Catalyzing for Thriving Youth from their Early Education through Young Adulthood

Deborah Lowe Vandell

Presentation to the

Mott Afterschool State Networks

Findings from 3 Large Studies

A 26-year longitudinal study of effects of early care & education AND organized afterschool activities

A new meta-analysis of effects on academic & educational outcomes

Review the critical conditions that need to be in place to achieve these important outcomes

Are There Enduring Effects of Organized Afterschool Activities?

The Study of Early Child Care and Youth Development (SECCYD)

SECCYD Sample

- 1,364 eligible births occurring during 1991
- Sampling designed to assure adequate representation of major socio-demographic niches
- Ten data collection sites
- 24 hospitals

Location of participating families

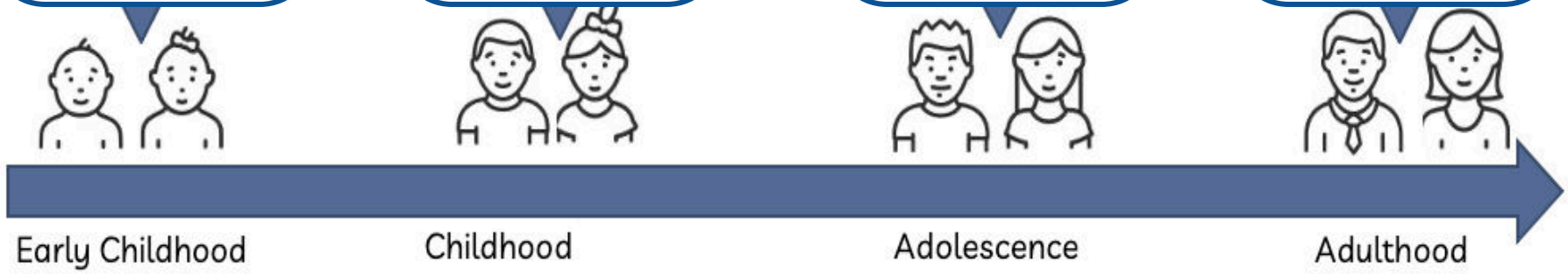
A 26-Year Longitudinal Study

Phase 1
Birth – 36m
n = 1364
Phase 2
54m – K
n = 1138

Phase 3
1st-6th grade
n = 1098

Phase 4
Age 15
n = 1004
Phase 5
End of high school
n = 779

Phase 6
Age 26-27
n = 814



The Study of Early Child Care and Youth Development (SECCYD)

An In-Depth Study of Children's Lives & Development Over Time

Settings where development occurs

- Families
- Early Care & Education
- Schools
- Neighborhoods
- AFTERSCHOOL !!

An In-Depth Study of Children's Lives & Development Over Time

Child Developmental Outcomes

- Cognitive-academic
- Language
- Social-emotional skills
- Physical health
- Social relationships
- Problem behaviors

An In-Depth Study of Children's Lives & Development Over Time

Settings where development occurs

- Families
- Early Care & Education
- Schools
- Neighborhoods
- AFTERSCHOOL !!

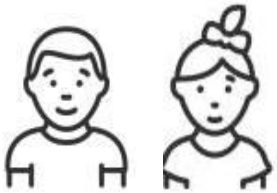
Child Developmental Outcomes

- Cognitive-academic
- Language
- Social-emotional
- Physical health
- Social relationships
- Problem behaviors

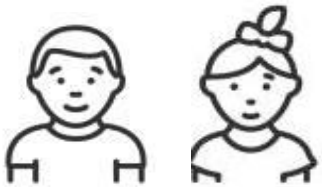
Over the years, a number of people have focused on the effects of organized afterschool activities using the SECCYD

