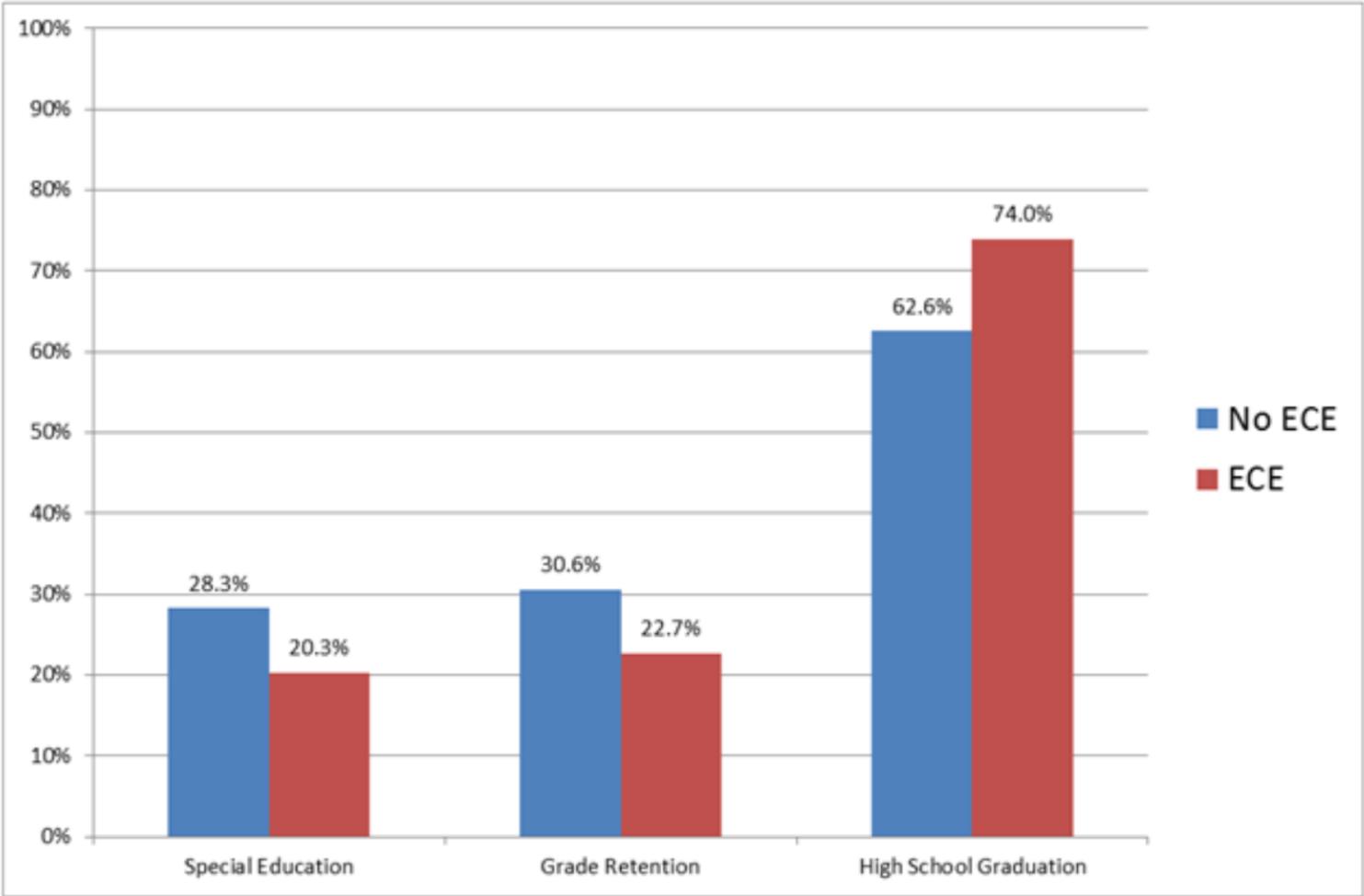
Economic pressures force poor and middle-income parents alike to spend more time away from their children to make ends meet. The need for quality early childhood education is intensifying, and the costs are increasing. Every child needs quality early childhood education.

Those in the greatest need receive the greatest public benefit from public funding.

- Quality, birth-to-five early childhood development programs can be used to prevent adult chronic disease
- High-quality early childhood development should be considered in health care, particularly among families receiving Medicaid and Children's Health Insurance Program (CHIP)
- Quality early childhood programs start with effective perinatal care for mothers and begin at birth for children
- Integrate early health and nutrition into early childhood development programs
- Early health is critical for later adult health outcomes

# High-quality Early Childhood Education Makes a Significant Difference Study, 2018

Figure 1: Average rates of special education placement, grade retention, and high school graduation for ECE participants vs. non-participants



From Educational Researcher (peer-review journal of the American Educational Research Association)

Study done by five universities (Harvard Graduate School of Education, New York University, University of California – Irvine, University of Washington, University of Wisconsin – Madison, and Rand Corporation

- Reduced future special education placement by 8.1 percentage points
- Decreased grade retention by 8.3 percentage points
- Increased high school graduation rates by 11.4 percentage points.
- No FADE-OUT. Sustained benefits through elementary school and beyond
- MORE THAN HALF OF LOW INCOME 3- and 4-year-olds are left out of center-based care
- \$8K to \$12K per pupil for special education
- 373,000 students drop out of high school annually at a cost of \$262,000 lifetime earnings per student

*Economic Report of the President, Transmitted to the Congress February 2016*

- Access to Head Start at 3 and 4, reduced child mortality 50 to 100% in the 300 poorest U.S. counties to close the gap with the national average
  - Increased high school graduation rate
  - Lowered arrest rate

## **Investing in early childhood education is a cost-effective strategy for promoting economic growth.**

Our economic future depends on providing the tools for upward mobility and building a highly educated, skilled workforce.