Children's Activities

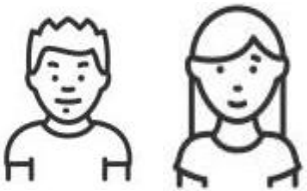
Children's Activities



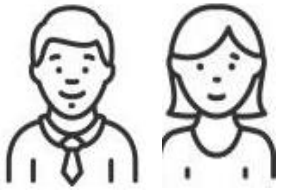
Children's Adjustment



Adolescents' Adjustment

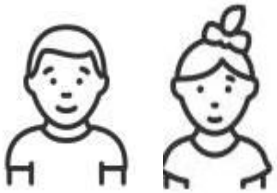


Adults' Adjustment

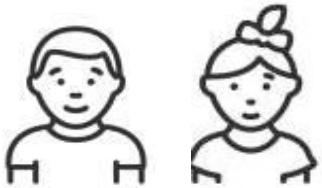


Children's K-5 Activities

Children's Activities



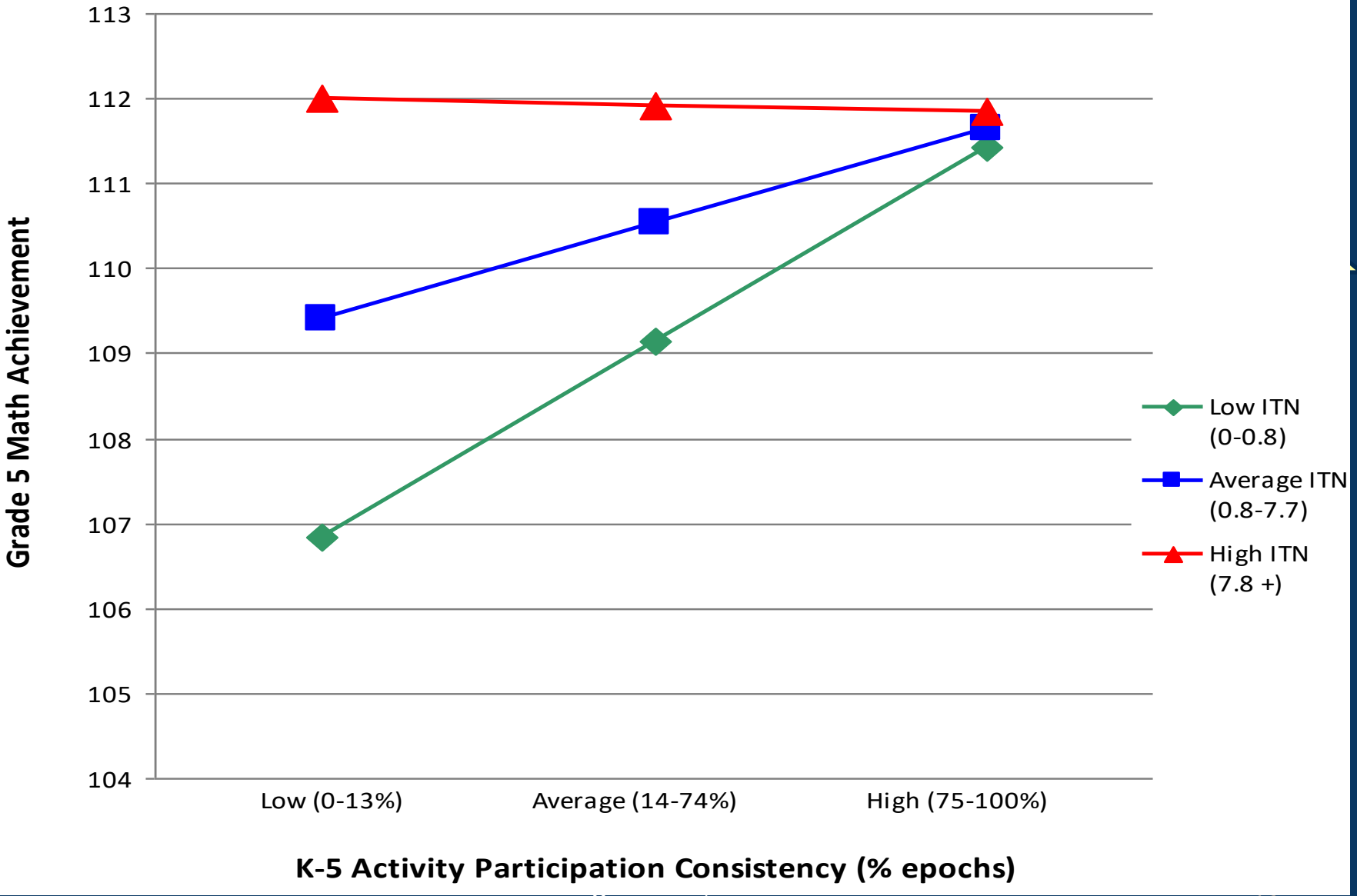
Children's Adjustment



Math

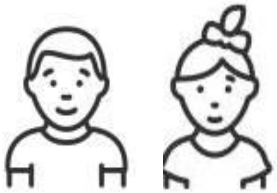
Reading

NICHD Early Child Care Research Network, 2004; Auger et al., 2013

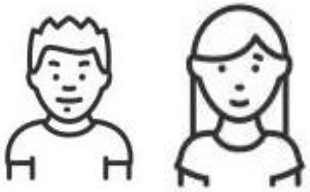

Grade 5 Math Achievement
113
112
111
110
109
108
107
106
105
104
Low (0-13%)
Average (14-74%)
High (75-100%)
K-5 Activity Participation Consistency (% epochs)
Low ITN (0-0.8)
Average ITN (0.8-7.7)
High ITN (7.8 +)