Early childhood education is the most efficient way to accomplish these goals:

- Heckman's study of the **Perry Preschool program** data showed a 7% to 10% return on investment per year
- Heckman's study of the **North Carolina's Abecedarian (ABC) and Carolina Approach to Responsive Education (CARE)** data showed a 13% return on investment per child per year

Idaho spends \$2.63 billion, or one-third of its \$7.9-billion budget (2016), on education annually

A 13% ROI per year could save \$341 million per year by investing in our people—early

Idaho spends \$7,486 per pupil vs. the \$12,201 national average (2015)

Only Idaho, New Hampshire, South Dakota, and Wyoming invest 0 public dollars in pre-K education

# Other States

- **Oklahoma** approved funding of universal, voluntary, high-quality pre-K as a grad level in its school funding formula. 75% of the state's 4-year-olds attend pre-K. Benefits found through middle school. (Only 32% of Idaho's 4-year-olds attend pre-K. Only 25% of Idaho's low income and 17% of Latino's attend pre-K.)
- **North Carolina's Smart Start and More at Four** programs show benefits through 8<sup>th</sup> grade including lower special education enrollment, reduced grade retention, and higher math and reading scores. A spillover effect was found in the scores of students not attending pre-K with those having attended pre-K. The kindergarten and later elementary years classroom environments were more conducive to learning because of less disruption and disciplinary issues.
- **Texas** funds half-day pre-K for low-income students and English language learners. Some school districts offer full day. Majority are for 4-year-olds, but some provide for 3-year-olds. 58% of pre-K grads are kindergarten ready based on indexes versus 42% who don't attend.
- **Arkansas Better Chance** pre-K graduates scored higher on kindergarten measures of vocabulary, math skills, and print concepts.
- **Georgia**'s pre-K graduates had higher kindergarten measures in language and literacy, math, and general knowledge.
- **New Mexico** pre-K graduates had higher kindergarten measures in vocabulary, math, and early literacy compared to nonattendees.

# A big step for early childhood education in Idaho

Great news for Idaho parents and students regarding early childhood education. Thanks to the successful collaboration of a bipartisan committee of stakeholders convened over the summer and the support of Gov. Brad Little, Idaho is the recipient of a \$3.3 million federal Preschool Development Grant. After attending an early education learning summit through Hunt Institute, we were able to form a bipartisan coalition that was focused on researching pre-K in Idaho. The grant is focused on strengthening existing early childhood education. Key components of the grant are research, planning, collaboration and coordination. Idaho is one of six states to be awarded funding for this grant.

The Idaho Association for the Education of Young Children will take the lead in the administration of the grant. The Idaho Legislature, state and local agencies, and partners will be working closely with Idaho AEYC to ensure that our students are prepared to enter kindergarten ready to learn, grow and develop. The grant will support a comprehensive approach, which will include the

identification of resources and support for parents, students, educators, and a wide variety of public and private entities. Many of these resources exist today but are not easily accessible to parents and educators.

Idaho families continue to express their desire for early learning options. This grant will provide the funding to investigate the wide variety of resources available, best practices and opportunities for innovation. Our hope is to immediately create a repository that lists all resources and best practices available to new parents. After visiting with hospitals, we are pleased that doctors and nurses have seen the need to have a place we can refer new parents who are looking for early education guidance. The structure of the grant is well defined and the result of extensive research, preparation and rigorous attention to the multiplicity of needs expressed by Idaho educators, families and legislators.

In addition to connecting parents with existing resources, we want to take a comprehensive look at what works, what doesn't work and how programs are funded. It is an opportunity to look at all existing programs, measure effectiveness and find room

for improvement. This grant will also give parents, educators and children more tools to strengthen language and literacy prior to starting kindergarten. The sooner our children are exposed to a rich literacy experience the better chance they have to be proficient by the third grade.

Specific grant activities and comprehensive strategies for the accomplishment of each have been developed. Activities are identified as follows:

- Activity one: Statewide needs assessment plan.
- Activity two: Statewide strategic plan.
- Activity three: Maximizing parental choice and knowledge.
- Activity four: Sharing best practices for early childhood education.
- Activity Five: Improving overall quality of early childhood care and education.

Without doubt, receipt of this grant and the wealth of knowledge gained will provide Idaho with a historical opportunity to make strategic investments in the improvement of early childhood education delivery and the trajectory of our children's education. It is time for Idaho to make an investment in early childhood learning. Our children and grandchildren are counting on us.

*Janie Ward-Engelking and Cherie Buckner-Webb are Democratic senators from Boise.*



**JANIE WARD-ENGELKING**

Guest columnist



**CHERIE BUCKNER-WEBB**

Guest columnist