Children's K-5 Activities

Children's Activities



Adolescents' Adjustment



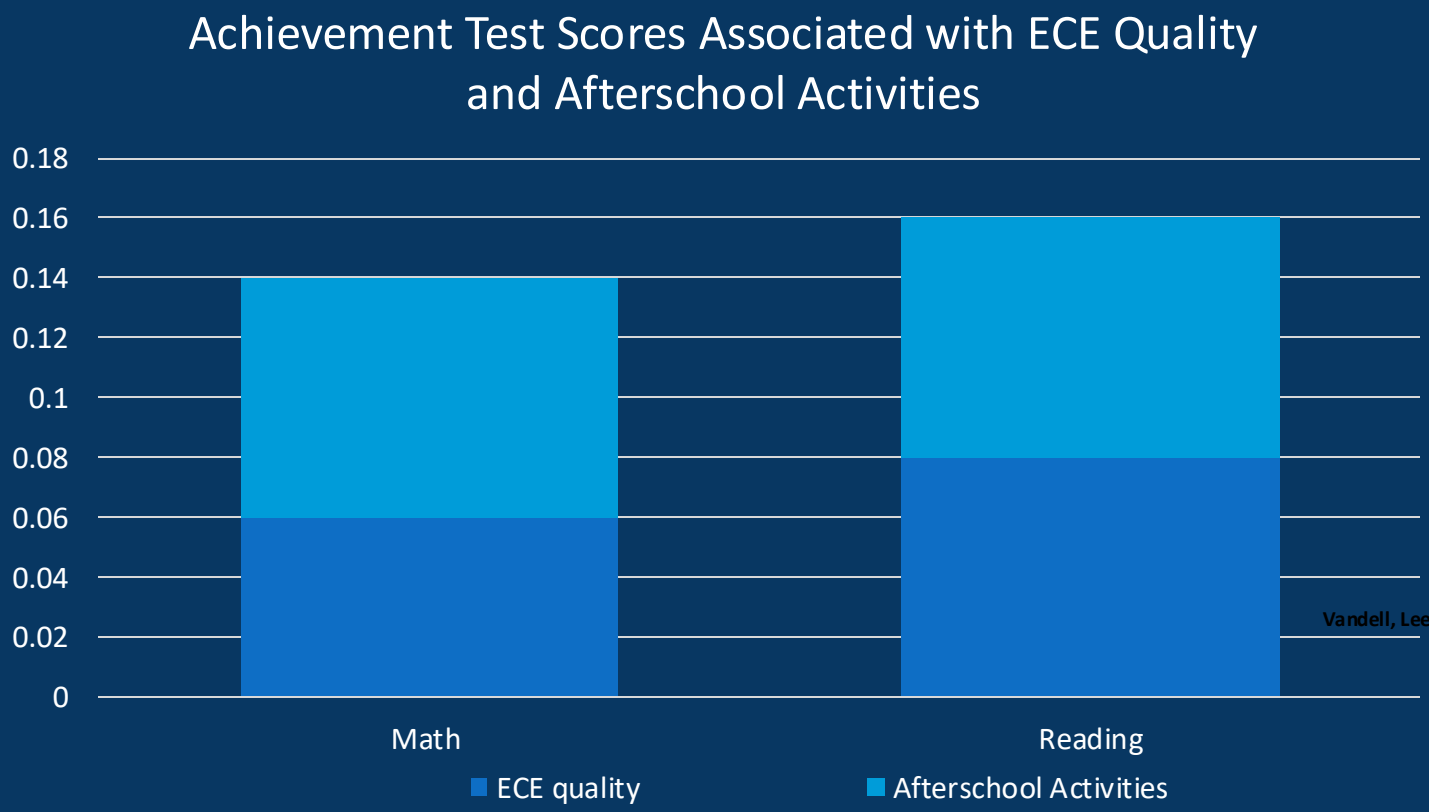
Math

Reading

Social confidence

Vandell, Lee et al., 2020

The combination of early childhood education and K-5 afterschool had powerful effects on 9th grade test scores

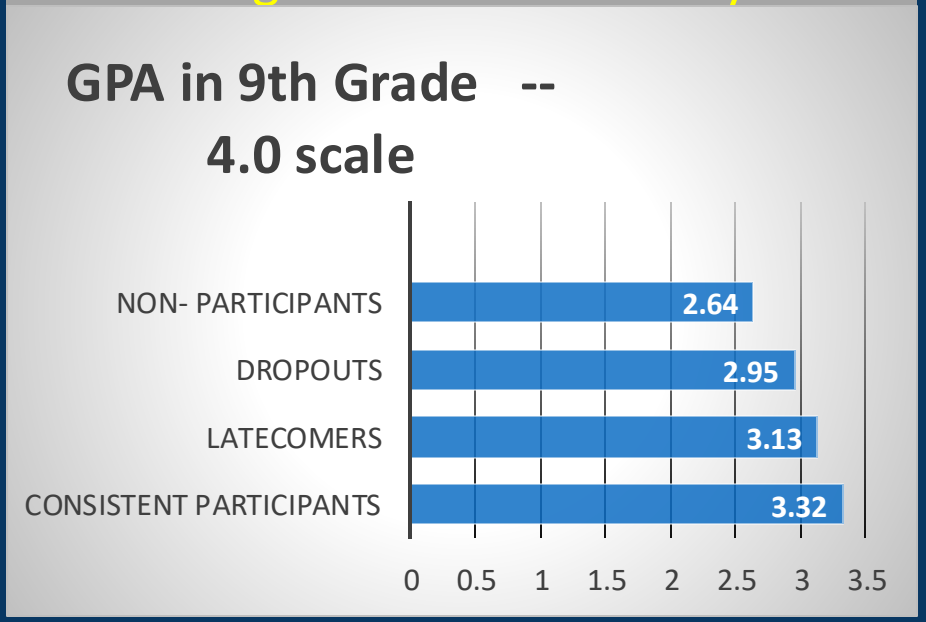


Effects of early childhood education and afterschool were cumulative, meaning a student who experiences both has twice the benefits.

Vandell, Lee, Whitaker, & Pierce (2020).

Grade 9:
High School Transition

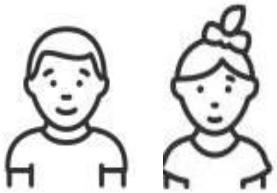
Consistent participation in afterschool activities during elementary school was linked to higher grades in 9th grade (the high school transition), even after controlling for child and family



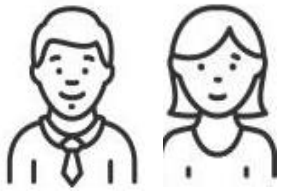
Robert Crosnoe, Chelsea Smith, & Tama Leventhal (2015). Family Background, School-Age Trajectories of Activity Participation, and Academic Achievement at the Start of High School. Applied Developmental Science, 19:3, 139-152.

Children's K-5 Activities

Children's Activities



Adults' Adjustment



Occupational Status

Educational Attainment

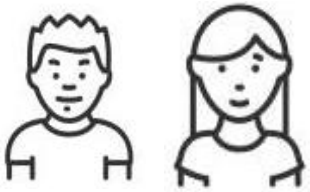
Risk taking

Arrests

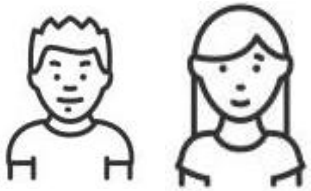
Vandell & Simpkins, 2024; Vandell et al., 2020

Adolescents' Activities

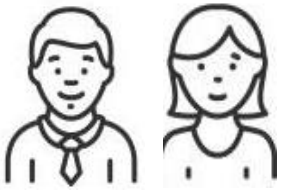
Adolescents' Activities



Adolescents' Adjustment

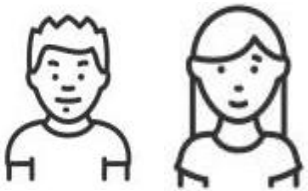


Adults' Adjustment

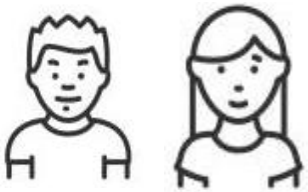


Adolescents' Activities

Adolescents' Activities



Adolescents' Adjustment



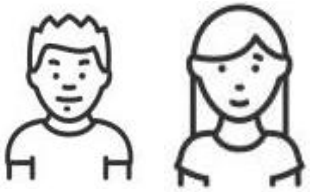
Academic achievement

Substance use

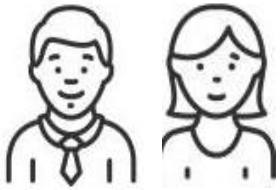
Liu et al., 2021; Lee & Vandell, 2015; Lee et al., 2018

Adolescents' Activities

Adolescents' Activities



Adults' Adjustment



Healthy Leisure activities

Less Substance Abuse

Hsieh et al., 2023; Simpkins et al., 2023

Concluding Thoughts: Part 1

- Evidence of effects of organized activities on both academic-educational outcomes ***and*** social-behavioral outcomes.

- Evidence that effects associated with sustained participation & with the quality of the experiences

A ***New*** Meta-Analysis of Academic & Educational Outcomes (2007-2021)

- What is a meta-analysis?
- And, why conduct this meta-analysis?

Effects of organized activities on academic and educational outcomes

Educational attainment

Standardized test scores

Grades

Attendance

Meta-Analytic Process

Peer-Reviewed Journal Articles

- Database Search
- Hand Search
- Backwards & Forwards Search
- 12,483 Articles

“Grey” Literature

- Database Search
- 766 Dissertations

Academic outcome	# of studies	Total N
Attendance	16	135,595
Grades	36	117,032
Standardized Test Scores	46	150,444
Educational Attainment	8	17,782

Academic outcome	# of studies	Total N
Attendance	16	135,595
Grades	36	117,032
Standardized Test Scores	46	150,444
Educational Attainment	8	17,782

Academic outcome	# of studies	Total N
Attendance	16	135,595
Grades	36	117,032
Standardized Test Scores	46	150,444
Educational Attainment	8	17,782

Academic outcome	# of studies	Total N
Attendance	16	135,595
Grades	36	117,032
Standardized Test Scores	46	150,444
Educational Attainment	8	17,782

What Did We Do Then?

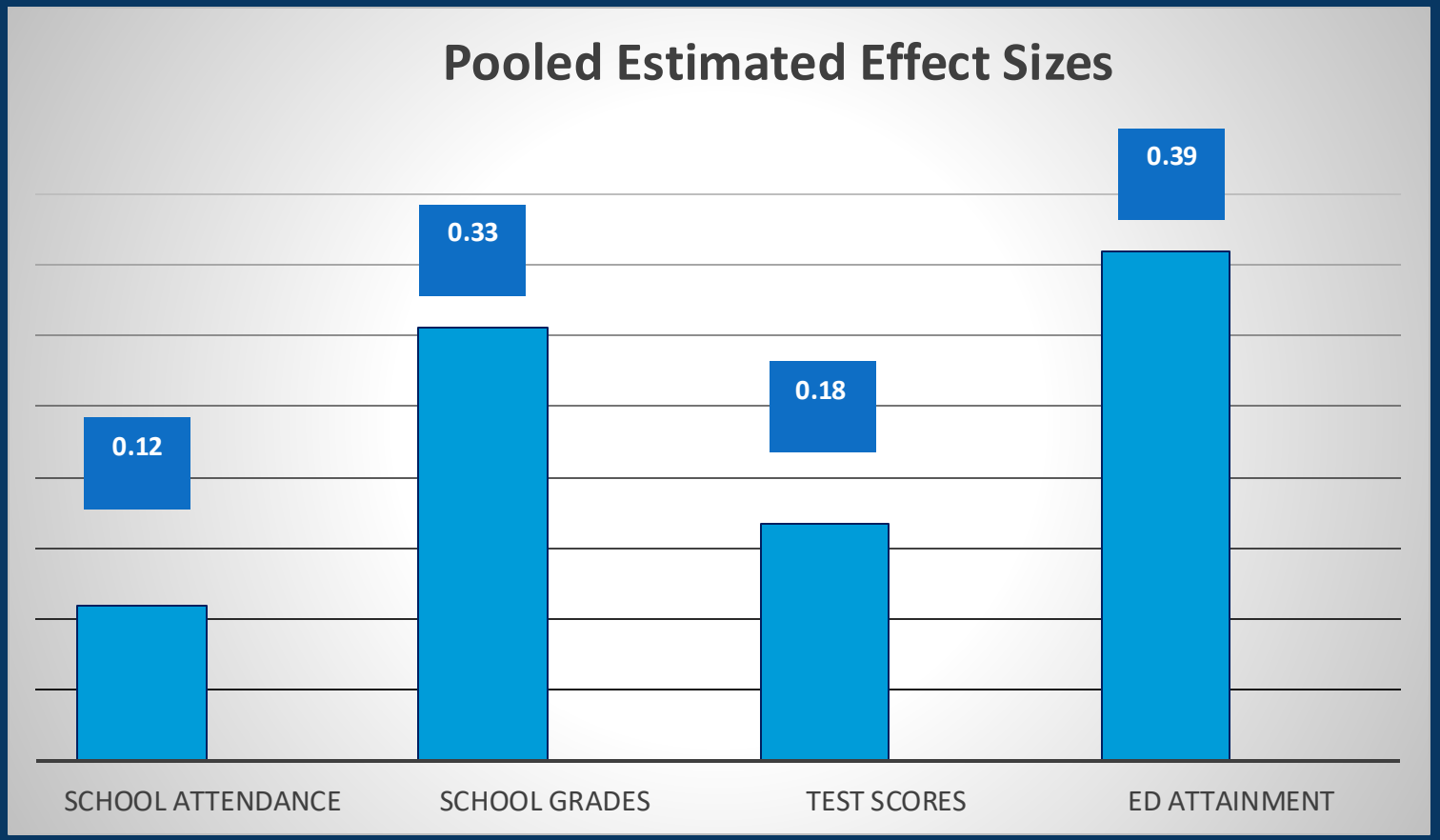
- So, what did we do with these studies? Basically, we computed effect sizes for each study separately and then looked at the average effect across the studies, taking into account how many participants were in each study.

- "Effect sizes" or the proportion of a standard deviation explain by treatment.

How To Interpret Effect Sizes: Compare to Other Interventions

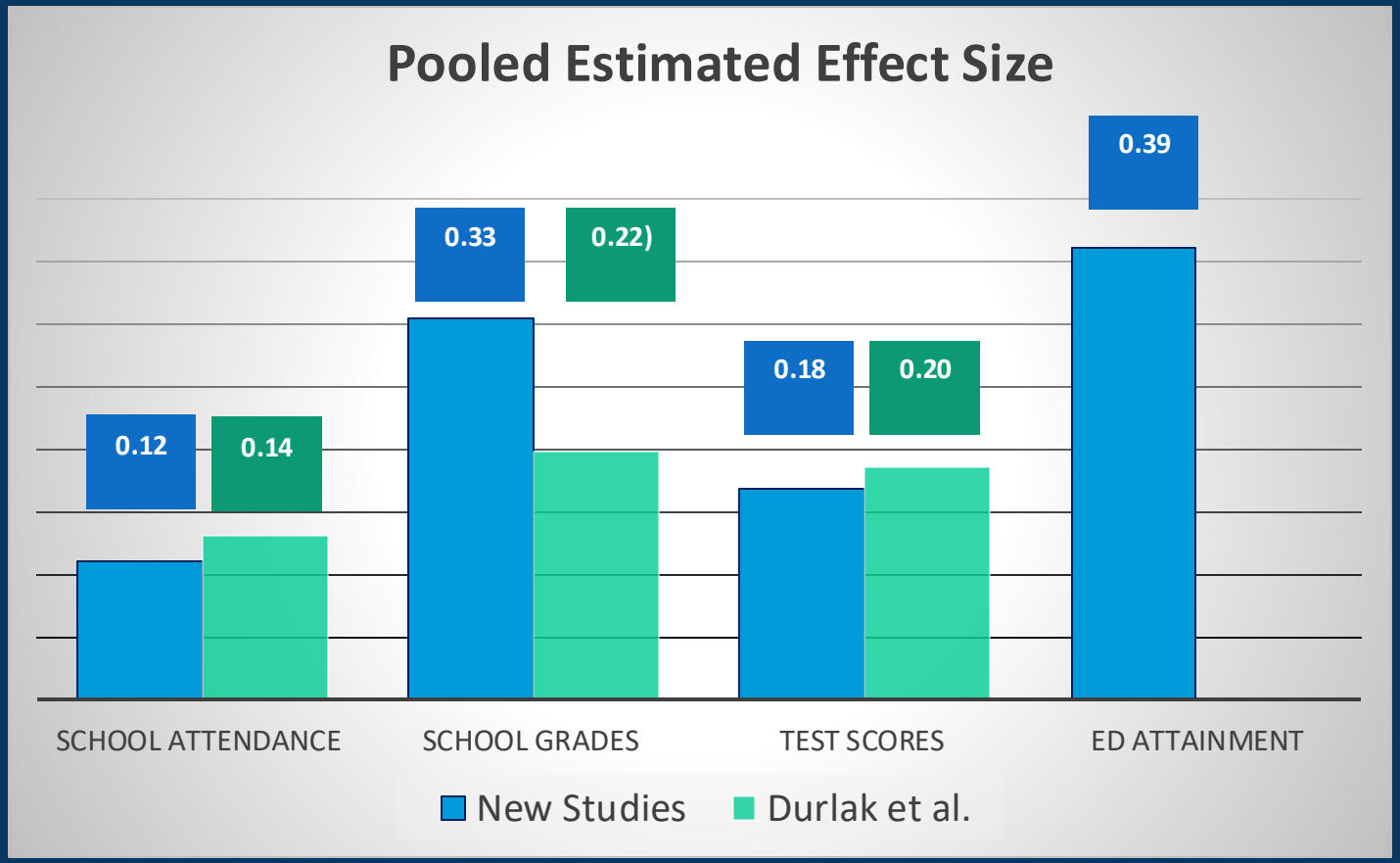
- Low-dose aspirin for prevention of heart attacks --- .03
- Universal free school breakfast--- .09
- Intensive tutoring in reading -- .04 - .09

Findings from our New Meta-Analysis of Contemporary Afterschool Research



Vandell et al., 2024

How does the New Meta-Analysis compare with Durlak et al.?



Durlak et al., 2010: Vandell et al., 2024

Do effects differ for academic programs versus non-academic programs?

- In a word….. No

Did effects differ for school-based and community-based programs?

- In a word….. No

What ***Does*** Make a Difference?

- ***Quality*** of youths' experiences at programs & activities

- ***Sustained participation*** in activities over time

Four Pillars of Quality

- Voice & choice
- Engaging, hands-on activities
- Positive interactions & relationships with adult staff
- Positive interactions & relationships with peers

2nd Essential: Program Attendance

- When program quality is high, program attendance is higher.
- When youth have higher attendance over the school year, academic and social gains are greater
- When attendance continues over multiple years, academic & social gains are greater

CONCLUDING THOUGHTS

For more information

dvandell@ uci.edu